AGENDA REPORT

Meeting Date:	May 7, 2013
Item Number:	E-9
To:	Honorable Mayor & City Council
From:	Daniel E. Cartagena, Senior Management Analyst
Subject:	CITY OF BEVERLY HILLS REQUEST FOR TIME SCHEDULE ORDER TO IMPLEMENT THE DRY WEATHER WASTE LOAD ALLOCATION OF THE TOTAL MAXIMUM DAILY LOAD FOR BACTERIA AT THE BALLONA CREEK, BALLONA ESTUARY AND SEPULVEDA CHANNEL
Attachments:	1. City of Beverly Hills Time Schedule Order (TSO)

RECOMMENDATION

Staff recommends that the City Council move to approve staff's request to submit on behalf of the City a Time Schedule Order (TSO) to implement the dry weather waste load allocation of the Total Maximum Daily Load (TMDL) for Bacteria at the Ballona Creek, Ballona Estuary and Sepulveda Channel.

DISCUSSION

On November 8, 2012, the Los Angeles Regional Water Quality Control Board (Regional Board) approved the reissue of the Los Angeles County Municipal Separate Storm Sewer System permit (hereinafter, the LA County MS4 permit). The LA County MS4 permit is a federal National Pollutant Discharge Elimination System (NPDES) permit that regulates municipal separate storm sewer system (MS4)[1] discharges of stormwater and

[1] According to 40 CFR section 122.26(b)(8), "[a] municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
(ii) Designed or used for collecting or conveying storm water;

urban runoff. As with all NPDES permits, the LA County MS4 permit must comply with all applicable provisions of the federal Clean Water Act and implementing regulations. Discharges from the MS4 reach waterbodies in Los Angeles County including, but not limited to, Santa Monica Bay, Los Angeles and Long Beach Harbors, and the Los Angeles and San Gabriel Rivers and their tributaries.

Federal Regulations under the Clean Water Act (CWA) require states to develop a list of impaired waters and pollutants for which they are impaired, also known as the 303(d) List. The States must then establish the capacity of the water body to assimilate the impairing pollutants. These criteria are done in the form of the pollutant TMDL, which defines that the water body can still receive pollutant loads up to the water quality objectives necessary to protect beneficial uses (e.g., recreation, trade and commerce, habitat preservation, etc.).

BALLONA CREEK WATERSHED

The Ballona Creek Watershed is approximately 128 square miles in size and is bounded by the Santa Monica Mountains to the north and the Baldwin Hills to the south. Approximately 81% of the Ballona Creek watershed is within the City of Los Angeles. The other 19% of the watershed area is within the jurisdictions of the City of Beverly Hills, Culver City, Inglewood, Santa Monica, West Hollywood, and the County of Los Angeles. The City of Beverly Hills comprises roughly 4.4% of the Ballona Creek Watershed.

Ballona Creek flows as an open channel for approximately 10 miles from Los Angeles (South of Hancock Park) through Culver City, reaching the Santa Monica Bay just south of Marina del Rey. Tributaries of the Creek and Estuary include Centinela Creek, Sepulveda Channel, Benedict Canyon Channel, and numerous other storm drains. The transition between the Creek and Estuary is considered to occur at Centinela Boulevard; Ballona Creek above Centinela Boulevard is concrete-lined and Ballona Creek below Centinela Boulevard is soft bottom.

COORDINATED MONITORING PLAN SUMMARY

The Ballona Creek, Sepulveda Channel, and Ballona Estuary were listed on the State's 1998 303(d) list as impaired due to exceedance of total and/or fecal coliform water quality standards. To address the high bacteria concentrations in the Creek and its tributaries, the Los Angeles Regional Water Quality Control Board (Regional Board) on June 8, 2006, adopted the Total Maximum Daily Loads for Bacterial Indicator Densities in Ballona Creek, Ballona Estuary, and Sepulveda Channel (Bacteria TMDL). The Bacteria TMDL subsequently became effective on April 27, 2007 after approval by the U.S. Environmental Protection Agency (USEPA). This TMDL has multi-part numeric targets based on the updated bacteria objectives for marine and fresh waters designated for contact recreation (REC-1), and fresh waters with Limited REC-1 and non-contact water recreation (REC-2) beneficial use designations.

The Bacteria TMDL identifies the Responsible Jurisdictions and Agencies as the Cities of Los Angeles, Culver City, Beverly Hills, Inglewood, West Hollywood, Santa Monica, County of Los Angeles, and California Department of Transportation (Caltrans). The City of Los Angeles is the Primary Jurisdiction as it controls the majority of the land area in the watershed.

(iii) Which is not a combined sewer; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW).

The BC Bacteria TMDL was adopted as Resolution No. 2006-011 by the Los Angeles Regional Water Quality Control Board (Regional Board) on June 8, 2006 and became effective on April 27, 2007. The BC Bacteria TMDL requires permittees to comply with the single sample maximum and geometric mean WLAs for the summer and winter dry-weather periods six years after the effective date of the TMDL (April 27, 2013).

On June 7, 2012, the Regional Board adopted an amendment to the BC Bacteria TMDL (Amended BC Bacteria TMDL) revising the final compliance date for the geometric mean WLAs from April 27, 2013 to coincide with the wet weather compliance date of July 15, 2021. The MS4 Permit incorporated the amended provisions; however, they are not effective at this time because the Amended BC Bacteria TMDL is currently going through the State and USEPA approval process. Therefore, by April 27, 2013, the MS4 Permit requires permittees to comply with the summer and winter dry-weather Water Quality Based Effluent Limitations (WQBELs) and receiving water limitations of the originally-adopted TMDL. WQBELs are established as a level of control derived and complies with water quality standards of a specific site.

As a permittee in the Ballona Creek watershed, Beverly Hills is proportionally responsible for 4.4% to 4.6% of the watershed-wide approach towards compliance of the requirements of the BC Bacteria TMDL and other applicable TMDLs. As a "built-out" city, Beverly Hills has implemented watershed control measures within its own boundaries to improve the water quality of impaired waters in the Ballona Creek watershed. Notwithstanding the City's efforts and efforts by other permittees in the watershed to date, periodic monitoring of bacteria indicators in Ballona Creek, Ballona Estuary, and Sepulveda Channel since June 2009 indicates the requirements incorporated into the MS4 Permit will not be met by April 27, 2013.

The City of Beverly Hills is requesting a TSO so that it may: 1) continue partnering with the City of Los Angeles and Ballona Creek Permittees to secure funding for implementation of the LFTF-1 project; 2) conduct a re-evaluation and quantitative analysis of the dry weather strategy with identification of alternative and additional structural BMPs to comply with the dry weather requirements; and 3) provide for additional time to secure funding and to implement those BMPs identified in the re-evaluation. Additionally, Beverly Hills is requesting this TSO to allow for the Amended BC Bacteria TMDL revisions associated with the geometric mean to become effective.

FISCAL IMPACT

The TSO delays the compliance date for meeting the bacteria TMDL in Ballona Creek and will relieve the City from exposure to penalties for missing the current deadline. However, with or without the TSO, the City faces significant costs to meet the bacteria TMDL. City incurs annual costs of approximately $48,000 as part of its cost sharing for TMDL monitoring activities conducted and managed by the City of Los Angeles. These funds are otherwise budgeted for. Moreover, the TSO identifies a project in Table 6 (Below) "Tier 1: Regional Structural BMPs" that will require funding by the City on a proportional basis. The City of Los Angeles' project "LFTF-1" is estimated to cost $6.25 million and while the City of Los Angeles anticipates to secure $2 million from the Clean Beaches Initiative, the City of Beverly Hills could be required to contribute $191,000 as its proportional share even if that grant is obtained. Without the grant Beverly Hills' estimated share would be $275,000. Specific City projects include the installation of full capture devices over a two-year period to comply with the Trash TMDL at an estimated cost of $800,000 to $900,000; purchase of a combination unit at an estimated cost to the

Wastewater Fund of $405,000 which will enable staff to mitigate category 1 sanitary sewer overflows and implement an aggressive catch basin cleaning schedule.

Proposed Action	Agency	Estimated Time after Adoption of TSO (tentatively by May 2013)	City of Beverly Hills Estimated Proportional Costs	Status of Funding Beverly Hills Proportional Costs
Tier 1: Regional Structural BMPs				
Re-evaluate dry weather implementation strategy with reasonable assurance analysis: • Draft report to RWQCB • Final report to RWQCB	City of LA (lead) + Other MS4 permittees	8 months 10 months	Unknown at this time	Unknown at this time
Implement LFTF-1: • Execute Grant Agreement • Complete design • Complete bid & award • Complete construction	City of LA (lead) + Other MS4 permittees	12 months 36 months 42 months 60 months	$191,000	Unknown at this time
Implement additional regional projects, as necessary (pending re-evaluation of dry weather strategy)	City of LA (lead) + Other MS4 permittees	60 months	Unknown at this time	Unknown at this time
Tier 2: City of Beverly Hills-specific BMPs				
Implement TMDL Outfall Monitoring Plan and submit annual reports to RWQCB	City of LA (lead) + other MS4 permittees	4 to 60 months	Unknown at this time	Unknown at this time
Install Full Capture Devices at all City owned storm drains in compliance with Trash TMDL interim and final WQBEL's	City of Beverly Hills	12 to 24 months	$800,000 - $900,000	Requested in the FY 13 - 14 CIP Budget & Budgeted for FY 14 - 15

Secure funding for purchase of GapVax Combo Unit truck for quick respond & contain Category 1 SSO's	City of Beverly Hills	6 to 12 months	$405,000	Budget Enhancement submitted for FY 13 - 14 Budget
Leverage Combo Unit truck to revamp catch basin maintenance schedule to meet and exceed permit maintenance requirements	City of Beverly Hills	12 months	$0	Staff to formalize process and initiate program in FY 13 - 14 Work Plan
City is exploring an overhaul of its current street sweeping schedule to include weekly sweeping of all alleys within City	City of Beverly Hills	12 months	Unknown at this time	Staff to formalize process and initiate program in FY 13 - 14 Work Plan
As part of the Public Information and Participation Program (PIPP) the City will produce public service videos highlighting the City's Stormwater Program to be broadcast on the City's cable channel and website	City of Beverly Hills	12 months	Unknown at this time	Staff to formalize process and initiate program in FY 13 - 14 Work Plan
Tier 3: Monitoring, Assessment, and Reporting				
Continue weekly CMP monitoring at all compliance stations and submit monthly reports to Regional Board	City of LA (lead) + other MSB permittees	On-going activity	Metals & Toxics $27,473.33 Bacteria $20,528.50	Included in FY 2013 – 14 Budget Included in FY 2013 – 14 Budget

More details will be provided to the City Council as part of the impacts assessment of the MS4 permit. The TSO is being presented at this time in order to meet a deadline established by the RWQCB of April 27, 2013 and to which staff has requested a five (5) year extension to April 8, 2018.

Noel Marquis
Finance Approval

Mahdi Aluzri
Approved By

Attachment 1

Mr. Samuel Unger
Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. Fourth Street, Suite 200
Los Angeles, CA 90013

CITY OF BEVERLY HILLS REQUEST FOR TIME SCHEDULE ORDER TO IMPLEMENT THE DRY WEATHER WASTE LOAD ALLOCATIONS OF THE TOTAL MAXIMUM DAILY LOAD FOR BACTERIA AT BALLONA CREEK, BALLONA ESTUARY & SEPULVEDA CHANNEL

Dear Mr. Unger,

The City of Beverly Hills (City) respectfully requests a Time Schedule Order (TSO) to implement the dry weather Waste Load Allocations (WLAs) of the Total Maximum Daily Load for Bacteria at Ballona Creek, Ballona Estuary, and Sepulveda Channel (BC Bacteria TMDL). The BC Bacteria TMDL was adopted as Resolution No. 2006-011 by the Los Angeles Regional Water Quality Control Board (Regional Board) on June 8, 2006 and became effective on April 27, 2007. The BC Bacteria TMDL requires permittees to comply with the single sample maximum and geometric mean WLAs for the summer and winter dry-weather periods six years after the effective date of the TMDL (April 27, 2013). Recently, by Order No. R4-2012-0175, the provisions of the BC Bacteria TMDLwere incorporated into NPDES Permit No. CAS004001 for Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Los Angeles County Flood Control District, including the County of Los Angeles, and the Incorporated Cities therein, except the City of Long Beach (MS4 Permit). The BC Bacteria TMDL WLAs were incorporated into the MS4 Permit as: 1) final Water Quality Based Effluent Limitations (WQBELs) set equal to the TMDL numeric targets and Basin Plan water quality objectives (WQOs); and 2) receiving water limitations set equal to the allowable number of exceedance days per the TMDL WLAs.

BACTERIA WATER QUALITY OBJECTIVES AND TMDL REVISIONS

On July 8, 2010, the Regional Board adopted, by Resolution No. R10-005, an amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) updating the bacteria WQOs for freshwaters designated for water contact recreation and limited water contact recreation (REC-1and LREC-1, respectively) by removing the fecal coliform WQO. This amendment became effective on December 5, 2011.

On June 7, 2012, the Regional Board adopted an amendment to the BC Bacteria TMDL (Amended BC Bacteria TMDL) revising the final compliance date for the geometric mean WLAs from April 27, 2013 to coincide with the wet weather compliance date of July 15, 2021. The MS4 Permit incorporated the amended provisions; however, they are not effective at this time because the Amended BC Bacteria TMDL is currently going through the State and USEPA approval process. Therefore, by April 27, 2013, the MS4 Permit requires permittees to comply

with the summer and winter dry-weather WQBELs and receiving water limitations of the originally-adopted TMDLas summarized in Tables 1 and 2, respectively.

As a permittee in the Ballona Creek watershed, Beverly Hills is proportionally responsible for 4.4-4.6% of the watershed-wide approach towards compliance of the requirements of the BC Bacteria TMDL and other applicable TMDLs. As a "built-out" city, Beverly Hills has implemented watershed control measures within its own boundaries to improve the water quality of impaired waters in the Ballona Creek watershed. Notwithstanding the City's efforts and efforts by other permittees in the watershed to reduce bacteria to date, periodic monitoring of bacteria indicators in Ballona Creek, Ballona Estuary, and Sepulveda Channel since June 2009 indicates the requirements incorporated into the MS4 Permit as specified in Tables 1 and 2 will not be met by April 27, 2013.The City covers approximately 4.4-4.6% of the total watershed area and along with the City of West Hollywood drains into BCB-1(Attachment 1).

Therefore, the City is requesting a TSO to: 1) allow for additional actions to be taken for its MS4 to attain the dry weather TMDL requirements associated with the single sample maximum water quality objectives; and 2) allow for the Amended BC Bacteria TMDL revisions associated with the geometric mean to become effective.

Table 1: Water Quality-Based Effluent Limitations incorporated into the MS4 Permit based on the Ballona Creek Bacteria TMDL

Constituent	Effluent Limitations (MPN or CFU)	
	Daily Maximum	Geometric Mean
Ballona Creek Estuary		
Total coliform*	10,000 / 100 mL	1,000 / 100mL
Fecal coliform	400 / 100 mL	200 / 100 mL
Enterococcus	104 / 100 mL	35 / 100 mL
Sepulveda Channel		
E. coli	235 / 100 mL	126 / 100mL
Ballona Creek Reach 2		
E. coli	576 / 100 mL	126 / 100mL
Ballona Creek Reach 1		
Fecal Coliform	4000 / 100 mL	2000 / 100mL

* Total coliform density shall not exceed a daily maximum of 1,000 / 100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

Table 2: Receiving Water Limitations incorporated into the MS4 Permit based on the Ballona Creek Bacteria TMDL

Time period	Annual allowable exceedance days of single sample objectives*	
	Daily sampling	Weekly sampling
Summer dry weather (April 1 to October 31)	0	0
Winter dry weather (November 1 to March 31)	3	1

* Exceedance days for Ballona Creek Estuary and at the confluence with Ballona Creek Estuary based on REC-1 marine water single sample bacteria water quality objectives (WQO). Exceedance days for Ballona Creek Reach 2 and at the confluence with Ballona Creek Reach 2 based on LREC-1 freshwater single sample bacteria WQO. Exceedance days for Sepulveda Channel based on REC-1 freshwater single sample bacteria WQO.

CURRENT WATER QUALITY OF BALLONA CREEK WATERSHED RECEIVING WATERS

Monitoring of indicator bacteria concentrations in receiving waters of the Ballona Creek watershed is coordinated by the City of Los Angeles on behalf of all watershed agencies per the Coordinated Monitoring Plan (CMP) for the BC Bacteria TMDL that was submitted to the Regional Board in January 2009. Through a cost-sharing agreement by all watershed agencies, monitoring stations BCB-1to BCB-8 (Attachment 1) have been sampled on a weekly basis since June 2009. Table 3 tabulates the annual average of the number of exceedance days of the single sample receiving water limitations. The data indicate that receiving water limitations have consistently been exceeded since the start of TMDL monitoring (June 2009) at all monitoring stations with the possible exception of station BCB-1 in Reach 1.

Table 3: Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL; Average Annual Number of Exceedance Days with Single Samples Limit Exceedances (2009-2012)[1]

Station ID	BCB-1	BCB-2	BCB-3	BCB-4	BCB-5	BCB-6	BCB-7	BCB-8
Summer-Dry Weather Exceedances	**4**	**16**	**17**	**24**	**15**	**24**	**25**	**6**
Summer-Dry Weather Allowance	3	0	0	0	0	0	0	0
Winter-Dry Exceedances	**1**	**5**	**5**	**14**	**6**	**13**	**13**	**4**
Winter-Dry Allowance	2	3	3	3	3	3	3	3

[1] Monitoring conducted weekly.

WATERSHED CONTROL MEASURES SINCE EFFECTIVE DATE OF ORIGINAL BC BACTERIA TMDL

As one of the permittees under the MS4 Permit, Beverly Hills has implemented multiple watershed control measures within its jurisdiction, both institutional measures and structural measures. The institutional BMPs that are expected to provide ancillary benefits to the bacteriological water quality of the receiving waters in the Ballona Creek watershed include the following:

- The City's residential streets in the Ballona Creek watershed are cleaned with street sweepers at a frequency of once a week.
- The City's commercial district streets are swept six-days a week.
- The City's 423 catch basins are cleaned at a frequency and in compliance with the current MS4 permit.
- The City services 182 trash commercial district receptacles located in the public right-of-way, seven-times a week.
- The City's Environmental Programs Inspector conducts inspections, outreach and enforcement as part of its Fats, Oils and Grease (FOG) program.
- The Environmental Program Inspector also conducts Illicit Connection/Illicit Discharge (IC/ID) enforcement.
- The City's Standard Urban Stormwater Mitigation Plan (SUSMP) program reviews all applicable commercial and residential development within the City's portion of the Ballona Creek watershed for program compliance.
- The City's Public Works & Transportation's stormwater program has an extensive outreach and education program to reduce pollutant sources and, specifically, is targeting dog owners in the watershed to reduce bacteria sources.
- As part of the City's Water Conservation ordinance, citywide outdoor landscape irrigation restrictions remain in effect. Property owners are limited to watering three-days a week.

In addition, multiple structural BMPs have been implemented by Beverly Hills in Ballona Creek watershed at a total cost of approximately $500,000, as summarized in Table 4; locations of these projects are shown in Attachment 2. Structural BMPs include measures for reducing trash discharges, such as catch basin retrofits.

Table 4. City of Beverly Hills structural BMPs in Ballona Creek watershed.

BMP/Project	Description
Trash BMPs with Ancillary Effects on Bacteria Removal	
Catch Basin Retrofits	City has installed surfgates to all of the 423 City owned stormdrains
Trash Diversion	Purchased, located and service additional 62 trash receptacles in commercial district.

In addition to implementation of specific watershed control measures, Beverly Hills participates in a watershed-wide jurisdictional approach to the compliance with the BC Bacteria TMDL requirements including the following:

- The final Coordinated Monitoring Plans for Ballona Creek were submitted on January 29, 2009.
- Weekly monitoring at eight (8) monitoring stations in Ballona Creek, Ballona Estuary and Sepulveda Channel began in June 2009. The City of Los Angeles, lead agency, provides the Regional Board with the monthly monitoring reports.
- Through an extensive stakeholder process with workshops, meetings, and field investigations with watershed stakeholders, Beverly Hills is an ongoing partner in the development of the Implementation Plan for the BC Bacteria TMDL that was submitted the Regional Board on November 25, 2009. This Implementation Plan was developed on behalf of all MS4 permittees in the watershed except the County of Los Angeles.
- Beverly Hills is a co-signer of agreements with the City of Los Angeles, along with other MS4 permittees in the Ballona Creek watershed, in the cost-sharing of watershed-wide activities to reduce bacteria, metals and toxics.

The Implementation Plan for the BC Bacteria TMDL (I-Plan) identified two structural BMPs specifically for bacteria load reductions during dry weather:

- Low Flow Treatment Facility #1 (LFTF-1), located on the main stem of Ballona Creek, was proposed to retrofit the existing North Outfall Treatment Facility for the capture, diversion, treatment and release of dry weather flow in Ballona Creek. This facility would treat dry weather runoff from about 65% of the total watershed area.
- Low Flow Treatment Facility #2 (LFTF-2) or the "Oval Street Parkway Retrofit" proposedthe capture and diversion of dry weather flow in Sepulveda Channel for treatment by green infrastructure BMPs in the Mar Vista oval streets area. This facility would treat dry weather runoff from about 18% of the watershed area.
- The I-Plan did not address all dry weather runoff discharges within the watershed area. Hence, additional planning for institutional and/or structural BMPs is required to ensure dry weather compliance at all compliance stations.

In addition to the proposed LFTFs, the I-Plan recognized that implementation of distributed structural BMPs for stormwater treatment would also assist with dry weather compliance.

On behalf of the watershed, the City of Los Angeles developed detailed concept reports of several I-Plan projects including the LFTFs with the objective of seeking funding through local and state grant programs as summarized in Table 5. Note that projects with concept reports are ready to move forward with predesign and design once funding has been secured.

Table 5. Current status of I-Plan Projects

I-Plan Project	Status	Grant Programs applied to
Low Flow Treatment Facility #1	Preliminary concept report; project cost estimate $6.25M	Clean Beaches Initiative
Low Flow Treatment Facility #2	Preliminary concept report indicated that project is not feasible without major modifications to scope	Unknown at this time

McArthur Park Stormwater BMP	Concept Report;cost estimate $3.0M	
Westwood Neighborhood Greenway Project	Concept Report; cost estimate $3.2M	Statewide Park Program; City's Prop O Program
Rancho Cienega Sports Complex Regional BMP Project	Concept Report; cost estimate $11.8M	Unknown at this time
Vermont Avenue Stormwater BMP Project	Concept Report; cost estimate $4M	IRWMP
Harvard Park Stormwater BMP	Concept Report; cost estimate $3.0M	Unknown at this time
La Brea Avenue Trail & Greenway Project	Concept Report; cost estimate $4.8M	Recreational Trails Program

Obtaining grants for water quality improvement projects is a competitive process because collective grant funding is not sufficient for municipalities to fund all their program needs. So far, most grant requests for the projects listed in Table 5 have been declined although recently the Clean Beaches Initiative program conditionally approved a maximum of $2.5M for the LFTF-1. Beverly Hills along with its watershed partners are monitoring funding alternatives for the purposes of securing the remaining funds needed for this project.

JUSTIFICATION FOR TIME SCHEDULE ORDER

Despite the implementation of multiple watershed control measures by the City of Los Angeles and other permittees in the BC watershed, the receiving water limitations for indicator bacteria in Ballona Creek, Ballona Estuary and Sepulveda Channel are still often exceeded during dry weather. Consequently, the City of Beverly Hills is requesting this TSO for the following reasons:

- CMP monitoring since June 2009 has provided additional information on the actual bacteriological water quality at TMDL compliance locations in Ballona Creek, Ballona Estuary and Sepulveda Channel and was not available when the I-Plan was developed. This data indicated that a more robust and sophisticated modeling approach is required to identify additional dry weather BMPs in selected sub-watersheds to ensure that Ballona Creek will meet the receiving water limitations at the individual compliance locations. For example, the quantitative analysis of the dry weather implementation strategy in the I-Plan was performed on a watershed-wide basis (i.e., it ensured that the overall bacteria loading from the Ballona Creek watershed to Ballona Estuary would meet the numeric targets), but it did not evaluate the bacteriological water quality at individual compliance stations in Ballona Creek reaches 1 and 2 and Sepulveda Channel.

- Lack of a sustainable funding source for projects identified in the I-Plan has caused a delay in the implementation.

- During the development of a concept report for LFTF-2, it was determined that the project concept for diversion of dry weather runoff from Sepulveda Channel and treatment in the

parkways of the "Oval Streets" area was infeasible. As LFTF-2 is one of the two projects specifically proposed by the I-Plan for dry weather compliance, the City is in the process of identifying alternative project(s) to address Sepulveda Channel.

Accordingly, the City of Beverly Hills is requesting a TSO so that it may: 1) continue partnering with the City of Los Angeles and Ballona Creek Permittees to secure funding for implementation of the LFTF-1 project; 2) conduct a re-evaluation and quantitative analysis of the dry weather strategy with identification of alternative and additional structural BMPs to comply with the dry weather requirements; and 3) provide for additional time to secure funding and to implement those BMP identified in the re-evaluation. Additionally, Beverly Hills is requesting this TSO to allow for the Amended BC Bacteria TMDL revisions associated with the geometric mean to become effective.

BEVERLY HILLS' ACTION PLAN FOR TIME SCHEDULE ORDER

Proposed action items and the estimated time for completion are summarized in Table 6 using a tiered approach to recognize that compliance with the dry weather requirements of the BC Bacteria TMDL requires both regional actions on a watershed wide basis and local solutions by the individual agencies:

- **Tier 1– Regional Structural BMPs**: In collaboration with the other MS4 permittees in the watershed, Beverly Hills will participate in the re-evaluation of the dry weather implementation strategy as contained in the I-Plan. This re-evaluation will: a) propose an alternative project for LFTF #2 to address Sepulveda Channel; b) identify any additional regional projects along mainstem Ballona Creek (if needed); and c) conduct a reasonable assurance analysis to demonstrate that the revised strategy will achieve compliance at the individual compliance stations in the receiving waters. Concurrently with the proposed plan revision, Beverly Hills will work with the City of Los Angeles to implement the LFTF #1 project as the cornerstone project for TMDL compliance. It is assumed that all MS4 permittees in the watershed will participate in sharing the costs of implementing of these regional solutions.
- **Tier 2–City of Beverly Hills - specific BMPs**: Beverly Hills will continue to work with and support the City of Los Angeles' efforts to coordinate dry weather outfall monitoring in Ballona Creek upon the submittal of the TMDL Outfall Monitoring Plan and approval of the plan by the Regional Board (note the TMDL Outfall Monitoring Plan is required by the Amended BC Bacteria TMDL within six months of the effective date, but the MS4 permittees intend the submit the final draft plan by April 2013 to allow substitution of outfall monitoring for accelerated receiving water monitoring). The City of Los Angeles will coordinate the submittal of annual TMDL outfall monitoring reports upon approval of the plan by the Regional Board.

  Data collected through TMDL Outfall Monitoring will support non-stormwater source control investigations targeting the subwatersheds and/or drainage areas associated with "problematic" outfalls by the City and other permittees in the watershed. The City will use the outfall data for:1) identifying the institutional BMP's to reduce non-stormwater

discharges within its jurisdiction; and 2) to prioritize the areas for implementation of distributed structural BMPs within its jurisdiction.

- **Tier 3 –Monitoring, Assessment, and Reporting**: Beverly Hills will continue to work with and support the City of Los Angeles' continued efforts to coordinate CMP monitoring and provide monthly reports to the Regional Board. In addition, the City will provide the Regional Board with annual status reports with updates of the City's progress with the TSO.

The City of Beverly Hills requests a TSO of 5 years, which is as short as possible considering the time that is required for implementation of the structural BMPs managed by the City of Los Angeles. Based on the experience of implementing projects in the past, the typical schedule and timeline for implementation of similar BMP projects is at a minimum four years as follows:

1. Development of a project concept report (3 months).
2. Pre-design withy development of the preferred alternative and, if applicable, completion of CEQA requirements and obtaining permits (6-9 months).
3. Design with development plans, specifications, and contract documents (12-15 months).
4. Advertisement, bid and award (6 months)
5. Construction (18-24 months).
6. Post construction, start-up and turnover (6 months).

Larger projects may require substantially more time depending on the technical complexity and other factors (e.g., preparation of EIR documentation, permits from Coastal Commission, etc.).

Table 6. Proposed Actions and Estimated Time for Completion

Proposed Action	Agency	Estimated Time after Adoption of TSO (tentatively by May 2013)
Tier 1: Regional Structural BMPs		
Re-evaluate dry weather implementation strategy with reasonable assurance analysis: • Draft report to RWQCB • Final report to RWQCB	City of LA (lead) + Other MS4 permittees	 • 8 months • 10 months
Implement LFTF-1: • Execute Grant Agreement • Complete design • Complete bid & award • Complete construction	City of LA (lead) + Other MS4 permittees	• 12 months • 36 months • 42 months • 60 months
Implement additional regional projects, as necessary (pending re-evaluation of dry weather strategy)	City of LA (lead) + Other MS4 permittees	• 60 months
Tier 2: City of Beverly Hills-specific BMPs		

Implement TMDL Outfall Monitoring Plan and submit annual reports to RWQCB	City of LA (lead) + other MS4 permittees	• 4 to 60 months
Install Full Capture Devices at all City owned storm drains in compliance with Trash TMDL interim and final WQBEL's	City of Beverly Hills	• 12 to 24 months
Secure funding for the purchase of Combo Unit truck, a GapVax Combination Unit, to more quickly respond and contain Category 1 SSO's	City of Beverly Hills	• 6 to 12 months
Leverage Combo Unit truck to revamp catch basin maintenance schedule to meet and exceed permit maintenance requirements	City of Beverly Hills	• 12 months
City is exploring an overhaul of its current street sweeping schedule to include weekly sweeping of all alleys within City	City of Beverly Hills	• 12 months
As part of the Public Information Program (PIP) the City will produce public service videos highlighting the City's Stormwater Program to be broadcast on the City's cable channel and website	City of Beverly Hills	• 12 months
Tier 3: Monitoring, Assessment, and Reporting		
Continue weekly CMP monitoring at all compliance stations and submit monthly reports to Regional Board	City of LA (lead) + other MSB permittees	• On-going activity

INTERIM LIMITS

The City proposes that the Regional Board adopt interim limits as presented in Table 7. The proposed interim limits are based on exceedance frequencies at receiving water stations monitored under the Coordinated Monitoring Plan from June 2009 to January 2013 (see Attachment 1 for monitoring site locations). Details on the approach to calculating the interim limits are provided in Attachment 3. The interim limits are expressed as allowable exceedance days under a weekly monitoring program. Consistent with the TMDL, if the monitoring frequency is increased or decreased, then the allowable exceedance days will increase or decrease proportionately.

The Regional Board has relied upon Appendix E of USEPA's Technical Support Document (1994) in the past as the guidance for the statistical derivation of interim limits where the daily maximum has been set at the 99th percentile. Additionally, this approach has been used by the Regional Board to establish interim limitations in instances where final WLAs in TMDLs are past due. Thus, as proposed, the interim limits are set equal to the 99th percentile of the annual number of single sample exceedance days as described in Attachment 3. The 99th percentile based interim limits are proposed for the duration of the 5-year TSO time period because LFTF#1, the primary project that will ensure attainment of the TMDL RWLs, will take five years to complete. It is expected to take the entirety of the 5-year TSO to secure funding, finalize design and environmental documentation, construct and start up the NOTF.

Table 7. Proposed TSO Interim Limits for the BC Bacteria TMDL

CMP Monitoring Site	Annual Allowable Dry Weather Exceedances Days based on Weekly Monitoring
BCB-1	11
BCB-2	31
BCB-3	34
BCB-4	51
BCB-5	34
BCB-6	51
BCB-7	52
BCB-8	16

SUMMARY

The City appreciatesyour consideration of this TSO request and we would like to thank you and your staff for your continued assistance. If you or your staff has any questions regarding this request, or needs additional information, please contact Christian Di Renzo, Senior Management Analyst with the City's Department of Public Works & Transportation at 310.285.2821.

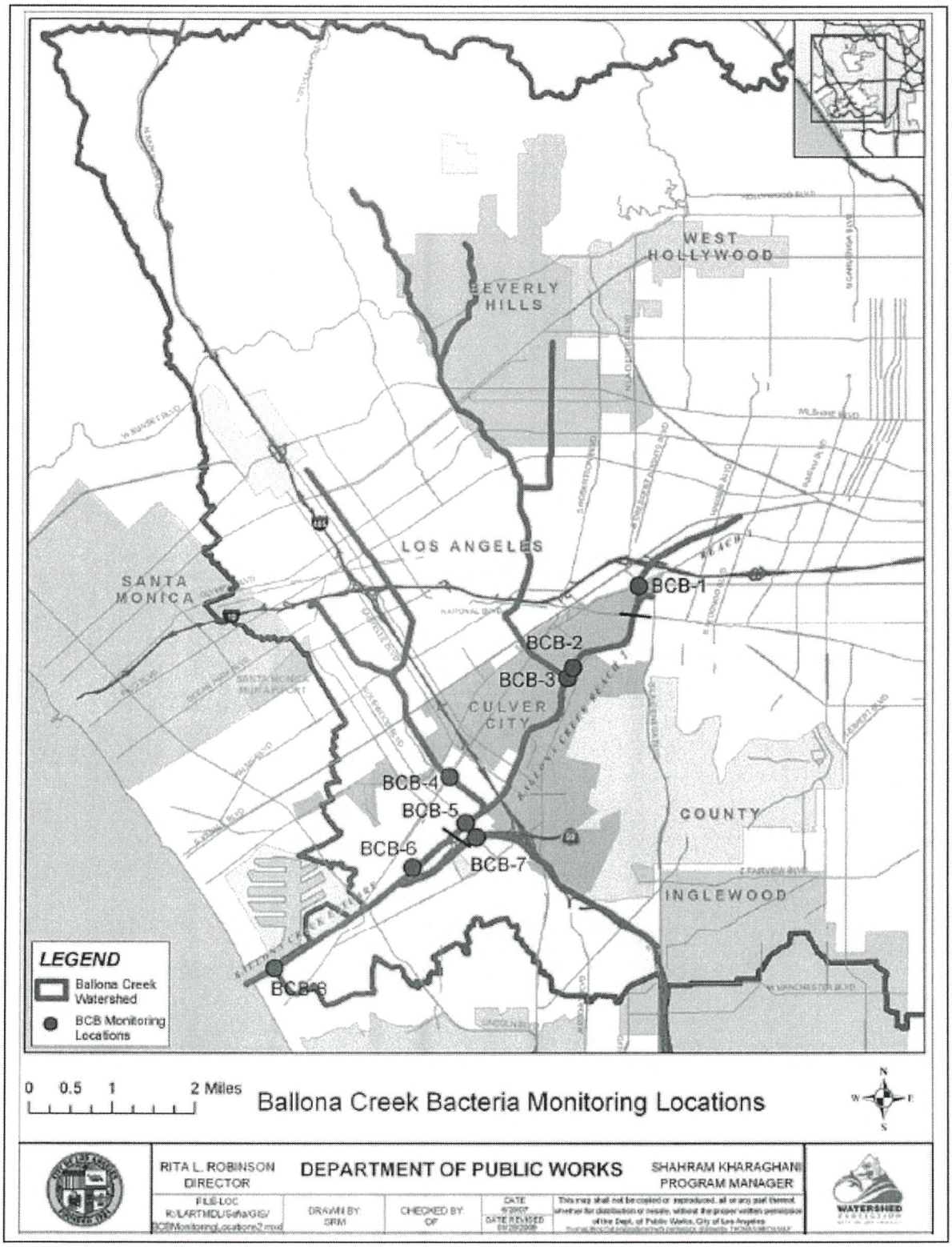
Sincerely,

JEFFREY KOLIN
City Manager,
City of Beverly Hills

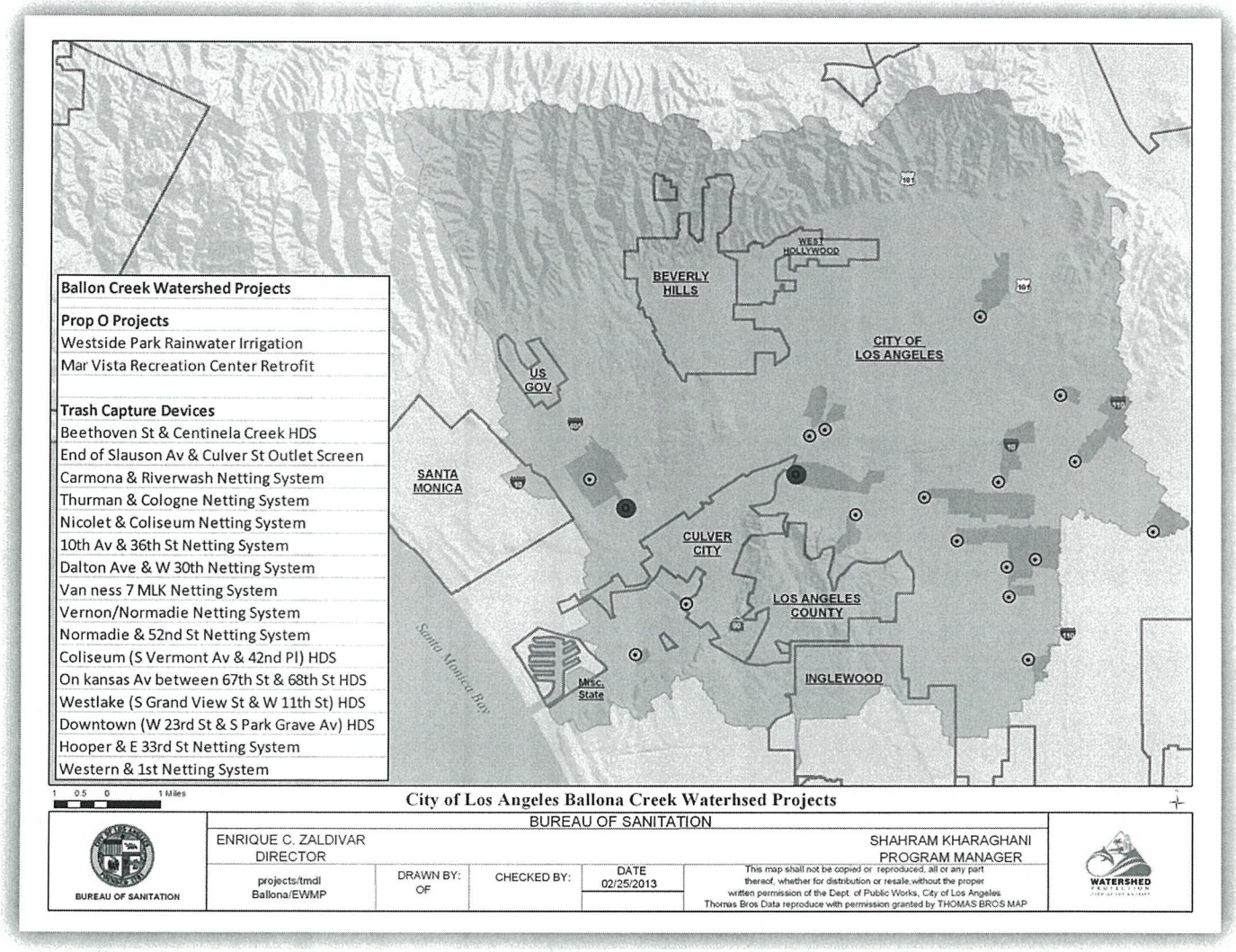
Attachments

Cc: Renee Purdee, California Regional Water Quality Control Board, Los Angeles Region
Ivar Ridgeway, California Regional Water Quality Control Board, Los Angeles Region
Rebecca Christmann, California Regional Water Quality Control Board, Los Angeles Region
Huub Cox, Assistant Division Manager (act.), City of Los Angeles, Bureau of Sanitation
Bruce Hamamoto, County of Los Angeles
Damian Skinner, City of Culver City
Sharon Perlstein, City of West Hollywood
Lauren Amamoto, City of Inglewood
Neil Shapiro, City of Santa Monica

ATTACHMENT 1: Ballona Creek Watershed Map and Bacteria TMDL Monitoring Locations



ATTACHMENT2: City of Los Angeles project locations in Ballona Creek watershed



ATTACHMENT 3: Interim Limit Calculations

Interim limits were calculated based on monitoring data collected during the Coordinated Monitoring Plan for the Ballona Creek Bacteria TMDLbetween June 2009 through January 2013. For most sites, there were a total of 187 samples collected during this period, of which 153 were collected during dry weather. Exceedances were determined using the same methodology as reported by the CMP in TMDL annual reports. Per the exceedance day calculation approach, an exceedance of *any* of the indicators measured in a sample is considered *one* exceedance.

For each site, the dry weather exceedance frequency was calculated on a rolling annual basis using dry weather data only. For each weekly sample collected, the dry weather exceedance frequency for the previous 365 days was calculated. In this manner, exceedance frequencies could be considered for a range of conditions in order to account for dry years, wet years, etc. That is, instead of using one exceedance frequency per year (a total of four [4] values) to calculate interim limits, at total of 111 annual exceedance frequencies were calculated for each site, as shown in Table A3-1. For these 111 weekly rolling annual exceedance frequencies, the percentile exceedance rates were calculated (median of the 111 values, 99th percentile of the 111 values, etc.) as shown in Table A3-1.

To calculate interim limits, the 99th percentile exceedance frequency was used. The Regional Board has relied upon Appendix E of USEPA's Technical Support Document (1994) in the past as the guidance for the statistical derivation of interim limits where the daily maximum has been set to the 99th percentile. Additionally, this approach has been used by the Regional Board to establish interim limitations in instances where final WLAs in TMDLs are past due. Thus, there is much precedent for using the 99th percentile exceedance frequency to calculate interim limits.

Table A3-1.Interim Limit Calculations for the Ballona Creek Bacteria TMDL

CMP Monitoring Site	Beneficial Use/WQO for Exceedance Calculations	Number of Annual Exceedance Frequencies Calculated	Median Exceedance Frequency	99th Percentile Exceedance Frequency	Interim Limit: Annual Allowable Exceedance Days based on Weekly Monitoring
BCB-1	REC-2	111	11.8%	19.5%	11
BCB-2	Limited REC-1	111	53.6%	59.5%	31
BCB-3	Limited REC-1	111	56.2%	64.3%	34
BCB-4	Freshwater REC-1	111	94.1%	97.8%	51
BCB-5	Limited REC-1	111	54.9%	64.3%	34
BCB-6	Marine REC-1	111	94.1%	97.6%	51
BCB-7	Marine REC-1	111	94.8%	100.0%	52
BCB-8	Marine REC-1	111	22.9%	29.9%	16