



# Total Maximum Daily Load Status Review Report

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September 27, 2018

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# 1 Introduction

The State Water Resources Control Board (SWRCB) adopted the *National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit for State of California Department of Transportation* (Order WQ 2014-0077-DWQ) (NPDES Permit), published September 19, 2012, effective July 1, 2013, and revised on May 20, 2014. The NPDES Permit was further amended by the SWRCB through Order WQ 2017-0026-EXEC on November 27, 2017 (Conformed NPDES Permit). The Conformed NPDES Permit describes the primary modifications to several sampling locations at Areas of Special Biological Significance (ASBS) and incorporation of water quality crediting via compliance units (CUs), defined below. The CU crediting is in response to the SWRCB's adoption of the Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) to Control Trash and Part I Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan) (collectively referred to as the Trash Amendments) on April 7, 2015 (effective on December 3, 2015).

NPDES Permit Attachment IV (TMDL Requirements), Section III.A.3.b, requires Caltrans to submit a Total Maximum Daily Load (TMDL) Status Review Report to the SWRCB annually. This report describes the ongoing control measures Caltrans has implemented to achieve TMDL CUs and comply with the NPDES Permit requirements within the prioritized reaches during the reporting period (July 1, 2017 – June 30, 2018).

The Conformed NPDES permit is currently undergoing a renewal process. Caltrans is coordinating with the SWRCB on TMDL requirements within the new permit.

This report complies with Provision E.4.b. Status Review Report in the NPDES Permit, which states,

“The Department shall prepare a **TMDL STATUS REVIEW REPORT** to be submitted with each Annual Report. The TMDL Status Review Report shall include all information required in Attachment IV [of the Permit].

“Attachment IV of the Permit requires that the Department include the following information regarding implementation of control measures in the selected reaches for the upcoming reporting period in the **TMDL STATUS REVIEW REPORT**:

- Name of the waterbody,
- Associated TMDL(s),
- Proposed control measures,
- Proposed number of CUs per control measure, and
- Projected schedule for installation of control measures with anticipated beginning and ending dates.”

The Regional Water Quality Control Boards (RWQCBs), SWRCB, and the United States Environmental Protection Agency (U.S. EPA) have assigned Caltrans as a stakeholder in 84 TMDLs. Each year, Caltrans is required to achieve a minimum of 1,650 CUs. A CU is defined as either

1. One acre of stormwater runoff (including run-on) that is retained, treated or otherwise controlled before discharge to the relevant reach; or
2. \$88,000 in funding contributed to a cooperative implementation effort to control polluted runoff.

For treatment of one acre, the CU credit may be claimed once the project has entered the Planning Initiation Document (PID) phase. Additionally, CU credit may be claimed for a BMP installed to monitor its effectiveness within a TMDL watershed. For funding contribution to a cooperative implementation effort, the CU is credited as early as when funding is transferred to the implementing agency.

To achieve compliance, Caltrans will implement the following:

- Standalone best management practice (BMP) retrofits;
- Fish passage remediation;
- Stakeholder cooperative implementation,
- SWRCB grant program;
- Design pollution prevention BMPs;
- Erosion control;
- Open-Graded Friction Course;
- Monitoring program-related retrofits;
- Post-construction treatment beyond permit requirements; and
- Other pollution reduction practices.

Attachment IV of the NPDES Permit also requires a discussion of previous years' activities in the TMDL Status Review Report, including:

- a. The status of implementation activities;
- b. The location of the control measures;
- c. The size and type of BMPs that were installed;
- d. The effectiveness of the BMPs installed, including any pertinent monitoring data (e.g., influent vs. effluent data);
- e. A summary update of any cooperative implementation agreements (see NPDES Permit Attachment IV, section II.B.1), including those that are solely for each TMDL;
- f. A summary update of activities and/or actions that have been completed for any cooperative implementation agreement for each TMDL;
- g. A summary update of projects initiated under the cooperative implementation grant program (see NPDES Permit Attachment IV, section II.B.2);
- h. A summary update of activities and/or actions that have been completed for any projects under the cooperative implementation grant program;
- i. A summary of institutional control measures implemented to comply with Attachment IV;

- j. A summary of TMDLs adopted during the past year where the Caltrans is assigned a waste load allocation (WLA) or Caltrans is identified as a responsible party in the implementation plan; and
- k. A discussion, supported by data and analysis, of whether Caltrans considers work in the reach complete because it has met WLAs and other TMDL performance criteria.

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## 2 Reach Prioritization for Pollutant Categories

NPDES Permit Attachment IV, Section I, Part A, requires Caltrans to prioritize impaired reaches included in the 84 listed TMDLs for which Caltrans has been named a stakeholder. Caltrans conducted the prioritization for each pollutant category (metals, pathogens, sediment, trash, etc.) and each reach by evaluating the applicable receiving waters within the watershed. The initial analysis of the watersheds was based on the rating factors below identified within NPDES Permit Attachment IV, Table IV.1:

- Impairment status;
- Caltrans' drainage area contributing to reach;
- Proximity to receiving waters; and
- Community environmental health impact.

After completion of the initial reach prioritization, the list was submitted to the SWRCB. The SWRCB coordinated efforts between Caltrans and the RWQCBs, and the SWRCB Executive Director approved the Reach Prioritization on August 15, 2015. Some of the other factors that were considered to refine the list included:

- Cooperative efforts with other dischargers or projects within Areas of Special Biological Significance (ASBS);
- Multiple TMDLs addressed through a single BMP;
- TMDL deadlines specified in a Basin Plan;
- RWQCB and SWRCB priorities;
- Safety considerations; and
- Multi-benefit projects that contribute to water quality improvement.

The prioritized list of reaches includes 298 reaches within the 84 TMDLs. The Reach Prioritization list finalized by the SWRCB was used to determine the number of high, medium, or low priority reaches within each RWQCB as shown in Table 2-1. The high priority reaches comprise of the top-third of the ranked reaches while the medium priority reaches are the middle-third ranked reaches and the low priority reaches are the bottom-third of the ranked reaches.

Table 2-1: Summary of Priority Reaches

RWQCB	Reaches		
	High Priority	Medium Priority	Low Priority
1 – North Coast	0	44	67
2 – San Francisco Bay	13	14	8
3 – Central Coast	0	7	1
4 – Los Angeles	63	12	13
5 – Central Valley	13	2	1
6 – Lahontan	0	5	0
7 – Colorado River	0	1	0
8 – Santa Ana	9	7	1
9 – San Diego	2	8	7
<b>Total</b>	100	100	98

As shown in Table 2-1, Region 1 (North Coast) and Region 4 (Los Angeles) have the maximum number of TMDLs and thus have the highest number of reaches. Since Region 4 (Los Angeles) has the maximum number of high priority reaches, Caltrans will continue to consider implementing and prioritizing projects within this Region to address the highly impaired waterbodies. Additionally, the implementation efforts will focus primarily on addressing the higher priority reaches (i.e., the top third reaches); however, Caltrans capital improvement projects are scoped and programmed five to ten years in advance. Future projects will be considered based on the final prioritization list. Appendix A identifies the CUs for a combination of completed and proposed projects within TMDL watersheds, Regions, and Districts.

## 3 TMDL Monitoring Activities

### 3.1 Overview

As part of the NPDES Permit requirements, Caltrans is required to conduct stormwater monitoring at a minimum of 100 Tier 1 and Tier 2 sites. The Conformed NPDES Permit defines Tier 1 sites as either ASBS or TMDL sites. Tier 2 sites are located outside of both ASBS and TMDL watersheds, where further characterization monitoring may be of interest. Selection and monitoring of Tier 2 sites is only required when the number of Tier 1 sites being monitored is less than 100.

#### 3.1.1 TMDL Monitoring

Caltrans is a named stakeholder in 84 TMDLs per the NPDES Permit Attachment IV (TMDL Requirements). Caltrans conducts characterization monitoring and BMP effectiveness monitoring in TMDL watersheds.

For the 2017–2018 season, 102 Tier 1 sites were monitored to address Conformed NPDES Permit Section E.2.c requirements. The total number of Tier 1 sites exceeded the minimum requirement of 100; therefore, no Tier 2 sites were required to be monitored for the 2017-18 wet season. These sites consisted of:

- 48 ASBS monitoring sites
- TMDL monitoring, 54 sites include the following
  - 28 sites in various TMDL watersheds
  - 10 sites in Chollas Creek TMDL watershed
  - 6 cooperative agreements in TMDL watersheds: one site credit for each cooperative monitoring agreement as agreed with the State Board
  - 10 BMP Pilot monitoring sites in TMDL watersheds

The Tier 1 TMDL Monitoring Project consisted of characterization for 38 sites within 21 TMDL watersheds. Caltrans conducted stormwater monitoring at the following Tier 1 TMDL sites listed in NPDES Permit Attachment IV (TMDL Requirements):

- Chollas Creek Diazinon TMDL
- Chollas Creek Dissolved Copper, Lead, and Zinc TMDL
- Klamath River in California Temperature, Dissolved Oxygen, Nutrient, and Microcystin TMDL
- Shasta River Dissolved Oxygen and Temperature TMDL
- Los Angeles River Trash TMDL
- Los Angeles River and Tributaries Metals TMDL
- Los Angeles River Watershed Bacteria TMDL
- Lost River Nitrogen, Biochemical Oxygen Demand, and pH TMDL
- Lower Eel River Temperature and Sediment TMDL
- Mad River Sediment and Turbidity TMDL
- Napa River Sediment TMDL

- Richardson Bay Pathogens TMDL
- Sacramento-San Joaquin River Delta Estuary Methylmercury TMDL
- Newport Bay, San Diego Creek Organochlorine Compounds (Dichlorodiphenyltrichloroethane or DDT, Chlordane, and Polychlorinated Biphenyls or PCBs) TMDL
- San Diego Creek and Newport Bay, including Rhine Channel Metals (Copper, Lead, and Zinc) TMDL
- San Diego Creek and Upper Newport Bay Cadmium TMDL
- San Diego Creek Watershed Organochlorine Compounds (DDT, or PCBs, and Toxaphene) TMDL
- San Lorenzo River (includes Carbonera, Lompico, and Shingle Mill Creeks) Sediment TMDL
- South Fork Eel River Temperature and Sediment TMDL
- San Francisco Bay Mercury TMDL
- San Francisco Bay PCB TMDL

Caltrans has no stormwater monitoring efforts planned in the following TMDL sites (listed in NPDES Permit Attachment IV), because it has met the monitoring obligations described in the Conformed NPDES Permit:

- Rhine Channel Area of Lower Newport Bay (Chromium and Mercury): Caltrans has no tributary area in the TMDL.
- Rainbow Creek TMDL Monitoring Project: In February 2017, after four years of monitoring, Caltrans submitted to the San Diego RWQCB a letter with a document that summarized the monitoring activities. The document concludes that its runoff did not meet the 2013 and 2017 Nitrogen WLAs and is slightly more than the 2021 Nitrogen WLA. Caltrans runoff did not meet the 2013 Phosphorus WLA, but Caltrans runoff is well below the 2017 and 2021 Phosphorus WLA. The difference between the Caltrans result and the WLA are within normal limits of data variability and there is no consistent trend in the data. A comparison of Caltrans runoff concentrations with the upstream and downstream receiving water locations indicate that it is unlikely Caltrans discharges are providing significant nutrient contributions to Rainbow Creek. The Caltrans drainage area contains no known sources of nutrients, makes up approximately 2 percent of the total watershed, and is bordered by commercial growers, nurseries and orchards—operations that take up 21 percent of the watershed. Soil tests have shown that the installation of an infiltration-type BMP is not practical. Caltrans has requested that the San Diego Basin RWQCB adjust the permitting language accordingly based on the monitoring report conclusions. The San Diego Basin RWQCB responded to Caltrans indicating that it supports a reduction in monitoring frequency to once per permit term. The next reporting period for Caltrans will be October 1, 2020 to September 30, 2021.
- District 8 Coachella Valley TMDL Monitoring Project: After two years of monitoring that concluded at the start of the 2015-16 wet season, Caltrans submitted its required monitoring report to the Colorado River Basin Water Board in November 2015. The monitoring report concludes that it is highly unlikely that Caltrans facilities represented



by the monitoring sites have been responsible for contribution of bacteria to the Coachella Valley Stormwater Channel due to not enough runoff reaching the channel. At the time the monitoring report was submitted, Caltrans contacted the Colorado River Basin RWQCB and asked to be removed from the TMDL due to lack of connectivity. The Colorado River Basin RWQCB responded on January 6, 2016 indicating that it was too early to determine exclusion of any groups/individuals from the responsible party list. When asked for an update on this monitoring project the Colorado River Basin RWQCB responded on May 31, 2018, “The TMDL Program hasn’t made any decision on Phase 2 implementation of this TMDL because we are still analyzing the data and information from Phase 1 implementation to find the sources of impairments.” No further work is anticipated at this time until the Colorado River Basin RWQCB makes a determination of exclusion. The Phase I monitoring effort is complete. Caltrans is waiting for direction from the Colorado River Basin RWQCB on the next phase of the TMDL.

Specific details and results of monitoring activities can be found in the *Caltrans Monitoring Results Report Fiscal Year 2017-2018*.

### **3.1.2 Cooperative Monitoring**

Caltrans also entered, and continues to enter, into TMDL cooperative agreements throughout the state. For the 2017-2018 wet season, Caltrans participated in six cooperative agreements covering activities in approximately a half dozen TMDL watersheds. Some of these cooperative agreements include provisions to perform monitoring activities related to adopted TMDLs. Cooperative monitoring agreements that Caltrans has entered include:

- Aquatic Science Center
- Ventura River Estuary Trash TMDL
- Santa Monica Bay Dry and Wet Weather Bacteria TMDL Coordinated Shoreline Water Quality Monitoring Program
- Memorandum of Acceptance (MOA) for Contaminated Sediment Management Plan for the Dominguez Channel
- MOA for Receiving Water Monitoring for Ventura River Algae TMDL
- Lake Elsinore and San Jacinto Watersheds Authority (LESJWA) – Lake Elsinore and Canyon Lake Nutrients TMDL

### **3.1.3 Other Water Quality Monitoring**

Caltrans also conducts other water quality monitoring efforts including independently funded projects, as well as collaborative efforts with other stakeholders, such as municipalities, the SWRCB and RWQCBs, and stormwater quality researchers. For the 2017-2018 season, Caltrans entered into Cooperative Monitoring Agreements for monitoring in the TMDL watersheds listed in Section 3.1.4 above.

Caltrans is pursuing Cooperative Monitoring Agreements for the following TMDL watersheds:

- Ballona Creek Wetlands, Sediment and Invasive Exotic Vegetation
- Calleguas Creeks, its Tributaries and Mugu Lagoon, Metals and Selenium

- Calleguas Creeks, its Tributaries and Mugu Lagoon, Organochlorine Pesticides, Polychlorinated Biphenyls (PCBs), and Siltation
- Dominguez Channel, Greater Los Angeles, and Long Beach Harbor Waters, Metals (Copper, Lead, Zinc), DDT, Polyaromatic Hydrocarbons (PAHs), and PCBs
- Long Beach City Beaches and Los Angeles River Estuary, Indicator Bacteria
- Los Angeles Area Echo Park Lake, Nitrogen, Phosphorus, Chlordane, Dieldrin, PCBs, and Trash
- Machado Lake, Eutrophic, Algae, Ammonia, and Odors (Nutrients)
- Machado Lake, Pesticides and PCBs
- Malibu Creek Watershed, Bacteria
- San Gabriel River, Metals (Copper, Lead, and Zinc) and Selenium
- Santa Clara River Estuary and Reaches 3, 5, 6, and 7, Coliform
- Santa Monica Bay Beaches, Bacteria
- Upper Santa Clara River, Chloride
- Colorado Lagoon, Organochlorine Pesticides, PCBs, Sediment Toxicity, PAHs and Metals (Lead and Zinc)
- Los Angeles Area North, Center and Legg Lake, Nitrogen, Phosphorus
- Los Angeles Area Peck Road Park Lake, Nitrogen, Phosphorus, Chlordane, DDT, Dieldrin, PCBs, and Trash
- Los Angeles Area Puddingstone Reservoir, Nitrogen, Phosphorus, Chlordane, DDT, PCBs, Mercury, Dieldrin
- Malibu Creek Watershed, Trash
- Revolon Slough and Beardsley Wash, Trash
- Santa Monica Bay Nearshore and Offshore, Debris (trash and plastic pellets)

## 3.2 Pilot Projects and Other Studies Completed Within TMDL Watersheds

### 3.2.1 Chollas Creek BMP Retrofit Monitoring

As part of the BMP retrofit project in the Chollas Creek watershed, Caltrans installed four subsurface modular infiltration basins, and 2 biofiltration swales. In addition, one existing Austin sand filter, and one biofiltration swale was also monitored. These BMPs treat runoff from 25 acres of impervious highway surfaces. It is estimated that runoff from 89 acres of the Chollas Creek watershed area is treated by these BMPs. During the 2016-2017 and 2017-2018 monitoring seasons, monitoring data indicate that the BMPs successfully reduced dissolved metals TMDL constituents when comparing results between influent samples to those from effluent samples.

### 3.2.2 Tahoe Road Rapid Assessment Methodology Verification and Traction Sand Monitoring

Water quality monitoring for the Road-Rapid Assessment Methodology (RAM) Verification and Traction Sand Monitoring study began in fiscal year 2015-2016. The study is intended to verify the accuracy and validity of the Lahontan RWQCB-mandated RAM field observation and data

management tool. The RAM study also includes monitoring stormwater runoff from areas where new abrasives are applied for snow and ice control.

An evaluation of alternate traction abrasives in Lake Tahoe identified several locally available abrasives. A laboratory evaluation conducted during 2012-2013 demonstrated that these abrasives contained on average 86% lower fine particle concentrations. Water quality monitoring conducted during 2013-2014 indicated that stormwater fine loads were about 60% lower in areas where alternate abrasives are used. During the 2015-2016 wet season, water quality monitoring commenced at two paired sites where different abrasives were applied. Only one successful event was monitored at each site. Several sites were identified for conducting RAM verification observations and for collecting samples of accumulated abrasives in areas where different types of traction sand are applied.

Monitoring was conducted for fiscal year 2016-2017, and the Road-RAM findings will be included in future status reports once the study has been completed.

### **3.2.3 Tahoe Sand Vault Retrofit Pilot Study**

Operational testing of retrofitted double chamber sand vaults in Lake Tahoe watershed evaluated the constructability, functionality, and maintainability of two different configurations. The retrofits incorporated features to increase residence time and allow infiltration through weep holes in the base of the vaults. Both vertical and horizontal flow retrofits operated as designed by providing sedimentation, filtration, and flow bypass during large runoff events. Infiltration monitoring at six locations for the 2014-2015 wet season indicated high infiltration rates at all sites. Water quality monitoring commenced at two locations during the 2015-2016 wet season but was limited by operational issues at both sites. Monitoring continued during the 2016-2017 and 2017-2018 wet seasons. Results will be presented when the study is completed.

### **3.2.4 District 3 Linear Filtration Pilot Study**

This study is located within the Sacramento-San Joaquin River Delta Estuary Methylmercury TMDL. Five low impact development (LID) principles based linear filters were installed to evaluate performance in terms of volume and load reduction. These included: 1) a linear filtration trench, 2) a linear infiltration trench, 3) a media filter drain, 4) a bioretention trench, and 5) a linear sand filter. Caltrans conducted water quality monitoring at all five linear filters for two storms during the 2014-2015 wet season and five to six storms during the 2015-2016 wet season.

The bioretention trench experienced operational issues during the 2015-2016 wet season, and monitoring data for this filter is not considered representative. Preliminary evaluation of monitoring data from the remaining four linear filters for seven to eight storm events shows total suspended solids (TSS) load reduction of 77% to 93% and methylmercury load reduction of 50% to 67%. Although preliminary, the data indicate that a few of these BMPs are effective in reducing methylmercury concentrations to TMDL targets. Additional monitoring data was collected during the 2016-2017 and 2017-2018 monitoring seasons to confirm this finding. At present, the data collected for seventeen storms to date is under evaluation, and an assessment will be presented within the report anticipated to be completed in 2018-2019 that will include

monitoring data for Bioretention Trench - from 2018-2019 season – whose operational issues have been fixed.

### **3.2.5 District 7 Linear Filtration Pilot Study**

This study is located within the Los Angeles River Metals and Bacteria TMDLs. Four LID principles based linear filters were installed to evaluate performance in terms of concentration, volume and load reduction. These included: 1) a linear filtration trench, 2) a media filter drain, 3) a linear sand filter, and 4) a linear sand filter with alternative sand.

Caltrans conducted water quality monitoring at all four linear filters for five storms during the 2015-2016 wet season. Monitoring continued during 2016-2017 and 2017-2018 monitoring seasons, and data collected for thirteen storm events to date. Further, additional monitoring is proposed for upcoming monitoring season, and the data collected to date is under evaluation. And a preliminary effectiveness assessment will be presented within the report, anticipated to be developed in 2018-2019.

### **3.2.6 State Route 73 Bioretention Study**

This study is located within the San Diego Creek TMDL watershed. Monitoring was conducted during the 2006 through 2008 storm seasons and again during 2015-2016. Monitoring continued during 2013 through 2017 storm season to evaluate the pollutant removal effectiveness of the bioretention basin on state route 73. The results indicated that effective treatment of TSS, total and dissolved metals, Total Kjeldahl Nitrogen (TKN), and polycyclic aromatic hydrocarbons (PAHs) (PCBs were not sampled) were observed. The results did not show effective treatment of total phosphorus, orthophosphate, and nitrate. However, the design tested did not include a raised underdrain, which is known to improve nitrate treatment and literature studies suggest that orthophosphate export only occurs during the first few years of media use. In 2017-2018 storm season, an inverted riser was added to the underdrain. Monitoring of the bioretention basin with the raised underdrain began in 2017-2018 storm season and is preliminary planned to continue for the 2018-2019 storm season.

In June 2017, bioretention BMP was approved for inclusion in Caltrans' BMP toolbox. The data collected so far will be used to develop guidance for incorporating of Bioretention BMPs on projects. Activities for future years will be determined based on the previous year's findings.

### **3.2.7 Tahoe Austin Media Filter Pilot Study**

Monitoring commenced during the 2003-2004 fiscal year and samples were collected to evaluate the pollutant removal effectiveness of activated alumina filters with respect to load reductions for the Tahoe TMDL. During FY 2015-2016, a final study report was completed for the Tahoe Activated Alumina Filter Study (Caltrans 2016a). According to the report, significant load reductions were observed for fine sediment particles, TSS, turbidity, and nutrients. The life span for activated alumina media, as indicated by the study's data, is estimated to be 30 years. During fiscal year 2016-2017, activated alumina filters were approved for inclusion in Caltrans' BMP toolbox. No further action is planned for this study.

## 4 TMDL Compliance Measures

### 4.1 Overview

Caltrans is continuing its efforts to reduce pollutant discharges to receiving waters through ongoing compliance activities and by implementing a consistent statewide approach to address NPDES Permit Attachment IV requirements for the named pollutants. To meet the TMDL and special requirements identified within Attachment IV, Caltrans has implemented a combination of strategies, including capital construction, improvement of current institutional practices, and participation in regional control efforts. In addition, Caltrans has maximized opportunities to incorporate treatment control devices as part of capital roadway improvement projects or standalone retrofit projects. Caltrans will continue its efforts to comply with the NPDES Permit requirements to address stormwater quality based on feasibility and the availability of funds. This section provides the various measures Caltrans has implemented to address the requirements of Attachment IV.

### 4.2 TMDL Implementation Activities

Each year, Caltrans implements activities to improve water quality, comply with Permit requirements, and achieve 1,650 CUs. Table 4-1 provides a summary of CU credit equivalence for all implemented measures.

**Table 4-1: Summary of Compliance Unit Credit Equivalence**

Post Construction Treatment BMPs*	1 acre treated = 1 CU
Municipal Coordination	1 acre treated = 1 CU, or \$88,000 = 1 CU
Fish Passage Projects	1 acre treated = 1 CU, or \$88,000 = 1 CU
Open/Gap-Graded Asphalt Pavements	1 acre treated = 1 CU
Slope Stabilization	1 acre treated = 1 CU

CU = Compliance Unit

\* Treatment beyond the minimum post-construction requirement

Additional information for each of the compliance credit methods and equivalencies are identified below.

### 4.3 Compliance Unit Estimation Methodology

#### 4.3.1 Treatment BMPs

Caltrans receives one CU for treating one acre of tributary drainage area for BMPs installed within Caltrans' right-of-way (ROW) that were implemented within TMDL watersheds to improve stormwater quality. This may be either retrofit construction or BMP treatment beyond the minimum post-construction requirement.

Table 4-2 summarizes the CUs that Caltrans is claiming through treatment BMPs for this reporting period (2016-2017) along with the accumulation of total units claimed in each District.

Appendix A provides additional information about the TMDLs and reach based CUs for all 84 NPDES Permit Attachment IV listed TMDL watersheds.

**Table 4-2: Treatment BMP Compliance Unit Summary per District**

District	Above and Beyond Treatment Compliance Units (FY 2017-2018)
1	1
2	0
3	17
4	12
5	6
6	0
7	443
8	72
9	0
10	0
11	2
12	67
<b>Total</b>	<b>620</b>

Caltrans has initiated the process to program projects within the Stormwater Mitigation Element of the State Highway Operation and Protection Program (SHOPP) for implementation upon approval of the prioritized list of reaches within the TMDL watersheds. There are many projects programmed in SHOPP as of June 2018, some of which are in the early planning stages of implementation; therefore, no compliance specific information is available at this time. As projects approach the design and construction phase where more accurate treatment information is available, they will be added to the CU estimates in the upcoming fiscal years. The programming of these projects will focus on the highest priority reaches. Additionally, the planned projects will be implemented based on feasibility and the availability of funds.

#### **4.3.2 Municipal Coordination**

The objective of municipal coordination is to enhance or establish communication, cooperation, and collaboration with other municipal separate storm sewer system (MS4) stormwater management agencies and their programs. This includes establishing agreements with municipalities, agencies, and flood control departments or districts as necessary or appropriate. Municipal coordination offers potential benefits to Caltrans in the form of cost-savings, economies of scale, or valuable trade-offs to achieve the same level of compliance for the receiving waterbody. Table 4-3 shows an example for each benefit.

**Table 4-3: Municipal Coordination Benefits and Examples**

Benefit	Example
Cost savings	The overall cost of a constructed BMP is shared.
Economies of scale	Treating a larger volume from both Caltrans and MS4 has a smaller per unit cost.
Trade-offs	Caltrans agrees to contribute funds, and a partner is responsible for maintenance.

One CU credit is achieved for each \$88,000 in funds contributed towards coordinated implementation efforts. The implementation efforts must be geared towards benefiting the water quality of the impaired waterbody through treatment BMPs or other control measures.

Currently, Caltrans is partnering with Orange County Flood Control District (OCFCD), County of Orange, City of Irvine, City of Tustin, and Irvine Ranch Water District (IRWD) in the Peters Canyon Wash Channel Water Capture and Reuse Pipeline Project. This project is a permanent long-term solution to address high nitrate and selenium concentrations in the groundwater that is pumped from under State Route 261. Currently no CUs have yet been claimed for this project.

NPDES Permit Attachment IV requires Caltrans to cooperate with local stakeholders to implement initiatives within the Lake Elsinore and Canyon Lake Nutrient TMDL to address water quality issues. Caltrans joined and continues to participate in the Lake Elsinore and Canyon Lake Nutrient TMDL Task Force group to comply with these TMDL requirements. Caltrans and the SWRCB are currently discussing the Lake Elsinore and Canyon Lake contribution and will update the claimed CUs once an agreement is reached.

#### **4.3.3 Design Pollution Prevention Activities**

For the road segments located in Category B (Sediment/Nutrient/Mercury/Siltation/Turbidity TMDL) watersheds and areas where there is a potential threat to water quality, slope stabilization activities will be prioritized for implementing appropriate controls to the maximum extent practicable (MEP) based on available resources. Several slope stabilization projects have been implemented and programmed (PS&E) within TMDL watersheds, and Caltrans has claimed CU credits for each acre treated. Appendix A provides the CU list of stabilization area projects within TMDL watersheds.

#### **4.3.4 Fish Passage**

Caltrans plans to continue its efforts to locate, assess, and remediate barriers to fish passage. Between July 2013 to December 2015, Caltrans has remediated approximately 14 fish passage locations within the North Coast Region, of which 10 are within applicable TMDL watersheds. The approximate cost of remediating the fish passage locations within TMDL watersheds was \$11.3 million. The remediated locations provide partial or full treatment for fish at each specific location. Partial treatment was allocated for locations where the barrier has been improved for adult or juvenile fish, but the location remains a partial barrier to fish during some life stage or time of year/flow. Full treatment was allocated for locations where the natural channel width is fully spanned, and post-project monitoring needs to occur to ensure that sediments in the channel do not impact passage for fish after the first few winter seasons. CUs for fish passage were allocated based on the CU credit equivalence identified in Table 4-1, which allows Caltrans to receive one CU credit per \$88,000 spent on such projects. For the fiscal year 2017-2018,

Caltrans is not claiming any fish passage CU credits. In the upcoming fiscal years, Caltrans will continue to remediate locations and claim CU credits as they are earned.

#### **4.3.5 Grant Program and Cooperative Implementation Agreement**

Caltrans had planned to participate in the SWRCB mandated cooperative grant program to achieve compliance credits. The grant program intended to fund capital projects in impaired watersheds (outside Caltrans' right-of-way) in which Caltrans has been assigned a WLA or otherwise has responsibility for implementation of the TMDL. For this grant program, one compliance credit will be obtained for each \$88,000 that Caltrans contributes towards coordinated water quality efforts recognized by the SWRCB. This program is still available to implement.

Although there has been no cooperative implementation with the SWRCB on the grant program, Caltrans is currently coordinating with other stakeholders to implement structural BMPs to address TMDL requirements. Compliance unit credits for this coordination may be claimed after funds contributed towards the implementation have been transferred. One CU credit will be achieved for each \$88,000 in funds contributed towards coordinated implementation efforts.

Table 4-4 lists the cooperative agreements that Caltrans is coordinating with the local MS4s and funded as of June 30, 2018. The listed projects implement storm water treatment structures within the TMDL watersheds listed in Attachment IV, and therefore achieve CU credits. For this fiscal year, CUs were achieved based on the CU credit equivalence listed within Table 4-1 which determines one compliance credit for each \$88,000 funded on cooperative agreements with the cities.

For future cooperative implementation agreements, the credit will be claimed when Caltrans transfers the funds to the implementing agency. Caltrans will continue collaborating with local municipalities for opportunities that will enhance water quality within TMDL watersheds.



Table 4-4: Cooperative Implementation Agreements between Caltrans and Local Municipalities

City	Project Description	Associated TMDLs	Total Project Cost	CIA Compliance Units (FY 2017-2018)
<b>City of Lakewood</b>	Lakewood (Bolivar Park) Water Capture Project	Los Cerritos Metals TMDL	\$11,000,000	31
<b>City of Signal Hill</b>	Los Cerritos Channel Sub-basin 4 Water Capture Project	Los Cerritos Metals TMDL	\$11,000,000	39
<b>City of Long Beach</b>	Long Beach Municipal Urban Stormwater Treatment (MUST) Project	Los Angeles River Metals TMDL; Los Angeles River Trash TMDL; Los Angeles River Bacteria TMDL; and Long Beach City Beaches and Los Angeles River Estuary (Indicator Bacteria)	\$28,000,000	48
<b>City of Bellflower</b>	Bellflower Water Capture Facility Project (Caruthers Park)	Los Cerritos Metals TMDL	\$13,000,000	28
<b>City of Carson</b>	Carriage Crest Water Capture Facility Project (Carriage Crest Park)	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (Metals (Copper, Lead, Zinc), DDT, PAHs, and PCBs); Machado Lake (Eutrophic, Algae, Ammonia, and Odors (Nutrients)); Machado Lake (Pesticides and PCBs), Machado Lake (Trash)	\$13,000,000	38
<b>City of Lakewood</b>	Mayfair Park Water Capture Facility Project	Los Cerritos Metals TMDL	\$15,000,000	12
<b>City of Richmond</b>	Marina Bay Parkway South 8 <sup>th</sup> Street/Potrero	San Francisco Bay (Mercury); San Francisco Bay (PCBs);	\$2,500,000	15
<b>City of Atherton</b>	Holbrook-Palmer Park	San Francisco Bay (Mercury); San Francisco Bay (PCBs)	\$13,600,000	1
<b>City of South San Francisco</b>	Orange Park	San Francisco Bay (Mercury); San Francisco Bay (PCBs)	\$9,500,000	1
<b>Total Cooperative Implementation Agreements Compliance Units FY 17-18</b>				<b>213</b>

### 4.3.6 Open/Gap Graded Asphalt Pavements

Porous pavement is an effective treatment control BMP widely used by municipalities for water quality. Caltrans conducted a study during 2007-2011 to evaluate the quality of stormwater runoff and water quality benefits from implementing porous pavement. The Project's investigation focused on three types of porous asphalt overlays including Rubberized Hot Mix Asphalt-Open-Graded (RHMA-O), Rubberized Hot Mix Asphalt-Gap-Graded (RHMA-G), and Open-Graded Friction Course (OGFC). The project analyses determined that porous overlay can improve water quality, consistent with other effective end-of-pipe treatment BMPs.

Additionally, the study determined other benefits of implementing porous pavement:

- Re-configuration or modification of existing drainage facilities is not required
- Porous pavement does not have any space or additional ROW constraints
- Porous pavement improves visibility during heavy rains due to the reduction of splash or spray and reduces the probability of hydroplaning, and
- Porous pavement helps in reducing traffic noise.

In summary, the implementation of porous asphalt leads to two benefits (water quality and roadway improvements) with one investment.

Caltrans has implemented open graded pavement within its ROW for improvement of roadway safety and stormwater quality. OGFC is a type of a pavement considerable number of voids. Caltrans has implemented projects within Districts 1, 7 and 8 for which they will be receiving compliance credits. The total amount of OGFC implemented within these projects for fiscal year 2017-2018 is approximately 515 acres, which includes lane areas only. Table 4-5 provides a summary of the OGFC CUs claimed by each district.

**Table 4-5: Treatment BMP Compliance Unit Summary per District**

District	OGFC Compliance Units (FY 2017-2018)
1	31
2	0
3	0
4	300
5	10
6	0
7	0
8	0
9	0
10	0
11	0
12	0
<b>Total</b>	<b>341</b>

## 5 TMDLs with Specific Implementation Requirements

NPDES Permit Attachment IV contains seven TMDLs that require implementation that is site-specific and based on pollutant category. Caltrans will use several methods to address these TMDLs:

- Klamath River Nutrients TMDL
- Napa River Sediment TMDL
- Sonoma Creek Sediment TMDL
- Ballona Creek Trash TMDL
- Los Angeles River Trash TMDL
- Lake Tahoe Sediment and Nutrients TMDL
- Lake Elsinore and Canyon Lake Nutrients TMDL

### 5.1 Klamath River Nutrients TMDL

Caltrans continues to find opportunities to locate, assess, and remediate barriers to fish passage. As of October 2017, Caltrans has completed two fish passage remediation, 203 fish passage assessment locations, 40 active fish passage remediation locations (currently programmed) and 62 priority fish passage barrier locations (future program).

### 5.2 Napa River Sediment TMDL

Caltrans is required to comply with Pollutant Category Part B (Sediment, Nutrients, Mercury, Siltation, and Turbidity) and conduct analyses on stream crossings associated with Caltrans roadways. An initial analysis of the stream crossings data determined there are approximately 55 perennial and non-perennial crossings within the Napa River watershed. The 2015 TMDL Status Review Report outlined a workplan for performing the stream crossing assessments. This workplan was revised to address the San Francisco Bay RWQCB's concerns; stream crossing assessments are planned for fall 2018.

The Caltrans Office of Biological Studies prioritized fish passage barriers throughout the state. Included in the Bay Area Fish Passage Advisory Committee (FishPAC) are the counties of Alameda, Contra Costa, Marin, Napa, Santa Clara, San Mateo, Solano and Sonoma. The Caltrans Office of Biological Studies is working to prioritize 20 of the original 83 known barrier locations in District 4. California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), Caltrans, and other local/non-profit fish passage partners have identified the 20 highest priorities for salmon/steelhead recovery, of which two are in Napa River.

Additionally, Caltrans has employed biofiltration swales, biofiltration strips, detention basins, one design pollution prevention (DPP) infiltration area, infiltration trenches, and sediment basins within this watershed. Caltrans also has identified several slopes prone to erosion which will be addressed in the coming fiscal years. Caltrans also continues to implement source control measures required by the Statewide Construction General Permit (CGP) on active construction sites to prevent the discharge of sediment.

### 5.3 Sonoma Creek Sediment TMDL

Caltrans is required to comply with Pollutant Category Part B (Sediment, Nutrients, Mercury, Siltation, and Turbidity) and conduct analyses on stream crossings associated with Caltrans roadways. An initial analysis of the stream crossing data determined there are approximately 18 perennial and non-perennial crossings within the Sonoma River watershed. The 2015 Caltrans TMDL Status Review Report outlined a workplan for performing the stream crossing assessments. This workplan was revised to address the San Francisco Bay RWQCB's concerns, and stream crossing assessments are planned for fall 2018.

CDFW, NMFS, Caltrans and other local/non-profit fish passage partners have identified the 20 highest priorities for salmon/steelhead recovery, of which six are in Sonoma Creek.

Additionally, Caltrans has employed biofiltration swales and biofiltration strips within the watershed. Caltrans also continues to implement source control measures with the CGP on active construction sites to prevent the discharge of sediment.

### 5.4 Ballona Creek Trash TMDL

Caltrans has approximately 53 centerline miles of highway and 1,180 acres of ROW within Ballona Creek watershed. Caltrans continues to implement measures to address the trash impairment in this watershed. Caltrans has employed several types of trash removal devices, including gross solids removal devices (GSRDs), Media Filter, Infiltration basin/trench and Biofiltration Swales within the Ballona Creek watershed. All the listed structural BMPs besides biofiltration swales and are certified full capture devices with a 100% trash removal efficiency. Caltrans has additional BMPs that are planned or in construction, which will also reduce the amount of trash discharging into Ballona Creek.

Caltrans also employs non-structural BMPs in the Ballona Creek Watershed, including sweeping, drain inlet cleaning, trash collection, storm drain stenciling, covered trash bins, public education, and public participation. Caltrans has also increased the frequency of the Adopt-A-Highway program to treat beyond the minimum permit requirements. Caltrans will continue its efforts to implement public education campaigns in the watershed. Caltrans has engaged in municipal coordination by collaborating with the California Water Boards and California Stormwater Quality Association (CASQA) on the "[Protect Every Drop](#)" Stormwater Public Education Campaign.

According to the SWRCB's water quality report card for Ballona Creek, water quality conditions within the watershed are improving, and trash abatement continues to increase. Additionally, significant trash reductions have been noticed since the adoption of this TMDL. Caltrans will continue its implementation efforts to address the WLAs of this TMDL.

### 5.5 Los Angeles River Trash TMDL

Caltrans has approximately 280 centerline miles of highway and 6,091 acres of ROW within the Los Angeles River watershed. Caltrans continues to implement control measures to address the trash impairment within the watershed. Caltrans has employed several types of trash removal devices for structural control, including GSRDs, media filters, infiltration basins/trench, detention basins, biofiltration swales/strips, design pollution prevention infiltration areas

(DPPIA), and multi-chambered treatment trains (MCTTs) within the Los Angeles River watershed. Caltrans has several additional BMPs in construction that, once in operation, will significantly reduce the amount of trash discharging from the Caltrans drainage area.

Caltrans also employs non-structural BMPs in the Los Angeles River Watershed, including sweeping, drain inlet cleaning, trash collection, storm drain stenciling, covered trash bins, public education and public participation. Caltrans has increased the frequency of trash/litter cleanups associated with contractor litter pick-up and the Adopt-A-Highway program, which has reduced the amount of trash discharging from its drainage area. Caltrans will continue its efforts to implement public education campaigns in the watershed. Caltrans has engaged in municipal coordination by collaborating with the California Water Boards and California Stormwater Quality Association (CASQA) on the "[Protect Every Drop](#)" Stormwater Public Education Campaign.

According to the SWRCB's water quality report card for Los Angeles River, water quality conditions within the watershed are improving, and trash abatement continues to increase. Additionally, qualitative trash reductions have been noticed since the adoption of this TMDL. Caltrans will continue its implementation efforts to address the WLAs of this TMDL.

## 5.6 Lake Elsinore and Canyon Lake Nutrients TMDL

Caltrans continues to implement control measures to address the nutrient impairment within the watershed. Caltrans has employed biofiltration swales, biofiltration strips, detention basins, DPP infiltration areas, and infiltration basins. Caltrans has additional control measures implemented throughout the watershed including street sweeping and inlet cleaning, which reduce sediment containing nutrients from the watershed.

Additionally, as part of the implementation requirements, Caltrans is required to coordinate with other stakeholders for this TMDL in achieving compliance. Caltrans is an active member of the Lake Elsinore/Canyon Lake Nutrient TMDL Task Force and works with other stakeholders on implementation actions, monitoring activities and special studies. As part of the TMDL Task Force efforts, there have been several activities implemented to reduce nutrients in Lake Elsinore including aeration systems, alum application (semi-annually), dredging, carp removal, and nuisance vegetation removal. Caltrans will continue to actively participate in the Task Force under the Task Force Agreement.

Based on recent data, it was determined that through the cooperative implementation measures within Canyon Lake and Lake Elsinore, significant improvement is being made toward achieving assigned targets and meeting compliance. However, throughout the redevelopment of this TMDL, it was determined that the numeric targets identified in the 2004 TMDL are unattainable, even with implementation measures to treat all runoff prior to entering the lake. The original TMDL targets are deemed unachievable for total phosphorus, total nitrogen and chlorophyll-*a*. Lake Elsinore does not have an outlet for all incoming loads from the stormwater runoff, which has led to loads historically accumulating within the lake. Therefore, the targets are deemed unattainable.

The TMDL Task Force group is currently redeveloping the TMDL through revisions of the numeric targets and WLAs for the receiving waterbody. Caltrans will continue its efforts to participate in the Task Force group for this TMDL.

### **5.7 Lake Tahoe Clarity TMDL**

The NPDES Permit required Caltrans to prepare a Pollutant Load Reduction Plan (PLRP) detailing the Caltrans approach for meeting the first pollutant load reduction milestone specified by the Lake Tahoe TMDL. The primary purpose of the PLRP is to provide a framework for pollutant load reduction analyses. The original PLRP was submitted on July 15, 2014 by Caltrans for the Lahontan RWQCB and the SWRCB. An update to the PLRP was completed on March 2017 which identifies the approach to achieve compliance for the second 10-year implementation milestone. The second 10-year milestone consists of reducing baseline fine sediment particles by 21%, and total nitrogen and total phosphorus loads by 14% each, before September 30, 2021.

Caltrans has installed Austin sand filters, biofiltration swales, detention basins, infiltration basins, infiltration trenches, and traction sand traps in the Lake Tahoe watershed.

Caltrans is also incorporating several pilot study projects within this watershed which have been identified in Section 3 (TMDL Monitoring Requirements) of this report.

## 6 San Francisco Bay Region Reporting

Caltrans continues to implement control measures to achieve compliance with NPDES Permit Attachment V (Region Specific Requirements); however, additional control measures are also considered within the San Francisco Bay Region to comply with Attachment V requirements. Attachment V states that Caltrans shall comply with the prohibition of the discharge of trash through implementation of control measures in high trash generating areas in the San Francisco Bay Region. Caltrans has completed an on-land visual assessment within the San Francisco Bay Region to determine trash generation rates for highways and ramps.

Trash reduction efforts within the San Francisco Bay Region include implementation of treatment control BMPs, institutional measures, and partnerships with local MS4 agencies including the Bay Area Stormwater Management Agencies Association (BASMAA). Table 6-1 lists additional control measures that Caltrans plans to implement to address reduce trash within the region.

**Table 6-1: Additional Trash Control Measures Planned for Implementation**

Control Measures
<b>Source Controls</b>
Public education and outreach programs
Street sweeping
Litter removal
Improved trash bin/container management
Waste hauler coordination
California Highway Patrol CHP/enforcement coordination
<b>Structural Controls</b>
Storm drain cleaning
Full capture treatment devices (e.g., GSRDs)
Infiltration basins
Media filters
Detention basins

Through the implementation of source control measures such as public education and outreach, Caltrans proactively generates awareness to help reduce trash from the region. Caltrans has continued to expand its [“Protect Every Drop”](#) campaign to raise awareness and reduce rates of littering and pollution within the state. Additional source control measures, such as street sweeping and litter removal (including Adopt-A-Highway), are ongoing. The feasibility of increasing the frequency of these activities within high trash generating areas is being explored while considering safety, traffic flow, and resource needs.

The *Caltrans Trash Load Reduction Workplan for the San Francisco Bay Region* was submitted to the RWQCB on March 7, 2018. Caltrans and San Francisco Bay Regional Board have had several meetings to discuss effective implementation strategies and to develop an acceptable workplan for controlling trash in the San Francisco Bay Region.

In November 2016, Caltrans initiated Phase 1 of the *Total Maximum Daily Load (TMDL) and Trash Reduction Study for California Department of Transportation (Caltrans) District 4 to address requirements of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Conformed Permit (Order No. 2012-0011-DWQ, dated April 7, 2015)*. Phase 1 assessed approximately 50 miles of highway and 100 on-/off-ramps along the Caltrans ROW for new and retrofit treatment BMPs that manage pollutants of concern (POCs) and/or provide trash capture. This project identified 20 treatment locations which were programed into the SHOPP 335 Program for implementation. A second phase assessed 48.5 miles and 120 on-ramps/off-ramps and resulted in the identification of 53 treatment locations. Phase 2 was completed in June 2018; a third phase began in September 2018. Additional phases are planned as part of this multi-phase project to study BMP feasibility throughout Caltrans District 4.

Caltrans has continued working with local permittees to identify opportunities for cooperative implementation, including funding projects in City of Richmond (treating 234 acres/70 Caltrans ROW acres) City of Atherton (2,875 acres/24 Caltrans ROW acres) and City of South San Francisco (6,300 acres/408 Caltrans ROW acres).

District 4, along with the Headquarters Division of Environmental Analysis (DEA), worked with BASMAA to reassess the Caltrans visual assessment for high trash generation areas. Caltrans met with BASMAA to reach a consensus on assessment methodologies and very high, high, medium and low trash generating definitions. Caltrans subsequently updated its On-land Visual Trash Assessment (OVTA) Protocol to incorporate assessment methods comparable to other municipal regional permittees (MRPs). Caltrans also developed a draft trash load reduction reporting template to report trash reduction efforts in the bay area in future years.

Caltrans is also pursuing a pilot project to evaluate and to install full trash capture devices at two discharge points in Alameda County near Interstate 880 southbound at post mile (PM) 16.58 in the City of San Leandro, and Interstate 880 southbound at PM 23.74 in the City of Hayward. The proposed projects will install end treatment net capture systems at the outfalls of Caltrans drainage systems. Caltrans has completed the field investigation of the selected sites and plans to install BMPs at these locations in 2018. Two additional sites have been selected for similar pilot installations along the Interstate 80 and Interstate 880 corridors. The evaluation of these full trash capture devices will follow a systematic approach that Caltrans created to identify, evaluate, approve, and integrate BMPs into Caltrans operations. This approach will ensure that sound scientific and technological criteria are used to develop new BMPs for implementation on transportation projects and activities. Evaluation criteria includes cost effectiveness, efficiency, and appropriateness for transportation infrastructure. Monitoring for operations and maintenance will occur for one full wet season.



## 7 Clear Lake Nutrient TMDL Program Status

In 1986, Clear Lake was added to the federal Clean Water Act Section 303(d) List of Impaired Water Bodies due to the nuisance of algal blooms. On June 23, 2006, the Central Valley RWQCB amended the Basin Plan, which included the elements of a TMDL for Clear Lake that established numeric allocations to reduce the amount of phosphorus. Caltrans was given a WLA of 100 kg per year. The goal of the pollutant control program is to reduce phosphorus loads from entering Clear Lake.

In 2008, Central Valley RWQCB staff approved an implementation plan to install monitoring stations at Caltrans facilities near the lake. Based on monitoring results and the implemented management measures, Caltrans concluded the annual rate of phosphorus/sediment discharged from its ROW to Clear Lake fulfills the TMDL WLA. The Central Valley RWQCB agreed to Caltrans' determination of its compliance.

Other dischargers whose efforts in reducing nutrients are ongoing include Lake County, agricultural sources, United States Forest Service (USFS), and United States Bureau of Land Management (USBLM). Lake County implements nutrient control measures such as sediment source control and riparian/wetland protection and restoration. USFS has also adopted a nutrient control program and has implemented projects to reduce sediment from off-highway vehicle activities. Agricultural sources have noticed a 50% reduction in phosphorus loads through their management practices. USBLM has implemented a wet weather closure policy to temporarily close all off-highway vehicle areas during specific conditions to reduce erosion.

Although there has been significant progress in reducing nutrient loads from discharges entering Clear Lake, the Central Valley RWQCB indicated that there is insufficient data to verify if any of these efforts have resulted in compliance with assigned TMDL allocations, or if further activities are necessary. The Central Valley RWQCB indicated that besides Caltrans, no other stakeholder of this TMDL has quantified its reductions of phosphorus to Clear Lake. Therefore, RWQCB staff will evaluate the appropriate next steps for the TMDL, which include determining how additional information on load allocations and compliance can be provided by the stakeholders. The staff indicated that load allocation information may be requested from stakeholders through 13267 orders, cleanup and abatement orders, or requests for additional monitoring. Upon a full assessment of compliance by each stakeholder, Central Valley RWQCB Staff will determine whether a basin plan amendment or a watershed-based management plan will be required.

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## **8 Summary of Adopted TMDLs not within NPDES Permit Attachment IV**

This section discusses TMDLs that were approved by the RWQCBs, SWRCB, and U.S. EPA after the final adoption of NPDES Permit Attachment IV on May 20, 2014.

### **8.1 Los Peñasquitos Lagoon Sediment TMDL**

Los Peñasquitos Lagoon was first listed on the Clean Water Act Section 303(d) list in 2010. The applicable 303(d) listed impairment within Los Peñasquitos Lagoon is sedimentation/siltation. This impairment required the development of a TMDL by the RWQCB. San Diego RWQCB initiated the development of a sediment TMDL by a third-party stakeholder group. A technical report (released on December 14, 2010) was developed on behalf of the City of San Diego and U.S. EPA. Caltrans is listed as a responsible party in this TMDL and is assigned a WLA. The San Diego RWQCB approved the TMDL on June 13, 2011. The SWRCB further approved the TMDL on January 21, 2014, and the Office of Administrative Law (OAL) approved it on July 14, 2014, which is also the effective date of the TMDL. U.S. EPA approved the TMDL on October 30, 2014. Stakeholders are required to attain all targets within 20 years of the approved TMDL date; therefore, this TMDL is to be in compliance by 2034.

### **8.2 San Gabriel River, Estuary and Tributaries Indicator Bacteria TMDL**

San Gabriel River, Estuary and its Tributaries was first listed for impairment of indicator bacteria in the Clean Water Act Section 303(d) list in 2010. The Los Angeles RWQCB initiated the development of this TMDL and first released the TMDL draft staff report on April 3, 2015 for public review and comments. Furthermore, the TMDL report was revised and released on June 1, 2015, after which the Los Angeles RWQCB adopted it on June 10, 2015. Caltrans is listed as a responsible stakeholder for this TMDL and is assigned a WLA. The SWRCB approved this TMDL on November 17, 2015, the OAL approved it on April 14, 2016, and U.S. EPA approved it on June 14, 2016. This TMDL requires achievement of the bacteria objectives to meet the recreational water quality use within the waterbodies. The implementation schedule indicates that the TMDL should achieve full compliance with the wet weather allowable exceedances and numeric targets within 20 years of the effective date of the TMDL. The effective date of the TMDL is June 14, 2016; therefore, full compliance for the impaired waterbodies should be achieved by June 14, 2036.

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## 9 Conclusion

Caltrans will continue to implement treatment projects and water pollution reduction practices such as source control and open-graded friction course within TMDL watersheds to achieve water quality along with receiving CUs as required in Attachment IV of the NPDES Permit. Achieving the CUs is dependent on Caltrans' budget allotted for the Stormwater Management Program and Caltrans' ability to program projects with its limited funding while balancing other legal mandates and priorities. The annual funding will determine the number of control measures, projects, and other water pollution reduction practices that can be implemented. Caltrans will continue addressing Attachment IV requirements and allocate resources needed to comply with the requirements of the NPDES Permit.

### 9.1 Overall TMDL Compliance Achieved

During this reporting period, Caltrans is claiming CUs towards the 84 listed TMDLs when acres treated were beyond the post construction requirements or if BMPs were implemented to address stormwater quality. Several waterbodies have multiple pollutant impairments. For such cases, multiple CU credits are claimed for each BMP capable of treating more than one of the listed pollutants. Table 9-1 summarizes the number of CUs for 2017-2018 within a TMDL watershed.

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Table 9-1: Compliance Unit Credits Summary

Region	Impaired Water Body	Pollutant(s)	Total Compliance Units Claimed in Fiscal Year 2017-18*
1 - North Coast	Albion River	Sediment	-
1 - North Coast	Big River	Sediment	-
1 - North Coast	Lower Eel River	Temperature and Sediment	-
1 - North Coast	Middle Fork Eel River	Temperature and Sediment	-
1 - North Coast	South Fork Eel River	Temperature and Sediment	-
1 - North Coast	Upper Main Eel River and Tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury)	Temperature and Sediment	3.3
1 - North Coast	Garcia River	Sediment	-
1 - North Coast	Gualala River	Sediment	-
1 - North Coast	Klamath River in California	Temperature, Dissolved Oxygen, Nutrients, and Microcystin	6.0
1 - North Coast	Lost River	Nitrogen, Biochemical Oxygen Demand to address Dissolved Oxygen and pH Impairments	-
1 - North Coast	Mad River	Sediment and Turbidity	3.1
1 - North Coast	Navarro River	Sediment and Temperature	-
1 - North Coast	Noyo River	Sediment	-
1 - North Coast	Redwood Creek	Sediment	4.5
1 - North Coast	Scott River	Sediment and Temperature	-
1 - North Coast	Shasta River	Dissolved Oxygen and Temperature	-
1 - North Coast	Ten Mile River	Sediment	-
1 - North Coast	Trinity River	Sediment	0.5
1 - North Coast	South Fork Trinity River and Hayfork Creek	Sediment	0.5

Table 9-1: Compliance Unit Credits Summary

Region	Impaired Water Body	Pollutant(s)	Total Compliance Units Claimed in Fiscal Year 2017-18*
<b>1 - North Coast</b>	Van Duzen River and Yager Creek	Sediment	14.5
<b>2 - San Francisco Bay</b>	Napa River	Sediment	0.3
<b>2 - San Francisco Bay</b>	Richardson Bay	Pathogens	42.5
<b>2 - San Francisco Bay</b>	San Francisco Bay	PCBs	108.5
<b>2 - San Francisco Bay</b>	San Francisco Bay	Mercury	134.7
<b>2 - San Francisco Bay</b>	San Pedro and Pacifica State Beach	Bacteria	-
<b>2 - San Francisco Bay</b>	Sonoma Creek	Sediment	-
<b>2 - San Francisco Bay</b>	San Francisco Bay Urban Creeks	Diazinon and Pesticide-Related Toxicity	42.8
<b>3 - Central Coast</b>	San Lorenzo River (includes Carbonera Lompico, and Shingle Mill Creeks)	Sediment	15.8
<b>3 - Central Coast</b>	Morro Bay (includes Chorro Creek, Los Osos Creek, and the Morro Bay Estuary)	Sediment	-
<b>4 - Los Angeles</b>	Ballona Creek	Metals (Silver, Cadmium, Copper, Lead, and Zinc) and Selenium	1.8
<b>4 - Los Angeles</b>	Ballona Creek, Ballona Estuary, and Sepulveda Channel	Bacteria	1.8
<b>4 - Los Angeles</b>	Ballona Creek	Trash	-
<b>4 - Los Angeles</b>	Ballona Creek Estuary	Toxic Pollutants (Silver, Cadmium, Lead, Zinc, Chlordane, DDTs, Total PCBs, and Total PAHs)	1.8
<b>4 - Los Angeles</b>	Ballona Creek Wetlands	Sediment and Invasive Exotic Vegetation	1.8
<b>4 - Los Angeles</b>	Calleguas Creeks and its Tributaries and Mugu Lagoon	Metals and Selenium	-
<b>4 - Los Angeles</b>	Calleguas Creeks and its Tributaries and Mugu Lagoon	Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation	-



Table 9-1: Compliance Unit Credits Summary

Region	Impaired Water Body	Pollutant(s)	Total Compliance Units Claimed in Fiscal Year 2017-18*
4 - Los Angeles	Colorado Lagoon	OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals (Lead and Zinc)	-
4 - Los Angeles	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters	Toxic Pollutants: Metals (Copper, Lead, Zinc), DDT, PAHs, and PCBs	38.0
4 - Los Angeles	Los Angeles Area (Lake Sherwood)	Mercury	-
4 - Los Angeles	Legg Lake	Trash	-
4 - Los Angeles	Los Angeles Area (North, Center, and Legg Lakes)	Nitrogen and Phosphorus	-
4 - Los Angeles	Long Beach City Beaches and Los Angeles River Estuary	Indicator Bacteria	-
4 - Los Angeles	Los Angeles Area (Echo Park Lake)	Nitrogen, Phosphorus, Chlordane, Dieldrin, PCBs, and Trash	-
4 - Los Angeles	Los Angeles Area (Peck Road Park Lake)	Nitrogen, Phosphorus, Chlordane, DDT, Dieldrin, PCBs, and Trash	-
4 - Los Angeles	Los Angeles River and Tributaries	Metals	61.6
4 - Los Angeles	Los Angeles River	Trash	-
4 - Los Angeles	Los Angeles River Watershed	Bacteria	10.2
4 - Los Angeles	Los Cerritos	Metals	110.0
4 - Los Angeles	Machado Lake	Pesticides and PCBs	-
4 - Los Angeles	Machado Lake	Trash	-
4 - Los Angeles	Machado Lake	Eutrophic, Algae, Ammonia, and Odors (Nutrients)	-
4 - Los Angeles	Malibu Creek	Trash	21
4 - Los Angeles	Malibu Creek Watershed	Bacteria	59.8

Table 9-1: Compliance Unit Credits Summary

Region	Impaired Water Body	Pollutant(s)	Total Compliance Units Claimed in Fiscal Year 2017-18*
4 - Los Angeles	Malibu Creek and Lagoon	Sedimentation and Nutrients to address Benthic Community Impairments	80.7
4 - Los Angeles	Marina del Rey Harbor	Toxic Pollutants (Copper, Lead, Zinc, Chlordane, and Total PCBs)	-
4 - Los Angeles	Marina del Rey, Harbor Back Basins, and Mother's Beach	Bacteria	-
4 - Los Angeles	Los Angeles Area (Puddingstone Reservoir)	Nitrogen, Phosphorus, Chlordane, DDT, PCBs, Mercury, and Dieldrin	-
4 - Los Angeles	Revolon Slough and Beardsley Wash	Trash	-
4 - Los Angeles	San Gabriel River	Metals (Copper, Lead, Zinc) and Selenium	60
4 - Los Angeles	Santa Clara River Estuary and Reaches 3, 5, 6, and 7	Coliform	40.5
4 - Los Angeles	Santa Clara River Reach 3	Chloride	-
4 - Los Angeles	Santa Monica Bay Beaches	Bacteria	61.6
4 - Los Angeles	Santa Monica Bay	DDTs and PCBs	79
4 - Los Angeles	Santa Monica Bay Nearshore and Offshore	Debris (trash and plastic pellets)	5.5
4 - Los Angeles	Upper Santa Clara River	Chloride	22.3
4 - Los Angeles	Ventura River Estuary	Trash	-
4 - Los Angeles	Ventura River and its Tributaries	Algae, Eutrophic Conditions, and Nutrients	1.5
5 - Central Valley	Clear Lake	Nutrients	-
5 - Central Valley	Cache Creek, Bear Creek, Sulphur Creek and Harley Gulch	Mercury	-
5 - Central Valley	Sacramento-San Joaquín River Delta Estuary	Methylmercury	-

Table 9-1: Compliance Unit Credits Summary

Region	Impaired Water Body	Pollutant(s)	Total Compliance Units Claimed in Fiscal Year 2017-18*
6 - Lahontan	Lake Tahoe	Sediment and Nutrients	17.3
6 - Lahontan	Truckee River	Sediment	-
7 - Colorado River	Coachella Valley Storm Water Channel	Bacterial Indicators	17.1
8 - Santa Ana	Big Bear Lake	Nutrients for Dry Hydrological Conditions	45.0
8 - Santa Ana	Lake Elsinore and Canyon Lake	Nutrients	9.8
8 - Santa Ana	Rhine Channel Area of Lower Newport Bay	Chromium and Mercury	-
8 - Santa Ana	San Diego Creek and Newport Bay, including Rhine Channel	Metals (Copper, Lead, and Zinc)	6.5
8 - Santa Ana	San Diego Creek and Upper Newport Bay	Cadmium	6.5
8 - Santa Ana	San Diego Creek Watershed	Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene)	5.7
8 - Santa Ana	Upper and Lower Newport Bay	Organochlorine Compounds (DDT, Chlordane, and PCBs)	-
9 - San Diego	Chollas Creek	Diazinon	-
9 - San Diego	Chollas Creek	Dissolved Copper, Lead and Zinc	-
9 - San Diego	Rainbow Creek	Total Nitrogen and Total Phosphorus	-
9 - San Diego	Project 1- Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)	Indicator Bacteria	30.2
Total:			1,174

\*Compliance Credits claimed for Fiscal Year 2017-2018 includes Above and Beyond Treatment, Cooperative Implementation Agreements and Open-Graded Friction Course.

## 10 References

- SWRCB. (2012, September 19). *National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Waste Discharge Requirements (WDRS) for State of California Department of Transportation*. Order No. 2012-0011-DWQ, NPDES No. CAS000003. Retrieved from [http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2012/wgo\\_2012\\_0011\\_dwq.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2012/wgo_2012_0011_dwq.pdf)
- Caltrans. (2014, July 15). *Caltrans Lake Tahoe Pollutant Load Reduction Plan*.
- Caltrans. (2016, June 22). *Caltrans Trash Load Reduction Workplan for the San Francisco Bay Region*. CTSW-RT-15-316.15.1.
- Caltrans. (2017, October). *2016 Fish Passage Annual Report to the Legislature*.

## **Appendix A: Compliance Units for Completed and Proposed Projects within TMDL Watersheds**

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Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #	BMP Locations				BMP Types								
													Beg PM	End PM	Lat. (N)	Long. (W)									
COMPLIANCE YEAR 4 (July 2017 - June 2018)																									
01-0A840	McCoy Creek Bridge Replacement	No	MEN	1	271	0.4	0.3	1	B	South Fork Eel River (Temperature and Sediment)	2	111	187	17.837	17.837	39.9531	-123.776	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
01-0A840	McCoy Creek Bridge Replacement	No	MEN	1	271	0.4	0.2	1	B	South Fork Eel River (Temperature and Sediment)	2	111	187	17.919	17.919	39.9543	-123.7757	Biofiltration Swale	0.2	0.2	-	N/A	Yes	N/A	2017-2018
01-43740	Sand Traps	No	HUM	1	299	0.0	0.4	1	B	Trinity River (Sediment)	2	120	196	30.851	30.851	40.90582794	-123.747525	Traction Sand Trap (TST)	0.4	0.4	-	N/A	Yes	N/A	2017-2018
03-1A73U	Water Quality Improvement	Yes	ED	3	50	1.0	14.2	6	B	Lake Tahoe (Sediment and Nutrients)	1	158	234	78.1	78.1	38.942691	-119.977213	Infiltration Basin	13.4	14.2	-	N/A	Yes	N/A	2017-2018
03-1A73U	Water Quality Improvement	Yes	ED	3	50	1.0	1.6	6	B	Lake Tahoe (Sediment and Nutrients)	1	158	234	78.3	78.3	38.944934	-119.974964	Delaware Sand Filter	1.5	1.6	-	N/A	Yes	N/A	2017-2018
03-1A73U	Water Quality Improvement	Yes	ED	3	50	1.0	1.4	6	B	Lake Tahoe (Sediment and Nutrients)	1	158	234	78.9	78.9	38.946194	-119.96427	Delaware Sand Filter	1.3	1.4	-	N/A	Yes	N/A	2017-2018
03-1A73U	Water Quality Improvement	Yes	ED	3	50	1.0	1.1	6	B	Lake Tahoe (Sediment and Nutrients)	1	158	234	79.199	79.199	38.947914	-119.959037	Delaware Sand Filter	1.1	1.1	-	N/A	Yes	N/A	2017-2018
04-0A185	Interchange Reconstruction	No	SON	4	101	11.2	0.4	2	B	San Francisco Bay (Mercury)	10	99	170	7.45	7.47	38.27044116	-122.666808	Biofiltration Swale	0.1	0.4	-	N/A	Yes	N/A	2017-2018
04-0A185	Interchange Reconstruction	No	SON	4	101	11.2	0.8	2	C	San Francisco Bay Urban Creeks (Diazinon and Pesticide Toxicity)	5	213	306	7.603	7.603	38.27189012	-122.669036	Biofiltration Swale	0.2	0.8	-	N/A	Yes	N/A	2017-2018
04-0A185	Interchange Reconstruction	No	SON	4	101	11.2	0.8	2	B	San Francisco Bay (Mercury)	10	99	170	7.603	7.603	38.27189012	-122.669036	Biofiltration Swale	0.2	0.8	-	N/A	Yes	N/A	2017-2018
04-0A185	Interchange Reconstruction	No	SON	4	101	11.2	0.8	2	C	San Francisco Bay (PCBs)	10	99	256	7.603	7.603	38.27189012	-122.669036	Biofiltration Swale	0.2	0.8	-	N/A	Yes	N/A	2017-2018
04-0A185	Interchange Reconstruction	No	SON	4	101	11.2	1.7	2	B	San Francisco Bay (Mercury)	10	99	170	7.6	7.68	38.27301055	-122.66864	Biofiltration Swale	0.3	1.7	-	N/A	Yes	N/A	2017-2018
04-0A185	Interchange Reconstruction	No	SON	4	101	11.2	10.8	2	B	San Francisco Bay (Mercury)	10	99	170	7.58	7.65	38.27088791	-122.671104	Biofiltration Swale	2.0	10.8	-	N/A	Yes	N/A	2017-2018
04-1G430	Replace Bridge	No	NAP	4	128	0.2	0.3	2	B	Napa River (Sediment)	3	48	107	7.485	7.485	38.48701596	-122.404563	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
04-1G430	Replace Bridge	No	NAP	4	128	0.2	0.3	2	B	San Francisco Bay (Mercury)	8	77	138	7.485	7.485	38.48701596	-122.404563	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
04-1G430	Replace Bridge	No	NAP	4	128	0.2	0.3	2	C	San Francisco Bay (PCBs)	8	174	251	7.485	7.485	38.48701596	-122.404563	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	0.4	2	B	San Francisco Bay (Mercury)	10	99	170	2.127	2.127	38.20940146	-122.600432	Biofiltration Swale	0.1	0.4	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	1.9	2	B	San Francisco Bay (Mercury)	10	99	170	2.254	2.254	38.21120598	-122.600656	Biofiltration Swale	0.2	1.9	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	1.3	2	B	San Francisco Bay (Mercury)	10	99	170	2.544	2.544	38.21802763	-122.604007	Biofiltration Swale	0.2	1.3	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	1.7	2	B	San Francisco Bay (Mercury)	10	99	170	2.56	2.56	38.21837985	-122.604261	Biofiltration Swale	0.2	1.7	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	2.3	2	B	San Francisco Bay (Mercury)	10	99	170	2.623	2.623	38.21965769	-122.605334	Biofiltration Swale	0.3	2.3	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	2.1	2	B	San Francisco Bay (Mercury)	10	99	170	2.638	2.638	38.21921905	-122.60626	Biofiltration Swale	0.3	2.1	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	2.1	2	B	San Francisco Bay (Mercury)	10	99	170	2.641	2.641	38.21985776	-122.605798	Biofiltration Swale	0.3	2.1	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	1.7	2	B	San Francisco Bay (Mercury)	10	99	170	4.21	4.21	38.24089495	-122.621554	Biofiltration Swale	0.2	1.7	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	MRN	4	101	12.3	0.3	2	B	San Francisco Bay (Mercury)	10	99	170	26.962	26.962	38.177031	-122.595134	Biofiltration Swale	0.0	0.3	-	N/A	Yes	N/A	2017-2018
04-2640N	Highway Reconstruction	No	SON	4	101	12.3	0.3	2	B	San Francisco Bay (Mercury)	10	99	170	2.465	2.465	38.21597952	-122.603396	Biofiltration Strip	0.0	0.3	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.5	2	B	San Francisco Bay (Mercury)	10	99	170	19.1	19.11	37.7012205	-121.893212	Biofiltration Swale	0.2	0.5	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.7	2	B	San Francisco Bay (Mercury)	13	100	172	18.929	18.893	37.70120127	-121.890014	Biofiltration Swale	0.3	0.7	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.7	2	B	San Francisco Bay (Mercury)	13	100	172	18.87	18.864	37.70101884	-121.888788	Biofiltration Swale	0.3	0.7	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	1.1	2	B	San Francisco Bay (Mercury)	13	100	172	18.87	18.864	37.7011797	-121.88708	Biofiltration Swale	0.5	1.1	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	2.1	2	B	San Francisco Bay (Mercury)	13	100	172	18.667	18.604	37.70107825	-121.885116	Biofiltration Swale	0.9	2.1	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.4	2	C	San Francisco Bay Urban Creeks (Diazinon and Pesticide Toxicity)	8	211	304	18.023	18.018	37.70094298	-121.873365	Biofiltration Swale	0.2	0.4	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.4	2	B	San Francisco Bay (Mercury)	13	100	171	18.023	18.018	37.70094298	-121.873365	Biofiltration Swale	0.2	0.4	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.5	2	B	San Francisco Bay (Mercury)	13	100	172	17.987	17.946	37.70064529	-121.87257	Biofiltration Swale	0.2	0.5	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.3	2	B	San Francisco Bay (Mercury)	13	100	172	16.841	16.832	37.7009182	-121.851264	Biofiltration Swale	0.1	0.3	-	N/A	Yes	N/A	2017-2018
04-2908V	Roadway Widening and Rehabilitation	No	ALA	4	580	7.5	0.6	2	B	San Francisco Bay (Mercury)	13	100	172	16.824	16.797	37.70099608	-121.851009	Biofiltration Swale	0.3						

Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
07-21594	Roadway Widening	No	LA	7	5	18.9	11.4	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	6	108	183	4.62	4.62	33.913808	-118.076403	Detention Basin	1.5	11.4	-	N/A	Yes	N/A	2017-2018
07-21594	Roadway Widening	No	LA	7	5	18.9	5.6	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	6	108	183	4.9	4.9	33.916948	-118.079698	Detention Basin	0.7	5.6	-	N/A	Yes	N/A	2017-2018
07-22410	Construct new interchange and soundwalls	No	LA	7	60	2.5	1.1	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	22.602	22.602	33.999349	-117.85139	Biofiltration Swale	0.9	1.1	-	N/A	Yes	N/A	2017-2018
07-22410	Construct new interchange and soundwalls	No	LA	7	60	2.5	1.4	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	22.702	22.702	33.999628	-117.849681	Biofiltration Swale	1.2	1.4	-	N/A	Yes	N/A	2017-2018
07-22410	Construct new interchange and soundwalls	No	LA	7	60	2.5	1.6	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	22.798	22.798	33.999927	-117.847975	Biofiltration Swale	1.3	1.6	-	N/A	Yes	N/A	2017-2018
07-22410	Construct new interchange and soundwalls	No	LA	7	60	2.5	5.6	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	22.099	22.099	33.997977	-117.859938	Biofiltration Swale	4.7	5.6	-	N/A	Yes	N/A	2017-2018
07-24080	Modification of Golden Valley Road Interchange	No	LA	7	14	0.7	0.3	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	29.62	29.62	34.391985	-118.473506	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-25510	Ramp Improvement	No	LA	7	60	1.3	3.5	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	24.23	24.23	34.007576	-117.825967	Biofiltration Swale	2.2	3.5	-	N/A	Yes	N/A	2017-2018
07-2769U	Source Control	No	LA	7	170	1.0	1.1	4	C	Los Angeles River and Tributaries (Metals)	11	28	64	19.778	19.778	34.22218972	-118.410701	Biofiltration Swale	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-2769U	Source Control	No	LA	7	170	1.0	1.1	4	E	Los Angeles River Watershed (Bacteria)	11	28	63	19.778	19.778	34.22218972	-118.410701	Biofiltration Swale	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-27911	INTERCHANGE IMPROVEMENT	No	LA	7	60	7.2	1.9	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	24.546	24.546	34.01192306	-117.822937	Austin Sand Filter	1.0	1.9	-	N/A	Yes	N/A	2017-2018
07-27911	INTERCHANGE IMPROVEMENT	No	LA	7	60	7.2	1.0	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	25.736	25.736	34.02495098	-117.80943	Biofiltration Swale	0.5	1.0	-	N/A	Yes	N/A	2017-2018
07-27911	INTERCHANGE IMPROVEMENT	No	LA	7	60	7.2	4.0	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	24.832	24.832	34.01464309	-117.819401	Biofiltration Swale	2.1	4.0	-	N/A	Yes	N/A	2017-2018
07-27911	INTERCHANGE IMPROVEMENT	No	LA	7	60	7.2	6.5	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	24.961	24.961	34.01635834	-117.818346	Biofiltration Swale	3.4	6.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	6.2	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	0.201	0.201	34.15338	-118.818039	Biofiltration Swale	6.1	6.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	6.2	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	0.201	0.201	34.15338	-118.818039	Biofiltration Swale	6.1	6.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	6.2	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	0.201	0.201	34.15338	-118.818039	Biofiltration Swale	6.1	6.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	6.2	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	0.201	0.201	34.15338	-118.818039	Biofiltration Swale	6.1	6.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	7.7	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	1	1	34.160303	-118.82914	Biofiltration Swale	7.4	7.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	7.7	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	1	1	34.160303	-118.82914	Biofiltration Swale	7.4	7.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	7.7	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	1	1	34.160303	-118.82914	Biofiltration Swale	7.4	7.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	7.7	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	382	1	1	34.160303	-118.82914	Biofiltration Swale	7.4	7.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	3.6	4	D	Malibu Creek Watershed (Trash)	2	16	36	0.6	0.6	34.156693	-118.823713	Austin Sand Filter	3.5	3.6	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	3.6	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	0.6	0.6	34.156693	-118.823713	Austin Sand Filter	3.5	3.6	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	3.6	4	D	Santa Monica Bay Nearshore and Offshore (Debris (trash and plastic pellets))	2	56	117	0.6	0.6	34.156693	-118.823713	Austin Sand Filter	3.5	3.6	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	VEN	7	101	2.5	3.6	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	0.6	0.6	34.156693	-118.823713	Austin Sand Filter	3.5	3.6	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.9	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	29.794	29.794	34.150498	-118.677313	Biofiltration Strip	3.8	3.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.9	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	29.794	29.794	34.150498	-118.677313	Biofiltration Strip	3.8	3.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.9	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	29.794	29.794	34.150498	-118.677313	Biofiltration Strip	3.8	3.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.9	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	29.794	29.794	34.150498	-118.677313	Biofiltration Strip	3.8	3.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.5	4	D	Malibu Creek Watershed (Trash)	5	3	6	30.101	30.101	34.151144	-118.682466	Austin Sand Filter	3.4	3.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.5	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	30.101	30.101	34.151144	-118.682466	Austin Sand Filter	3.4	3.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.5	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	30.101	30.101	34.151144	-118.682466	Austin Sand Filter	3.4	3.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	30.903	30.903	34.150233	-118.695891	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	30.903	30.903	34.150233	-118.695891	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	30.903	30.903	34.150233	-118.695891	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	30.903	30.903	34.150233	-118.695891	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.009	31.009	34.14909545	-118.69728	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.009	31.009	34.14909545	-118.69728	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.009	31.009	34.14909545	-118.69728	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.009	31.										



Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach					BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #	BMP Locations				BMP Types								
													Beg PM	End PM	Lat. (N)	Long. (W)									
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.3	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	30.996	30.996	34.149133	-118.697206	Biofiltration Strip	2.2	2.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.3	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	30.996	30.996	34.149133	-118.697206	Biofiltration Strip	2.2	2.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.7	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	30.801	30.801	34.150916	-118.694326	Biofiltration Swale	2.6	2.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.7	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	30.801	30.801	34.150916	-118.694326	Biofiltration Swale	2.6	2.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.7	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	30.801	30.801	34.150916	-118.694326	Biofiltration Swale	2.6	2.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.7	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	30.801	30.801	34.150916	-118.694326	Biofiltration Swale	2.6	2.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.397	31.397	34.144734	-118.702092	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.397	31.397	34.144734	-118.702092	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.397	31.397	34.144734	-118.702092	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.397	31.397	34.144734	-118.702092	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	30.996	30.996	34.149133	-118.697206	Biofiltration Strip	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	30.996	30.996	34.149133	-118.697206	Biofiltration Strip	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	30.996	30.996	34.149133	-118.697206	Biofiltration Strip	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.3	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	30.996	30.996	34.149133	-118.697206	Biofiltration Strip	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	E	Malibu Creek Watershed (Bacteria)	4	8	18	33.801	33.801	34.143188	-118.739968	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	33.801	33.801	34.143188	-118.739968	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	33.801	33.801	34.143188	-118.739968	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	8	9	19	33.801	33.801	34.143188	-118.739968	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.3	31.3	34.14561718	-118.700744	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.3	31.3	34.14561718	-118.700744	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.3	31.3	34.14561718	-118.700744	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.3	31.3	34.14561718	-118.700744	Biofiltration Strip	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.499	31.499	34.143919	-118.703553	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.499	31.499	34.143919	-118.703553	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.499	31.499	34.143919	-118.703553	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.499	31.499	34.143919	-118.703553	Biofiltration Swale	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.4	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.301	31.301	34.145612	-118.700742	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.1	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	30.996	30.996	34.149133	-118.697206	Biofiltration Swale	2.0	2.1	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.1	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	30.996	30.996	34.149133	-118.697206	Biofiltration Swale	2.0	2.1	-	N/A	Yes	N/A	

Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.6	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	32.102	32.102	34.13986347	-118.712648	Biofiltration Swale	0.6	0.6	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	32.103	32.103	34.13987194	-118.712619	Biofiltration Swale	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	32.103	32.103	34.13987194	-118.712619	Biofiltration Swale	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	32.103	32.103	34.13987194	-118.712619	Biofiltration Swale	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.5	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	32.103	32.103	34.13987194	-118.712619	Biofiltration Swale	0.5	0.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	32.802	32.802	34.13813	-118.72462	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	32.802	32.802	34.13813	-118.72462	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	32.802	32.802	34.13813	-118.72462	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	32.802	32.802	34.13813	-118.72462	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	D	Malibu Creek Watershed (Trash)	5	3	6	33.4	33.4	34.141289	-118.733786	Austin Sand Filter	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	33.4	33.4	34.141289	-118.733786	Austin Sand Filter	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	33.4	33.4	34.141289	-118.733786	Austin Sand Filter	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.4	4	E	Malibu Creek Watershed (Bacteria)	4	8	18	33.506	33.506	34.142197	-118.735158	Biofiltration Swale	2.3	2.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.4	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	33.506	33.506	34.142197	-118.735158	Biofiltration Swale	2.3	2.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.4	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	33.506	33.506	34.142197	-118.735158	Biofiltration Swale	2.3	2.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.4	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	4	8	19	33.506	33.506	34.142197	-118.735158	Biofiltration Swale	2.3	2.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	E	Malibu Creek Watershed (Bacteria)	4	8	18	33.901	33.901	34.143175	-118.741743	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	33.901	33.901	34.143175	-118.741743	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	33.901	33.901	34.143175	-118.741743	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.5	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	4	8	19	33.901	33.901	34.143175	-118.741743	Biofiltration Strip	1.5	1.5	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.0	4	E	Malibu Creek Watershed (Bacteria)	4	8	18	33.802	33.802	34.143188	-118.739985	Biofiltration Swale	1.9	2.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.0	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	33.802	33.802	34.143188	-118.739985	Biofiltration Swale	1.9	2.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.0	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	33.802	33.802	34.143188	-118.739985	Biofiltration Swale	1.9	2.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	2.0	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	4	8	19	33.802	33.802	34.143188	-118.739985	Biofiltration Swale	1.9	2.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	E	Malibu Creek Watershed (Bacteria)	5	3	7	31.104	31.104	34.147915	-118.698362	Biofiltration Strip	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	31.104	31.104	34.147915	-118.698362	Biofiltration Strip	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	31.104	31.104	34.147915	-118.698362	Biofiltration Strip	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.7	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	5	3	8	31.104	31.104	34.147915	-118.698362	Biofiltration Strip	1.6	1.7	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.3	4	E	Malibu Creek Watershed (Bacteria)	4	8	18	33.701	33.701	34.143161	-118.73829	Biofiltration Strip	1.3	1.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.3	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	33.701	33.701	34.143161	-118.73829	Biofiltration Strip	1.3	1.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.3	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	33.701	33.701	34.143161	-118.73829	Biofiltration Strip	1.3	1.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.3	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	4	8	19	33.701	33.701	34.143161	-118.73829	Biofiltration Strip	1.3	1.3	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.4	4	E	Malibu Creek Watershed (Bacteria)	4	8	18	34.201	34.201	34.143655	-118.746909	Biofiltration Strip	1.4	1.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.4	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	34.201	34.201	34.143655	-118.746909	Biofiltration Strip	1.4	1.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.4	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	34.201	34.201	34.143655	-118.746909	Biofiltration Strip	1.4	1.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.4	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	4	8	19	34.201	34.201	34.143655	-118.746909	Biofiltration Strip	1.4	1.4	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.1	4	E	Malibu Creek Watershed (Bacteria)	3	1	2	35.3	35.3	34.146632	-118.76578	Biofiltration Strip	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7																					

Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach					BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations				BMP Types							
														Beg PM	End PM	Lat. (N)	Long. (W)								
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.0	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	36.3	36.3	34.146761	-118.783203	Biofiltration Swale	2.9	3.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.0	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	36.3	36.3	34.146761	-118.783203	Biofiltration Swale	2.9	3.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.0	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	3	1	3	36.3	36.3	34.146761	-118.783203	Biofiltration Swale	2.9	3.0	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.8	4	E	Malibu Creek Watershed (Bacteria)	3	1	2	36.8	36.8	34.146163	-118.791802	Biofiltration Strip	3.7	3.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.8	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	36.8	36.8	34.146163	-118.791802	Biofiltration Strip	3.7	3.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.8	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	36.8	36.8	34.146163	-118.791802	Biofiltration Strip	3.7	3.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	3.8	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	3	1	3	36.8	36.8	34.146163	-118.791802	Biofiltration Strip	3.7	3.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	23	2.5	1.2	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	37.499	37.499	34.148886	-118.803503	Biofiltration Strip	1.2	1.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	23	2.5	1.2	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	37.499	37.499	34.148886	-118.803503	Biofiltration Strip	1.2	1.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	23	2.5	1.2	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	37.499	37.499	34.148886	-118.803503	Biofiltration Strip	1.2	1.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	23	2.5	1.2	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	37.499	37.499	34.148886	-118.803503	Biofiltration Strip	1.2	1.2	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	37.499	37.499	34.148886	-118.803503	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	37.499	37.499	34.148886	-118.803503	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	37.499	37.499	34.148886	-118.803503	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.8	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	37.499	37.499	34.148886	-118.803503	Biofiltration Swale	0.8	0.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	37.602	37.602	34.149395	-118.805137	Biofiltration Strip	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	37.602	37.602	34.149395	-118.805137	Biofiltration Strip	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	37.602	37.602	34.149395	-118.805137	Biofiltration Strip	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.8	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	37.602	37.602	34.149395	-118.805137	Biofiltration Strip	1.7	1.8	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.1	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	37.702	37.702	34.14989	-118.806762	Biofiltration Swale	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.1	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	37.702	37.702	34.14989	-118.806762	Biofiltration Swale	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.1	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	37.702	37.702	34.14989	-118.806762	Biofiltration Swale	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.1	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	37.702	37.702	34.14989	-118.806762	Biofiltration Swale	1.1	1.1	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.9	4	E	Malibu Creek Watershed (Bacteria)	2	16	37	38.187	38.187	34.152307	-118.814552	Biofiltration Swale	0.9	0.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.9	4	E	Santa Monica Bay Beaches (Bacteria)	3	181	264	38.187	38.187	34.152307	-118.814552	Biofiltration Swale	0.9	0.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.9	4	C	Santa Monica Bay (DDTs and PCBs)	3	181	263	38.187	38.187	34.152307	-118.814552	Biofiltration Swale	0.9	0.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	0.9	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	38.187	38.187	34.152307	-118.814552	Biofiltration Swale	0.9	0.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.9	4	D	Malibu Creek Watershed (Trash)	2	16	36	38.005	38.005	34.151391	-118.811632	Austin Sand Filter	1.8	1.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.9	4	D	Santa Monica Bay Nearshore and Offshore (Debris (trash and plastic pellets))	1	58	119	38.005	38.005	34.151391	-118.811632	Austin Sand Filter	1.8	1.9	-	N/A	Yes	N/A	2017-2018
07-28150	Construct BMPs	Yes	LA	7	101	2.5	1.9	4	B	Malibu Creek and Lagoon (Sedimentation and Nutrients to address Benthic Community Impairments)	2	16	38	38.005	38.005	34.151391	-118.811632	Austin Sand Filter	1.8	1.9	-	N/A	Yes	N/A	2017-2018
07-28690	Roadway Rehabilitation and Restoration	No	LA	7	60	0.0	1.2	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	20.35	20.35	33.994162	-117.890002	Detention Basin	1.2	1.2	-	N/A	Yes	N/A	2017-2018
07-28690	Roadway Rehabilitation and Restoration	No	LA	7	60	0.0	1.3	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	20.48	20.48	33.994145	-117.887753	Detention Basin	1.3	1.3	-	N/A	Yes	N/A	2017-2018
07-28730	Source Control	No	LA	7	210	0.0	0.3	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	3	90	156	41.69	41.69	34.12054	-117.871019	Biofiltration Swale	0.3	0.3	-	N/A	Yes	N/A	2017-2018
07-28730	Source Control	No	LA	7	210	0.0	0.4	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	3	90	156	41.8	41.8	34.120171	-117.869174	Biofiltration Swale	0.4	0.4	-	N/A	Yes	N/A	2017-2018
07-29510	ROADSIDE SAFETY IMPROVEMENT	No	LA	7	5	0.2	1.0	4	C	Los Angeles River and Tributaries (Metals)	11	28	64	40.05	40.05	34.274612	-118.450668	Biofiltration Swale	1.0	1.0	6/21/2013	N/A	Yes	N/A	2017-2018
07-29510	ROADSIDE SAFETY IMPROVEMENT	No	LA	7	5	0.2	1.0	4	E	Los Angeles River Watershed (Bacteria)	11	28	63	40.05	40.05	34.274612	-118.450668	Biofiltration Swale	1.0	1.0	6/21/2013	N/A	Yes	N/A	2017-2018
07-29540	Roadside Safety Improvement	No	VEN	7	33	0.5	0.5	4	B	Ventura River and its Tributaries (Algae, Eutrophic Conditions, and Nutrients)	1	2	5	0.088	0.088	34.280651	-119.305834	Biofiltration Swale	0.5	0.5	4/15/2013	N/A	Yes	N/A	2017-2018
07-29540	Roadside Safety Improvement	No	VEN	7	101	0.5	0.9	4	B	Ventura River and its Tributaries (Algae, Eutrophic Conditions, and Nutrients)	1	2	5	30.82	30.82	34.279013	-119.305975	Biofiltration Swale	0.9	0.9	4/15/2013	N/A	Yes	N/A	2017-2018
07-29610	ROADSIDE SAFETY IMPROVEMENTS	No	LA	7	405	0.2	3.3	4	C	Los Angeles River and Tributaries (Metals)	1	19	45	6.649	6.649	33.820252	-118.192944	Biofiltration Swale	3.3	3.3	4/25/2013	N/A	Yes	N/A	2017-2018
07-29610	ROADSIDE SAFETY IMPROVEMENTS	No	LA	7	405	0.2	3.3	4	E	Los Angeles River Watershed (Bacteria)	1	19	44	6.649	6.649	33.820252	-118.192944	Biofiltration Swale	3.3	3.3	4/25/2013	N/A	Yes	N/A	2017-2018
07-29630	Roadside Safety Improvements	No	LA	7	405	0.2	1.8	4	C and G	Ballona Creek (Metals (Ag, Cd, Cu, Pb, Zn) and Selenium)	2	13	32	25.852	25.852	33.986542	-118.398169	Biofiltration Swale	1.8	1.8	6/19/2013	N/A	Yes	N/A	2017-2018
07-29630	Roadside Safety Improvements	No	LA	7	405	0.2																			

Caltrans TMDL Compliance Unit Credit Tracking System

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Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
07-29630	Roadside Safety Improvements	No	LA	7	405	0.2	1.8	4	E	Ballona Creek, Ballona Estuary, and Sepulveda Channel (Bacteria)	2	13	31	25.852	25.852	33.986542	-118.398169	Biofiltration Swale	1.8	1.8	6/19/2013	N/A	Yes	N/A	2017-2018
07-29630	Roadside Safety Improvements	No	LA	7	405	0.2	1.8	4	E	Santa Monica Bay Beaches (Bacteria)	6	46	104	25.852	25.852	33.986542	-118.398169	Biofiltration Swale	1.8	1.8	6/19/2013	N/A	Yes	N/A	2017-2018
07-29630	Roadside Safety Improvements	No	LA	7	405	0.2	1.8	4	B	Ballona Creek Wetlands (Sediment and Invasive Exotic Vegetation)	2	13	28	25.852	25.852	33.986542	-118.398169	Biofiltration Swale	1.8	1.8	6/19/2013	N/A	Yes	N/A	2017-2018
07-30310	Grade Separation	No	LA	7	60	0.3	3.0	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	21.479	21.479	33.996256	-117.870523	Biofiltration Swale	3.0	3.0		N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.4	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	26.563	26.563	34.35840795	-118.506102	Infiltration Trench	1.4	1.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.4	4	I	Upper Santa Clara River (Chloride)	2	218	314	26.563	26.563	34.35840795	-118.506102	Infiltration Trench	1.4	1.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.4	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	26.971	26.971	34.36383481	-118.503939	DPP Infiltration Area (DPPIA)	1.4	1.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.4	4	I	Upper Santa Clara River (Chloride)	2	218	314	26.971	26.971	34.36383481	-118.503939	DPP Infiltration Area (DPPIA)	1.4	1.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.9	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	27.002	27.002	34.36423801	-118.503722	DPP Infiltration Area (DPPIA)	0.9	0.9	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.9	4	I	Upper Santa Clara River (Chloride)	2	218	314	27.002	27.002	34.36423801	-118.503722	DPP Infiltration Area (DPPIA)	0.9	0.9	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.6	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	27.07	27.07	34.3653452	-118.503103	Infiltration Trench	0.6	0.6	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.6	4	I	Upper Santa Clara River (Chloride)	2	218	314	27.07	27.07	34.3653452	-118.503103	Infiltration Trench	0.6	0.6	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.4	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	27.09	27.09	34.36568098	-118.501767	Infiltration Trench	1.4	1.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.4	4	I	Upper Santa Clara River (Chloride)	2	218	314	27.09	27.09	34.36568098	-118.501767	Infiltration Trench	1.4	1.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.2	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	27.13	27.13	34.36674724	-118.502202	Infiltration Trench	2.2	2.2	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.2	4	I	Upper Santa Clara River (Chloride)	2	218	314	27.13	27.13	34.36674724	-118.502202	Infiltration Trench	2.2	2.2	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.0	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	27.81	27.81	34.37646745	-118.494233	Infiltration Trench	2.0	2.0	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.0	4	I	Upper Santa Clara River (Chloride)	2	218	314	27.81	27.81	34.37646745	-118.494233	Infiltration Trench	2.0	2.0	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.9	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	28.046	28.046	34.37661854	-118.493658	Infiltration Trench	0.9	0.9	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.9	4	I	Upper Santa Clara River (Chloride)	2	218	314	28.046	28.046	34.37661854	-118.493658	Infiltration Trench	0.9	0.9	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	3.8	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	28.013	28.013	34.37922543	-118.492902	Infiltration Trench	3.8	3.8	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	3.8	4	I	Upper Santa Clara River (Chloride)	2	218	314	28.013	28.013	34.37922543	-118.492902	Infiltration Trench	3.8	3.8	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.6	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	28.402	28.402	34.38070806	-118.489562	DPP Infiltration Area (DPPIA)	2.6	2.6	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.6	4	I	Upper Santa Clara River (Chloride)	2	218	314	28.402	28.402	34.38070806	-118.489562	DPP Infiltration Area (DPPIA)	2.6	2.6	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.4	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	28.581	28.581	34.38268918	-118.487433	DPP Infiltration Area (DPPIA)	0.4	0.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.4	4	I	Upper Santa Clara River (Chloride)	2	218	314	28.581	28.581	34.38268918	-118.487433	DPP Infiltration Area (DPPIA)	0.4	0.4	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.6	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	30.623	30.623	34.40000456	-118.458887	Infiltration Trench	1.6	1.6	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.1	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	30.82	30.82	34.40133896	-118.456012	Infiltration Trench	1.1	1.1	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.9	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	30.888	30.888	34.40181481	-118.455035	Infiltration Trench	0.9	0.9	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	2.0	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	34.049	34.049	34.4273456	-118.413492	DPP Infiltration Area (DPPIA)	2.0	2.0	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	3.1	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	26.145	26.145	34.35256167	-118.504606	Infiltration Trench	3.1	3.1	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	3.1	4	I	Upper Santa Clara River (Chloride)	2	218	314	26.235	26.145	34.35256167	-118.504606	Infiltration Trench	3.1	3.1	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.8	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	4	187	270	26.145	26.235	34.35381259	-118.505032	Infiltration Trench	1.8	1.8	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.8	4	I	Upper Santa Clara River (Chloride)	2	218	314	26.235	26.235	34.35381259	-118.505032	Infiltration Trench	1.8	1.8	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	0.8	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	30.896	30.896	34.40215186	-118.45506	DPP Infiltration Area (DPPIA)	0.8	0.8	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.9	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	32.444	32.444	34.4180705	-118.438477	Infiltration Trench	1.9	1.9	10/29/2014	N/A	Yes	N/A	2017-2018
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.8	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	32.552	32.552	34.41875411	-118.436874	Infiltration Trench	1.8	1.8	10/29/				



Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
07-31230	Storm Water Mitigation	No	LA	7	14	0.6	1.6	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	34.23	34.23	34.42741557	-118.410355	Infiltration Trench	1.6	1.6	10/29/2014	N/A	Yes	N/A	2017-2018
07-3X710	Improvement of On ramp and Off ramp	No	LA	7	60	0.6	2.7	4	C	Los Angeles River and Tributaries (Metals)	7	27	61	7.61	7.61	34.035699	-118.095716	Biofiltration Swale	2.7	2.7	-	N/A	Yes	N/A	2017-2018
07-3X710	Improvement of On ramp and Off ramp	No	LA	7	60	0.6	0.7	4	C	Los Angeles River and Tributaries (Metals)	7	27	61	7.88	7.88	34.036466	-118.091141	Biofiltration Swale	0.7	0.7	-	N/A	Yes	N/A	2017-2018
07-4H900	Off-Ramp Widening	No	LA	7	60	0.2	0.9	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	5	101	173	20.5	20.5	33.994141	-117.887405	Biofiltration Swale	0.9	0.9	-	N/A	Yes	N/A	2017-2018
07-4P530	HIGHWAY PLANTING RESTORATION	No	LA	7	5	0.0	4.8	4	C	Los Angeles River and Tributaries (Metals)	4	21	49	22.659	22.659	34.103615	-118.251415	Biofiltration Swale	4.8	4.8	-	N/A	Yes	N/A	2017-2018
07-4P530	HIGHWAY PLANTING RESTORATION	No	LA	7	5	0.0	4.8	4	E	Los Angeles River Watershed (Bacteria)	4	21	48	22.659	22.659	34.103615	-118.251415	Biofiltration Swale	4.8	4.8	-	N/A	Yes	N/A	2017-2018
07-4U449	Landscape Planting, Irrigation & Hardscape	No	LA	7	14	1.0	1.2	4	E	Santa Clara River Estuary and Reaches 3, 5, 6, 7 (Coliform)	5	236	271	33.54	33.54	34.426041	-118.421817	Biofiltration Swale	1.2	1.2	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	34.38	34.43	33.739098	-117.075645	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.5	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	34.829	34.95	33.740145	-117.068106	DPP Infiltration Area (DPPIA)	0.2	0.5	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.4	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	36.34	36.43	33.743848	-117.043001	DPP Infiltration Area (DPPIA)	0.2	0.4	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	1.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	36.57	36.82	33.743861	-117.039007	DPP Infiltration Area (DPPIA)	0.5	1.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	1.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	37	37.38	33.743863	-117.031529	DPP Infiltration Area (DPPIA)	0.6	1.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	28.701	28.701	33.744228	-117.172694	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	32.481	32.49	33.743384	-117.107348	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	32.509	32.57	33.743384	-117.106828	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	1.4	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.94	31.22	33.743164	-117.134271	DPP Infiltration Area (DPPIA)	0.6	1.4	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.41	33.42	33.738735	-117.092324	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.42	33.44	33.738735	-117.092153	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.2	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	36.45	36.49	33.743857	-117.04109	DPP Infiltration Area (DPPIA)	0.1	0.2	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.5	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	36.54	36.66	33.74386	-117.039529	DPP Infiltration Area (DPPIA)	0.2	0.5	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.6	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	31.56	31.73	33.743203	-117.123276	DPP Infiltration Area (DPPIA)	0.3	0.6	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.5	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	29.03	29.13	33.742936	-117.1674	DPP Infiltration Area (DPPIA)	0.2	0.5	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	32.742	32.8	33.742421	-117.103051	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.7	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.03	30.17	33.743133	-117.15008	DPP Infiltration Area (DPPIA)	0.3	0.7	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.2	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.18	30.22	33.743144	-117.147486	DPP Infiltration Area (DPPIA)	0.1	0.2	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.6	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.24	30.35	33.743146	-117.146448	DPP Infiltration Area (DPPIA)	0.3	0.6	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.6	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.38	30.5	33.743148	-117.144024	DPP Infiltration Area (DPPIA)	0.3	0.6	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	1.5	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.5	30.73	33.743148	-117.141946	DPP Infiltration Area (DPPIA)	0.7	1.5	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.4	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	30.78	30.86	33.743159	-117.137095	DPP Infiltration Area (DPPIA)	0.2	0.4	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	1.1	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	31	31.19	33.743164	-117.133205	DPP Infiltration Area (DPPIA)	0.5	1.1	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.1	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	31.78	31.8	33.743217	-117.119375	DPP Infiltration Area (DPPIA)	0.0	0.1	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.45	33.46	33.738743	-117.09164	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.47	33.54	33.738749	-117.091299	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.2	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.55	33.6	33.738775	-117.089935	DPP Infiltration Area (DPPIA)	0.1	0.2	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.1	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.61	33.63	33.738794	-117.088911	DPP Infiltration Area (DPPIA)	0.0	0.1	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	1.1	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	35.068	35.44	33.741722	-117.064375	DPP Infiltration Area (DPPIA)	0.5	1.1	-	N/A	Yes	N/A	2017-2018

Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.7	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	35.47	35.64	33.743858	-117.058142	DPP Infiltration Area (DPPIA)	0.3	0.7	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.6	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	35.66	35.8	33.743853	-117.054838	DPP Infiltration Area (DPPIA)	0.3	0.6	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.4	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	36.34	36.43	33.743848	-117.043001	DPP Infiltration Area (DPPIA)	0.2	0.4	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	32.802	32.89	33.741997	-117.102114	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	4.6	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	32.888	33.06	33.741358	-117.100721	DPP Infiltration Area (DPPIA)	2.1	4.6	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.1	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.9	33.93	33.738911	-117.083926	DPP Infiltration Area (DPPIA)	0.0	0.1	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.93	33.94	33.738919	-117.083407	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.1	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.94	33.96	33.738921	-117.083234	DPP Infiltration Area (DPPIA)	0.0	0.1	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.0	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	33.96	33.97	33.738926	-117.082888	DPP Infiltration Area (DPPIA)	0.0	0.0	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	34.16	34.22	33.739015	-117.079429	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0N670	Construct Raised Median, TWLTL & Road Widening	No	RIV	8	74	11.7	0.3	8	B	Lake Elsinore and Canyon Lake (Nutrients)	2	172	249	34.31	34.37	33.739086	-117.076841	DPP Infiltration Area (DPPIA)	0.1	0.3	-	N/A	Yes	N/A	2017-2018
08-0R430	Implement sediment source control	No	SBD	8	38	0.0	45.0	8	B	Big Bear Lake (Nutrients for Dry Hydrological Conditions)	1	23	51	50.4	59.4	34.24707653	-116.970949	DPP Infiltration Area (DPPIA)	45.0	45.0	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	2.1	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.554	52.554	33.74980584	-116.267668	Infiltration Basin	1.5	2.1	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	0.8	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.613	52.613	33.74929154	-116.266786	Infiltration Basin	0.5	0.8	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	2.3	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.284	52.284	33.74956545	-116.272374	Infiltration Basin	1.6	2.3	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	6.8	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.265	52.265	33.75080699	-116.272524	Infiltration Basin	4.8	6.8	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	3.8	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.447	52.447	33.74934697	-116.269652	Infiltration Basin	2.7	3.8	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	0.5	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.483	52.483	33.74874848	-116.26918	Infiltration Basin	0.4	0.5	-	N/A	Yes	N/A	2017-2018
08-47520	Reconstruct Existing Interchange	No	RIV	8	10	7.1	7.9	7	E	Coachella Valley Storm Water Channel (Bacterial Indicators)	1	198	288	52.797	52.797	33.74614807	-116.264841	Infiltration Basin	5.6	7.9	-	N/A	Yes	N/A	2017-2018
11-2T218	Construct HOV Lanes Birmingham to Palomar Airport Rd	No	SD	11	5	23.0	2.1	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	13	185	268	41.524	41.524	33.04860775	-117.286427	Biofiltration Swale	0.9	2.1	-	N/A	Yes	N/A	2017-2018
11-2T218	Construct HOV Lanes Birmingham to Palomar Airport Rd	No	SD	11	5	23.0	0.8	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	13	185	268	41.518	41.518	33.04816342	-117.28803	Biofiltration Swale	0.4	0.8	-	N/A	Yes	N/A	2017-2018
11-2T218	Construct HOV Lanes Birmingham to Palomar Airport Rd	No	SD	11	5	23.0	2.8	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	13	185	268	41.568	41.568	33.04889	-117.2881	Biofiltration Swale	1.3	2.8	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	1.5	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.3	22.3	33.77517269	-118.073436	Biofiltration Swale	0.8	1.5	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	1.3	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.53	22.52	33.77440789	-118.086081	Biofiltration Swale	0.7	1.3	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	1.5	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.543	22.543	33.7757033	-118.087036	Biofiltration Swale	0.8	1.5	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	3.2	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.548	22.548	33.77607341	-118.087282	Biofiltration Swale	1.7	3.2	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	22	19.0	1.4	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.804	22.804	33.77489931	-118.089685	Biofiltration Swale	0.7	1.4	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	9.3	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.625	22.625	33.77749916	-118.090425	Biofiltration Swale	5.0	9.3	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	0.3	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	3.258	3.258	33.78021367	-118.089699	Biofiltration Swale	0.2	0.3	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	2.6	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	23.841	23.841	33.78186404	-118.090039	Biofiltration Swale	1.4	2.6	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	405	19.0	3.5	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	23.9	23.9	33.78272507	-118.090387	Biofiltration Swale	1.9	3.5	-	N/A	Yes	N/A	2017-2018

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Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	2.3	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	23.885	23.885	33.78255469	-118.090164	Biofiltration Swale	1.2	2.3	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	0.8	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	0.096	0.096	33.78575346	-118.09132	Biofiltration Swale	0.4	0.8	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	LA	7	605	19.0	3.7	4	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	0.846	0.846	33.79547699	-118.087368	Biofiltration Swale	2.0	3.7	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	3.5	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	22.607	22.607	33.79025212	-118.089155	Biofiltration Swale	1.9	3.5	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	1.7	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	0.27	0.27	33.78760083	-118.089478	Biofiltration Swale	0.9	1.7	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	1.4	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	0.197	0.197	33.78712	-118.0907	Biofiltration Swale	0.8	1.4	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	1.0	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	0.284	0.284	33.78779777	-118.089429	Biofiltration Swale	0.5	1.0	-	N/A	Yes	N/A	2017-2018
12-07163	Freeway Widening and HOV Improvements	No	ORA	12	605	19.0	2.4	8	C and G	San Gabriel River (Metals (Cu, Pb, Zn) and Selenium)	1	83	147	0.465	0.465	33.78479609	-118.089786	Biofiltration Swale	1.3	2.4	-	N/A	Yes	N/A	2017-2018
12-0C890	HOV Improvements	No	ORA	12	5	0.7	0.4	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	4	68	129	31.793	31.793	33.75546189	-117.851764	Biofiltration Swale	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0C890	HOV Improvements	No	ORA	12	5	0.7	0.4	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	3	67	128	31.793	31.793	33.75546189	-117.851764	Biofiltration Swale	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0C890	HOV Improvements	No	ORA	12	5	0.7	0.4	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	4	68	129	32.389	32.389	33.75864544	-117.861653	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0C890	HOV Improvements	No	ORA	12	5	0.7	0.4	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	3	67	128	32.389	32.389	33.75864544	-117.861653	Biofiltration Strip	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	0.8	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.513	16.513	33.59750723	-117.676204	Biofiltration Swale	0.3	0.8	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	2.3	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.456	16.456	33.59755949	-117.675142	Biofiltration Swale	0.9	2.3	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	0.2	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.489	16.489	33.59796523	-117.675462	Biofiltration Swale	0.1	0.2	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	1.5	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.511	16.511	33.59858023	-117.675395	Biofiltration Swale	0.6	1.5	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	0.7	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.608	16.608	33.5982832	-117.677567	Biofiltration Swale	0.3	0.7	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	1.6	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.623	16.623	33.59824745	-117.677878	Biofiltration Swale	0.6	1.6	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	1.3	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	16.949	16.949	33.60052622	-117.68276	Biofiltration Swale	0.5	1.3	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	3.2	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	17.009	17.009	33.60091392	-117.683669	Biofiltration Swale	1.3	3.2	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	5.9	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	15.355	15.355	33.58212344	-117.672406	Biofiltration Swale	2.4	5.9	-	N/A	Yes	N/A	2017-2018

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								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	1.5	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	15.421	15.421	33.58305413	-117.67216	Biofiltration Swale	0.6	1.5	-	N/A	Yes	N/A	2017-2018
12-0K022	Widening Segment 2	No	ORA	12	5	12.8	2.7	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	2	197	287	15.638	15.638	33.58637455	-117.67136	Biofiltration Swale	1.1	2.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	1.0	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	10.73	10.73	33.6828119	-117.747009	DPP Infiltration Area (DPPIA)	1.0	1.0	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	1.0	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	10.73	10.73	33.6828119	-117.747009	DPP Infiltration Area (DPPIA)	1.0	1.0	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	1.0	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	10.73	10.73	33.6828119	-117.747009	DPP Infiltration Area (DPPIA)	1.0	1.0	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.8	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	10.592	10.592	33.68123652	-117.748364	DPP Infiltration Area (DPPIA)	0.8	0.8	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.8	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	10.592	10.592	33.68123652	-117.748364	DPP Infiltration Area (DPPIA)	0.8	0.8	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.8	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	10.592	10.592	33.68123652	-117.748364	DPP Infiltration Area (DPPIA)	0.8	0.8	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	10.912	10.912	33.68500819	-117.745342	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	10.912	10.912	33.68500819	-117.745342	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	10.912	10.912	33.68500819	-117.745342	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	11.062	11.062	33.68677656	-117.743857	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	11.062	11.062	33.68677656	-117.743857	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	11.062	11.062	33.68677656	-117.743857	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	11.213	11.213	33.68859798	-117.74239	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	11.213	11.213	33.68859798	-117.74239	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.7	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	11.213	11.213	33.68859798	-117.74239	DPP Infiltration Area (DPPIA)	0.7	0.7	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	1.2	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	11.381	11.381	33.69057827	-117.740719	DPP Infiltration Area (DPPIA)	1.2	1.2	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	1.2	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	11.381	11.381	33.69057827	-117.740719	DPP Infiltration Area (DPPIA)	1.2	1.2	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	1.2	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	11.381	11.381	33.69057827	-117.740719	DPP Infiltration Area (DPPIA)	1.2	1.2	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.4	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	11.605	11.605	33.6931768	-117.738421	DPP Infiltration Area (DPPIA)	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.4	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	11.605	11.605	33.6931768	-117.738421	DPP Infiltration Area (DPPIA)	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.4	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	11.605	11.605	33.6931768	-117.738421	DPP Infiltration Area (DPPIA)	0.4	0.4	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.2	8	C	San Diego Creek and Newport Bay, including Rhine Channel (Metals (Cu, Pb, and Zn))	3	65	126	11.881	11.881	33.69679477	-117.736133	DPP Infiltration Area (DPPIA)	0.2	0.2	-	N/A	Yes	N/A	2017-2018
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.2	8	C	San Diego Creek and Upper Newport Bay (Cadmium)	2	66	127	11.881	11.881	33.69679477	-117.736133	DPP Infiltration Area (DPPIA)	0.2	0.2	-	N/A	Yes	N/A	2017-2018



Caltrans TMDL Compliance Unit Credit Tracking System

Reporting Period: 2017-2018

Last Updated: September 26, 2018

Project ID	Project Name	Retrofit (installing BMPs for TMDLs only)? (Y/N)	County	District	Route	Net Impervious Area Increase (ac)	BMP Treatment Area (acres)	TMDL		Implementation Reach				BMP(s) Location & Type				Total CUs	Total BMP Treatment Area	Actual Date for PID Phase	Total Post Project Impervious Area within the Project Limit	Hydraulically Inseparable Areas (Yes/No)	Redeveloped Impervious Areas (acres)	Year Credits Claimed	
								RB	Pollutant Category	Total Maximum Daily Load	Reach #	Final State Board Reach Priority #		BMP Locations											BMP Types
														Beg PM	End PM	Lat. (N)	Long. (W)								
12-0N100	Safety Improvements	No	ORA	12	133	0.7	0.2	8	C	San Diego Creek Watershed (Organochlorine Compounds (DDT, Chlordane, PCBs, and Toxaphene))	1	166	242	11.881	11.881	33.69679477	-117.736133	DPP Infiltration Area (DPPIA)	0.2	0.2	-	N/A	Yes	N/A	2017-2018
12-0Q340	Oso Bridge Widening and SR 241 extension	No	ORA	12	241	6.6	25.5	9	E	Project I - Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) (Indicator Bacteria)	3	196	286	14.545	14.545	33.58772247	-117.610695	Austin Sand Filter	18.9	25.5	-	N/A	Yes	N/A	2017-2018
01-0A360	Open-Graded Friction Course	No	HUM	1	299	0.0	2.6	1	B	Redwood Creek (Sediment)	2	132	208	19.3	19.802	40.92564392	-123.840505	Open-Graded Friction Course	2.6	2.6	-	N/A	Yes	N/A	2017-2018
01-0A360	Open-Graded Friction Course	No	HUM	1	299	0.0	0.7	1	B	Redwood Creek (Sediment)	2	132	208	19.3	19.802	40.92564392	-123.840505	Open-Graded Friction Course	0.7	0.7	-	N/A	Yes	N/A	2017-2018
01-0C900	Open-Graded Friction Course	No	MEN	1	101	0.0	0.7	1	B	Upper Main Eel River and Tributaries including Tomki Creek, Outlet Creek, and Lake Pillsbury (Temperature and Sediment)	2	116	192	50.731	51.2	39.46333654	-123.350476	Open-Graded Friction Course	0.7	0.7	-	N/A	Yes	N/A	2017-2018
01-0C900	Open-Graded Friction Course	No	MEN	1	101	0.0	2.6	1	B	Upper Main Eel River and Tributaries including Tomki Creek, Outlet Creek, and Lake Pillsbury (Temperature and Sediment)	2	116	192	50.731	51.2	39.46333654	-123.350476	Open-Graded Friction Course	2.6	2.6	-	N/A	Yes	N/A	2017-2018
01-29610	Open-Graded Friction Course	No	HUM	1	101	0.0	1.6	1	B	Mad River (Sediment and Turbidity)	1	146	222	R89.772	R90.042	40.91748382	-124.093909	Open-Graded Friction Course	1.6	1.6	-	N/A	Yes	N/A	2017-2018
01-29610	Open-Graded Friction Course	No	HUM	1	101	0.0	1.6	1	B	Mad River (Sediment and Turbidity)	1	146	222	R89.772	R90.042	40.91748382	-124.093909	Open-Graded Friction Course	1.6	1.6	-	N/A	Yes	N/A	2017-2018
01-39910	Open-Graded Friction Course	No	HUM	1	36	0.0	9.8	1	B	Van Duzen River and Yager Creek (Sediment)	1	128	204	1.7	4.855	40.54572279	-124.113651	Open-Graded Friction Course	9.8	9.8	-	N/A	Yes	N/A	2017-2018
01-39910	Open-Graded Friction Course	No	HUM	1	36	0.0	4.6	1	B	Van Duzen River and Yager Creek (Sediment)	1	128	204	1.7	4.855	40.54572279	-124.113651	Open-Graded Friction Course	4.6	4.6	-	N/A	Yes	N/A	2017-2018
01-42370	Open-Graded Friction Course	No	HUM	1	299	0.0	0.6	1	B	Redwood Creek (Sediment)	2	132	208	20.11	20.5	40.91712023	-123.831736	Open-Graded Friction Course	0.6	0.6	-	N/A	Yes	N/A	2017-2018
01-42370	Open-Graded Friction Course	No	HUM	1	299	0.0	0.6	1	B	Redwood Creek (Sediment)	2	132	208	20.11	20.5	40.91712023	-123.831736	Open-Graded Friction Course	0.6	0.6	-	N/A	Yes	N/A	2017-2018
01-49940	Open-Graded Friction Course	No	DN	1	101	0.0	3.0	1	B and H	Klamath River in California (Temperature, Dissolved Oxygen, Nutrient, and Microcystin)	1	151	227	R4.424	7.628	41.5202136	-124.032388	Open-Graded Friction Course	3.0	3.0	-	N/A	Yes	N/A	2017-2018
01-49940	Open-Graded Friction Course	No	DN	1	101	0.0	3.0	1	B and H	Klamath River in California (Temperature, Dissolved Oxygen, Nutrient, and Microcystin)	1	151	227	R4.424	7.628	41.5202136	-124.032388	Open-Graded Friction Course	3.0	3.0	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	20.0	2	E	Richardson Bay (Pathogens)	1	214	307	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	20.0	20.0	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	20.0	2	B	San Francisco Bay (Mercury)	11	81	144	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	20.0	20.0	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	20.0	2	C	San Francisco Bay (PCBs)	11	81	143	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	20.0	20.0	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	20.0	2	C	San Francisco Bay Urban Creeks (Diazinon and Pesticide Toxicity)	7	208	301	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	20.0	20.0	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	22.5	2	E	Richardson Bay (Pathogens)	1	214	307	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	22.5	22.5	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	22.5	2	B	San Francisco Bay (Mercury)	11	81	144	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	22.5	22.5	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	22.5	2	C	San Francisco Bay (PCBs)	11	81	143	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	22.5	22.5	-	N/A	Yes	N/A	2017-2018
04-0C740	Open-Graded Friction Course	No	MRN	4	101	0.0	22.5	2	C	San Francisco Bay Urban Creeks (Diazinon and Pesticide Toxicity)	7	208	301	3.304	8.468	37.87095485	-122.507301	Open-Graded Friction Course	22.5	22.5	-	N/A	Yes	N/A	2017-2018
04-1A682	Open-Graded Friction Course	No	ALA	4	880	0.0	32.4	2	B	San Francisco Bay (Mercury)	3	192	281	28.508	29.9	37.77395844	-122.230546	Open-Graded Friction Course	32.4	32.4	-	N/A	Yes	N/A	2017-2018
04-1A682	Open-Graded Friction Course	No	ALA	4	880	0.0	32.4	2	C	San Francisco Bay (PCBs)	3	194	283	28.508	29.9	37.77395844	-122.230546	Open-Graded Friction Course	32.4	32.4	-	N/A	Yes	N/A	2017-2018
04-1A682	Open-Graded Friction Course	No	ALA	4	880	0.0	32.4	2	B	San Francisco Bay (Mercury)	3	192	281	28.508	29.9	37.77395844	-122.230546	Open-Graded Friction Course	32.4	32.4	-	N/A	Yes	N/A	2017-2018
04-1A682	Open-Graded Friction Course	No	ALA	4	880	0.0	32.4	2	C	San Francisco Bay (PCBs)	3	194	283	28.508	29.9	37.77395844	-122.230546	Open-Graded Friction Course	32.4	32.4	-	N/A	Yes	N/A	2017-2018
05-0L701	Open-Graded Friction Course	No	SCR	5	17	0.0	3.6	3	B	San Lorenzo River (includes Carbonera, Lompico, and Shingle Mill Creeks) (Sediment)	2	154	230	6.85	7.461	37.07450705	-121.988569	Open-Graded Friction Course	3.6	3.6	-	N/A	Yes	N/A	2017-2018
05-0L701	Open-Graded Friction Course	No	SCR	5	17	0.0	4.7	3	B	San Lorenzo River (includes Carbonera, Lompico, and Shingle Mill Creeks) (Sediment)	3	159	235	9.135	9.95	37.10078196	-121.977291	Open-Graded Friction Course	4.7	4.7	-	N/A	Yes	N/A	2017-2018
05-1C180	Open-Graded Friction Course	No	SCR	5	17	0.0	2.0	3	B	San Lorenzo River (includes Carbonera, Lompico, and Shingle Mill Creeks) (Sediment)	3	159	235	9.4	9.748	37.10399371	-121.975784	Open-Graded Friction Course	2.0	2.0	-	N/A	Yes	N/A	2017-2018