ATTACHMENT K

SUMMARY OF TMDL-RELATED ACTIVITIES

[This page has been left blank intentionally]

Summary of TMDL-Related Activities

The table below is a summary of TMDL efforts by the Los Angeles County Flood Control District (LACFCD), generally between July 2014 and June 2015, pursuant to the 2012 MS4 Permit (Appendix E, Part XIX, Sections A-G, or pages E-45 to E-62). In addition to those TMDL-specific actions, as a regional entity, the LACFCD also continued to pursue, when appropriate, voluntary measures that have broad, regional benefits affecting multiple TMDLs across watersheds.

For example, the Watershed Management Modeling System (www.LACountyWMMS.com) developed by the LACFCD and made available in the public domain in 2013, was the basis for the Reasonable Assurance Analysis in 15 of 19 WMP and EWMP plans. The WMMS is an important advancement in stormwater management, not only in Los Angeles County but potentially worldwide. The LACFCD continues to provide support for the modeling tool and routinely responds to requests for information and interviews.

Also, the LACFCD is a key partner in the Multi-Agency Collaborative (MAC), a unique collaboration to explore non-traditional partnerships among water management agencies. In collaboration with the Los Angeles Department of Water and Power, City of Los Angeles Bureau of Sanitation, Tetra Tech, Inc., and TreePeople, the LACFCD is interested in examining the water quality and water supply benefits of distributed green infrastructure systems at the residential parcel-scale. Phase 1 was completed in February 2015, including recommendations to guide future partnerships in addressing the region's water challenges and achieving sustainable solutions. Phase 2 will develop and implement a demonstration program of up to ten properties in the region to help supplement the partners' current understanding of the effectiveness of distributed best management practices on water supply, water quality, and flood attenuation, as well as to further promote non-traditional inter-agency collaboration.

Details of additional LACFCD TMDL-related activities are summarized in the table below.

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
Santa Clara River Watershed Management Area TMDLs		
Santa Clara River Nitrogen Compounds TMDL	N/A	• Conducted monitoring at the Santa Clara mass emission station, which includes constituents identified in these TMDLs. • Partnered with the County of Ventura and the U.S. Army Corps of Engineers to conduct a Santa Clara River feasibility study. • Participated in the Upper Santa Clara River Agencies Group to develop a CIMP and an EWMP. The revised CIMP was submitted to the Regional Board
Upper Santa Clara River Chloride TMDL	N/A	
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	N/A	

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
		in April 2015, which was conditionally approved in June 2015. • Submitted the draft EWMP to the Regional Board in June 2015.
Santa Monica Bay Watershed Management Area TMDLs		
Santa Monica Bay Beaches Bacteria TMDL	• Partnered with other Santa Monica Bay Beaches Permittees to conduct monitoring for this TMDL per the existing Coordinated Monitoring Plan (CMP), which has been on-going since 2004. • The City of Los Angeles submitted the monitoring results for the reporting period of June 1, 2014, through May 30, 2015, on behalf of the Permittees including the LACFCD on December 15, 2015. The report is also included in Appendix D of Attachment J.	• Continued to operate and maintain 21 Low Flow Diversions (LFDs) along Santa Monica Bay. The LFDs are being upgraded to increase reliability. (See Attachment L) • Completed construction of an inflatable rubber dam in Santa Monica Canyon Channel to divert urban runoff to the Hyperion Sewage Treatment Plant in April 2015. The new system is capable of treating approximately 12 cubic feet per second, or 7.75 million gallons per day. • Participated in various Watershed Groups to develop CIMPs and EWMPs. • Submitted the revised CIMPs to the Regional Board in May, June, and July 2015. Three of the six CIMPs were conditionally approved in July and August 2015. • Submitted the draft EWMPs to Regional Board in June 2015.
Santa Monica Bay TMDL for DDTs and PCBs	N/A	
Santa Monica Bay Nearshore and Offshore Debris TMDL	• The LACFCD's Trash Monitoring Reporting Plan (submitted in December 2012) and the Plastic Pellets Monitoring Reporting Plan (submitted in September 2013) were approved in July 2015. The Annual Monitoring Reports will be submitted as part of next year's annual report.	
Malibu Creek and Lagoon Bacteria TMDL	• Partnered with other Malibu Creek Watershed Permittees to conduct monitoring for this TMDL per the existing CMP, which has been ongoing since 2008.	• Conducted monitoring at the Malibu Creek mass emission station, which includes constituents identified in these TMDLs.

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
	• The City of Agoura Hills submits the CMP results monthly to the Regional Board, on behalf of the Permittees including the LACFCD.	• Cooperated with the City of Agoura Hills for the city's efforts to naturalize a 425-foot long concrete segment of Medea Creek owned by the LACFCD. • Participated in the Malibu Creek Watershed Group and the North Santa Monica Bay Watershed (J1/J4) Group to develop CIMPs and EWMPs. • Submitted the draft CIMPs to the Regional Board in June 2014. The North Santa Monica Bay Watershed CIMP was conditionally approved in August 2015. The Malibu Creek Watershed revised CIMP is pending approval. • Submitted the draft EWMPs to the Regional Board in June 2015.
Malibu Creek Nutrient TMDL	N/A	
Malibu Creek Watershed Trash TMDL	N/A	
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	• In May 2015, a Time Schedule Order (TSO) was approved for the Permittees, including the LACFCD. The LACFCD is collaborating with the other agencies on efforts required by the TSO.	• Conducted monitoring at the Ballona Creek mass emission station, which includes constituents identified in these TMDLs. • Collaborated with Permittees to develop plans for three new flow diversions in the Sepulveda, Ballona, and Centinela Channels. • Participated in the Ballona Creek Watershed Group to develop a CIMP and EWMP. • Submitted the revised CIMP to the Regional Board in July 2015, which was conditionally approved in August 2015. • Submitted the draft EWMP to the Regional Board in June 2015.
Ballona Creek Estuary Toxic Pollutants TMDL	N/A	
Ballona Creek Metals TMDL	N/A	
Ballona Creek Trash TMDL	• Continued to operate a trash boom near the mouth of Ballona Creek at Lincoln Blvd.	
Ballona Wetlands TMDL	• Partnered with the California Department of Fish and Wildlife and the California Coastal Conservancy on the Ballona Wetlands Restoration efforts.	
Marina del Rey Harbor Toxic Pollutants TMDL	• The LACFCD, in partnership with other Marina del Rey Watershed permittees,	• Continued to operate three LFDs in the Marina del Rey watershed.

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
	initiated a sediment stressor identification study. The study workplan is submitted to the Regional Board in August 2015 and was conditionally approved in October 2015.	• Participated in the Marina del Rey EWMP Group. • Submitted the draft CIMP to the Regional Board in June 2014, which is pending approval. • Submitted the draft EWMP to the Regional Board in June 2015. • Initiated the construction of the Oxford Basin project to improve water quality in Marina del Rey (See Attachment L).
Marina del Rey Mothers' Beach and Back Basins Bacteria TMDL	N/A	
Dominguez Channel and Greater Harbors Waters WMA TMDLs		
Machado Lake Trash TMDL	• Resumed the operation of a trash boom in Wilmington Drain in June 2015, following the completion of the Wilmington Drain Multi-use project. • Coordinated with the City of Los Angeles to install a trash net system in Wilmington Drain north of Lomita Blvd.	• Contributed to the Wilmington Drain multi-use project, which will help improve water quality both in Wilmington Drain and Machado Lake. • Participated in the Dominguez Channel Watershed Management Area, the Beach Cities, and the Peninsula Cities Groups to develop CIMPs and EWMPs to address these TMDLs. • Submitted the Dominguez Channel WMA revised CIMP to the Regional Board in April 2015, which was conditionally approved in September 2015. • Submitted the revised Beach Cities CIMP in July 2015, which was conditionally approved in August 2015. • Submitted the revised Peninsula CIMP in May 2015, which is pending approval. • Submitted the draft EWMPs to the Regional Board in June 2015. • Permittees initiated non-stormwater outfall screening in September 2014.
Machado Lake Nutrient TMDL	• In October 2014, along with the City of Torrance, commenced a nutrient monitoring program to determine whether the Walteria Flood Control Basin contributes or removes pollutant loading from the stormwater and dry weather flow it receives. The first year of monitoring data was collected from October 2014 to October 2015; a monitoring report is being prepared. • Monitoring of Walteria Basin is expected to continue into a second year.	

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
Machado Lake Pesticides and PCBs TMDL	N/A	
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	• Partnered with Greater Harbor Waters Regional Monitoring Coalition Group to conduct monitoring for this TMDL. The annual monitoring report was submitted by the City of Long Beach on behalf of all participating agencies including the LACFCD before December 15, 2015. • Participated in the preparation of a Contaminated Sediment Management Plan (CSMP) for the Dominguez Channel Estuary. The draft CSMP was submitted to the Regional Board on March 20, 2014. In July 2015, the group received comments from the Regional Board and is currently working to address those comments.	• Participated in the planning for a storm water capture and use project at Chester Washington Golf Course and the feasibility of a treatment wetland at the South Gate Coast Botanic Gardens. • Conducted monitoring at the Dominguez Channel mass emission station, which includes constituents identified in these TMDLs. • Participated in the Dominguez Channel Watershed Management Area, Beach Cities, and the Peninsula Cities Groups to develop CIMPs and EWMPs to address these TMDLs. • Submitted the revised Dominguez Channel Watershed CIMP to the Regional Board in April 2015, which was conditionally approved in September 2015. The Peninsula EWMP Agencies revised CIMP was submitted in May 2015, and is pending approval. • Submitted the draft EWMPs to the Regional Board in June 2015. • Permittees initiated non-stormwater outfall screening in September 2014.
Los Angeles Harbor Bacteria TMDL	• The City of Los Angeles Bureau of Sanitation conducts monitoring and submits monthly data reports to the Regional Board on behalf of the participating Permittees, including the LACFCD.	
Los Angeles River WMA TMDLs		
Los Angeles River Trash TMDL	• Continued to operate a trash boom near the mouth of the Los Angeles River at the Ocean Blvd. • Worked with permittees to issue access permits for installation of trash capture devices.	

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
Los Angeles River Nitrogen Compounds and Related Effects TMDL	N/A	• Partnered with the City of Los Angeles on Rory Shaw Wetlands multi-use project in the Sun Valley Watershed (See Attachment L). • Partnered with the U.S. Army Corps of Engineers to conduct ecosystem restoration feasibility studies for Arroyo Seco and Compton Creek. • Participated in the planning of stormwater capture projects on DWP easement near Bandini Street in the City of Vernon, in large medians in East Los Angeles, and at Roosevelt Park. • Partnered with the County to evaluate a potential multi-benefit project for the Earvin “Magic” Johnson Park. • Participated in the Upper Los Angeles River Watershed Group, Rio Hondo/San Gabriel River Group, Los Angeles River Upper Reach 2 Sub-Watershed Group, and the Lower Los Angeles River Watershed Group to develop CIMPs and WMPs/EWMPs. • Submitted pertinent CIMPs to the Regional Board in June 2014, and all but the Upper Los Angeles River Reach 2 CIMP were revised and approved or conditionally approved by August 2015. • Submitted the draft EWMPs to the Regional Board in June 2015. Submitted the WMPs in June 2014, which were approved in July 2015. • Permittees initiated non-stormwater outfall screening in the Upper LA River watershed group area in January 2015, and other watershed group areas in May 2015. • Conducted monitoring at the Los Angeles River mass emission station, which includes constituents identified in these TMDLs.
Los Angeles River and Tributaries Metals TMDL	N/A	
Los Angeles River Watershed Bacteria TMDL	• Participated in the preparation of the Load Reduction Strategy for Segment B, which was submitted to the Regional Board in June 2015. • Participated in the dry weather monitoring and preparation of Load Reduction Strategy for Segment A of the LA River, Rio Hondo Channel, and Arroyo Seco.	
Los Angeles Area Lakes TMDLs	N/A	
Legg Lake Trash TMDL	N/A	

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	N/A	• Participated in the Lower Los Angeles River Watershed Group to develop a CIMP and WMP to address this TMDL. • Submitted the revised CIMP to the Regional Board in February 2015, which was conditionally approved in June 2015. • Submitted the draft WMP to Regional Board in June 2014, which was approved on July 21, 2015. • Permittees completed non-stormwater outfall screening in November 2014.
San Gabriel River WMA TMDLs		
San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL	N/A	• Participated in investigating stormwater capture projects at Adventure Park and Bassett High School. • Participated in the Upper San Gabriel River Watershed Group, the Rio Hondo/San Gabriel River, and the Lower San Gabriel River Watershed Group to develop CIMPs and EWMPs to address these TMDLs. • The CIMP for the Upper San Gabriel River Group was conditionally approved in June 2015, and the other two CIMPs were approved in June 2015. • Submitted the draft EWMPs for the Upper San Gabriel River Watershed Group and the Rio Hondo/San Gabriel River Group in June 2015. • The WMP for the Lower San Gabriel River Group was approved by the Regional Board on July 21, 2015. • Permittees initiated non-stormwater outfall screening for the Upper San Gabriel River Group in September 2014 and completed non-stormwater outfall screening for the Lower San Gabriel River
Los Angeles Area Lakes TMDLs	N/A	

TMDL	Activities specific to individual TMDL	Activities common to two or more TMDLs
		Group in November 2014. • Conducted monitoring at the San Gabriel and Coyote Creek mass emission stations, which includes constituents identified in these TMDLs.
Los Cerritos Channel WMA TMDLs		
Los Cerritos Channel Metals TMDL	N/A	• Participated in investigating stormwater capture projects at Bolivar Park in the City of Lakewood and Skylinks Golf Course in Long Beach. • Participated in the Los Cerritos Channel Watershed Group and the Alamitos Bay/Los Cerritos Channel Group to develop CIMPs and WMPs to address these TMDLs. • Submitted the revised CIMPs to the Regional Board in June 2015 and July 2015, respectively, which were approved on July 28, 2015 and August 18, 2015, respectively. • Submitted the revised WMPs to the Regional Board in June 2015 and May 2015, respectively, which were approved on July 21, 2015 and August 11, 2015.
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	• In July 2015, the City of Long Beach, on behalf of participating agencies including the LACFCD, submitted a Biennial Progress Report on the implementation actions of this TMDL. This report covers the actions taken during the 2013-2015 Reporting Year. • Monitoring per the approved Colorado Lagoon TMDL CMP is ongoing. The first Annual Monitoring Report was submitted in December 2014 per TMDL requirements.	