

ATTACHMENT E**SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS
APPLICABLE TO ORDER NO. R9-2013-0001**

These provisions implement Total Maximum Daily Loads (TMDLs), adopted by the San Diego Water Board and approved by USEPA under Clean Water Act section 303(c), which are applicable to discharges regulated under this Order. The provisions and schedules for implementation of the TMDLs described below must be incorporated into the Water Quality Improvement Plans, required pursuant to Provision B of this Order, for the specified Watershed Management Areas.

1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed
2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin
3. Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed
4. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek
5. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay
6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed

a. APPLICABILITY

- (1) TMDL Basin Plan Amendment: Resolution No. R9-2002-0123
- (2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	August 14, 2002
State Water Board Approval Date:	July 16, 2003
Office of Administrative Law Approval Date:	September 11, 2003
US EPA Approval Date:	November 3, 2003
- (3) TMDL Effective Date: September 11, 2003
- (4) Watershed Management Area: San Diego Bay
- (5) Water Body: Chollas Creek
- (6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, San Diego Unified Port District

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 1.c:

Table 1.1

Receiving Water Limitations as Concentrations in Chollas Creek

Constituent	Exposure Duration	Receiving Water Limitation	Averaging Period
Diazinon	Acute	0.08 µg/L	1 hour
	Chronic	0.05 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 1.c:

Table 1.2

Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Diazinon	Acute	0.072 µg/L	1 hour
	Chronic	0.045 µg/L	4 days

(3) Best Management Practices

The following BMPs for Chollas Creek must be incorporated into the Water Quality Improvement Plan for the San Diego Bay Watershed Management Area and implemented by the Responsible Copermittees:

- (a) The Responsible Copermittees must implement BMPs to support the achievement of the WQBELs under Specific Provision 1.b for Chollas Creek.
- (b) The Responsible Copermittees must implement the Diazinon Toxicity Control Plan and Diazinon Public Outreach/Education Program as described in the report titled, *Technical Report for Total Maximum Daily Load for Diazinon in Chollas Creek Watershed, San Diego County*, dated August 14, 2002, including subsequent modifications, in order to achieve the WQBELs under Specific Provision 1.b.
- (c) The Responsible Copermittees should coordinate any BMPs implemented to address this TMDL with Caltrans as possible.

c. COMPLIANCE SCHEDULE

The Responsible Copermittees are required to achieve their respective WLAs by December 31, 2010. The Responsible Copermittees must be in compliance with the WQBELs under Specific Provision 1.b.

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

- (1) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.
- (2) The Responsible Copermittees must monitor the effluent of the MS4 outfalls for diazinon within the Chollas Creek watershed, and calculate or estimate the annual diazinon loads, in accordance with the requirements of Provisions D.2, D.4.b.(1), and D.4.b.(2) of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

e. COMPLIANCE DETERMINATION

Compliance with WQBELs of Specific Provision 1.b may be demonstrated via one of the following methods:

- (1) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
- (2) There are no exceedances of the applicable receiving water limitations under Specific Provision 1.b.(1) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls; OR
- (3) There are no violations of the applicable effluent limitations under Specific Provision 1.b.(2) at the Responsible Copermittees' MS4 outfalls.

2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2005-0019

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	September 22, 2005
Office of Administrative Law Approval Date:	December 2, 2005
US EPA Approval Date:	February 8, 2006

(3) TMDL Effective Date: December 2, 2005

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Shelter Island Yacht Basin

(6) Responsible Copermittee: City of San Diegot

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Shelter Island Yacht Basin consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision [2.c](#):

Table 2.1

Receiving Water Limitations as Concentrations in Shelter Island Yacht Basin

Constituent	Exposure Duration	Receiving Water Limitation	Averaging Period
Dissolved Copper	Acute	4.8 µg/L	1 hour
	Chronic	3.1 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision [2.c](#):

Table 2.2

Effluent Limitations as Annual Loads in MS4 Discharges to Shelter Island Yacht Basin

Constituent	Effluent Limitation
Dissolved Copper	30 kg/yr

(3) Best Management Practices

The Responsible Copermittee must implement BMPs to support the achievement of the WQBELs under Specific Provision [2.b](#) for Shelter Island Yacht Basin

c. COMPLIANCE SCHEDULE

The Responsible Copermittee is required to achieve the MS4 WLA by December 2, 2005. The Responsible Copermittee must be in compliance with the WQBELs under Specific Provision [2.b](#).

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

The Responsible Copermittee must monitor the effluent of its MS4 outfalls for dissolved copper, and calculate or estimate the monthly and annual dissolved copper loads, in accordance with the requirements of Provisions [D.2](#), [D.4.b.\(1\)](#), and [D.4.\(b\)\(2\)](#) of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

e. COMPLIANCE DETERMINATION

Compliance with WQBELs of Specific Provision [2.b](#) may be demonstrated via one of the following methods:

- (1) There is no direct or indirect discharge from the Responsible Copermittee's MS4s to the receiving water;
- (2) There are no exceedances of the applicable receiving water limitations under Specific Provision [2.b.\(1\)](#) in the receiving water at, or downstream of the Responsible Copermittee's MS4 outfalls; OR
- (3) There are no violations of the applicable effluent limitations under Specific Provision [2.b.\(2\)](#) at the Responsible Copermittee's MS4 outfalls.

3. Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2005-0036

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	November 16, 2005
Office of Administrative Law Approval Date:	February 1, 2006
US EPA Approval Date:	March 22, 2006

(3) TMDL Effective Date: February 1, 2006

(4) Watershed Management Area: Santa Margarita River

(5) Water Body: Rainbow Creek

(6) Responsible Copermittee: County of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Rainbow Creek consist of the following

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision [3.c.\(1\)](#):

Table 3.1

Receiving Water Limitations as Concentrations in Rainbow Creek

Constituent	Receiving Water Limitation
Nitrate (as N)	10 mg/L
Total Nitrogen	1 mg/L
Total Phosphorus	0.1 mg/L

(2) Effluent Limitations

- (a) Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 3.c.(1):

Table 3.2

Effluent Limitations as Concentrations in MS4 Discharges to Rainbow Creek

Constituent	Effluent Limitation
Nitrate (as N)	10 mg/L
Total Nitrogen	1 mg/L
Total Phosphorus	0.1 mg/L

- (b) Pollutant loads from given land uses discharging to and from the MS4s must not exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 3.c.(1):

Table 3.3

Effluent Limitations as Annual Loads in MS4 Discharges to Rainbow Creek

Land Use	Total N	Total P
Commercial nurseries	116 kg/yr	3 kg/yr
Park	3 kg/yr	0.1 kg/yr
Residential areas	149 kg/yr	12 kg/yr
Urban areas	27 kg/yr	6 kg/yr

Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision 3.0.

(3) Best Management Practices

- (a) The Responsible Copermittee must implement BMPs to support the achievement of the WQBELs under Specific Provision 3.b for Rainbow Creek.
- (b) The Responsible Copermittee should coordinate any BMPs implemented to address this TMDL with Caltrans and other sources as possible.

c. COMPLIANCE SCHEDULE**(1) Compliance Date**

The Responsible Copermittee must be in compliance with the WQBELs under Specific Provision [3.b](#), by December 31, 2021.

(2) Interim Compliance Requirements**Table 3.4**

Interim Effluent Limitations as Annual Loads in MS4 Discharges from Specific Land Uses to Rainbow Creek

Land Use	Total N Interim Effluent Limitations (kg/yr)			Total P Interim Effluent Limitations (kg/yr)		
	Interim Compliance Date			Interim Compliance Date		
	2009	2013	2017	2009	2013	2017
Commercial nurseries	390	299	196	20	16	10
Park	5	3	3	0.15	0.10	0.10
Residential areas	507	390	260	99	74	47
Urban areas	40	27	27	9	6	6

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

The Responsible Copermittee must implement the Sampling and Analysis Plan for Rainbow Creek Nutrient Reduction TMDL Implementation Water Quality Monitoring, dated January 2010. The results of any monitoring conducted during the reporting period, and assessment of whether the interim and final WQBELs have been achieved must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

e. COMPLIANCE DETERMINATION

(1) Compliance with interim compliance requirements of Specific Provision [3.c.\(2\)](#) may be demonstrated via one of the following methods:

- (a) There is no direct or indirect discharge from the Responsible Copermittee's MS4s to the receiving water;
- (b) There are no exceedances of the applicable receiving water limitations under Specific Provision [3.b.\(1\)](#) in the receiving water at, or downstream of the Responsible Copermittee's MS4 outfalls;
- (c) There are no violations of the applicable effluent limitations under Specific Provision [3.b.\(2\)\(a\)](#) at the Responsible Copermittee's MS4 outfalls;
- (d) The pollutant loads from given land uses discharging to and from the MS4s do not exceed the applicable effluent limitations under Specific Provision [3.b.\(2\)\(b\)](#); OR

- (e) The Responsible Copermittee has submitted and is fully implementing a Water Quality Improvement Plan, accepted by the San Diego Water Board, which provides reasonable assurance that the interim compliance requirements will be achieved by the interim compliance dates.
- (2) Compliance with WQBELs of Specific Provision 3.b may be demonstrated via one of the following methods:
- (a) There is no direct or indirect discharge from the Responsible Copermittee's MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision 3.b.(1) in the receiving water at, or downstream of the Responsible Copermittee's MS4 outfalls;
 - (c) There are no violations of the applicable effluent limitations under Specific Provision 3.b.(2)(a) at the Responsible Copermittee's MS4 outfalls; OR
 - (d) The pollutant loads from given land uses discharging to and from the MS4s do not exceed the applicable effluent limitations under Specific Provision 3.b.(2)(b).

4. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2007-0043

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 13, 2007
State Water Board Approval Date:	July 15, 2008
Office of Administrative Law Approval Date:	October 22, 2008
US EPA Approval Date:	December 18, 2008

(3) TMDL Effective Date: October 22, 2008

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Chollas Creek

(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, San Diego Unified Port District

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 4.c.(1):

Table 4.1

Receiving Water Limitations as Concentrations in Chollas Creek

Constituent	Exposure Duration	Receiving Water Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$(0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$(0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$(0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$(0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

(2) Effluent Limitations

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 4.c.(1):

Table 4.2

Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

(3) Best Management Practices

- (a) The Responsible Copermittees must implement BMPs to support the achievement of the WQBELs under Specific Provision 4.b for Chollas Creek.
- (b) The Responsible Copermittees should coordinate any BMPs implemented to address this TMDL with Caltrans and the U.S. Navy as possible.

c. COMPLIANCE SCHEDULE**(1) WLA Compliance Date**

The Responsible Copermittees are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 4.b, by October 22, 2028.

(2) Interim Compliance Requirements

The Responsible Copermitttee must comply with the following interim WQBELs by the interim compliance date:

Table 4.3

Interim Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Interim Compliance Date	Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
October 22, 2018	Dissolved Copper	Acute	$1.2 \times 90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
	Dissolved Lead	Acute	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
	Dissolved Zinc	Acute	$1.2 \times 90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

- (1) The Responsible Copermitttees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermitttees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*, when it is amended to include monitoring requirements for the Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.
- (2) The Responsible Copermitttees must monitor the effluent of the MS4 outfalls discharging to Chollas Creek for dissolved copper, lead, and zinc, and calculate or estimate the monthly and annual dissolved copper, lead, and zinc loads, in accordance with the requirements of Provisions [D.2](#), [D.4.b.\(1\)](#), and [D.4.b.\(2\)](#) of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

e. COMPLIANCE DETERMINATION

- (1) Compliance with interim compliance requirements of Specific Provision 4.c.(2) may be demonstrated via one of the following methods:
 - (a) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision 4.b.(1) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls;
 - (c) There are no violations of the applicable effluent limitations under Specific Provision 4.b.(2) at the Responsible Copermittees' MS4 outfalls; OR
 - (d) The Responsible Copermittees have submitted and is fully implementing a Water Quality Improvement Plan, accepted by the San Diego Water Board, which provides reasonable assurance that the interim compliance requirements will be achieved by the interim compliance dates.
- (2) Compliance with WQBELs of Specific Provision 4.b may be demonstrated via one of the following methods:
 - (a) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision 4.b.(1) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls; OR
 - (c) There are no violations of the applicable effluent limitations under Specific Provision 4.b.(2) at the Responsible Copermittees' MS4 outfalls.

5. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2008-0027

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 11, 2008
State Water Board Approval Date:	June 16, 2009
Office of Administrative Law Approval Date:	September 15, 2009
US EPA Approval Date:	October 26, 2009

(3) TMDL Effective Date: September 15, 2009

(4) Watershed Management Areas: See [Table 5.0](#)

(5) Water Bodies: See [Table 5.0](#)

(6) Responsible Copermittees: See [Table 5.0](#)

Table 5.0

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Dana Point Harbor	Baby Beach	-City of Dana Point -County of Orange
San Diego Bay	San Diego Bay	Shelter Island Shoreline Park	- San Diego Unified Port District

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in [Table 5.0](#) consist of the following:

(1) Receiving Water Limitations

- (a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provisions [5.c.\(1\)\(a\)](#) and [5.c.\(2\)](#):

Table 5.1

Receiving Water Limitations as Bacteria Densities in the Water Body

Receiving Water Limitations		
Constituent	Single Sample Maximum ^{1,2}	30-Day Geometric Mean ²
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
<i>Enterococcus</i>	104 MPN/100mL	35 MPN/100mL

Notes:

1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.

- (b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermitttees must demonstrate that the discharges from the MS4s are not causing or contributing to the exceedance of receiving water limitations.

(2) Effluent Limitations

Discharges from the MS4s must not contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provisions [5.c.\(1\)\(a\)](#) and [5.c.\(2\)](#) to demonstrate the discharge is not causing or contributing to a violation of receiving water quality standards:

Table 5.2

Effluent Limitations as Bacteria Densities in MS4 Discharges to the Water Body

Effluent Limitations		
Constituent	Single Sample Maximum ^{1,2}	30-Day Geometric Mean ²
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
<i>Enterococcus</i>	104 MPN/100mL	35 MPN/100mL

Notes:

1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.

Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision [5.c.](#)

(3) Best Management Practices

- (a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in [Table 5.0](#) must incorporate the Bacteria Load Reduction Plan (BLRP) required to be developed pursuant to Resolution No. R9-2008-0027.
- (b) The Responsible Copermittee must implement BMPs to support the achievement of the WQBELs under Specific Provision [5.0](#) for the segments or areas of the water bodies listed in [Table 5.0](#)

c. COMPLIANCE SCHEDULE**(1) Baby Beach in Dana Point Harbor****(a) WLA Compliance Dates**

The Responsible Copermittees for MS4 discharges to Baby Beach are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision [5.0](#), according to the following compliance schedule:

Table 5.3*Compliance Schedule Dates to Achieve Baby Beach WLAs*

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform	September 15, 2014	September 15, 2009
Fecal Coliform		September 15, 2009
<i>Enterococcus</i>		September 15, 2019

(b) Interim Compliance Requirements

The Responsible Copermittees for MS4 discharges to Baby Beach must comply with the following interim WQBELs by the interim compliance date:

Table 5.4*Interim Effluent Limitations as Loads in MS4 Discharges to Baby Beach*

Constituent	Interim Compliance Date	Dry Weather Interim Effluent Limitation	Wet Weather Interim Effluent Limitation
Total Coliform	September 15, 2012	4.93x10 ⁹ MPN/day	NA*
Fecal Coliform	September 15, 2012	0.59x10 ⁹ MPN/day	NA*
<i>Enterococcus</i>	September 15, 2012	0.42x10 ⁹ MPN/day	NA**
	September 15, 2016	NA*	207x10 ⁹ MPN/30days

Notes:

* The WQBELs under Specific Provision [5.b](#) must already be achieved by the given interim compliance date.

** There is no corresponding interim WQBEL for the given interim compliance date.

(2) Shelter Island Shoreline Park in San Diego Bay

The Responsible Copermittee for MS4 discharges to Shelter Island Shoreline Park is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision [5.0](#), by December 31, 2012.

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS**(1) Monitoring Stations**

Monitoring locations should consist of, at a minimum, the same locations used to collect data required pursuant to Order Nos. R9-2007-0001 and R9-2009-0002, and beach monitoring for Health and Safety Code section 115880.³³ If exceedances of the applicable interim or final receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations must also be used to demonstrate that the bacteria loads from the identified anthropogenic sources have been addressed and are no longer causing exceedances in the receiving waters.

(2) Monitoring Procedures

- (a) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly. Dry weather samples collected from additional monitoring stations established to identify sources must be collected at an appropriate frequency to demonstrate bacteria loads from the identified anthropogenic sources have been addressed and are no longer causing exceedances in the receiving waters.
- (b) The Responsible Copermittees must collect wet weather monitoring samples within the first 24 hours of the first storm event³⁴ of the rainy season (i.e. October 1 through April 30). Wet weather samples collected from receiving water stations and any additional monitoring stations established to identify sources must be collected at an appropriate frequency to demonstrate bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.
- (c) Samples must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(3) Assessment and Reporting Requirements

- (a) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs have been achieved.

³³ Commonly referred to as AB 411 monitoring

³⁴ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

- (b) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

e. COMPLIANCE DETERMINATION

- (1) Compliance with interim compliance requirements of Specific Provision [5.c.\(1\)\(b\)](#) may be demonstrated via one of the following methods:
 - (a) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision [5.b.\(1\)\(a\)](#) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls;
 - (c) There are no violations of the applicable effluent limitations under Specific Provision [5.b.\(2\)](#) at the Responsible Copermittees' MS4 outfalls;
 - (d) The pollutant loads discharging from the Responsible Copermittees' MS4 outfalls do not exceed the applicable effluent limitations under Specific Provision [5.c.\(1\)\(b\)](#);
 - (e) The Responsible Copermittees can demonstrate that exceedances of the applicable receiving water limitations under Specific Provision [5.b.\(1\)\(a\)](#) in the receiving water are due to loads from natural sources, AND pollutant loads from the Copermittees' MS4 are not causing or contributing to the exceedances; OR
 - (f) The Responsible Copermittees have submitted and are fully implementing a Water Quality Improvement Plan, accepted by the San Diego Water Board, which provides reasonable assurance that the interim compliance requirements will be achieved by the interim compliance dates.
- (2) Compliance with WQBELs of Specific Provision [5.b](#) may be demonstrated via one of the following methods:
 - (a) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision [5.b.\(1\)\(a\)](#) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls;
 - (c) There are no violations of the applicable effluent limitations under Specific Provision [5.b.\(2\)](#) at the Responsible Copermittees' MS4 outfalls;

- (d) The pollutant loads discharging from the Responsible Copermittees' MS4 outfalls do not exceed the applicable effluent limitations under Specific Provision [5.c.\(1\)\(b\)](#); OR
- (e) The Responsible Copermittees can demonstrate that exceedances of the applicable receiving water limitations under Specific Provision [5.b.\(1\)\(a\)](#) in the receiving water are due to loads from natural sources, AND pollutant loads from the Copermittees' MS4 are not causing or contributing to the exceedances.

6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2010-0001

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 10, 2010
State Water Board Approval Date:	December 14, 2010
Office of Administrative Law Approval Date:	April 4, 2011
US EPA Approval Date:	June 22, 2011

(3) TMDL Effective Date: April 4, 2011

(4) Watershed Management Areas: See [Table 6.0](#)

(5) Water Bodies: See [Table 6.0](#)

(6) Responsible Copermittees: See [Table 6.0](#)

Table 6.0

Applicability of Total Maximum Daily Loads for Indicator Bacteria

Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	-City of Laguna Beach -County of Orange -Orange County Flood Control District
		at Heisler Park - North	
	Pacific Ocean Shoreline	at Main Laguna Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Woods -County of Orange -Orange County Flood Control District
		Laguna Beach at Ocean Avenue	
		Laguna Beach at Cleo Street	
		Arch Cove at Bluebird Canyon Road	
	Pacific Ocean Shoreline	Laguna Beach at Dumond Drive	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Hills -City of Laguna Niguel -City of Laguna Woods -City of Lake Forest -City of Mission Viejo -County of Orange -Orange County Flood Control District
Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach			
Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Hills -City of Laguna Niguel -City of Laguna Woods -City of Lake Forest -City of Mission Viejo -County of Orange -Orange County Flood Control District	
Aliso Creek Mouth	at mouth		

ATTACHMENT E: SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS

6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I –
Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

Table 6.0 (Cont'd)

Applicability of Total Maximum Daily Loads for Indicator Bacteria

Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees	
South Orange County (cont'd)	Pacific Ocean Shoreline	Aliso Beach at West Street	-City of Dana Point -City of Laguna Beach -City of Laguna Niguel -County of Orange -Orange County Flood Control District	
		Aliso Beach at Table Rock Drive		
		100 Steps Beach at Pacific Coast Hwy at hospital (9 th Avenue)		
		at Salt Creek (large outlet)		
		Salt Creek Beach at Salt Creek service road		
		Salt Creek Beach at Strand Road		
	Pacific Ocean Shoreline	at San Juan Creek	-City of Dana Point -City of Laguna Hills -City of Laguna Niguel -City of Mission Viejo -City of Rancho Santa Margarita -City of San Juan Capistrano -County of Orange -Orange County Flood Control District	
	San Juan Creek	lower 1 mile	-City of San Juan Capistrano -County of Orange -Orange County Flood Control District	
	San Juan Creek Mouth	at mouth		
	Pacific Ocean Shoreline	Pacific Ocean Shoreline	at Poche Beach	-City of Dana Point -City of San Clemente -County of Orange -Orange County Flood Control District
			Ole Hanson Beach Club	
			Beach at Pico Drain	
			San Clemente City Beach at El Portal Street Stairs	
			San Clemente City Beach at Mariposa Street	
			San Clemente City Beach at Linda Lane	
San Clemente City Beach at South Linda Lane				
San Clemente City Beach at Lifeguard Headquarters				
under San Clemente Municipal Pier				
San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)				
San Clemente State Beach at Riviera Beach				
Can Clemente State Beach at Cypress Shores				
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	-City of Oceanside -City of Vista -County of San Diego	

Table 6.0 (Cont'd)

Applicability of Total Maximum Daily Loads for Indicator Bacteria

Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	-City of Carlsbad -City of Encinitas -City of Escondido -City of San Marcos -County of San Diego
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	-City of Del Mar -City of Escondido -City of Poway -City of San Diego -City of Solana Beach -County of San Diego
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	-City of Del Mar -City of Poway -City of San Diego -County of San Diego
Mission Bay	Pacific Ocean Shoreline	La Jolla Shores Beach at El Paseo Grande	-City of San Diego
		La Jolla Shores Beach at Caminito del Oro	
		La Jolla Shores Beach at Vallecitos	
		La Jolla Shores Beach at Avenida de la Playa	
		at Casa Beach, Children's Pool	
		South Casa Beach at Coast Boulevard	
		Whispering Sands Beach at Ravina Street	
		Windansea Beach at Vista de la Playa	
		Windansea Beach at Bonair Street	
		Windansea Beach at Playa del Norte	
		Windansea Beach at Palomar Avenue	
		at Tourmaline Surf Park	
		Pacific Beach at Grand Avenue	
	Tecolote Creek	Entire reach and tributaries	

Table 6.0 (Cont'd)*Applicability of Total Maximum Daily Loads for Indicator Bacteria**Project I- Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
San Diego River	Forrester Creek	lower 1 mile	-City of El Cajon -City of Santee -County of San Diego
	San Diego River	lower 6 miles	-City of El Cajon -City of La Mesa
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach	-City of San Diego -City of Santee -County of San Diego
San Diego Bay	Chollas Creek	lower 1.2 miles	-City of La Mesa -City of Lemon Grove -City of San Diego -County of San Diego - San Diego Unified Port District

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in [Table 6.0](#) consist of the following:

(1) Receiving Water Limitations

- (a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provision [6.c.\(1\)](#):

Table 6.1*Receiving Water Limitations as Bacteria Densities and Allowable Exceedance Frequencies in the Water Body*

Constituent	Receiving Water Limitations			
	Single Sample Maximum ^{1,2} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency ³	30-Day Geometric Mean ² (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22% / 0%	1,000	0%
Fecal Coliform	400	22% / 0%	200	0%
<i>Enterococcus</i>	10 ⁴ / 61 ⁵	22% / 0%	35 ⁴ / 33 ⁵	0%

Notes:

1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days.
4. This *Enterococcus* receiving water limitation applies to segments of areas of Pacific Ocean Shoreline listed in [Table 6.0](#).
5. This *Enterococcus* receiving water limitations applies to segments or areas of creeks or creek mouths listed in [Table 6.0](#).

Interim receiving water limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision [6.c](#).

- (b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittees must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittee must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision [6.b.\(2\)](#).

(2) Effluent Limitations

Discharges from the MS4s must not contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provision [6.c.\(1\)](#) to demonstrate the discharge is not causing or contributing to a violation of receiving water quality standards:

Table 6.2

Effluent Limitations as Bacteria Densities and Allowable Exceedance Frequencies in MS4 Discharges to the Water Body

Effluent Limitations				
Constituent	Single Sample Maximum ^{1,2} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency ³	30-Day Geometric Mean ² (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22% / 0%	1,000	0%
Fecal Coliform	400	22% / 0%	200	0%
<i>Enterococcus</i>	104 ⁴ / 61 ⁵	22% / 0%	35 ⁴ / 33 ⁵	0%

Notes:

1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days.
4. This *Enterococcus* effluent limitation applies to MS4 discharges to segments of areas of Pacific Ocean Shoreline listed in [Table 6.0](#).
5. This *Enterococcus* effluent limitation applies to MS4 discharges to segments or areas of creeks or creek mouths listed in [Table 6.0](#).

Interim effluent limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision [6.c](#).

(3) Best Management Practices

- (a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in [Table 6.0](#) must incorporate the Comprehensive Load Reduction Plans (CLRPs) required to be developed pursuant to Resolution No. R9-2010-0001. For segments or areas in [Table 6.0](#) that have been delisted from the Clean Water Act Section 303(d) List of Water Quality Limited Segments, a CLRP is not required.
- (b) The Responsible Copermittee must implement BMPs to support the achievement of the WQBELs under Specific Provision [6.b](#) for the segments or areas of the water bodies listed in [Table 6.0](#).
- (c) The Responsible Copermittees should coordinate any BMPs implemented to address this TMDL with Caltrans and owners/operators of small MS4s as possible.

c. COMPLIANCE SCHEDULE

(1) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to a segment or area of the water bodies listed in [Table 6.0](#) are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision [6.b](#), according to the following compliance schedule:

Table 6.3

Compliance Schedule Dates to Achieve Indicator Bacteria WLAs

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform*	April 4, 2021	April 4, 2031
Fecal Coliform		
<i>Enterococcus</i>		

* Total coliform receiving water limitations only apply to segments or areas of Pacific Ocean Shoreline listed in [Table 6.0](#).

(2) Interim Compliance Requirements

The Responsible Copermittees must comply with the following interim WQBELs by the interim compliance dates:

(a) Interim Dry Weather Receiving Water Limitations

The Responsible Copermittee must calculate the “existing” exceedance frequencies of the 30-day geometric mean water quality objectives for each of the indicator bacteria by analyzing the available monitoring data collected between January 1, 1996 and December 31, 2002. “Existing” exceedance frequencies may be calculated by segment or area of a water body, or by water body, and/or by Watershed Management Area listed in [Table 6.0](#). Separate “existing” exceedance frequencies must be calculated for beaches and creeks/creek mouths.

The Responsible Copermittees must achieve a 50 percent reduction in the “existing” exceedance frequency of the 30-day geometric mean WQBELs for the segments or areas of the water bodies listed in [Table 6.0](#) by the interim compliance dates for achieving the interim dry weather WQBELs given in [Table 6.5](#). A 50 percent reduction in the “existing” exceedance frequency is equivalent to half of the “existing” exceedance frequency of the 30-day geometric mean WQBELs.

The “existing” exceedance frequencies and the interim dry weather allowable exceedance frequencies (i.e. interim dry weather WQBELs) calculated by the Responsible Copermittees must be included in the Water Quality Improvement Plans for the applicable Watershed Management Areas.

(b) Interim Wet Weather Receiving Water Limitations

The Responsible Copermittees must achieve the interim wet weather receiving water limitations in [Table 6.4](#), expressed as interim allowable exceedance frequencies, by the interim compliance dates for achieving the interim wet weather WQBELs given in [Table 6.5](#).

Table 6.4

Interim Wet Weather Receiving Water Limitations Expressed as Interim Wet Weather Allowable Exceedance Frequencies

Watershed Management Area	Water Body	Segment or Area	Interim Wet Weather Allowable Exceedance Frequencies					
			Total Coliform	Fecal Coliform	Enterococcus			
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	38%	37%	39%			
		at Heisler Park - North						
	Pacific Ocean Shoreline	at Main Laguna Beach						
		Laguna Beach at Ocean Avenue						
		Laguna Beach at Cleo Street						
		Arch Cove at Bluebird Canyon Road						
		Laguna Beach at Dumond Drive						
	Pacific Ocean Shoreline	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach				41%	41%	42%
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek				41%	41%	42%
	Aliso Creek Mouth	at mouth				41%	41%	42%
	Pacific Ocean Shoreline	Aliso Beach at West Street				36%	36%	36%
		Aliso Beach at Table Rock Drive						
100 Steps Beach at Pacific Coast Hwy at hospital (9 th Avenue)								
at Salt Creek (large outlet)								
Salt Creek Beach at Salt Creek service road								
	Salt Creek Beach at Strand Road							

Table 6.4 (Cont'd)

Interim Wet Weather Receiving Water Limitations Expressed as Interim Wet Weather Allowable Exceedance Frequencies

Watershed Management Area	Water Body	Segment or Area	Interim Wet Weather Allowable Exceedance Frequencies			
			Total Coliform	Fecal Coliform	Enterococcus	
South Orange County (cont'd)	Pacific Ocean Shoreline	at San Juan Creek	44%	44%	48%	
	San Juan Creek	lower 1 mile	44%	44%	47%	
	San Juan Creek Mouth	at mouth	44%	44%	47%	
	Pacific Ocean Shoreline	at Poche Beach		35%	35%	36%
		Ole Hanson Beach Club Beach at Pico Drain				
		San Clemente City Beach at El Portal Street Stairs				
		San Clemente City Beach at Mariposa Street				
		San Clemente City Beach at Linda Lane				
		San Clemente City Beach at South Linda Lane				
		San Clemente City Beach at Lifeguard Headquarters				
		under San Clemente Municipal Pier				
		San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)				
		San Clemente State Beach at Riviera Beach				
San Clemente State Beach at Cypress Shores						
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	45%	44%	47%	
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	40%	40%	41%	
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	33%	33%	36%	

Table 6.4 (Cont'd)

*Interim Wet Weather Receiving Water Limitations Expressed as
Interim Wet Weather Allowable Exceedance Frequencies*

Watershed Management Area	Water Body	Segment or Area	Interim Wet Weather Allowable Exceedance Frequencies		
			Total Coliform	Fecal Coliform	Enterococcus
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	26%	26%	26%
Mission Bay	Pacific Ocean Shoreline	La Jolla Shores Beach at El Paseo Grande	37%	37%	37%
		La Jolla Shores Beach at Caminito del Oro			
		La Jolla Shores Beach at Vallecitos			
		La Jolla Shores Beach at Avenida de la Playa			
		at Casa Beach, Children's Pool			
		South Casa Beach at Coast Boulevard			
		Whispering Sands Beach at Ravina Street			
		Windansea Beach at Vista de la Playa			
		Windansea Beach at Bonair Street			
		Windansea Beach at Playa del Norte			
		Windansea Beach at Palomar Avenue			
at Tourmaline Surf Park					
	Tecolote Creek	Entire reach and tributaries	49%	49%	51%
San Diego River	Forrester Creek	lower 1 mile	46%	43%	49%
	San Diego River	lower 6 miles	46%	43%	49%
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach	46%	43%	51%
San Diego Bay	Chollas Creek	lower 1.2 miles	41%	41%	43%

(c) Interim Compliance Dates

The Responsible Copermittees must achieve the interim receiving water limitations under Specific Provisions 6.c.(2)(a) and 6.c.(2)(b) by the interim compliance dates given in Table 6.5.

Table 6.5*Interim Compliance Dates to Achieve Interim WQBELs*

Watershed Management Area	Water Body	Segment or Area	Interim Compliance Dates	
			Interim Dry Weather WQBELs	Interim Wet Weather WQBELs
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	April 4, 2016	April 4, 2021
		at Heisler Park - North		
	Pacific Ocean Shoreline	at Main Laguna Beach	April 4, 2016	April 4, 2021
		Laguna Beach at Ocean Avenue		
		Laguna Beach at Cleo Street		
		Arch Cove at Bluebird Canyon Road		
	Pacific Ocean Shoreline	Laguna Beach at Dumond Drive	April 4, 2016	April 4, 2021
		Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach		
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	April 4, 2018	April 4, 2021
	Aliso Creek Mouth	at mouth	April 4, 2018	April 4, 2021
	Pacific Ocean Shoreline	Aliso Beach at West Street	April 4, 2016	April 4, 2021
		Aliso Beach at Table Rock Drive		
		100 Steps Beach at Pacific Coast Hwy at hospital (9 th Avenue)		
at Salt Creek (large outlet)				
Salt Creek Beach at Salt Creek service road		April 4, 2017		
	Salt Creek Beach at Strand Road	April 4, 2017	April 4, 2021	

Table 6.5 (Cont'd)*Interim Compliance Dates to Achieve Interim WQBELs*

Watershed Management Area	Water Body	Segment or Area	Interim Compliance Dates		
			Interim Dry Weather WQBELs	Interim Wet Weather WQBELs	
South Orange County (cont'd)	Pacific Ocean Shoreline	at San Juan Creek	April 4, 2016	April 4, 2021	
	San Juan Creek	lower 1 mile	April 4, 2018	April 4, 2021	
	San Juan Creek Mouth	at mouth	April 4, 2016	April 4, 2021	
	Pacific Ocean Shoreline		at Poche Beach	April 4, 2016	April 4, 2021
			Ole Hanson Beach Club Beach at Pico Drain	April 4, 2016	April 4, 2021
			San Clemente City Beach at El Portal Street Stairs	April 4, 2017	April 4, 2021
			San Clemente City Beach at Mariposa Street		
			San Clemente City Beach at Linda Lane	April 4, 2016	April 4, 2021
			San Clemente City Beach at South Linda Lane	April 4, 2018	April 4, 2021
			San Clemente City Beach at Lifeguard Headquarters	April 4, 2017	April 4, 2021
			under San Clemente Municipal Pier		
			San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)	April 4, 2018	April 4, 2021
			San Clemente State Beach at Riviera Beach	April 4, 2016	April 4, 2021
	San Clemente State Beach at Cypress Shores	April 4, 2017	April 4, 2021		
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	April 4, 2017	April 4, 2021	
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	April 4, 2016	April 4, 2021	
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	April 4, 2016	April 4, 2021	

Table 6.5 (Cont'd)*Interim Compliance Dates to Achieve Interim QWBELs*

Watershed Management Area	Water Body	Segment or Area	Interim Compliance Dates	
			Interim Dry Weather QWBELs	Interim Wet Weather QWBELs
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	April 4, 2016	April 4, 2021
Mission Bay	Pacific Ocean Shoreline	La Jolla Shores Beach at El Paseo Grande	April 4, 2016	April 4, 2021
		La Jolla Shores Beach at Caminito del Oro		
		La Jolla Shores Beach at Vallecitos		
		La Jolla Shores Beach at Avenida de la Playa		
		at Casa Beach, Children's Pool		
		South Casa Beach at Coast Boulevard		
		Whispering Sands Beach at Ravina Street		
		Windansea Beach at Vista de la Playa		
		Windansea Beach at Bonair Street		
		Windansea Beach at Playa del Norte		
		Windansea Beach at Palomar Avenue		
	at Tourmaline Surf Park			
	Pacific Beach at Grand Avenue			
	Tecolote Creek	Entire reach and tributaries		
San Diego River	Forrester Creek	lower 1 mile	April 4, 2018	April 4, 2021
	San Diego River	lower 6 miles		
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach		
San Diego Bay	Chollas Creek	lower 1.2 miles	April 4, 2018	April 4, 2021

d. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS**(1) Monitoring and Assessment Requirements for Beaches****(a) Monitoring Stations**

For beaches addressed by the TMDL, monitoring locations should consist of, at a minimum, the same locations used to collect data required pursuant to Order Nos. R9-2007-0001 and R9-2009-0002, and beach monitoring for Health and Safety Code section 115880.³⁵ If exceedances

³⁵ Commonly referred to as AB 411 monitoring

of the applicable interim or final receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations must also be used to demonstrate that the bacteria loads from the identified anthropogenic sources have been addressed and are no longer causing exceedances in the receiving waters.

(b) Monitoring Procedures

- (i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly. Dry weather samples collected from additional monitoring stations established to identify sources must be collected at an appropriate frequency to demonstrate bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.
- (ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations at least once within the first 24 hours of the first storm event³⁶ of the rainy season (i.e. October 1 through April 30). Wet weather samples collected from receiving water stations and any additional monitoring stations established to identify sources must be collected at an appropriate frequency to demonstrate bacteria loads from the identified sources have been addressed and are no longer in exceedance of the allowable exceedance frequencies in the receiving waters.
- (iii) Samples must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

- (i) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs for the Pacific Ocean Shoreline segments or areas listed in [Table 6.0](#) have been achieved.
- (ii) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

³⁶ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

(2) Monitoring and Assessment Requirements for Creeks and Creek Mouths

(a) Monitoring Stations

For creeks addressed by the TMDL, monitoring locations should consist of, at a minimum, a location at or near the mouth of the creek (e.g. Mass Loading Station or Mass Emission Station) and one or more locations upstream of the mouth (e.g. Watershed Assessment Station). If exceedances of the applicable interim or final receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations must also be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.

(b) Monitoring Procedures

- (i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations in accordance with the requirements of Provision D.
- (ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations within the first 24 hours of the first storm event³⁷ of the rainy season (i.e. October 1 through April 30).
- (iii) Samples collected from receiving water monitoring stations must be analyzed for fecal coliform and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

- (i) The Responsible Copermittees must analyze the receiving water monitoring data to assess whether the interim and final receiving water WQBELs for the creeks and creek mouths listed in [Table 6.0](#) have been achieved.
- (ii) The Responsible Copermittee must identify and incorporate additional MS4 outfall and receiving water monitoring stations and/or adjust monitoring frequencies to identify sources causing exceedances of the receiving water WQBELs.
- (iii) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

³⁷ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

e. COMPLIANCE DETERMINATION

- (1) Compliance with interim compliance requirements of Specific Provision 6.c.(2) may be demonstrated via one of the following methods:
 - (a) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision 6.b.(1) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls;
 - (c) There are no violations of the applicable effluent limitations under Specific Provision 6.b.(2) at the Responsible Copermittees' MS4 outfalls;
 - (d) There are no exceedances of the applicable interim receiving water limitations under Specific Provision 6.c.(2) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls;
 - (e) The Responsible Copermittees can demonstrate that exceedances of the applicable interim or final receiving water limitations under Specific Provision 6.b.(1)(a) or 6.c.(2) in the receiving water are due to loads from natural sources, AND pollutant loads from the Copermittees' MS4 are not causing or contributing to the exceedances; OR
 - (f) The Responsible Copermittees have submitted and are fully implementing a Water Quality Improvement Plan, accepted by the San Diego Water Board, which provides reasonable assurance that the interim compliance requirements will be achieved by the interim compliance dates.
- (2) Compliance with WQBELs of Specific Provision 6.b may be demonstrated via one of the following methods:
 - (a) There is no direct or indirect discharge from the Responsible Copermittees' MS4s to the receiving water;
 - (b) There are no exceedances of the applicable receiving water limitations under Specific Provision 6.b.(1) in the receiving water at, or downstream of the Responsible Copermittees' MS4 outfalls;
 - (c) There are no violations of the applicable effluent limitations under Specific Provision 6.b.(2) at the Responsible Copermittees' MS4 outfalls; OR
 - (d) The Responsible Copermittees can demonstrate that exceedances of the applicable final receiving water limitations under Specific Provision 6.b.(1)(a) in the receiving water are due to loads from natural sources, AND pollutant loads from the Copermittees' MS4 are not causing or contributing to the exceedances.

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