

ATTACHMENT K. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Jurisdictional Permittees.

Table K-1: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Santa Clarita</i>	X	X		X

Table K-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Agoura Hills</i>	X	X	X	X	X	X
<i>Beverly Hills</i>	X	X	X			
<i>Calabasas</i>	X	X	X	X	X	X
<i>Culver City</i>	X	X	X			
<i>El Segundo</i>	X	X	X			
<i>Hermosa Beach</i>	X	X	X			
<i>Hidden Hills</i>	X	X	X	X	X	X
<i>Inglewood</i>	X	X	X			

T
E
N
T
A
T
I
V
E

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Los Angeles (City of)</i>	X	X	X			
<i>Los Angeles (County of)</i>	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X
Malibu	X	X	X	X	X	X
<i>Manhattan Beach</i>	X	X	X			
<i>Palos Verdes Estates</i>	X	X	X			
<i>Rancho Palos Verdes</i>	X	X	X			
<i>Redondo Beach</i>	X	X	X			
<i>Rolling Hills</i>	X	X	X			
<i>Rolling Hills Estates</i>	X	X	X			
Santa Monica	X	X	X			
<i>Torrance</i>	X	X	X			
West Hollywood	X	X	X			
Westlake Village	X	X	X	X	X	X

T
E
N
T
A
T
I
V
E

Table K-3: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
El Segundo							
Hermosa Beach							
Hidden Hills							
Inglewood	X	X	X	X	X		
Los Angeles (City of)	X	X	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X	X	X
Los Angeles County Flood Control		X	X	X	X	X	X
Malibu							
Manhattan Beach							
Palos Verdes Estates							
Rancho Palos Verdes							
Redondo Beach							
Rolling Hills							

T
E
N
T
A
T
I
V
E

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
<i>Rolling Hills Estates</i>							
Santa Monica	X	X	X	X	X		
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table K-4: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
El Segundo					X
Gardena					X
Hawthorne					X
<i>Inglewood</i>					X
Lawndale					X
Lomita		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X

T
E
N
T
A
T
I
V
E

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Los Angeles County Flood Control</i>		X	X	X	X
<i>Manhattan Beach</i>					X
<i>Palos Verdes Estates</i>		X	X	X	
<i>Rancho Palos Verdes</i>		X	X	X	
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	
<i>Rolling Hills Estates</i>		X	X	X	
<i>Torrance</i>		X	X	X	X

Table K-5: Los Angeles River Watershed Management Area TMDLs

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Alhambra</i>	X	X	X	X			
<i>Arcadia</i>	X	X	X	X		X	
<i>Bell</i>	X	X	X	X			
<i>Bell Gardens</i>	X	X	X	X			
<i>Bradbury</i>	X	X	X	X		X	
<i>Burbank</i>	X	X	X	X			
<i>Calabasas</i>	X	X	X	X		X	
<i>Carson</i>	X	X	X	X			

T
E
N
T
A
T
I
V
E

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Commerce	X	X	X	X			
Compton	X	X	X	X			X
Cudahy	X	X	X	X			
Downey	X	X	X	X			
Duarte	X	X	X	X		X	
El Monte	X	X	X	X		X	
Glendale	X	X	X	X			
Hidden Hills	X	X	X	X			
Huntington Park	X	X	X	X			
Inglewood							
Irwindale	X	X	X	X		X	
La Canada Flintridge	X	X	X	X			
Lakewood	X	X					X
Los Angeles (City of)	X	X	X	X		X	X
Los Angeles (County of)	X	X	X	X		X	X
Los Angeles County Flood Control		X	X	X	X	X	X
Lynwood	X	X	X	X			
Maywood	X	X	X	X			
Monrovia	X	X	X	X		X	
Montebello	X	X	X	X			
Monterey Park	X	X	X	X			
Paramount	X	X	X	X			X

T
E
N
T
A
T
I
V
E

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Pasadena	X	X	X	X			
Pico Rivera	X	X	X	X			
Rosemead	X	X	X	X			
San Fernando	X	X	X	X			
San Gabriel	X	X	X	X			
San Marino	X	X	X	X			
Santa Clarita	X	X	X	X			
Sierra Madre	X	X	X	X		X	
Signal Hill	X	X	X	X	X		X
South El Monte	X	X	X	X			
South Gate	X	X	X	X			
South Pasadena	X	X	X	X			
Temple City	X	X	X	X			
Vernon	X	X	X	X			

T
E
N
T
A
T
I
V
E

Table K-6: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Arcadia	X			
Artesia	X			

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Azusa	X		X	
Baldwin Park	X			
Bellflower	X			X
Bradbury	X			
Cerritos	X			
Claremont	X		X	
Covina	X			
Diamond Bar	X			
Downey	X			
Duarte	X			
El Monte	X	X	X	
Glendora	X			
Hawaiian Gardens	X			
Industry	X			
Irwindale	X		X	
La Habra Heights	X			
La Mirada	X			
La Puente	X			
La Verne	X		X	
Lakewood	X			
Los Angeles (County of)	X	X	X	X
Los Angeles County Flood Control	X	X	X	X
Monrovia				
Norwalk	X			
Pico Rivera	X			

T
E
N
T
A
T
I
V
E

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Pomona	X		X	
San Dimas	X		X	
Santa Fe Springs	X			
South El Monte	X	X	X	
Walnut	X			
West Covina	X			
Whittier	X			

Table K-7: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		
<i>Signal Hill</i>	X		

T
E
N
T
A
T
I
V
E

Table K-8: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
Claremont	X
Pomona	X

Table K-9: Los Angeles River Watershed Management Area Metals TMDLs by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Alhambra		X			
<i>Arcadia</i>		X			
Bell		X			
Bell Gardens		X			
Bradbury		X			
Burbank			X	X	
Calabasas					X
<i>Carson</i>	X				
Commerce		X			
<i>Compton</i>	X	X			
Cudahy		X			
<i>Downey</i>		X			
<i>Duarte</i>		X			
<i>El Monte</i>		X			

T
E
N
T
A
T
I
V
E

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
<i>Glendale</i>		X	X	X	
<i>Hidden Hills</i>					X
<i>Huntington Park</i>	X	X			
<i>Inglewood</i>					
<i>Irwindale</i>		X			
<i>La Canada Flintridge</i>		X	X		
<i>Lakewood</i>					
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X
<i>Lynwood</i>	X	X			
<i>Maywood</i>		X			
<i>Monrovia</i>		X			
<i>Montebello</i>		X			
<i>Monterey Park</i>		X			
<i>Paramount</i>		X			
<i>Pasadena</i>		X	X		
<i>Pico Rivera</i>		X			
<i>Rosemead</i>		X			
<i>San Fernando</i>				X	
<i>San Gabriel</i>		X			
<i>San Marino</i>		X			
<i>Santa Clarita</i>					
<i>Sierra Madre</i>		X			
<i>Signal Hill</i>	X				
<i>South El Monte</i>		X			

T
E
N
T
A
T
I
V
E

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
South Gate	X	X			
South Pasadena		X			
Temple City		X			
Vernon		X			

Table K-10: Los Angeles River Watershed Management Area Bacteria TMDL by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
Alhambra		X												X		
Arcadia														X		
Bell		X														
Bell Gardens		X												X		
Bradbury														X		
Burbank			X						X							
Calabasas											X	X				
Carson										X						
Commerce		X												X		
Compton	X	X								X						
Cudahy		X														
Downey		X												X		
Duarte														X		

TENTATIVE

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
<i>El Monte</i>														X		
<i>Glendale</i>		X	X				X			X					X	X
<i>Hidden Hills</i>								X				X				
<i>Huntington Park</i>		X								X						
<i>Inglewood</i>																
<i>Irwindale</i>													X			
<i>La Canada Flintridge</i>			X				X									X
<i>Lakewood</i>	X															
<i>Los Angeles (City of)</i>		X	X	X	X	X	X	X	X	X	X	X	X		X	X
<i>Los Angeles (County of)</i>	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lynwood</i>	X	X								X						
<i>Maywood</i>		X														
<i>Monrovia</i>													X			
<i>Montebello</i>		X											X			
<i>Monterey Park</i>		X											X			
<i>Paramount</i>	X	X														
<i>Pasadena</i>		X	X				X							X		X
<i>Pico Rivera</i>													X			
<i>Rosemead</i>													X			
<i>San Fernando</i>														X		
<i>San Gabriel</i>													X			

TENTATIVE

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
San Marino														X		
Santa Clarita									X							
Sierra Madre														X		
Signal Hill	X															
South El Monte														X		
South Gate		X								X				X		
South Pasadena		X					X							X		
Temple City														X		
Vernon		X														

TENTATIVE

Table K-11: Santa Monica Bay Watershed Management Area Bacteria TMDL by Reach

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
Agoura Hills									X
Beverly Hills								X	
Calabasas	X								X
Culver City								X	
El Segundo		X			X				
Hermosa Beach					X	X			
Hidden Hills									X

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
<i>Inglewood</i>								X	
<i>Los Angeles (City of)</i>	X	X	X				X	X	
<i>Los Angeles (County of)</i>	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X
<i>Malibu</i>	X			X					X
<i>Manhattan Beach</i>					X	X			
<i>Palos Verdes Estates</i>							X		
<i>Rancho Palos Verdes</i>							X		
<i>Redondo Beach</i>						X			
<i>Rolling Hills</i>							X		
<i>Rolling Hills Estates</i>							X		
<i>Santa Monica</i>		X	X					X	
<i>Torrance</i>						X			
<i>West Hollywood</i>								X	
<i>Westlake Village</i>									X

T
E
N
T
A
T
I
V
E

Table K-12: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
<i>Artesia</i>			X	X				
<i>Azusa</i>	X							X
<i>Baldwin Park</i>	X					X	X	
<i>Bellflower</i>				X				
<i>Bradbury</i>								
<i>Cerritos</i>			X	X				
<i>Claremont</i>	X	X						
<i>Covina</i>	X							
<i>Diamond Bar</i>		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
<i>Glendora</i>	X							X
<i>Hawaiian Gardens</i>			X					
<i>Industry</i>	X	X			X	X		
<i>Irwindale</i>	X					X	X	X
<i>La Habra Heights</i>		X	X					
<i>La Mirada</i>			X					
<i>La Puente</i>	X	X				X		
<i>La Verne</i>	X	X						
<i>Lakewood</i>			X	X				
<i>Los Angeles (County of)</i>	X	X	X		X	X		X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X

TENTATIVE

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
Monrovia								
Norwalk			X	X				
Pico Rivera					X	X		
Pomona	X	X						
San Dimas	X	X						
Santa Fe Springs			X	X	X			
South El Monte						X		
Walnut	X	X						
West Covina	X	X						
Whittier		X	X		X	X		

T
E
N
T
A
T
I
V
E

ATTACHMENT L. TMDLs IN THE SANTA CLARA RIVER WATERSHED MANAGEMENT AREA (WMA)

A. Santa Clara River Nitrogen Compounds TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges to the Santa Clara River Reach 5³ as of the effective date of this Order:

Constituent	Effluent Limitations (mg/L)	
	1-hour Average	30-day Average
Total Ammonia as Nitrogen	5.2	1.75
Nitrate as Nitrogen plus Nitrite as Nitrogen	--	6.8

B. Upper Santa Clara River Chloride TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following water quality-based effluent limitation for discharges to the Santa Clara River Reaches 5 and 6 as of the effective date of this Order:

Constituent	Effluent Limitation Instantaneous Maximum (mg/L)
Chloride	100

C. Lake Elizabeth Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Lake Elizabeth no later than March 6, 2016 and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Lake Elizabeth, per the schedule below:

Deadline	Effluent Limitation	
	Drainage Area covered by Full Capture Systems (%)	Annual Trash Discharge (gal/yr)
Baseline	0	529
March 6, 2012	20	423
March 6, 2013	40	317
March 6, 2014	60	212
March 6, 2015	80	106
March 6, 2016	100	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in C.2 and C.3 above per the provisions in Part VI.E.5.

³ The Basin Plan Chapter 7-9 Santa Clara River Nitrogen Compounds TMDL uses the USEPA Santa Clara River reach designations. The USEPA's Santa Clara River Reach 7 corresponds to Santa Clara River Reach 5 in the Los Angeles Region's Basin Plan Chapter 2.

T
E
N
T
A
T
I
V
E

D. Santa Clara River Indicator Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Santa Clara River Reaches 5, 6 and 7 during dry weather no later than March 21, 2023 and during wet weather⁴ no later than March 21, 2029:

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

3. Receiving Water Limitations

- a. Permittees shall comply with the following interim bacteria receiving water limitations⁵ for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		Deadline
	Daily Sampling	Weekly Sampling	
Dry Weather	17	3	March 21, 2016
Wet Weather	61	9	March 21, 2016

- b. Permittees shall comply with the following final bacteria receiving water limitations⁶ for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		Deadline
	Daily Sampling	Weekly Sampling	
Dry Weather	5	1	March 21, 2023
Wet Weather	16	3	March 21, 2029

- c. Permittees shall comply with the following geometric mean receiving water limitation for the Santa Clara River Reaches 5, 6, and 7 during dry weather no later than March 21, 2023 and during wet weather no later than March 21, 2029:

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

⁴ Wet weather is defined as days with 0.1 inch of rain or more and the three days following the rain event.

⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each reach.

⁶ Ibid.

ATTACHMENT M. TMDLs IN THE SANTA MONICA BAY WATERSHED MANAGEMENT AREA

A. Santa Monica Bay Beaches Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. 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, 2021:

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
 - a. Permittees in 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%

T
E
N
T
A
T
I
V
E

Table M-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		
					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			

T
E
N
T
A
T
I
V
E

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		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			
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 [#] , SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56

T
E
N
T
A
T
I
V
E

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		
					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 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	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.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

T
E
N
T
A
T
I
V
E

- b. Permittees shall comply with the following grouped⁷ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart c. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

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 ⁸	17	3

- c. Permittees shall comply with the following grouped² 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:

		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 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, southern drain	1	1	5	1

T
E
N
T
A
T
I
V
E

⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

⁸ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

		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 5-4	Hermosa City Beach at 26th St.	3	1	12	2
SMB 5-5	Hermosa Beach Pier	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
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

T
E
N
T
A
T
I
V
E

- d. 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, 2021:

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

B. Santa Monica Bay Nearshore and Offshore Debris TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

2. 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, 2020⁹, and every year thereafter.
3. 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 ¹⁰	Mar 20, 2016 (80%)	Mar 20, 2017 (60%)	Mar 20, 2018 (40%)	Mar 20, 2019 (20%)	Mar 20, 2020 ¹¹ (0%)
		Annual Trash Discharge (gals/yr)				
Agoura Hills ¹²	1,044	835	626	418	209	0
Calabasas ¹⁰	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 ¹⁰	3,131	2,505	1,879	1,252	626	0

T
E
N
T
A
T
I
V
E

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

⁹ If a Permittee by November 4, 2013, adopts local ordinances to ban plastic bags, smoking in public places and single use expanded polystyrene food packaging then the final compliance date will be extended until March 20, 2023.

¹⁰ If a Permittee elects not to use the default baseline, then the Permittee shall include a plan to establish a site specific trash baseline in their Trash Monitoring and Reporting Plan.

¹¹ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2019-2020 storm year and every year thereafter.

¹² Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established to implement the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established to implement the Malibu Creek Watershed Trash TMDL.

2. Permittees shall comply with the following WLAs, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay, per the provisions in Part IV.E.3:

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

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

D. TMDLs in the Malibu Creek Subwatershed

1. Malibu Creek and Lagoon Bacteria TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- b. 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 July 15, 2021:

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 July 15, 2021:

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

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped¹³ final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

T
E
N
T
A
T
I
V
E

Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

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 ¹⁴	17	3

- ii. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

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 July 15, 2021:

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

T
E
N
T
A
T
I
V
E

2. Malibu Creek Watershed Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibou Lake, Malibu Lagoon, Malibou 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.
- c. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

¹⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment M –TMDLs in the Santa Monica Bay WMA

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

- d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in D.2.b and D.2.c above per the provisions in Part VI.E.5.
- 3. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
 - b. Permittees shall comply with the following grouped¹⁵ WLAs per the provisions in Part IV.E.3 for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibu 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	WLA	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15) ¹⁶	8 lbs/day	0.8 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

E. TMDLs in the Ballona Creek Subwatershed

1. Ballona Creek Trash TMDL

¹⁵ 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.

¹⁶ The mass-based summer WLAs are calculated as the sum of the allocations for “runoff from developed areas” and “dry weather urban runoff.”

T
E
N
T
A
T
I
V
E

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. 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.
- c. 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 Year¹⁷
(pounds of drip-dry trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ¹⁸ (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	70,712	14,142	7,071	2,333	0
Culver City	37,271	7,454	3,727	1,230	0
Inglewood	22,324	4,465	2,232	737	0
Los Angeles, City of	942,720	188,544	94,272	31,110	0
Los Angeles, County of	52,693	10,539	5,269	1,739	0
Santa Monica	2,579	516	258	85	0
West Hollywood	13,411	2,682	1,341	443	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 ¹⁶ (0%)
		Annual Trash Discharge (gallons of uncompressed trash)			
Beverly Hills	45,336	9,067	4,534	1,496	0
Culver City	25,081	5,016	2,508	828	0
Inglewood	14,717	2,943	1,472	486	0
Los Angeles, City of	602,068	120,414	60,207	19,868	0
Los Angeles, County of	32,679	6,536	3,268	1,078	0
Santa Monica	1,749	350	175	58	0
West Hollywood	9,360	1,872	936	309	0

T
E
N
T
A
T
I
V
E

¹⁷ For purposes of the provisions in this subpart, a storm year is defined as October 1 to September 30.

¹⁸ Permittees shall achieve their final water quality-based effluent limitation of zero trash discharged for the 2014-2015 storm year and every year thereafter.

- d. Seventy-two (72) hours after each rain event, Permittees shall clean out and measure trash retained.
- e. Every 3 months during dry weather, Permittees shall clean out and measure trash retained.
- f. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.1.b and E.1.c above per the provisions in Part VI.E.5.

2. Ballona Creek Estuary Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of sediment-bound pollutants deposited 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
DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

T
E
N
T
A
T
I
V
E

- c. Permittees shall comply with interim and final water quality-based effluent limitations for sediment-bound pollutant loads deposited 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

- d. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part E.2.b by demonstrating any one of the following:

- i. Final water quality-based effluent limitations for sediment-bound pollutants deposited to Ballona Creek Estuary are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Concentrations of sediments discharged meet the numeric targets for sediment as defined in the TMDL.
3. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

b. 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 July 15, 2021:

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 July 15, 2021:

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 July 15, 2021:

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 July 15, 2021:

T
E
N
T
A
T
I
V
E

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

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped¹⁹ 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 ²⁰	17*	3	July 15, 2021

* 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 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 July 15, 2021.
- 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 July 15, 2021:

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

T
E
N
T
A
T
I
V
E

¹⁹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁰ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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 July 15, 2021:

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 July 15, 2021:

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

4. Ballona Creek Metals TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Final Water Quality-Based Effluent Limitations
 - i. Permittees shall comply with the following dry weather²¹ water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

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 weather²² 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

T
E
N
T
A
T
I
V
E

²¹ 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.

²² Ibid.

Lead	13
Selenium	5
Zinc	304

- iii. Permittees shall comply with the following wet weather²³ 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	1.70×10^{-5} x daily storm volume (L)
Lead	5.58×10^{-5} x daily storm volume (L)
Selenium	4.73×10^{-6} x daily storm volume (L)
Zinc	1.13×10^{-4} x daily storm volume (L)

- c. 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

5. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following grouped²⁴ WLA per the provisions in Part VI.E.3 for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual WLA ²⁵ (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed)	44,615

²³ 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.

²⁴ The WLA is group-based and shared among all MS4 Permittees located within the drainage area.

²⁵ The WLA is applied as a 3-year average.

load)	
-------	--

F. TMDLs in Marina del Rey Subwatershed

1. Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. 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 July 15, 2021:

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

- i. Permittees shall comply with the following grouped²⁶ 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 July 15, 2021.

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 ²⁷	17	3

- ii. Permittees shall comply with the following grouped²⁸ 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:

	Annual Allowable Exceedance Days of the Single Sample Objective (days)
--	--

T
E
N
T
A
T
I
V
E

²⁶ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁷ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

Station ID	Monitoring Location	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

- 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 July 15, 2021:

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

2. Marina del Rey Harbor Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016²⁹, expressed as an annual loading of pollutants associated with total suspended solids (TSS) 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

- c. Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

²⁹ 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.

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

- d. If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS 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, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

- e. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part F.2.b by demonstrating any one of the following:
- i. Final water quality-based effluent limitations for pollutants associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Pollutant concentrations associated with TSS discharged meet the numeric targets for sediment as defined in the TMDL.

T
E
N
T
A
T
I
V
E

ATTACHMENT N. TMDLs IN DOMINGUEZ CHANNEL AND GREATER HARBOR WATERS WATERSHED MANAGEMENT AREA

A. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

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

- a. Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ³⁰	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- b. Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach at all times:

³⁰ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment N –TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

T
E
N
T
A
T
I
V
E

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

B. Machado Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Machado Lake no later than March 6, 2016, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Machado Lake, per the schedule below:

**Machado Lake Trash Water Quality-Based Effluent Limitations
(gallons of uncompressed trash per year)**

Permittees	Baseline ³¹	3/6/2012	3/6/2013	3/6/2014	3/6/2015	3/6/2016 ³²
		(80%)	(60%)	(40%)	(20%)	(0%)
Annual Trash Discharge (gallons/yr)						
Carson	8141	6513	4885	3257	1628	0
Lomita	9393	7514	5636	3757	1879	0
City of Los Angeles	12331	9865	7399	4932	2466	0
Los Angeles County	8304	6643	4982	3322	1661	0
Los Angeles County Flood Control District	16	13	10	7	3	0
Palos Verdes Estates	1976	1581	1186	791	395	0
Rancho Palos Verdes	5227	4181	3136	2091	1045	0
Redondo Beach	18	15	11	7	4	0
Rolling Hills	7004	5603	4202	2801	1401	0
Rolling Hills Estates	14722	11777	8833	5889	2944	0
Torrance	34809	27847	20885	13924	6962	0

4. If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s).

³¹ The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

³² Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

T
E
N
T
A
T
I
V
E

5. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Machado Lake Nutrient TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following interim and final water quality-based effluent limitations for discharges to Machado Lake:

Deadline	Interim and Final Effluent Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

3. Compliance Determination

- a. Permittees may be deemed in compliance with the water quality-based effluent limitations by actively participating in a Lake Water Quality Management Plan (LWQMP) and attaining the receiving water limitations for Machado Lake. The City of Los Angeles has entered into a Memorandum of Agreement with the Regional Water Board to implement the LWQMP and reduce external nutrient loading to attain the following receiving water limitations:

Deadline	Interim and Final Receiving Water Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

- b. Permittees may be deemed in compliance with water quality-based effluent limitations by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee's drainage area where approved by the Regional Water Board Executive Officer based on the results of a special study by the Permittee.³³

- i. The County of Los Angeles submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations
----------	--

³³ The annual mass-based allocation shall be equivalent to a monthly average concentration of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions.

T
E
N
T
A
T
I
V
E

	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	887	1739
September 11, 2018	71	710

- ii. The City of Torrance submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	3,760	7,370
September 11, 2018	301	3008

D. Machado Lake Pesticides and PCBs TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges of suspended sediments to Machado Lake, applied as a 3-year average no later than September 30, 2019:

Pollutant	Effluent Limitations for Suspended Sediment-Associated Contaminants (µg/kg dry weight)
Total PCBs	59.8
DDT (all congeners)	4.16
DDE (all congeners)	3.16
DDD (all congeners)	4.88
Total DDT	5.28
Chlordane	3.24
Dieldrin	1.9

E. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral listed below as of the effective date of this Order:
 - a. Dominguez Channel Freshwater – Wet Weather
 - i. The freshwater toxicity interim water quality-based effluent limitation is 2 TUc. The freshwater interim effluent limitation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in

T
E
N
T
A
T
I
V
E

US EPA’s “Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program” (2000).

- ii. Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel and Torrance Lateral:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- b. Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum					
	(mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
Dominguez Channel Estuary (below Vermont Avenue)	220.0	510.0	789.0	1.727	31.60	1.490
Long Beach Inner Harbor	142.3	50.4	240.6	0.070	4.58	0.060
Los Angeles Inner Harbor	154.1	145.5	362.0	0.341	90.30	2.107
Long Beach Outer Harbor (inside breakwater)	67.3	46.7	150	0.075	4.022	0.248
Los Angeles Outer Harbor (inside breakwater)	104.1	46.7	150	0.097	4.022	0.310
Los Angeles River Estuary	53.0	46.7	183.5	0.254	4.36	0.683
San Pedro Bay Near/Off Shore Zones	76.9	66.6	263.1	0.057	4.022	0.193
Los Angeles Harbor - Cabrillo Marina	367.6	72.6	281.8	0.186	36.12	0.199
Los Angeles Harbor - Consolidated Slip	1470.0	1100.0	1705.0	1.724	386.00	1.920
Los Angeles Harbor - Inner Cabrillo Beach Area	129.7	46.7	163.1	0.145	4.022	0.033
Fish Harbor	558.6	116.5	430.5	40.5	2102.7	36.6

- 3. Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:

- a. Dominguez Channel Freshwater – Wet Weather

- i. Freshwater Toxicity Effluent Limitation shall not exceed the monthly median of 1 Tuc.
- ii. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to Dominguez Channel and all upstream reaches and tributaries of Dominguez Channel above Vermont Avenue:

T
E
N
T
A
T
I
V
E

Metals	Water Column Mass-Based Final Effluent Limitation Daily Maximum ³⁴ (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

b. Torrance Lateral Freshwater and Sediment – Wet Weather

- i. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to the Torrance Lateral:

Metals	Water Column Effluent Limitation Daily Maximum ³⁵ (unfiltered, µg/L)
Total Copper	9.7
Total Lead	42.7
Total Zinc	69.7

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Torrance Lateral:

Metals	Concentration-Based Effluent Limitation Daily Maximum (mg/kg dry)
Total Copper	31.6
Total Lead	35.8
Total Zinc	121

c. Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters

- i. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of pollutants in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (kg/yr)			
	Total Cu	Total Pb	Total Zn	Total PAHs

³⁴ Effluent limitations are based on a hardness of 50 mg/L, and 90th percentile of annual flow rates (62.7 cfs) in Dominguez Channel. Recalculated mass-based effluent limitations using ambient hardness and flow rate at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the California Toxics Rule (CTR) are achieved.

³⁵ Effluent limitations are based on a hardness of 50 mg/L. Recalculated concentration-based effluent limitations using ambient hardness at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the CTR are achieved.

Water Body	Final Effluent Limitations Annual (kg/yr)			
	Total Cu	Total Pb	Total Zn	Total PAHs
Dominguez Channel Estuary	22.4	54.2	271.8	0.134
Consolidated Slip	2.73	3.63	28.7	0.0058
Inner Harbor	1.7	34.0	115.9	0.088
Outer Harbor	0.91	26.1	81.5	0.105
Fish Harbor (POLA)	0.00017	0.54	1.62	0.007
Cabrillo Marina (POLA)	0.0196	0.289	0.74	0.00016
San Pedro Bay	20.3	54.7	213.1	1.76
LA River Estuary	35.3	65.7	242.0	2.31

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediments discharged to the Dominguez Channel Estuary, Consolidated Slip, and Fish Harbor:

Water Body	Effluent Limitations Daily Maximum (mg/kg dry sediment)		
	Cadmium	Chromium	Mercury
Dominguez Channel Estuary	1.2	--	--
Consolidated Slip	1.2	81	0.15
Fish Harbor	--	--	0.15

- d. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of total DDT and total PCBs in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	DDT total	PCBs total
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

4. Compliance Determination

- a. Permittees shall be deemed in compliance with the interim concentration-based water quality-based effluent limitations for pollutant concentrations in the Attachment N – TMDLs in the Dominguez Channel and Greater Harbor Waters WMA

T
E
N
T
A
T
I
V
E

- iv.** Demonstrate that the sediment quality condition protective of fish tissue is achieved per the State Water Board's Statewide Enclosed Bays and Estuaries Plan.

T
E
N
T
A
T
I
V
E

ATTACHMENT O. TMDLs IN LOS ANGELES RIVER WATERSHED MANAGEMENT AREA

A. Los Angeles River Watershed Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to the Los Angeles River no later than September 30, 2016 and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Los Angeles River, per the schedule below:

**Los Angeles River Watershed Trash Effluent Limitations³⁷ per Storm Year³⁸
(gallons of uncompressed trash)**

Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ³⁹ (0%)
Alhambra	11971	7981	3990	1317	0
Arcadia	15032	10022	5011	1654	0
Bell	4808	3205	1603	529	0
Bell Gardens	4050	2700	1350	446	0
Bradbury	1283	855	428	141	0
Burbank	27777	18518	9259	3055	0
Calabasas	6752	4501	2251	743	0
Carson	2050	1366	683	225	0
Commerce	17620	11747	5873	1938	0
Compton	15957	10638	5319	1755	0
Cudahy	1781	1187	594	196	0
Downey	11719	7813	3906	1289	0
Duarte	3663	2442	1221	403	0
El Monte	12662	8442	4221	1393	0
Glendale	42094	28063	14031	4630	0
Hidden Hills	1099	733	366	121	0
Huntington Park	5748	3832	1916	632	0
Irwindale	3706	2470	1235	408	0
La Cañada Flintridge	10049	6699	3350	1105	0
Los Angeles	412454	274969	137485	45370	0
Los Angeles County	93067	62045	31022	10237	0
Lynwood	8460	5640	2820	931	0
Maywood	1839	1226	613	202	0
Monrovia	14006	9337	4669	1541	0
Montebello	15111	10074	5037	1662	0
Monterey Park	11670	7780	3890	1284	0
Paramount	8236	5490	2745	906	0
Pasadena	33599	22400	11200	3696	0
Pico Rivera	4186	2791	1395	460	0
Rosemead	8192	5461	2731	901	0
San Fernando	4184	2789	1395	460	0
San Gabriel	6103	4069	2034	671	0

T
E
N
T
A
T
I
V
E

³⁷ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

³⁸ Storm year is defined as October 1 to September 30 herein.

³⁹ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016³⁹ (0%)
San Marino	4317	2878	1439	475	0
Santa Clarita	270	180	90	30	0
Sierra Madre	3483	2322	1161	383	0
Signal Hill	2830	1887	943	311	0
Simi Valley	41	27	14	5	0
South El Monte	4800	3200	1600	528	0
South Gate	13171	8781	4390	1449	0
South Pasadena	4472	2981	1491	492	0
Temple City	5272	3514	1757	580	0
Vernon	14161	9441	4720	1558	0

**Los Angeles River Watershed Trash Effluent Limitations⁴⁰ per Storm Year⁴¹
(pounds of drip-dry trash)**

Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016⁴² (0%)
Alhambra	20628	13752	6876	2269	0
Arcadia	27911	18607	9304	3070	0
Bell	7601	5067	2534	836	0
Bell Gardens	7011	4674	2337	771	0
Bradbury	3648	2432	1216	401	0
Burbank	51117	34078	17039	5623	0
Calabasas	15669	10446	5223	1724	0
Carson	3062	2042	1021	337	0
Commerce	25644	17096	8548	2821	0
Compton	25907	17271	8636	2850	0
Cudahy	3018	2012	1006	332	0
Downey	20552	13701	6851	2261	0
Duarte	7106	4737	2369	782	0
El Monte	20480	13653	6827	2253	0
Glendale	88049	58700	29350	9685	0
Hidden Hills	3246	2164	1082	357	0
Huntington Park	9279	6186	3093	1021	0
Irwindale	5373	3582	1791	591	0
La Cañada Flintridge	22124	14749	7375	2434	0
Los Angeles	771750	514500	257250	84893	0
Los Angeles County	195542	130361	65181	21510	0
Lynwood	13940	9293	4647	1533	0
Maywood	3165	2110	1055	348	0
Monrovia	30296	20198	10099	3333	0
Montebello	25112	16741	8371	2762	0
Monterey Park	21137	14091	7046	2325	0
Paramount	13347	8898	4449	1468	0
Pasadena	62254	41503	20751	6848	0
Pico Rivera	6765	4510	2255	744	0
Rosemead	14213	9476	4738	1563	0
San Fernando	6923	4615	2308	762	0

⁴⁰ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

⁴¹ Storm year is defined as October 1 to September 30 herein.

⁴² Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁴² (0%)
San Gabriel	10931	7287	3644	1202	0
San Marino	8744	5829	2915	962	0
Santa Clarita	698	465	233	77	0
Sierra Madre	7558	5038	2519	831	0
Signal Hill	4266	2844	1422	469	0
Simi Valley	103	69	34	11	0
South El Monte	7296	4864	2432	803	0
South Gate	21700	14467	7233	2387	0
South Pasadena	8507	5671	2836	936	0
Temple City	9546	6364	3182	1050	0
Vernon	20044	13363	6681	2205	0

- 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 VI.E.5.

B. Los Angeles River Nitrogen Compounds and Related Effects TMDL

- Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Water Body	NH ₃ -N (mg/L)		NO ₃ -N (mg/L)	NO ₂ -N (mg/L)	NO ₃ -N+NO ₂ -N (mg/L)
	One-hour Average	Thirty-day Average	Thirty-day Average	Thirty-day Average	Thirty-day Average
Los Angeles River above Los Angeles-Glendale WRP (LAG)	4.7	1.6	8.0	1.0	8.0
Los Angeles River below LAG	8.7	2.4	8.0	1.0	8.0
Los Angeles Tributaries	10.1	2.3	8.0	1.0	8.0

C. Los Angeles River and Tributaries Metals TMDL

- Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- Final Water Quality-Based Effluent Limitations
 - The watershed is divided into five jurisdictional groups based on the subwatersheds of the tributaries that drain to each reach of the river. Each jurisdictional group shall achieve compliance in prescribed percentages of its subwatershed(s). Jurisdictional groups can be reorganized or subdivided upon approval by the Regional Water Board Executive Officer.
 - Permittees shall comply with the following grouped⁴³ dry weather⁴⁴ water quality-based effluent limitations no later than January 11, 2024, expressed as total recoverable metals.⁴⁵

⁴³ The dry weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees that are located within the drainage area.

⁴⁴ Dry weather is defined as any day when the maximum daily flow in the Los Angeles River is less than 500 cfs measured at the Wardlow gage station.

⁴⁵ Dry weather effluent limitations are equal to storm drain flows (critical flows minus median POTW flows minus median open space flows) multiplied by reach specific numeric targets, minus the contribution from direct air deposition.

Waterbody	Effluent Limitations Daily Maximum (kg/day)		
	Copper	Lead	Zinc
LA River Reach 6	WER ¹ x 0.53	WER ¹ x 0.33	---
LA River Reach 5	WER ¹ x 0.05	WER ¹ x 0.03	---
LA River Reach 4	WER ¹ x 0.32	WER ¹ x 0.12	---
LA River Reach 3	WER ¹ x 0.06	WER ¹ x 0.03	---
LA River Reach 2	WER ¹ x 0.13	WER ¹ x 0.07	---
LA River Reach 1	WER ¹ x 0.14	WER ¹ x 0.07	---
Bell Creek	WER ¹ x 0.06	WER ¹ x 0.04	---
Tujunga Wash	WER ¹ x 0.001	WER ¹ x 0.0002	---
Burbank Channel	WER ¹ x 0.15	WER ¹ x 0.07	---
Verdugo Wash	WER ¹ x 0.18	WER ¹ x 0.10	---
Arroyo Seco	WER ¹ x 0.01	WER ¹ x 0.01	---
Rio Hondo Reach 1	WER ¹ x 0.01	WER ¹ x 0.006	WER ¹ x 0.16
Compton Creek	WER ¹ x 0.04	WER ¹ x 0.02	---

¹WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- c. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather no later than January 11, 2024, expressed as total recoverable metals:

Waterbody	Effluent Limitations Daily Maximum (µg total recoverable metals/L)		
	Copper	Lead	Zinc
LA River Reach 5, 6 and Bell Creek	WER ¹ x 30	WER ¹ x 19	---
LA River Reach 4	WER ¹ x 26	WER ¹ x 10	---
LA River Reach 3 above LA-Glendale WRP and Verdugo Wash	WER ¹ x 23	WER ¹ x 12	---
LA River Reach 3 below LA-Glendale WRP	WER ¹ x 26	WER ¹ x 12	---
Burbank Western Channel (above WRP)	WER ¹ x 26	WER ¹ x 14	---
Burbank Western Channel (below WRP)	WER ¹ x 19	WER ¹ x 9.1	---
LA River Reach 2 and Arroyo Seco	WER ¹ x 22	WER ¹ x 11	---
LA River Reach 1	WER ¹ x 23	WER ¹ x 12	---
Compton Creek	WER ¹ x 19	WER ¹ x 8.9	---
Rio Hondo Reach 1	WER ¹ x 13	WER ¹ x 5.0	WER ¹ x 131

T
E
N
T
A
T
I
V
E

¹WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- d. Permittees shall comply with the following grouped⁴⁶ wet weather⁴⁷ water quality-based effluent limitations no later than January 11, 2028, expressed as total recoverable metals discharged to all reaches of the Los Angeles River and its tributaries.

Constituent	Effluent Limitation Daily Maximum (kg/day)
Cadmium	WER ¹ x 2.8 x 10 ⁻⁹ x daily volume (L) – 1.8
Copper	WER ¹ x 1.5 x 10 ⁻⁸ x daily volume (L) – 9.5
Lead	WER ¹ x 5.6 x 10 ⁻⁸ x daily volume (L) – 3.85
Zinc	WER ¹ x 1.4 x 10 ⁻⁷ x daily volume (L) – 83

¹ WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- 3. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to the Los Angeles River 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, 2020	75	--
January 11, 2024	100	50
January 11, 2028	100	100

D. Los Angeles River Watershed Bacteria TMDL

- 1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- 2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

⁴⁶ The wet weather water quality-based effluent limitations are grouped-based and shared among all MS4 Permittees located within the drainage area.

⁴⁷ Wet weather is defined as any day when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs measured at the Wardlow gage station.

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

3. Permittees shall comply with the following grouped⁴⁸ interim dry weather single sample bacteria water quality-based effluent limitations for specific river segments and tributaries as listed in the table, below, according to the schedule in Table O-1:

River Segment or Tributary	Daily Maximum <i>E. coli</i> Load (10 ⁹ MPN/Day)
Los Angeles River Segment A (Willow to Rosecrans)	301
Los Angeles River Segment B (Rosecrans to Figueroa)	518
Los Angeles River Segment C (Figueroa to Tujunga)	463
Los Angeles River Segment D (Tujunga to Balboa)	454
Los Angeles River Segment E (Balboa to headwaters)	32
Aliso Canyon Wash	23
Arroyo Seco	24
Bell Creek	14
Bull Creek	9
Burbank Western Channel	86
Compton Creek	7
Dry Canyon	7
McCoy Canyon	7
Rio Hondo	2
Tujunga Wash	10
Verdugo Wash	51

- a. Unexpectedly high-loading outfalls may be excluded from interim compliance calculations under the following circumstances: If an outfall which was 1) loading *E. coli* at a rate less than the 25th percentile of outfalls during the monitoring events used to develop the “MS4 Load Reduction Strategy” (LRS), but, at the time of compliance monitoring, is 2) loading *E. coli* at a rate greater than the 90th percentile of outfalls, and 3) actions are taken prior to the end of the first phase (i.e. 10 years after the beginning of the segment or tributary specific phase) such that the outfall is returned to a loading less than the 50th percentile of the outfalls

⁴⁸ The interim dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees located within the drainage area. However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.

at compliance monitoring, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.

- b. Likewise, if an outfall which was 1) the subject of a dry weather diversion is found, at the time of compliance monitoring, to be 2) contributing greater than the 90th percentile loading rate, and 3) actions are taken such that the outfall is returned to a loading less than the 50th percentile of the outfalls at compliance monitoring, and a maintenance schedule for the diversion is submitted with the compliance report, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.

4. Receiving Water Limitations

- a. Permittees shall comply with the following grouped⁴⁹ final single sample bacteria receiving water limitations for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Dry Weather	5	1
Non-HFS ⁵⁰ Waterbodies Wet Weather	15	2
HFS Waterbodies Wet Weather	10 (not including HSF days)	2 (not including HSF days)

- b. Permittees shall comply with the following geometric mean receiving water limitation for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

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

Table O-1. Los Angeles River Bacteria Implementation Schedule for Dry Weather

Italics in this Table refer to Permittees using an alternative compliance plan instead of an LRS.

Implementation Action	Responsible Parties	Deadline
SEGMENT B (upper and middle Reach 2 – Figueroa Street to Rosecrans Avenue)		
First phase – Segment B		
Submit a Load Reduction Strategy (LRS) for Segment B (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment B	September 23, 2014

⁴⁹ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4, Long Beach MS4, and Caltrans.

⁵⁰ HFS stands for high flow suspension as defined in Chapter 2 of the Basin Plan.

Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment B, if using LRS	March 23, 2019
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment B, if using LRS	March 23, 2022
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment B, if using alternative compliance plan</i>	<i>March 23, 2022</i>
Second phase, if necessary – Segment B for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment B	March 23, 2023
Complete implementation of LRS	MS4 Permittees discharging to Segment B, if using LRS	September 23, 2026
Achieve final water quality-based effluent limitations in Segment B or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment B, if using LRS	September 23, 2028
SEGMENT B TRIBUTARIES (Rio Hondo and Arroyo Seco)		
First phase – Segment B Tributaries (Rio Hondo and Arroyo Seco)		
Submit a Load Reduction Strategy (LRS) for Segment B tributaries (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment B tributaries	March 23, 2016
Complete implementation of LRS	MS4 Permittees discharging to Segment B tributaries, if using LRS	September 23, 2020
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment B tributaries, if using LRS	September 23, 2023
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment B tributaries, if using alternative compliance plan</i>	<i>September 23, 2023</i>
Second phase, if necessary – Segment B Tributaries (Rio Hondo and Arroyo Seco) for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment B tributaries	September 23, 2024

T
E
N
T
A
T
I
V
E

Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment B tributaries, if using LRS	March 23, 2028
Achieve final water quality-based effluent limitations Segment B tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment B tributaries, if using LRS	March 23, 2030
SEGMENT A (lower Reach 2 and Reach 1 – Rosecrans Avenue to Willow Street)		
First phase – Segment A		
Submit a Load Reduction Strategy (LRS) for Segment A (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment A	September 23, 2016
Complete implementation of LRS	MS4 Permittees discharging to Segment A, if using LRS	March 23, 2021
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment A, if using LRS	March 23, 2024
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment A, if using alternative compliance plan</i>	<i>March 23, 2024</i>
Second phase, if necessary – Segment A for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment A	March 23, 2025
Complete implementation of LRS	MS4 Permittees discharging to Segment A, if using LRS	September 23, 2029
Achieve final water quality-based effluent limitations in Segment A or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment A, if using LRS	September 23, 2031
SEGMENT A TRIBUTARY (Compton Creek)		
First phase – Segment A Tributary		
Submit a Load Reduction Strategy (LRS) for Segment A tributary (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment A tributary	March 23, 2018
Complete implementation of LRS	MS4 Permittees discharging to Segment A tributary if using LRS	September 23, 2022

T
E
N
T
A
T
I
V
E

Implementation Action	Responsible Parties	Deadline
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment A tributary if using LRS	September 23, 2025
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment A tributary, if using alternative compliance plan</i>	<i>September 23, 2025</i>
Second phase, if necessary – Segment A Tributary for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment A tributary	September 23, 2026
Complete implementation of LRS	MS4 Permittees discharging to Segment A tributary, if using LRS	March 23, 2030
Achieve final water quality-based effluent limitations in Segment A tributary or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment A tributary, if using LRS	March 23, 2032
SEGMENT E (Reach 6 – LA River headwaters [confluence with Bell Creek and Calabasas Creek] to Balboa Boulevard)		
First phase – Segment E		
Submit a Load Reduction Strategy (LRS) for Segment E (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment E	September 23, 2017
Complete implementation of LRS	MS4 Permittees discharging to Segment E, if using LRS	March 23, 2022
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment E, if using LRS	March 23, 2025
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment E, if using alternative compliance plan</i>	<i>March 23, 2025</i>
Second phase, if necessary –Segment E for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment E	March 23, 2026
Complete implementation of LRS	MS4 Permittees discharging to Segment E, if using LRS	September 23, 2029

T
E
N
T
A
T
I
V
E

Implementation Action	Responsible Parties	Deadline
Achieve final Water quality-based effluent limitations in Segment E or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment E, if using LRS	September 23, 2031
SEGMENT E TRIBUTARIES (Dry Canyon Creek, McCoy Creek, Bell Creek, and Aliso Canyon Wash)		
First phase – Segment E Tributaries		
Submit a Load Reduction Strategy (LRS) for Segment E tributaries (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment E tributaries	September 23, 2021
Complete implementation of LRS	MS4 Permittees discharging to Segment E tributaries if using LRS	March 23, 2026
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment E tributaries, if using LRS	March 23, 2029
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment E tributaries, if using alternative compliance plan</i>	<i>March 23, 2029</i>
Second phase, if necessary – Segment E Tributaries for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment E tributaries	March 23, 2030
Complete implementation of LRS	MS4 Permittees discharging to Segment E tributaries, if using LRS	September 23, 2033
Achieve final water quality-based effluent limitations in Segment E tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment E tributaries, if using LRS	September 23, 2035
SEGMENT C (lower Reach 4 and Reach 3 – Tujunga Avenue to Figueroa Street) SEGMENT C TRIBUTARIES (Tujunga Wash, Burbank Western Channel, and Verdugo Wash) SEGMENT D (Reach 5 and upper Reach 4 – Balboa Boulevard to Tujunga Avenue) SEGMENT D TRIBUTARIES (Bull Creek)		
First phase – Segment C, Segment C Tributaries, Segment D, Segment D tributaries		
Submit a Load Reduction Strategies (LRS) for Segment C, Segment C tributaries, Segment D, Segment D tributaries (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	March 23, 2023

T
E
N
T
A
T
I
V
E

Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS	September 23, 2027
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS	September 23, 2030
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using alternative compliance plan</i>	<i>September 23, 2030</i>
Second phase, if necessary - Segment C, Segment C Tributaries, Segment D, Segment D Tributaries for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	September 23, 2031
Complete implementation of LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS	March 23, 2035
Achieve final water quality-based effluent limitations in Segment C, Segment C tributaries, Segment D, Segment D tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS	March 23, 2037

T
E
N
T
A
T
I
V
E

5. Compliance

- a.** Permittees may demonstrate compliance with the final dry weather limitations by demonstrating that final receiving water limitations are met in the receiving waters or by demonstrating one of the following conditions at outfalls to the receiving waters:
 - i.** Flow-weighted concentration of *E. coli* in MS4 discharges during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
 - ii.** Zero discharge during dry weather.
- b.** In addition, individual Permittees or subgroups of Permittees may differentiate their dry weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:

- i. The flow-weighted concentration of E. coli in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather; or
 - iii. Demonstration that the MS4 loading of E. coli to the segment or tributary during dry weather is less than or equal to the calculated loading rate that would not cause or contribute to exceedances based on the loading capacity representative of conditions in the River at the time of compliance.
- c. The interim dry weather water quality-based effluent limitations are group-based, shared among all MS4 Permittees that drain to a segment or tributary. However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.

E. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the following final WLAs for discharges to the Los Angeles River Estuary per the provisions in Part VI.E.3:

Constituent	WLA (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

- a. Permittees shall comply with the following grouped⁵¹ final single sample bacteria WLAs for the Los Angeles River Estuary per the provisions in Part VI.E.3:

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)	9	2

⁵¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

Wet Weather ⁵²	17	3
---------------------------	----	---

- b. Permittees shall comply with the following geometric mean receiving water limitations for all monitoring stations in the Los Angeles River Estuary per the provisions in Part VI.E.3:

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

4. Compliance Determination

- a. Permittees may demonstrate compliance with the final dry or weather WLAs by demonstrating that final WLAs expressed as allowable exceedance days are met in the receiving waters or by demonstrating one of the following conditions at outfalls to the receiving waters:
 - i. Flow-weighted concentration of bacterial indicators in MS4 discharges during dry or wet weather is less than or equal to the WLAs in part E.2 above, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge during dry weather.
- b. In addition, individual Permittees or subgroups of Permittees may differentiate their dry or wet weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:
 - i. The flow-weighted concentration of bacterial indicators in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry or wet weather is less than or equal to the WLAs in part E.2 above, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather.

T
E
N
T
A
T
I
V
E

F. Los Angeles Area Lakes TMDLs (USEPA established)

1. Lake Calabazas Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)

⁵² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Attachment O –TMDLs in the Los Angeles River WMA

City of Calabasas	48.5	220
-------------------	------	-----

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.066 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.66 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by the Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. The Permittee shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved and the chlorophyll *a* target of 20 ug/L measured as a summer average (May-September) and as an annual average is met.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, pH are achieved, and the chlorophyll *a* target is met, then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
City of Calabasas	0.1	1.0

Measured as in-lake concentration and applied as a summer average (May-September) and an annual average.

2. Echo Park Lake Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northern	City of Los Angeles	24.7	156
Southern	City of Los Angeles	7.129	49.69

Measured at the point of discharge using a three-year average. The mass-based allocations are equivalent to existing concentrations of 0.12 mg/L total phosphorus as a summer average (May-September) and annual average, and

T
E
N
T
A
T
I
V
E

1.2 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. In assessing compliance with WLAs, Permittees assigned both northern and southern subwatershed allocations may have their allocations combined.
- e. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target of 20 ug/L as a summer average (May-September) and as an annual average is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

3. Echo Park Lake PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
Northern	City of Los Angeles	1.77	0.17
Southern	City of Los Angeles	1.77	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{**}	Total PCBs in the Water Column (ng/L) ^{***}
Northern	City of Los Angeles	59.8	0.17
Southern	City of Los Angeles	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

T
E
N
T
A
T
I
V
E

4. Echo Park Lake Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Northern	City of Los Angeles	2.10	0.59
Southern	City of Los Angeles	2.10	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Northern	City of Los Angeles	3.24	0.59
Southern	City of Los Angeles	3.24	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

5. Echo Park Lake Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)	Dieldrin in the Water Column (ng/L)
--------------	-----------	--	-------------------------------------

T
E
N
T
A
T
I
V
E

Northern	City of Los Angeles	0.80	0.14
Southern	City of Los Angeles	0.80	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{***}
Northern	City of Los Angeles	1.90	0.14
Southern	City of Los Angeles	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

6. Echo Park Lake Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Parts VI.E.3 and VI.E.5.
- c. Permittees shall comply with the following WLA:

Permittee	Trash (Gal/year)
City of Los Angeles	0

7. Peck Road Park Lake Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Eastern	Arcadia	383	2,320

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Eastern	Bradbury	497	3,223
Eastern	Duarte	1,540	9,616
Eastern	Irwindale	496	3,487
Eastern	County of Los Angeles	924	5,532
Eastern	Monrovia	6,243	38,736
Near Lake	Arcadia	158	1,115
Near Lake	El Monte	96.2	602
Near Lake	Irwindale	28.2	207
Near Lake	County of Los Angeles	129	773
Near Lake	Monrovia	60.4	415
Western	Arcadia	2,840	16,334
Western	County of Los Angeles	467	2,818
Western	Monrovia	425	2,678
Western	Sierra Madre	695	4,254

Measured at the point of discharge using a three-year average. The mass-based allocations are equivalent to existing concentrations of 0.076 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.76 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 ug/L as a summer average (May-September) and as an annual average is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

8. Peck Road Park Lake PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
Eastern	Arcadia	1.29	0.17
Eastern	Bradbury	1.29	0.17
Eastern	Duarte	1.29	0.17
Eastern	Irwindale	1.29	0.17
Eastern	County of Los Angeles	1.29	0.17
Eastern	Monrovia	1.29	0.17
Near Lake	Arcadia	1.29	0.17
Near Lake	El Monte	1.29	0.17
Near Lake	Irwindale	1.29	0.17
Near Lake	County of	1.29	0.17

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
	Los Angeles		
Near Lake	Monrovia	1.29	0.17
Western	Arcadia	1.29	0.17
Western	County of Los Angeles	1.29	0.17
Western	Monrovia	1.29	0.17
Western	Sierra Madre	1.29	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total PCBs in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	59.8	0.17
Eastern	Bradbury	59.8	0.17
Eastern	Duarte	59.8	0.17
Eastern	Irwindale	59.8	0.17
Eastern	County of Los Angeles	59.8	0.17
Eastern	Monrovia	59.8	0.17
Near Lake	Arcadia	59.8	0.17
Near Lake	El Monte	59.8	0.17
Near Lake	Irwindale	59.8	0.17
Near Lake	County of Los Angeles	59.8	0.17
Near Lake	Monrovia	59.8	0.17
Western	Arcadia	59.8	0.17
Western	County of Los Angeles	59.8	0.17
Western	Monrovia	59.8	0.17
Western	Sierra Madre	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

9. Peck Road Park Lake Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.

T
E
N
T
A
T
I
V
E

- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Eastern	Arcadia	1.73	0.59
Eastern	Bradbury	1.73	0.59
Eastern	Duarte	1.73	0.59
Eastern	Irwindale	1.73	0.59
Eastern	County of Los Angeles	1.73	0.59
Eastern	Monrovia	1.73	0.59
Near Lake	Arcadia	1.73	0.59
Near Lake	El Monte	1.73	0.59
Near Lake	Irwindale	1.73	0.59
Near Lake	County of Los Angeles	1.73	0.59
Near Lake	Monrovia	1.73	0.59
Western	Arcadia	1.73	0.59
Western	County of Los Angeles	1.73	0.59
Western	Monrovia	1.73	0.59
Western	Sierra Madre	1.73	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	3.24	0.59
Eastern	Bradbury	3.24	0.59
Eastern	Duarte	3.24	0.59
Eastern	Irwindale	3.24	0.59
Eastern	County of Los Angeles	3.24	0.59
Eastern	Monrovia	3.24	0.59
Near Lake	Arcadia	3.24	0.59
Near Lake	El Monte	3.24	0.59
Near Lake	Irwindale	3.24	0.59
Near Lake	County of Los Angeles	3.24	0.59

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Near Lake	Monrovia	3.24	0.59
Western	Arcadia	3.24	0.59
Western	County of Los Angeles	3.24	0.59
Western	Monrovia	3.24	0.59
Western	Sierra Madre	3.24	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

10. Peck Road Park DDT TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Eastern	Arcadia	5.28	0.59
Eastern	Bradbury	5.28	0.59
Eastern	Duarte	5.28	0.59
Eastern	Irwindale	5.28	0.59
Eastern	County of Los Angeles	5.28	0.59
Eastern	Monrovia	5.28	0.59
Near Lake	Arcadia	5.28	0.59
Near Lake	El Monte	5.28	0.59
Near Lake	Irwindale	5.28	0.59
Near Lake	County of Los Angeles	5.28	0.59
Near Lake	Monrovia	5.28	0.59
Western	Arcadia	5.28	0.59
Western	County of Los Angeles	5.28	0.59
Western	Monrovia	5.28	0.59
Western	Sierra Madre	5.28	0.59

Measured at the point of discharge. Applied as an annual average.

11. Peck Road Park Lake Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

T
E
N
T
A
T
I
V
E

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)	Dieldrin in the Water Column (ng/L)
Eastern	Arcadia	0.43	0.14
Eastern	Bradbury	0.43	0.14
Eastern	Duarte	0.43	0.14
Eastern	Irwindale	0.43	0.14
Eastern	County of Los Angeles	0.43	0.14
Eastern	Monrovia	0.43	0.14
Near Lake	Arcadia	0.43	0.14
Near Lake	El Monte	0.43	0.14
Near Lake	Irwindale	0.43	0.14
Near Lake	County of Los Angeles	0.43	0.14
Near Lake	Monrovia	0.43	0.14
Western	Arcadia	0.43	0.14
Western	County of Los Angeles	0.43	0.14
Western	Monrovia	0.43	0.14
Western	Sierra Madre	0.43	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	1.90	0.14
Eastern	Bradbury	1.90	0.14
Eastern	Duarte	1.90	0.14
Eastern	Irwindale	1.90	0.14
Eastern	County of Los Angeles	1.90	0.14
Eastern	Monrovia	1.90	0.14
Near Lake	Arcadia	1.90	0.14
Near Lake	El Monte	1.90	0.14
Near Lake	Irwindale	1.90	0.14
Near Lake	County of Los Angeles	1.90	0.14
Near Lake	Monrovia	1.90	0.14
Western	Arcadia	1.90	0.14
Western	County of	1.90	0.14

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{***}
	Los Angeles		
Western	Monrovia	1.90	0.14
Western	Sierra Madre	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

12. Peck Road Park Lake Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Parts VI.E.3 and VI.E.5.
- c. Permittees shall comply with the following WLA:

Permittee	Trash (gal/year)
Arcadia	0
Bradbury	0
Duarte	0
El Monte	0
Irwindale	0
County of Los Angeles	0
Monrovia	0
Sierra Madre	0

T
E
N
T
A
T
I
V
E

ATTACHMENT P. TMDLs IN SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

A. San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
2. Permittees shall comply with the following grouped⁵³ wet weather⁵⁴ WLAs, expressed as total recoverable metals discharged to all upstream reaches and tributaries of the San Gabriel River Reach 2 and Coyote Creek per the provisions in Part VI.E.3:

Water Body	WLA Daily Maximum (kg/day)		
	Copper	Lead	Zinc
San Gabriel Reach 2	---	81.34 x daily storm volume (L)	---
Coyote Creek	24.71 x daily storm volume (L)	96.99 x daily storm volume (L)	144.57 x daily storm volume (L)

3. Permittees shall comply with the following grouped⁷² dry weather WLAs, expressed as total recoverable metals discharged to San Gabriel River Reach 1, Coyote Creek, San Gabriel River Estuary, and San Jose Creek Reach 1 and Reach 2 per the provisions in Part VI.E.3:

Water Body	WLA Daily Maximum	
	Copper	Selenium
San Gabriel Reach 1	18 ug/L	---
Coyote Creek	0.941 kg/day*	---
San Gabriel River Estuary	3.7 ug/L	---
San Jose Creek Reach 1 and 2	---	5 ug/L

*Calculated based upon the median flow at LACDPW Station F354-R of 19 cfs multiplied by the numeric target of 20 ug/L, minus direct air deposition of 0.002 kg/d.

4. Permittees may convert the grouped mass-based WLAs into individual WLAs based on the percentage of the watershed and land uses within the Permittee’s jurisdiction, upon approval of the Regional Water Board Executive Officer.

B. Legg Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016, and every year thereafter.

⁵³ The wet weather and dry weather water WLAs are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, the City of Long Beach, and Orange County MS4 Permittees located within the drainage area and Caltrans.

⁵⁴ In San Gabriel River Reach 2, wet weather TMDLs apply when the maximum daily flow of the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam. In Coyote Creek, wet weather TMDLs apply when the maximum daily flow in the creek is equal to or greater than 156 cfs as measured at LACDPW flow gauge station F354-R, located at the bottom of the creek, just above the Long Beach WRP.

T
E
N
T
A
T
I
V
E

3. Permittees that choose to comply via a full capture compliance strategy must demonstrate a phased implementation of full capture devices attaining interim effluent limitations over the following 8-year period until the final effluent limitation of zero is attained:

Deadline	Effluent Limitation
	Drainage Area covered by Full Capture Systems (%)
March 6, 2008	0
March 6, 2012	20
March 6, 2013	40
March 6, 2014	60
March 6, 2015	80
March 6, 2016	100

Legg Lake Trash Effluent Limitations⁵⁵ (gallons of uncompressed trash per year)

Permittees	Baseline ⁵⁶ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ⁵⁷ (0%)
Los Angeles County	2400.03	1920.02	1440.02	960.01	480.01	0
Los Angeles County Flood Control District	24.05	19.24	14.43	9.62	4.81	0
City of El Monte	509.48	407.58	305.69	203.79	101.90	0
City of South El Monte	3896.76	3117.41	2338.06	1558.70	779.35	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.
5. If a Permittee opts to derive site specific trash generation rates through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation shall be calculated by multiplying the point source area(s) by the derived trash generation rate(s).
6. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

⁵⁵ Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations.

⁵⁶ The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

⁵⁷ Permittees shall achieve their final effluent limitation of zero trash discharged for the year and every year thereafter.

C. Los Angeles Area Lakes TMDLs⁵⁸ (USEPA established)

1. Legg Lake System Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Flow (ac-ft/yr)	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northwestern	County of Los Angeles	33.5	53.6	148.7
Northwestern	South El Monte	308	526.3	1,500.6
Northeastern	El Monte	122	226.6	590.3
Northeastern	County of Los Angeles	8.18	12.8	39.2
Northeastern	South El Monte	287	498.7	1,394.8

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.065 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.65 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target of 20 ug/L as a summer average (May-September) and an annual average is met, in the lake.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

T
E
N
T
A
T
I
V
E

⁵⁸ Los Angeles Area Lakes TMDL includes multiple watershed management areas. Attachment P –TMDLs in the San Gabriel River WMA

Subwatershed	Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
Northwestern	County of Los Angeles	0.1	1.0
Northwestern	South El Monte	0.1	1.0
Northeastern	El Monte	0.1	1.0
Northeastern	County of Los Angeles	0.1	1.0
Northeastern	South El Monte	0.1	1.0

Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.

2. Puddingstone Reservoir Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northern	Claremont	169	829
Northern	County of Los Angeles	741	3,390
Northern	La Verne	2,772	11,766
Northern	Pomona	6.30	28.3
Northern	San Dimas	31.1	137

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.071 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.71 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved and the chlorophyll *a* target of 20 ug/L as a summer average (May-September) and an annual average is met, in the lake.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target is met, in the lake then the total

T
E
N
T
A
T
I
V
E

phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Subwatershed	Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
Northern	Claremont	0.1	1.0
Northern	County of Los Angeles	0.1	1.0
Northern	La Verne	0.1	1.0
Northern	Pomona	0.1	1.0
Northern	San Dimas	0.1	1.0

Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.

3. Puddingstone Reservoir Mercury TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs during both wet and dry weather:

Subwatershed	Permittee	Total Mercury (g-Hg/yr)
Northern	Claremont	0.674
Northern	County of Los Angeles	2.79
Northern	La Verne	10.6
Northern	Pomona	0.026
Northern	San Dimas	0.109

Measured at the point of discharge.

4. Puddingstone Reservoir PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight)	Total PCBs in the Water Column (ng/L)
Northern	Claremont	0.59	0.17
Northern	County of Los Angeles	0.59	0.17
Northern	La Verne	0.59	0.17
Northern	Pomona	0.59	0.17
Northern	San Dimas	0.59	0.17

Measured at the point of discharge. Applied as an annual average.

T
E
N
T
A
T
I
V
E

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{**}	Total PCBs in the Water Column (ng/L) ^{****}
Northern	Claremont	59.8	0.17
Northern	County of Los Angeles	59.8	0.17
Northern	La Verne	59.8	0.17
Northern	Pomona	59.8	0.17
Northern	San Dimas	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

5. Puddingstone Reservoir Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Northern	Claremont	0.75	0.57
Northern	County of Los Angeles	0.75	0.57
Northern	La Verne	0.75	0.57
Northern	Pomona	0.75	0.57
Northern	San Dimas	0.75	0.57

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

T
E
N
T
A
T
I
V
E

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Northern	Claremont	3.24	0.57
Northern	County of Los Angeles	3.24	0.57
Northern	La Verne	3.24	0.57
Northern	Pomona	3.24	0.57
Northern	San Dimas	3.24	0.57

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

6. Puddingstone Reservoir Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)	Dieldrin in the Water Column (ng/L)
Northern	Claremont	0.22	0.14
Northern	County of Los Angeles	0.22	0.14
Northern	La Verne	0.22	0.14
Northern	Pomona	0.22	0.14
Northern	San Dimas	0.22	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Northern	Claremont	1.90	0.14
Northern	County of Los Angeles	1.90	0.14
Northern	La Verne	1.90	0.14

Northern	Pomona	1.90	0.14
Northern	San Dimas	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

7. Puddingstone Reservoir DDT TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Northern	Claremont	3.94	0.59
Northern	County of Los Angeles	3.94	0.59
Northern	La Verne	3.94	0.59
Northern	Pomona	3.94	0.59
Northern	San Dimas	3.94	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 21 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{*,**}	4-4' DDT in the Water Column (ng/L) ^{*,***}
Northern	Claremont	5.28	0.59
Northern	County of Los Angeles	5.28	0.59
Northern	La Verne	5.28	0.59
Northern	Pomona	5.28	0.59
Northern	San Dimas	5.28	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

T
E
N
T
A
T
I
V
E

ATTACHMENT Q. TMDLs IN LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA

A. Los Cerritos Channel Metals TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-7.
2. Permittees shall comply with the following dry weather⁵⁹ WLAs, expressed as total recoverable metals discharged to Los Cerritos Channel, per the provisions in Part VI.E.3:

Constituent	WLA Daily Maximum (g/day)
Copper	67.2

3. Permittees shall comply with the following wet weather⁶⁰ WLA, expressed as total recoverable metals discharged to Los Cerritos Channel, per the provisions in Part VI.E.3:

Constituent	WLA Daily Maximum (g/day)
Copper	$4.709 \times 10^{-6} \times$ daily storm volume (L)
Lead	$26.852 \times 10^{-6} \times$ daily storm volume (L)
Zinc	$46.027 \times 10^{-6} \times$ daily storm volume (L)

B. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-7.
2. Permittees shall comply with the following interim water quality-based effluent limitations as of the effective date of this Order, for sediments within Colorado Lagoon:

Constituent	Interim Concentration-based Effluent Limitations Monthly Average (µg/dry kg)
Chlordane	129.65
Dieldrin	26.20
Lead	399,500
Zinc	565,000
PAHs	4,022
PCBs	89.90
DDT	149.80

3. Permittees shall comply with the following final water quality-based effluent limitations no later than July 28, 2018, for sediments within Colorado Lagoon:

⁵⁹ Dry weather is defined as any day when the maximum daily flow in Los Cerritos Channel is less than 23 cubic feet per second (cfs) measured at Stearns Street Monitoring Station.

⁶⁰ Wet weather is defined as any day when the maximum daily flow in Los Cerritos Channel is equal to or greater than 23 cfs measured at Stearns Street Monitoring Station.

Constituent	Final Concentration Based Effluent Limitations Monthly Average (µg/dry kg)
Chlordane	0.50
Dieldrin	0.02
Lead	46,700
Zinc	150,000
PAHs	4,022
PCBs	22.70
DDT	1.58

4. The mass-based water quality-based effluent limitations are shared by the MS4 Permittees, which includes the LACFCD, City of Long Beach and Caltrans. Permittees shall comply with the following grouped final water quality-based effluent limitations no later than July 28, 2018, expressed as an annual discharge of sediment to Colorado Lagoon:

Constituent	Annual Mass-based Effluent Limitations (mg/yr)				
	Project 452	Line I	Termino Ave	Line K	Line M
Chlordane	5.10	3.65	12.15	1.94	0.73
Dieldrin	0.20	0.15	0.49	0.08	0.03
Lead	476,646.68	340,455.99	1,134,867.12	181,573.76	68,116.09
Zinc	1,530,985.05	1,093,541.72	3,645,183.47	583,213.37	218,788.29
PAHs	41,050.81	29,321.50	97,739.52	15,637.89	5,866.44
PCBs	231.69	165.49	551.64	88.26	33.11
DDT	16.13	11.52	38.40	6.14	2.30

5. Compliance with the concentration-based water quality-based effluent limitations shall be determined by pollutant concentrations in the sediment in Colorado Lagoon at points in the West Arm, North Arm and Central Arm that represent the cumulative inputs from the MS4 drainage to the lagoon.

T
E
N
T
A
T
I
V
E

**ATTACHMENT R. TMDLs IN THE MIDDLE SANTA ANA RIVER WATERSHED
MANAGEMENT AREA (SANTA ANA REGION TMDL)**

A. Middle Santa Ana River Watershed Bacteria Indicator TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-8.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to San Antonio Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁶¹: geometric mean less than 180 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 360 organisms/100 mL during any 30-day period.
 - b. *E. coli*: *E. coli*: geometric mean less than 113 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 212 organisms/100 mL during any 30-day period.
3. Permittees shall comply with the following receiving water limitations for discharges to San Antonio Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform⁶²: geometric mean less than 200 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 400 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 126 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 235 organisms/100 mL during any 30-day period.

T
E
N
T
A
T
I
V
E

⁶¹ The fecal coliform water quality-based effluent limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

⁶² The fecal coliform receiving water limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.