

**B. TMDLs in the Santa Monica Bay Watershed Management Area**

1. Santa Monica Bay Beaches Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013<sup>1</sup>:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 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.

c) Receiving Water Limitations

- (1) If an approved Integrated Water Resources Approach is implemented, each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table 1
July 15, 2013	25%
July 15, 2018	50%

<sup>1</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented, then the Permittees shall comply with the final water quality-based effluent limitations during wet weather no later than July 15, 2021.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

**Table 1: Interim Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group**

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
			Tuna Canyon	SMB 1-17			
Zuma Canyon	SMB 1-5						
2	City of Los Angeles	County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Marina del Rey	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6 SMB 3-7, SMB 3-8 <sup>#</sup> SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 <sup>#</sup>	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach	Hermosa	SMB 5-1 <sup>#</sup> , SMB 5-2, SMB 5-3 <sup>#</sup> , SMB 5-4 <sup>#</sup> , SMB 5-5 <sup>#</sup>	29	29	29
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 <sup>#</sup> , SMB 6-3, SMB 6-4, SMB 6-5 <sup>#</sup> , SMB 6-6 <sup>#</sup>	58	57	56

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 <sup>#</sup> , SMB 7-2 <sup>#</sup> , SMB 7-3 <sup>#</sup> , SMB 7-4 <sup>#</sup> , SMB 7-5 <sup>#</sup> , SMB 7-6 <sup>#</sup> , SMB 7-7, SMB 7-8 <sup>#</sup> , SMB 7-9 <sup>#</sup>	36	36	36

# For those beach monitoring locations subject to the antidegradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified below in Section B.1.c)(4).

\* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group. Caltrans will be required under the Statewide Storm Water Permit for State of California Department of Transportation to jointly complying with the allowable number of exceedance days.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

- (2) Permittees shall comply with the following grouped<sup>2</sup> final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to antidegradation provision, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013<sup>3</sup>:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather <sup>4</sup>	17	3

- (3) Permittees shall comply with the following grouped<sup>2</sup> final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation provision as of the effective date of this Order:

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
		Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	0	0	17	3
SMB 2-13	Imperial Highway storm drain	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	1	1	4	1
SMB 5-2	28th Street storm drain at Manhattan Beach	0	0	17	3
SMB 5-3	Manhattan Beach Pier	1	1	5	1
SMB 5-4	Hermosa City Beach at 26th St.	3	1	12	2
SMB 5-5	Hermosa Beach Pier, southern drain	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	3	1	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	1	1	3	1

<sup>2</sup> The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 permittees and Caltrans.

<sup>3</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented, then the Permittees shall comply with the final water quality-based effluent limitations during wet weather no later than July 15, 2021.

<sup>4</sup> Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 7-1	Malaga Cove, Palos Verdes Estates	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	1	1	2	1
SMB 7-6	White's Point, Royal Palms County Beach	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	1	1	3	1

- (4) Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013<sup>5</sup>:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

2. Santa Monica Bay Nearshore and Offshore Debris TMDL

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged into water bodies within the Santa Monica Bay WMA and then into Santa Monica Bay or on the shoreline of Santa Monica Bay no later than March 20, 2020, and every year thereafter.
- c) Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

Permittees	Baseline	Mar 20, 2016 (80%)	Mar 20, 2017 (60%)	Mar 20, 2018 (40%)	Mar 20, 2019 (20%)	Mar 20, 2020 (0%)
		Annual Trash Discharge (gals/yr)				

<sup>5</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented, then the Permittees shall comply with the final water quality-based effluent limitations during wet weather no later than July 15, 2021.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Agoura Hills <sup>6</sup>	1,044	835	626	418	209	0
Calabasas <sup>7</sup>	1,656	1,325	994	663	331	0
Culver City	52	42	31	21	10	0
El Segundo	2,732	2,186	1,639	1,093	546	0
Hermosa Beach	1,117	894	670	447	223	0
Los Angeles, City of	25,112	20,090	15,067	10,045	5,022	0
Los Angeles, County of	5,138	4,110	3,083	2,055	1,028	0
Malibu	5,809	4,648	3,486	2,324	1,162	0
Manhattan Beach	2,501	2,001	1,501	1,001	500	0
Palos Verdes Estates	3,346	2,677	2,007	1,338	669	0
Rancho Palos Verdes	7,254	5,803	4,353	2,902	1,451	0
Redondo Beach	3,197	2,558	1,918	1,279	639	0
Rolling Hills	515	412	309	206	103	0
Rolling Hills Estates	365	292	219	146	73	0
Santa Monica	5,672	4,537	3,403	2,269	1,134	0
Torrance	2,484	1,987	1,490	993	497	0
Westlake Village <sup>7</sup>	3,131	2,505	1,879	1,252	626	0

d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].

3. Santa Monica Bay TMDL for DDTs and PCBS (U.S. EPA established)

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay:

Constituent	Annual Mass-Based Effluent Limitations (g/yr)
DDT	27.08
PCBs	140.25

c) Compliance shall be determined based on a three-year averaging period.

4. TMDLs in the Malibu Creek Subwatershed

- a) Malibu Creek and Lagoon Bacteria TMDL

(1) Permittees subject to the provisions below are identified in Table B-1.

<sup>6</sup> Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established by the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established by the Malibu Creek Watershed Trash TMDL.

(2) Water Quality-Based Effluent Limitations

- (i) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 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.

- (ii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped<sup>7</sup> final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016<sup>8</sup>:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather <sup>9</sup>	17	3

- (ii) Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather

<sup>7</sup> The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 permittees, Ventura MS4 permittees and Caltrans.

<sup>8</sup> The Regional Water Board may extend the wet weather compliance date up to July 15, 2021, at the Regional Water Board's discretion.

<sup>9</sup> Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.



as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- (iii) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

b) Malibu Creek Watershed Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table B-1.
- (2) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibu Lake, Malibu Lagoon, Malibu Lake, Medea Creek, Lindero Creek, Lake Lindero, and Las Virgenes Creek in the Malibu Creek Watershed no later than July 7, 2017 and every year thereafter.
- (3) Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

Permittees	Baseline	July 7, 2013 (80%)	July 7, 2014 (60%)	July 7, 2015 (40%)	July 7, 2016 (20%)	July 7, 2017 (0%)
	Annual Trash Discharge (gals/yr)					
Agoura Hills	1810	1448	1086	724	362	0
Calabasas	673	539	404	269	135	0
Hidden Hills	71	57	43	28	14	0
Los Angeles County	1117	894	670	447	223	0
Malibu	226	181	136	91	45	0
Westlake Village	143	114	86	57	29	0

- (4) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].

c) Malibu Creek Watershed Nutrients TMDL (USEPA established)

- (1) Permittees subject to the provisions below are identified in Table B-1.
- (2) Permittees shall comply with the following grouped<sup>10</sup> water quality-based effluent limitations as of the effective date of this Order for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibou Lake, Malibu Creek and Malibu Lagoon and its tributaries. Tributaries to Malibu Creek and Lagoon, include the following upstream water bodies; Triunfo Creek, Palo Comado Creek, Cheesebro Creek, Strokes Creek and Cold Creek.

Time Period	Effluent Limitations	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15)	3 lbs/day	0.3 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

5. TMDLs in the Ballona Creek Subwatershed

a) Ballona Creek Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Ballona Creek no later than September 30, 2015 and every year thereafter.
- (3) Permittees shall comply with the interim and final water quality-based effluent limitations for trash discharged to Ballona Creek, per the schedule below:

Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year<sup>11</sup> (pounds of drip-dry trash)

Permittees	Baseline	Sept 30, 2012	Sept 30, 2013	Sept 30, 2014	Sept 30, 2015 <sup>12</sup>
		(20%)	(10%)	(3.3%)	(0%)
Annual Trash Discharge (pounds of trash)					
Beverly Hills	79,914	15,983	7,991	2,637	0
Culver City	36,509	7,302	3,651	1,205	0
Inglewood	21,564	4,313	2,156	712	0
Los Angeles, City of	950,238	190,048	95,024	31,358	0

<sup>10</sup> USEPA was unable to specifically distinguish the amounts of pollutant loads from allocation categories associated with areas regulated by the storm water permits. Therefore, allocations for storm water permits are grouped.

<sup>11</sup> Storm year is defined as October 1 to September 30 herein.

<sup>12</sup> Permittees shall achieve their final effluent limitation of zero trash discharge for the 2014-2015 storm year and every year thereafter.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Los Angeles, County of	57,920	11,584	5,792	1,911	0
Santa Monica	2,299	460	230	76	0
West Hollywood	13,018	2,604	1,302	430	0

Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year (gallons of uncompressed trash)

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	79,914	15,983	7,991	2,637	0
Culver City	36,509	7,302	3,651	1,205	0
Inglewood	21,564	4,313	2,156	712	0
Los Angeles, City of	950,238	190,048	95,024	31,358	0
Los Angeles, County of	57,920	11,584	5,792	1,911	0
Santa Monica	2,299	460	230	76	0
West Hollywood	13,018	2,604	1,302	430	0

- (4) Seventy-two (72) hours after each rain event, Permittees shall clean out and measure trash retained.
- (5) Every 3 months during dry weather, Permittees shall clean out and measure trash retained.
- (6) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in a)(2) and a)(3) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].

b) Ballona Creek Estuary Toxic Pollutants TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of pollutants from the sediment discharged to Ballona Creek Estuary:

Constituent	Effluent Limitations	
	Annual	Units
Cadmium	8.0	kg/yr
Copper	227.3	kg/yr
Lead	312.3	kg/yr
Silver	6.69	kg/yr
Zinc	1003	kg/yr
Chlordane	3.34	g/yr

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads from sediments discharged to Ballona Creek Estuary, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)
January 11, 2013	25
January 11, 2015	50
January 11, 2017	75
January 11, 2021	100

c) Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.

(2) Water Quality-Based Effluent Limitations

- (i) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 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.

- (ii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

- (iii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	576/100 mL	126/100 mL

- (iv) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped<sup>13</sup> single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; Centinela Creek at the confluence with Ballona Creek Estuary; Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	3	1	April 27, 2013
Wet Weather <sup>14</sup>	17*	3	April 27, 2017 <sup>15</sup>

\* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- (ii) Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from

<sup>13</sup> The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

<sup>14</sup> Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

<sup>15</sup> The Regional Water Board may extend the wet weather compliance date up to July 15, 2021, at the Regional Water Board's discretion.

Ballona Creek Reach 1 during any 30-day period. Permittees shall achieve compliance with this receiving water limitation during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017.

- (iii) Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- (iv) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- (v) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

d) Ballona Creek Metals TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.

- (2) Final Water Quality-Based Effluent Limitations

- (i) Permittees shall comply with the following dry weather<sup>16</sup> water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

<sup>16</sup> Dry weather is defined as any day when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

Constituent	Effluent Limitation Daily Maximum (g/day)	
	Ballona Creek	Sepulveda Channel
Copper	807.7	365.6
Lead	432.6	196.1
Selenium	169	76
Zinc	10,273.1	4,646.4

- (ii) In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather<sup>17</sup> no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (µg/L)
Copper	24
Lead	13
Selenium	5
Zinc	304

- (iii) Permittees shall comply with the following wet weather<sup>18</sup> water quality-based effluent limitations no later than January 11, 2021, expressed as total recoverable metals discharged to Ballona Creek and its tributaries:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	$1.70 \times 10^{-5} \times$ daily storm volume (L)
Lead	$5.58 \times 10^{-5} \times$ daily storm volume (L)
Selenium	$4.73 \times 10^{-6} \times$ daily storm volume (L)
Zinc	$1.13 \times 10^{-4} \times$ daily storm volume (L)

<sup>17</sup> *Ibid.*

<sup>18</sup> Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to Ballona Creek and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2014	75	--
January 11, 2016	100	50
January 11, 2021	100	100

- e) Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)

- (1) Permittees subject to the provisions below are identified in Table B-2.  
 (2) Permittees shall comply with the following grouped<sup>19</sup> water quality-based effluent limitations as of the effective date of this Order for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual Effluent Limitation (m <sup>3</sup> /yr)
Total Sediment (suspended sediment plus sediment bed load)	44,615

6. TMDLs in Marina del Rey Subwatershed

- a) Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.  
 (2) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than March 18, 2014<sup>20</sup>:

<sup>19</sup> The water quality-based effluent limitation is group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

<sup>20</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented, then the Permittees shall comply with the final water quality-based effluent limitations during wet weather no later than July 15, 2021.



LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 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.

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped<sup>21</sup> final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation provisions, during dry weather as of the effective date of this Order and during wet weather no later than March 18, 2014<sup>22</sup>.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather <sup>23</sup>	17	3

- (ii) Permittees shall comply with the following grouped<sup>24</sup> final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation provision as of the effective date of this Order:

Station ID	Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
		Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	3	1	8	1

<sup>21</sup> The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

<sup>22</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented, then the Permittees shall comply with the final water quality-based effluent limitations during wet weather no later than July 15, 2021.

<sup>23</sup> Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

<sup>24</sup> The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

- (iii) Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than March 18, 2014<sup>25</sup>:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

b) Marina del Rey Harbor Toxic Pollutants TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016<sup>26</sup>, expressed as an annual loading of pollutants from the sediment discharged to Marina del Rey Harbor Back Basins D, E, and F:

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads from sediments discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2014	50
March 22, 2016	100

- (4) If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent

<sup>25</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented, then the Permittees shall comply with the final water quality-based effluent limitations during wet weather no later than July 15, 2021.

<sup>26</sup> If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

limitations for pollutant loads from sediments discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

<b>Deadline</b>	<b>Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)</b>
March 22, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

WORKING PROPOSAL