

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

TIME SCHEDULE ORDER NO. R4-2014-0142

**REQUIRING THE COUNTY OF LOS ANGELES, THE LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT AND THE CITY OF LOS ANGELES
TO COMPLY WITH REQUIREMENTS PERTAINING TO DISCHARGES OF
BACTERIA DURING DRY WEATHER TO THE BACK BASINS OF MARINA DEL REY
HARBOR AND MARINA BEACH PRESCRIBED IN ORDER NO. R4-2012-0175
(NPDES PERMIT NO. CAS004001)**

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) finds:

1. On November 8, 2012, the Los Angeles Water Board adopted waste discharge requirements and a National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R4-2012-0175) for municipal separate storm sewer system (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of those discharges originating from the City of Long Beach MS4 (Los Angeles County MS4 Permit).
2. The requirements of the Los Angeles County MS4 Permit apply to the Los Angeles County Flood Control District (LACFCD), the County of Los Angeles (County), the City of Los Angeles (City), and 83 other incorporated cities within the LACFCD with the exception of the City of Long Beach.
3. Prior to the effective date of Order No. R4-2012-0175, Order No. 01-182 served as the Los Angeles County MS4 Permit. Order No. 01-182 was amended on August 9, 2007, by Order No. R4-2007-0042, to incorporate receiving water limitations consistent with the assumptions and requirements of the summer dry weather waste load allocations in the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria Total Maximum Daily Load (TMDL). Part 2.6 of Order No. 01-182 required the following:

"During Summer Dry Weather there shall be no discharges of bacteria from MS4s into Marina del Rey Harbor Basins D, E, or F, including Mothers' Beach that cause or contribute to exceedances of the applicable bacteria objectives. The applicable bacteria objectives include both the single sample and geometric mean bacteria objectives set to protect the Water Contact Recreation (REC-1) beneficial use, as set forth in the Basin Plan. [Footnote omitted.]"
4. The LACFCD encompasses more than 3,000 square miles, the County of Los Angeles, 85 cities, and approximately 2.1 million land parcels. The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed of Los Angeles County, including approximately 500 miles of open channel; 2,800 miles of underground storm drains; an estimated 120,000 catch basins; and several dams. Most if not all of the MS4s of other permittees of the Los Angeles County MS4 Permit connect to the LACFCD's system.

July 10, 2014

5. The LACFCD's MS4 conveys both storm water and non-storm water discharges into receiving waters in all of the major watershed management areas within the region, including the Los Angeles River Watershed; San Gabriel River Watershed; the Santa Monica Bay Watershed Management Area, which includes the Marina del Rey subwatershed; and the Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area.
6. The County also owns and maintains MS4s throughout the unincorporated areas of Los Angeles County, which convey both storm water and non-storm water discharges into receiving waters in all of the major watershed management areas within the region, including the Los Angeles River Watershed; San Gabriel River Watershed; the Santa Monica Bay Watershed Management Area, which includes the Marina del Rey subwatershed; and the Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area. Approximately 0.62 square mile of County unincorporated land area lays within the Marina del Rey subwatershed.
7. The City of Los Angeles encompasses approximately 469 square miles; of this area, approximately 1.52 square miles of the City's jurisdiction lay within the Marina del Rey subwatershed. The City's MS4 conveys both storm water and non-storm water discharges into receiving waters in the watershed management areas of the Los Angeles River Watershed; the Santa Monica Bay Watershed Management Area, which includes the Marina del Rey subwatershed; and the Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area. The City's MS4 consists of 1,125 miles of storm drain pipes, 11 pump plants, and 66,260 catch basins among other appurtenances.
8. The Marina del Rey subwatershed is approximately 2.9 square miles and includes portions of the City of Los Angeles, Culver City, and unincorporated areas of the County of Los Angeles. Marina del Rey Harbor (Marina or MdRH), which opens into Santa Monica Bay, is the largest artificial small craft harbor in the United States. The Marina consists of eight basins (Basins A-H); Basins D, E, and F are referred to as the back basins. The Marina is owned and operated by the County of Los Angeles.
9. Marina Beach, commonly referred to as Mothers' Beach, is a sheltered sandy beach located in Basin D of the Marina. Because of its sheltered environment, Marina Beach attracts families with young children where the children can swim in the calm waters.
10. The land area immediately surrounding the Marina, which includes the Oxford Flood Control Basin, is an unincorporated area of the County of Los Angeles. As a result, the County has MS4 discharges into Back Basins D, E, and F.
11. The LACFCD owns and operates the Oxford Flood Control Basin, which discharges into Back Basin E. In addition, the LACFCD owns and maintains portions of the MS4 that discharge into Back Basin F.
12. Within the Marina del Rey subwatershed, discharges from the City's MS4 only enter Back Basin E of the Marina. The City does not have any direct or indirect MS4 discharges into Back Basins D or F.
13. Marina Beach was listed on California's 1998 Clean Water Act Section 303(d) List as impaired due to "Beach Closures" and "High Coliform Count" and Back Basins D, E, and F

were listed as impaired due to “High Coliform Count.” To address impairments in the Marina due to elevated bacteria levels, on August 7, 2003, the Los Angeles Water Board adopted the Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria Total Maximum Daily Load (Bacteria TMDL or TMDL). The TMDL established wasteload allocations for MS4 discharges, including those from the County’s, the LACFCD’s, and the City’s drainage areas. The TMDL’s implementation plan required achievement of the dry weather wasteload allocations by March 18, 2007.

14. The County, the LACFCD, and the City have been collaborating with one another since 2004 when the TMDL became effective. In addition, these local agencies have agreed to collectively develop an enhanced watershed management program for the Marina del Rey subwatershed pursuant to the Los Angeles County MS4 Permit.
15. In February 2007, the Los Angeles County MS4 permittees in the MdrH subwatershed submitted the *Mother’s Beach and Back Basins Bacteria TMDL Non-Point Source Study* (2007 NPS Study) to the Los Angeles Water Board. The results of this study suggested that the majority of the bacteria in the Marina originates from avian sources and other wildlife. According to the study, the Oxford Flood Control Basin and Boone-Olive Pump Plant contribute the majority of bacteria loading to the back basins. The study concluded that the bacteria contributions from direct loading by avian sources to the back basins were relatively small when compared to bacteria loads discharged to the back basins from the major drainages of the Oxford Flood Control Basin and the Boone-Olive Pump Plant. During the dry weather monitoring events, the highest concentrations of bacteria occurred in the Oxford Flood Control Basin and the Boone-Olive Pump Plant. During the wet weather monitoring events, the highest concentrations of bacteria occurred in the Oxford Flood Control Basin, Boone-Olive Pump Plant, and Basin E.
16. The 2007 NPS Study used two molecular source tracking methods -- the quantitative Polymerase Chain Reaction (qPCR) technique and ribotyping -- to determine the host origins of the bacteria in the Marina. The analyses using qPCR and ribotyping showed little fecal contamination from humans in the back basins. Most of the positive results for human fecal matter were from locations in Basin E and were mainly observed during wet weather. Ribotyping analyses determined that about 66% and 74% of bacteria contained in water samples collected from Basins D, E, and F during dry and wet weather, respectively, were avian in origin. Rodent and canine sources were secondary to avian sources during dry weather, each accounting for approximately 10% of bacteria, while during wet weather rodent sources accounted for 3% and canine sources accounted for 11% of bacteria. Human sources accounted for 3% and 5% of bacteria load during dry and wet weather events, respectively.
17. The 2007 NPS Study conducted a series of five dry weather surveys and two wet weather surveys of influent and effluent from the Oxford Flood Control Basin and the effluent from the Boone-Olive Pump Plant, which discharge to Basin E. A summary of some of the dry and wet weather results are presented in the following table:

Station ID			Fecal Coliform (MPN/100 mL)		<i>Enterococci</i> (MPN/100 mL)	
			Dry Weather		Dry Weather	
			Minimum Density	Maximum Density	Minimum Density	Maximum Density
Oxford Basin	8	Effluent	<20	1,300	<10	1,106
	14	Influent	<20	11,000	<10	2,143
	15	Influent	80	300,000	41	2,755
Boone-Olive	16	Effluent	80	35,000	156	5,475

Values bolded indicate exceedances of the single sample objective.

18. On June 7, 2012, the Los Angeles Water Board adopted revisions to the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL. The State Water Board approved the revisions to the TMDL on March 19, 2013 and the Office of Administrative Law approved them on November 7, 2013. The United States Environmental Protection Agency (USEPA) approved the revisions pursuant to Clean Water Act section 303(d) on July 2, 2014. The revised TMDL became effective on July 2, 2014.
19. The revised TMDL changed the wasteload allocations (WLAs) assigned to MS4 discharges, expressed as annual allowable exceedance days of the single sample objectives, during the winter dry-weather period and further changed the final implementation deadline for the geometric mean WLAs from March 18, 2007 to July 15, 2021.
20. The Los Angeles County MS4 Permit includes new water quality-based effluent limitations and corresponding revised receiving water limitations for bacteria to implement the WLAs established in the TMDL.
21. Attachment M of the Los Angeles County MS4 Permit requires the County, the LACFCD, and the City to comply with the following daily maximum final water quality-based effluent limitations for MS4 discharges to Marina Beach and Back Basins D, E, and F during dry weather as of the effective date of the Permit:

Constituent	Effluent Limitations (MPN or cfu)
	Daily Maximum
Total coliform*	10,000/100 mL
Fecal coliform	400/100 mL
<i>Enterococcus</i>	104/100 mL

* 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.

22. Attachment M of the Los Angeles County MS4 Permit requires the County, the LACFCD, and the City to comply with the following grouped¹ final single sample bacteria receiving

¹ The final receiving water limitations are group-based and shared among all MS4 permittees located within the drainage area to the receiving water.

water limitations for MS4 discharges to Marina Beach and Back Basins D, E, and F during dry weather as of the effective date indicated below:

Time Period	Annual Allowable Exceedance Days of the Receiving Water Limitations		
	Daily Sampling	Weekly Sampling	Effective Date
Summer Dry Weather (April 1 to October 31)	0	0	December 28, 2012
Winter Dry Weather (November 1 to March 31)	9	2	July 2, 2014

23. Attachment M of the Los Angeles County MS4 Permit also requires the County, the LACFCD, and the City to collectively comply with water quality-based effluent limitations and receiving water limitations expressed as geometric mean values for MS4 discharges to Marina Beach and Back Basins D, E, and F; however, compliance with these geometric mean water quality-based effluent limitations and receiving water limitations is not required until July 15, 2021. Therefore, requirements regarding the geometric mean water quality-based effluent limitations and receiving water limitations are not included herein as they occur after the expiration date of Order No. R4-2012-0175. All further references to water quality-based effluent limitations and receiving water limitations herein pertain to the single sample water quality-based effluent limitations and receiving water limitations.
24. Pursuant to Part VI.E.4 of the Los Angeles County MS4 Permit, permittees that anticipate that additional time is necessary to comply with the water quality-based effluent limitations and/or receiving water limitations for State adopted TMDLs where the final compliance deadlines have passed may request a time schedule order (TSO) pursuant to Water Code section 13300 for the Board's consideration.
25. On December 24, 2012, the County and LACFCD jointly submitted a letter to the Los Angeles Water Board requesting a TSO pursuant to Water Code section 13300 to provide time for the County and LACFCD to implement structural BMPs to control the discharge of bacteria from their MS4s to Marina Beach and Back Basins D, E, and F in order to comply with the new bacteria water quality-based effluent limitations and the corresponding revised receiving water limitations applicable during dry weather.
26. On December 24, 2012, the City submitted a letter to the Los Angeles Water Board requesting a TSO pursuant to Water Code section 13300 to provide time for the City to take additional actions individually or in coordination with other permittees to control the discharge of bacteria from its MS4 to Basin E in order to comply with the new bacteria water quality-based effluent limitations and the corresponding revised receiving water limitations applicable during dry weather.
27. The County, the LACFCD, and the City had anticipated that their implementation of low flow diversions (LFDs), bio-retention filters, and non-structural best management practices (BMPs) would be sufficient to meet the TMDL dry-weather WLAs for Marina Beach and Back Basins D, E, and F. However, despite these efforts, some areas adjacent to Marina Beach and within Back Basins D, E, and F continue to exceed the water quality-based effluent limitations and/or the receiving water limitations for bacteria at frequencies above that allowed in the Los Angeles County MS4 Permit.

28. Water quality monitoring in the Marina is coordinated by the City on behalf of the Los Angeles County MS4 dischargers per the specifications of the Coordinated Monitoring Plan for the MdRH Bacteria TMDL. Nine receiving water monitoring locations have been sampled weekly since April 2007, with the exception of monitoring stations MdRH-1, which is sampled six days a week, and MdRH-2, which is sampled on Saturday in addition to weekly sampling.
29. The City provided the Los Angeles Water Board the following summary of **summer dry weather bacteria sampling results** for the Marina. The data summary reflects sampling conducted each year from April 1 through October 31, starting in 2007 through 2013.

Annual Summer Dry Weather Exceedance Days of the Single Sample Objectives
(April 1 – October 31)

Marina Beach and Basin D										
Year	MdRH-1		MdRH-2		MdRH-3		MdRH-4 (surface)		MdRH-4 (depth)	
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed
2007	27	0	4	0	2	0	2	0	1	0
2008	17	0	7	0	1	0	0	0	2	0
2009	27	0	4	0	2	0	4	0	1	0
2010	11	0	3	0	2	0	1	0	0	0
2011	15	0	5	0	1	0	1	0	0	0
2012	22	0	7	0	1	0	0	0	0	0
2013	21	0	11	0	13	0	3	0	2	0

Basin E									
Year	MdRH-5		MdRH-6 (surface)		MdRH-6 (depth)		MdRH-7		
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed	
2007	4	0	3	0	0	0	4	0	
2008	9	0	8	0	1	0	13	0	
2009	7	0	4	0	2	0	4	0	
2010	5	0	0	0	2	0	2	0	
2011	2	0	3	0	4	0	3	0	
2012	3	0	2	0	2	0	4	0	
2013	2	0	1	0	0	0	2	0	

Basin F									
Year	MdRH-8 (surface)		MdRH-8 (depth)		MdRH-9 (surface)		MdRH-9 (depth)		
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed	
2007	1	0	0	0	3	0	1	0	

Basin F								
Year	MdRH-8 (surface)		MdRH-8 (depth)		MdRH-9 (surface)		MdRH-9 (depth)	
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed
2008	0	0	0	0	1	0	0	0
2009	1	0	0	0	1	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	1	0	0	0
2012	0	0	0	0	0	0	0	0
2013	1	0	2	0	0	0	0	0

30. The City provided the Los Angeles Water Board the following summary of **winter dry weather bacteria sampling results** for the Marina. The data summary reflects sampling conducted from November 1 through March 31 of the next year, starting in 2007 through 2014.

Annual Winter Dry Weather Exceedance Days of the Single Sample Objectives
(November 1 – March 31)

Marina Beach and Basin D										
Year	MdRH-1		MdRH-2		MdRH-3		MdRH-4 (surface)		MdRH-4 (depth)	
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed
2007 – 08	22	9	4	2	1	2	2	2	0	2
2008 – 09	17	9	1	2	3	2	0	2	1	2
2009 – 10	35	9	6	2	2	2	0	2	0	2
2010 – 11	21	9	5	2	1	2	0	2	0	2
2011 – 12	36	9	4	2	2	2	1	2	1	2
2012 – 13	39	9	10	2	12	2	0	2	0	2
2013 – 14	65	9	21	2	10	2	5	2	3	2

Basin E									
Year	MdRH-5		MdRH-6 (surface)		MdRH-6 (depth)		MdRH-7		
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed	
2007 – 08	1	2	2	2	0	2	1	2	
2008 – 09	1	2	0	2	1	2	1	2	
2009 – 10	1	2	2	2	1	2	0	2	
2010 – 11	3	2	2	2	1	2	5	2	
2011 – 12	0	2	2	2	3	2	2	2	
2012 – 13	1	2	3	2	3	2	5	2	
2013 – 14	2	2	5	2	4	2	3	2	

Basin F								
Year	MdRH-8 (surface)		MdRH-8 (depth)		MdRH-9 (surface)		MdRH-9 (depth)	
	Actual	Allowed	Actual	Allowed	Actual	Allowed	Actual	Allowed
2007 – 08	0	2	0	2	0	2	0	2
2008 – 09	0	2	0	2	2	2	0	2
2009 – 10	0	2	1	2	0	2	1	2
2010 – 11	0	2	0	2	0	2	0	2
2011 – 12	0	2	0	2	0	2	0	2
2012 – 13	0	2	0	2	0	2	0	2
2013 – 14	1	2	0	2	0	2	0	2

31. In the Marina del Rey subwatershed, the County, the LACFCD and/or the City have completed the following actions, in addition to those conducted under the permittees' storm water management programs, to address MS4 discharges of bacteria:
- a. Installation of three year-round LFDs by the LACFCD at the Boone-Olive Pump Plant, Washington Boulevard and Thatcher Avenue, and Berkeley Drive and Yale Avenue, which cumulatively collect and divert non-storm water during dry-weather from a drainage area of 561 acres. The City of Los Angeles encompasses 519 of the 561 acres and Culver City encompasses the remaining 42 acres; however, the TSO does not apply to Culver City's MS4 discharges.
 - b. Installation of five bio-retention filters by the LACFCD in catch basins at Garfield Avenue, Abbot Kinney Boulevard, and Coeur D'Alene Avenue, which cumulatively collect and treat non-storm water and storm water from 31 acres (not served by the LFDs) of the drainage area to Basin E.
 - c. Relining and repairing eleven miles of sewer lines and 208 manholes in the Marina del Rey subwatershed by the County.
 - d. Implementation of low impact development ordinances by both the City and County, requiring retention of storm water from new development and significant redevelopment.
 - e. Completion of the *Marina del Rey Small Drain Survey* and the *Mother's Beach and Back Basins Bacteria TMDL Non-Point Source Study* by Los Angeles County MS4 permittees identified as responsible agencies in the Bacteria TMDL.
 - f. Increased street and parking lot sweeping frequency. Streets and parking lots in the Marina are swept at least twice a week by the County. Parking Lot 15 is swept six times a week during the winter and seven times a week during the summer by the County. Parking Lots 11, 13, and 16 are swept four times a week by the County. The City conducts street sweeping in some areas within its drainage to the back basins on a weekly basis.
 - g. Annual inspection of restaurants by the County for potential sources of bacteria, trash, and other pollutants from waste disposal, grease containers, mop sinks, and other housekeeping activities. The inspection identifies facilities lacking minimum storm water BMPs and good housekeeping practices.
 - h. Inspections, outreach, and enforcement as part of the Restaurant and Grocery Store Trash Management Program by the City.

- i. Retrofit of 103 City-owned and 190 LACFCD-owned catch basins by the City with trash screens. The City cleans the 103 City-owned catch basins twice a year.
32. The County has implemented other watershed control measures to address nonpoint sources of bacteria within the Marina and immediately adjacent to the Marina, including the following:
 - a. Installation of two subsurface water circulators just offshore of Marina Beach. The circulators pump water toward the beach face at a rate of 30,000 gallons per minute each. The circulators are currently in operation.
 - b. Installation of bird spikes on all light standards in County owned parking lots including Lots 5, 7, 10, and 11, which discharge into Back Basins D, E, and F.
 - c. Removal of trash from all County facilities in the Marina on a daily basis.
 - d. Removal of bird fecal matter from Marina Beach. The beach is raked and sanitized daily by County staff as part of its maintenance program.
33. California Water Code section 13300 states:

“Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”
34. Based on an evaluation of routine monitoring data and data collected during the NPS Study, the County’s and the LACFCD’s MS4 discharges to Marina Beach and Back Basins D, E, and F and the City’s MS4 discharges to Basin E are not or may not be able to consistently comply with the final water quality-based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus* in the Los Angeles County MS4 Permit. Accordingly, pursuant to California Water Code section 13300, a discharge of waste is taking place or threatens to take place that violates requirements prescribed by the Los Angeles Water Board.
35. California Water Code section 13385, subdivisions (h) and (i), require the Los Angeles Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties “where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, *if all of the [specified] requirements are met*” (emphasis added).
36. In accordance with California Water Code section 13385(j)(3), the Los Angeles Water Board finds that: (a) the bacteria water quality-based effluent limitations applicable to the County’s and the LACFCD’s MS4 discharges to Marina Beach and Back Basins D, E, and F and the City’s MS4 discharges to Basin E are new effluent limitations in the Los Angeles County MS4 Permit, (b) the County, the LACFCD, and the City need to implement new or modified control measures in order to comply with the bacteria limitations, and (c) the new

or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

37. Since the time schedule for completion of the actions necessary to bring the waste discharge into compliance exceeds one year from the effective date of this TSO, this TSO includes interim requirements and the dates for their achievement. The interim requirements include both interim water quality-based effluent limitations and corresponding interim receiving water limitations for total coliform, fecal coliform, and *enterococcus* and actions and milestones leading to compliance with the final water quality-based effluent limitations and corresponding final receiving water limitations for these pollutants. This TSO does not exceed five years.
38. This TSO establishes interim water quality-based effluent limitations and corresponding interim receiving water limitations for single samples of total coliform, fecal coliform, and *enterococcus* during summer and winter dry weather. This TSO also requires the County and the LACFCD to undertake specific actions to control bacteria in their MS4 discharges to Marina Beach and Basins D, E, and F and requires the City to undertake specific actions to control bacteria in its MS4 discharges to Basin E to bring the County's, the LACFCD's, and the City's MS4 discharges into compliance with the final water quality-based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus*. The established time schedule is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the final water quality-based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus*.
39. The interim water quality-based effluent limitations and interim receiving water limitations are set equal to the 95th percentile of the annual exceedance days for the summer dry weather period and the 95th percentile of the annual exceedance days for winter dry weather period calculated using monitoring data from November 2009 through March 2014.
40. California Water Code section 13385(j)(3) requires the County, the LACFCD, and the City to each prepare and implement a Pollution Prevention Plan (PPP), either individually or collaboratively, pursuant to California Water Code section 13263.3. Pursuant to California Water Code section 13263.3(d)(1)(D), the Los Angeles Water Board has determined that a PPP is necessary for total coliform, fecal coliform, and *enterococcus*.
41. A TSO is appropriate in this circumstance to allow the County, the LACFCD, and the City the necessary time to undertake actions either individually or collectively to reduce the amount of bacteria discharged from their respective MS4s to Marina Beach and Basins D, E, and F. The bacteria exceedances temporarily allowed by this TSO are in the public interest given the multiple environmental benefits associated with directing resources toward and promptly achieving compliance with the final dry-weather water quality-based effluent limitations and corresponding receiving water limitations for bacteria through the implementation of multi-benefit BMPs.
42. Full compliance by the County, the LACFCD, and the City with their respective applicable requirements in this TSO exempts the County, the LACFCD, and the City from mandatory minimum penalties only for violations of the final water quality-based effluent limitations for

total coliform, fecal coliform, and enterococcus applicable to their MS4 discharges during dry weather to Marina Beach and Back Basins D, E and F, as set forth in Attachment M of the Los Angeles County MS4 Permit, pursuant to California Water Code section 13385(j)(3).

43. As long as the County, the LACFCD, and the City are in compliance with their respective applicable requirements in this TSO, it is not the Los Angeles Water Board's intention to take an enforcement action for violations of the Receiving Water Limitations for bacteria applicable to Marina Beach or Back Basins D, E, or F, as set forth in Part V.A and Attachment M of the Los Angeles County MS4 Permit.
44. This TSO is being issued for the protection of the environment. Therefore, issuance of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21100 et seq.) in accordance with sections 15301 and 15321(a)(2) of Title 14 of the California Code of Regulations.
45. The Los Angeles Water Board has notified the County, the LACFCD, the City, and interested agencies and persons of its intent to issue this TSO concerning compliance with waste discharge requirements. The Los Angeles Water Board heard and considered all testimony pertinent to this matter in a public hearing.
46. Any person aggrieved by this action of the Los Angeles Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the Los Angeles Water Board action, except that if the thirtieth day following the date action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to California Water Code section 13300, the County, the LACFCD, and the City shall comply with their respective applicable requirements listed below to ensure their MS4 discharges during dry weather to Marina Beach and Back Basins D, E, and F comply with the final water quality-based effluent limitations during dry weather and do not cause or contribute to exceedances during dry weather of corresponding receiving water limitations for bacteria in the Los Angeles County MS4 Permit (Order No. R4-2012-0175):

1. From July 10, 2014 to December 28, 2017, the County's and the LACFCD's MS4 discharges to Basins D and F, and the County's, the LACFCD's, and the City's MS4 discharges to Basin E, shall not collectively exceed the interim water quality-based effluent limitations for total coliform, fecal coliform, and *enterococcus* for each monitoring location more than the allowable number of exceedance days provided in the table below, on an annual basis (November 1-October 31):

Compliance Monitoring Location	Annual Allowable Exceedance Days			
	Single Sample Summer Dry Weather (April 1 - October 31)		Single Sample Winter Dry Weather (November 1 - March 31)	
	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-1	22	---	60	---
MdRH-2	---	11	---	19
MdRH-3	---	12	---	12
MdRH-4 (surface)	---	3	---	5
MdRH-4 (depth)	---	2	---	3
MdRH-5	---	5	---	3
MdRH-6 (surface)	---	3	---	5
MdRH-6 (depth)	---	4	---	4
MdRH-7	---	4	---	5
MdRH-8 (surface)	---	1	---	2
MdRH-8 (depth)	---	2	---	2
MdRH-9 (surface)	---	1	---	2
MdRH-9 (depth)	---	0	---	2

- From July 10, 2014 to December 28, 2017, the County and the LACFCD shall collectively comply with the following interim receiving water limitations for each monitoring location in Basins D and F, and the County, the LACFCD, and the City shall collectively comply with the following interim receiving water limitations for each monitoring location in Basin E, for total coliform, fecal coliform, and *enterococcus*, expressed as allowable exceedance days on an annual basis (November 1-October 31):

Compliance Monitoring Location	Annual Allowable Exceedance Days			
	Single Sample Summer Dry Weather (April 1 - October 31)		Single Sample Winter Dry Weather (November 1 - March 31)	
	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-1	22	---	60	---
MdRH-2	---	11	---	19
MdRH-3	---	12	---	12
MdRH-4 (surface)	---	3	---	5
MdRH-4 (depth)	---	2	---	3
MdRH-5	---	5	---	3
MdRH-6 (surface)	---	3	---	5
MdRH-6 (depth)	---	4	---	4
MdRH-7	---	4	---	5
MdRH-8 (surface)	---	1	---	2
MdRH-8 (depth)	---	2	---	2
MdRH-9 (surface)	---	1	---	2
MdRH-9 (depth)	---	0	---	2

- The County, the LACFCD, and the City shall implement and complete the following watershed control measures according to the schedule below:

Task	Description	Responsible Permittee	Completion Date
Monitor Back Basins D, E, and F, and Marina Beach	Continue to monitor Back Basins D, E, and F, and Marina Beach, for bacteria according to the Coordinated Monitoring Plan for the Bacteria TMDL to determine compliance.	County, LACFCD, and City	Ongoing
Submit PPP	Submit a Pollution Prevention Plan.	County and LACFCD	September 8, 2014
Submit PPP, including the "Dry Weather Flow Investigation and Abatement report"	Submit a PPP, which includes the "Dry Weather Flow Investigation and Abatement report" that details the results of the 2013 non-storm water discharge investigations, identifies a process for addressing non-storm water discharges (including those unlikely to be abated with enforcement actions), and evaluates potential actions, including candidate locations for structural BMPs, to mitigate these non-storm water discharges, as needed.	City	September 8, 2014
Conduct weekly observations and sampling of non-storm water at major MS4 outfalls	Conduct weekly observations and sampling of non-storm water, if present, at major MS4 outfalls during low tide conditions within the Marina. Data shall be submitted with the annual progress reports.	County, LACFCD, and City	Commencing November 1, 2014 through December 28, 2017
Implement pollution prevention measures as set forth in approved PPP	Implement pollution prevention tasks and measures as set forth in approved PPP and approved schedules.	County, LACFCD, and City	Various (completion date to be established in approved PPP)
Conduct monthly field observations and submit semi-annual summary reports	Conduct monthly non-storm water discharge investigations and follow-up on non-storm water discharges as appropriate through procedures identified in the PPP, including the "Dry Weather Flow Abatement report." Semi-annual reports will	City	December 15, 2014 (Summer period) May 15, 2015 (Winter period) and on those

Task	Description	Responsible Permittee	Completion Date
	summarize dry weather non-storm water discharge observations and actions taken to eliminate non-storm water discharges that are not authorized or conditionally exempted by the Los Angeles County MS4 Permit.		dates each year thereafter until December 2017
Parking Lot 5 and 7 Retrofit projects	Construct BMPs at Parking Lot 5 and 7 to capture, infiltrate, or treat runoff generated by the 90th percentile, 24-hour storm event prior to discharge into Back Basin F.	County	December 31, 2014
Education and Outreach Plan	Submit an education and outreach plan targeting residents and visitors to Marina Beach, informing the targeted audience of potential public health risks associated with elevated levels of bacteria and agency efforts to address impacts to water quality from bacteria as well as individual actions that can be taken by residents and visitors. The plan shall consider the potential for additional signage or other types of written material to be distributed in the vicinity of Marina Beach.	County, LACFCD, and City	December 31, 2014
Oxford Retention Basin Multiuse Enhancement project	Construct the Oxford Retention Basin Multi-Use Enhancement Project, which includes excavation of contaminated sediment from the bottom of the basin and installation of a berm between the two existing tide gates to improve water circulation and quality within the Oxford Basin.	LACFCD	December 31, 2015
If Basin E exceedances continue: Quantify the contributions of MS4 discharges and nonpoint sources and	If Basin E exceedances persist after completion of the Oxford Basin Multi-Use Enhancement Project, initiation of a study to evaluate the extent to which MS4 discharges are causing or contributing to exceedances;	County, LACFCD, and City	July 1, 2016

Task	Description	Responsible Permittee	Completion Date
implement BMPs.	quantify the loading of bacteria from nonpoint sources; and implement structural and non-structural BMPs as required.		
Comprehensive oral and written progress report	Submit a comprehensive written progress report, followed by an oral progress report to the Los Angeles Water Board at a public meeting, detailing the effectiveness of the actions taken through December 31, 2015 to reduce bacteria in MS4 discharges and receiving waters as required by the Los Angeles County MS4 Permit and this TSO.	County, LACFCD, and City	July 1, 2016
Parking Lot 9 Retrofit project	Construct BMPs at Parking Lot 9 to capture, infiltrate, or treat runoff generated by the 90th percentile, 24-hour storm event prior to discharge into Back Basin E.	County	December 31, 2016
Marina del Rey Library Parking Lot project	Construct BMPs at Marina del Rey Library Parking Lot to capture, infiltrate, or treat runoff generated by the 90th percentile, 24-hour storm event prior to discharge into Back Basin F.	County	October 31, 2017

4. The County's and the LACFCD's MS4 discharges to Basins D, E, and F, and the City's MS4 discharges to Basin E, shall achieve full compliance with the final water quality-based effluent limitations and shall not cause or contribute to exceedances of corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus* as soon as possible, but no later than December 28, 2017.
5. The County, the LACFCD, and the City shall submit a Pollution Prevention Plan (PPP), either individually or collaboratively, for bacteria, with a time schedule for implementation, for approval of the Executive Officer no later than September 8, 2014, pursuant to California Water Code section 13263.3(d)(1)(D). Pursuant to California Water Code section 13263.3(d)(2), the PPP shall include, but is not limited to, all of the following:
 - a. An analysis of the bacteria discharged from the County's, the LACFCD's, and the City's MS4s into Back Basins D, E, and F, including a description of the sources of the pollutants, and a comprehensive review of the processes and activities that result in the generation and discharge of the pollutants.

- b. An analysis of the potential for pollution prevention to reduce the generation of the bacteria, including the application of innovative and alternative technologies and any adverse environmental impacts resulting from the use of those methods.
 - c. A detailed description of the tasks and time schedules required to investigate and implement various elements of pollution prevention techniques.
 - d. A statement of the County's, LACFCD's, and City's pollution prevention goals and strategies, including priorities for short-term and long-term action, as they relate to reducing levels of bacteria in each of their MS4 discharges to Back Basins D, E, and F.
 - e. A description of the County's, LACFCD's, and City's existing pollution prevention methods related to reducing levels of bacteria in each of their MS4 discharges to Back Basins D, E, and F.
 - f. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.
 - g. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures to reduce discharges of bacteria from the County's, LACFCD's, and City's MS4s to Back Basins D, E, and F selected by each of the County, LACFCD, and City for implementation.
6. The PPP shall also include operation and maintenance plans for existing structural BMPs, including LFDs, bio-retention filters, and trash excluders (including trash screens installed in catch basins) implemented to achieve the final water quality-based effluent limitations and corresponding receiving water limitations addressed by this TSO. For future structural BMPs, implemented to achieve the final water quality-based effluent limitations and corresponding receiving water limitations, including those identified in the table above, an operation and maintenance plan shall be developed and submitted to the Regional Board within 60 days of project completion.
7. The County, the LACFCD, and the City shall submit annual progress reports, either individually or collaboratively, by December 15th of each year of efforts taken by each agency towards achieving compliance with the final water quality-based effluent limitations and achieving corresponding receiving water limitations for bacteria. The reports shall summarize the progress to date, activities conducted during that fiscal year (i.e., July 1-June 30), including a summary and documentation of non-structural BMPs (e.g., street and parking lot sweeping locations and frequency, catch basin cleaning, restaurant inspections) and structural BMP operation and maintenance activities outlined in the PPP, and the activities planned for the upcoming fiscal year. In the report(s), the County, the LACFCD, and the City shall each state whether or not they were in compliance with the interim water-quality based effluent limitations and receiving water limitations for bacteria during the reporting period. An interim progress report(s) shall be submitted by February 27, 2015, for the period of July 2014 through December 2014. The first annual progress report(s) shall be received by the Los Angeles Water Board by December 15, 2015, and will cover the fiscal year from July 2014 through June 2015.
8. The County, the LACFCD, and the City shall individually or collaboratively submit a final report on the results of their implementation and evaluation of the selected actions/measures by December 28, 2017. The report shall include: a) a description of the actions/measures implemented; b) the monitoring data collected after the implementation of the selected actions/measures including treatment process, if any; and c) an evaluation of the effectiveness of the selected actions/measures, including comparison to final water quality-based effluent limitations and receiving water limitations.

9. All technical and monitoring reports required under this TSO are required pursuant to California Water Code sections 13267 and 13383. The Los Angeles Water Board needs the required information in order to determine compliance with this TSO and the Los Angeles County MS4 Permit. The Los Angeles Water Board believes that the burdens, including costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.
10. Any person signing a document submitted under this TSO shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
11. If the County, the LACFCD, or the City fails to comply with any provision applicable to that agency in this TSO, the Los Angeles Water Board may take any further action authorized by law against the agency that is out of compliance. The Executive Officer, or his/her delegee, is authorized to take appropriate enforcement action pursuant, but not limited to, California Water Code sections 13350 and 13385. The Los Angeles Water Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.
12. All other provisions of the Los Angeles County MS4 Permit (Order No. R4-2012-0175) not in conflict with this TSO are in full force and effect.
13. The Los Angeles Water Board may reopen this TSO at its discretion or at the request of the County, the LACFCD, or the City, if warranted. Lack of progress towards compliance with the applicable final water quality-based effluent limitations and receiving water limitations addressed by this TSO may be cause for the Los Angeles Water Board to modify the conditions of this TSO.
14. This TSO becomes effective immediately upon adoption by the Los Angeles Water Board. This TSO expires on December 28, 2017, or upon the effective date of a new Los Angeles County MS4 Permit that supersedes Order No. R4-2012-0175, whichever date occurs first.

I, Samuel Unger, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on July 10, 2014.



Samuel Unger
Executive Officer