

Attachment A to Resolution No. 2002-XXX
Proposed Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate
Implementation Provisions for the Region’s Bacteria Objectives and to incorporate the
Santa Monica Bay Beaches Wet-Weather Bacteria TMDL

Proposed for adoption by the California Regional Water Quality Control Board, Los Angeles Region on ~~September 26~~December 12, 2002.

Amendments:

List of Figures, Tables and Inserts

Add under Chapter 7, Section 7-4 (Santa Monica Bay Beaches Bacteria TMDL):

Tables

7-4.4. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Elements

7-4.5a. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): ~~Interim Compliance~~
Targets by Beach Region and Final Allowable Exceedance Days by Beach Location

7-4.5b6. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Interim Compliance
Targets by ~~Beach Region~~Jurisdictional Groups

7-4.67. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Significant Dates

Chapter 3. Water Quality Objectives, “Bacteria, Coliform”

Add under “Implementation Provisions for Water Contact Recreation Bacteria Objectives”

The single sample bacteriological objectives shall be strictly applied except when provided for in a Total Maximum Daily Load (TMDL). In all circumstances, including in the context of a TMDL, the geometric mean objectives shall be strictly applied. In the context of a TMDL, the Regional Board may implement the single sample objectives in fresh and marine waters by using a ‘reference system/antidegradation approach’ or ‘natural sources exclusion approach’ as discussed below. A reference system is defined as an area and associated monitoring point that is not impacted by human activities that potentially affect bacteria densities in the receiving water body.

These approaches recognize that there are natural sources of bacteria, which may cause or contribute to exceedances of the single sample objectives for bacterial indicators. They also acknowledge that it is not the intent of the Regional Board to require treatment or diversion of natural water bodies or to require treatment of natural sources of bacteria from undeveloped areas. Such requirements, if imposed by the Regional Board, could adversely affect valuable aquatic life and wildlife beneficial uses supported by natural water bodies in the Region.

Under the reference system/antidegradation implementation procedure, a certain frequency of exceedance of the single sample objectives above shall be permitted on the basis of the observed exceedance frequency in the selected reference system or the targeted water body, whichever is less. The reference system/anti-degradation approach ensures that bacteriological water quality is at least as good as that of a reference system and that no degradation of existing bacteriological water quality is permitted where existing bacteriological water quality is better than that of the selected reference system.

Under the natural sources exclusion implementation procedure, after all anthropogenic sources of bacteria have been controlled such that they do not cause an exceedance of the single sample objectives, a certain frequency of exceedance of the single sample objectives shall be permitted based on the residual exceedance frequency in the specific water body. The residual exceedance frequency shall define the background level of exceedance due to natural sources. The ‘natural sources exclusion’ approach may be used if an appropriate reference system cannot be identified due to unique characteristics of the target

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water body. These approaches are consistent with the State Antidegradation Policy (State Board Resolution No. 68-16) and with federal antidegradation requirements (40 CFR 131.12).

The appropriateness of these approaches and the specific exceedance frequencies to be permitted under each will be evaluated within the context of TMDL development for a specific water body, at which time the Regional Board may select one of these approaches, if appropriate.

These implementation procedures may only be implemented within the context of a TMDL addressing municipal storm water (i.e. MS4), including the MS4 requirements of the Statewide Permit for Storm Water Discharges from the State of California Department of Transportation (CalTrans), and non-point sources discharges. These implementation provisions do not apply to NPDES discharges other than MS4 discharges.¹

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries, Section 7-4 (Santa Monica Bay Beaches Bacteria TMDL)

Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only)*

This TMDL was adopted by the Regional Water Quality Control Board on ~~September 26~~December 12, 2002.

This TMDL was approved by:

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

The following table summarizes the key elements of this TMDL.

¹ Municipal storm water discharges in the Los Angeles Region are those with permits under the Municipal Separate Storm Sewer System (MS4) NPDES Program. For example, the MS4 permits at the time of this amendment are the Los Angeles County Municipal Storm Water NPDES Permit, Ventura County Municipal Storm Water NPDES Permit, City of Long Beach Municipal Storm Water NPDES Permit, and elements of the statewide storm water permit for the California Department of Transportation (CalTrans).

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Table 7-4.4. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Elements

Element	Key Findings and Regulatory Provisions
<p><i>Problem Statement</i></p>	<p>Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at many Santa Monica Bay (SMB) beaches. Swimming in waters with elevated bacterial indicator densities has long been associated with adverse health effects. Specifically, local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects and recreational water quality, as measured by bacterial indicator densities.</p>
<p><i>Numeric Target</i> <i>(Interpretation of the numeric water quality objective, used to calculate the waste load allocations)</i></p>	<p>The TMDL has a multi-part numeric target based on the bacteriological water quality objectives for marine water to protect the water contact recreation (REC-1) use. These targets are the most appropriate indicators of public health risk in recreational waters.</p> <p>These bacteriological objectives are set forth in Chapter 3 of the Basin Plan, as amended by the Regional Board on October 25, 2001. The objectives are based on four bacterial indicators and include both geometric mean limits and single sample limits. The Basin Plan objectives that serve as numeric targets for this TMDL are:</p> <p><u>1. Rolling 30-day Geometric Mean Limits</u></p> <ol style="list-style-type: none"> a. Total coliform density shall not exceed 1,000/100 ml. b. Fecal coliform density shall not exceed 200/100 ml. c. Enterococcus density shall not exceed 35/100 ml. <p><u>2. Single Sample Limits</u></p> <ol style="list-style-type: none"> a. Total coliform density shall not exceed 10,000/100 ml. b. Fecal coliform density shall not exceed 400/100 ml. c. Enterococcus density shall not exceed 104/100 ml. d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1. <p>These objectives are generally based on an acceptable health risk <u>for marine recreational waters</u> of 19 illnesses per 1,000 exposed individuals at as set by the US EPA (US EPA, 1986). The targets apply throughout the year. The final compliance point for the targets is the wave wash² where there is a freshwater outlet (i.e., publicly-owned storm drain or natural creek) to the beach, or at ankle depth at beaches without a freshwater outlet.</p> <p>Implementation of the above bacteria objectives and the associated TMDL numeric targets is achieved using a ‘reference system/anti-degradation approach’ <u>rather than the alternative ‘natural sources exclusion approach’ or strict application of the single sample objectives.</u> As required by the CWA and Porter-Cologne Water Quality Control Act, Basin Plans include beneficial uses of waters, water quality objectives to protect those uses, an anti-degradation policy, collectively referred to as water quality standards, and other plans and policies necessary to implement water quality standards. This TMDL and its associated waste load allocations, which shall be incorporated into relevant permits, are the vehicles for implementation of the Region’s</p>

² The wave wash is defined as the point at which the storm drain or creek empties and the effluent from the storm drain initially mixes with the receiving ocean water.

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Element	Key Findings and Regulatory Provisions
	<p>standards.</p> <p>The ‘reference system/anti-degradation approach’ means that on the basis of historical exceedance levels at existing shoreline monitoring locations, including a local reference beach within Santa Monica Bay, a certain number of daily exceedances of the single sample bacteria objectives are permitted. The allowable number of exceedance days is set such that (1) bacteriological water quality at any site is at least as good as at a designated reference site within the watershed and (2) there is no degradation of existing shoreline bacteriological water quality. This approach recognizes that there are natural sources of bacteria that may cause or contribute to exceedances of the single sample objectives and that it is not the intent of the Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of bacteria from undeveloped areas.</p> <p>The geometric mean targets may not be exceeded at any time. For the single sample targets, each existing shoreline monitoring site is assigned an allowable number of exceedance days during wet weather, defined as days with 0.1 inch of rain or greater and the three days following the rain event. (A separate amendment incorporating the Santa Monica Bay Beaches Dry-Weather Bacteria TMDL addressed the allowable number of summer and winter dry-weather exceedance days.)</p>
<i>Source Analysis</i>	<p>With the exception of isolated sewage spills, storm water runoff conveyed by storm drains and creeks is the primary source of elevated bacterial indicator densities to SMB beaches during wet weather. Because the bacterial indicators used as targets in the TMDL are not specific to human sewage, storm water runoff from undeveloped areas may also be a source of elevated bacterial indicator densities. For example, storm water runoff from natural areas may convey fecal matter from wildlife and birds or bacteria from soil. This is supported by the finding that, at the reference beach, the probability of exceedance of the single sample targets during wet weather is 0.22.</p>
<i>Loading Capacity</i>	<p>Studies show that bacterial degradation and dilution during transport from the watershed to the beach do not significantly affect bacterial indicator densities at SMB beaches. Therefore, the loading capacity is defined in terms of bacterial indicator densities, which is the most appropriate for addressing public health risk, and is equivalent to the numeric targets, listed above. As the numeric targets must be met in the wave wash and throughout the day, no degradation allowance is provided.</p>
<i>Waste Load Allocations (for point sources)</i>	<p>Waste load allocations are expressed as the number of sample days at a shoreline monitoring site that may exceed the single sample targets identified under “Numeric Target.” Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.</p> <p>For each shoreline monitoring site and corresponding subwatershed, an allowable number of exceedance days is set for wet weather.</p>

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	<p>The allowable number of exceedance days for a shoreline monitoring site for each time period is based on the lesser of two criteria (1) exceedance days in the designated reference system and (2) exceedance days based on historical bacteriological data at the monitoring site. This ensures that shoreline bacteriological water quality is at least as good as that of a largely undeveloped system and that there is no degradation of existing shoreline bacteriological water quality.</p> <p>All responsible jurisdictions and responsible agencies³ within a subwatershed are jointly responsible for complying with the allowable number of exceedance days for each associated shoreline monitoring site identified in Table 7-4.5a below.</p> <p>The three Publicly Owned Treatment Works (POTWs)⁴ discharging to Santa Monica Bay are each given individual WLAs of zero (0) days of exceedance during wet weather.</p>

³ For the purposes of this TMDL, “responsible jurisdictions and responsible agencies” ~~includes~~ are defined as: (1) local agencies that are responsible for discharges from a publicly owned treatment works to the Santa Monica Bay watershed or directly to the Bay, (2) local agencies that are permittees or co-permittees on a municipal storm water permit, (3) local or state agencies that have jurisdiction over a beach adjacent to Santa Monica Bay, and (4) the California Department of Transportation pursuant to its storm water permit.

⁴ City of Los Angeles’ Hyperion Wastewater Treatment Plant, Los Angeles County Sanitation Districts’ Joint Water Pollution Control Plant, and Las Virgenes Municipal Water Districts’ Tapia Wastewater Reclamation Facility.

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<p><i>Load Allocations (for nonpoint sources)</i></p>	<p>Because all storm water runoff to SMB beaches is regulated as a point source, load allocations of zero days of exceedance are set in this TMDL. <u>If a nonpoint source is directly impacting shoreline bacteriological quality and causing an exceedance of the numeric target(s), the permittee(s) under the Municipal Storm Water NPDES Permits are not responsible through these permits. However, the jurisdiction or agency adjacent to the shoreline monitoring location may have further obligations as described under “Compliance Monitoring” below.</u></p>
<p><i>Implementation</i></p>	<p>This TMDL will be implemented in four phases over an 18-year period. The regulatory mechanisms used to implement the TMDL will include primarily the Los Angeles County Municipal Storm Water NPDES Permit (MS4 Permit), the Caltrans Storm Water Permit, the three NPDES permits for the POTWs, and the authority contained in sections 13267 and 13263 of the Water Code. Each NPDES permit assigned a waste load allocation shall be reopened or amended at reissuance, after considering the input of interested persons, to incorporate the applicable waste load allocation(s) as a permit requirement.</p> <p><u>The implementation schedule will be determined on the basis of the implementation plan(s), which must be submitted by responsible jurisdictions and agencies within one year of the effective date of the TMDL (see Table 7-4.7). If responsible jurisdictions and agencies intend to pursue an integrated water resources approach that includes beneficial re-use of storm water, as demonstrated in the above-mentioned implementation plan, up to an 18-year implementation timeframe will be allotted in recognition of the additional planning and time needed for this approach. Otherwise, at most a 10-year implementation timeframe will be allotted.</u></p> <p><u>The subwatersheds associated with each beach monitoring location may include multiple responsible jurisdictions and responsible agencies. Therefore, a “primary jurisdiction,” defined as the jurisdiction comprising greater than fifty percent of the subwatershed land area, is identified for each subwatershed (see Table 7-4.6).⁵ Seven primary jurisdictions are identified within the Santa Monica Bay watershed, each with a group of associated subwatersheds and beach monitoring locations. These are identified as “jurisdictional groups” (see Table 7-4.6). The primary jurisdiction of each “jurisdictional group” shall be responsible for submitting the implementation plan described above, which will determine the implementation timeframe for the subwatershed. A jurisdictional group may change its primary jurisdiction by submitting a joint, written request, submitted by the current primary jurisdiction and the proposed primary jurisdiction, to the Executive Officer requesting a reassignment of primary responsibility. Two jurisdictional groups may also choose to change the assignment of monitoring locations between the two groups by submitting a joint, written request, submitted by the current primary jurisdiction and the proposed primary jurisdiction, to the Executive Officer requesting a reassignment of the monitoring location.</u></p>

⁵ Primary jurisdictions are not defined for the Ballona Creek subwatershed or the Malibu Creek subwatershed, since separate bacteria TMDLs are being developed for these subwatersheds.

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	<p><u>If an integrated water resources approach is pursued, the jurisdictional group(s) must achieve a 10% cumulative percentage reduction from the total exceedance-day reduction required for the group of beach monitoring locations within 6 years, a 25% reduction within 10 years, and a 50% reduction within 15 years of the effective date of the TMDL. These interim milestones for the jurisdictional group(s) will be re-evaluated based on the written implementation plan submitted to the Regional Board one year after the effective date of the TMDL (see Table 7-4.7).</u></p> <p><u>If an integrated water resources approach is not pursued, the jurisdictional group(s) must achieve a 25% cumulative percentage reduction from the total exceedance-day reduction required for the group of beach monitoring locations within 6 years, and a 50% reduction within 8 years of the effective date of the TMDL (see Table 7-4.7).</u></p> <p><u>The final implementation targets in terms of allowable wet-weather exceedance days must be achieved at each individual beach location within 18 years of the effective date if an integrated water resources approach is pursued, or within 10 years of the effective date if an integrated water resources approach is not pursued. In addition, the geometric mean targets must be achieved for each individual beach location within 18 years or 10 years of the effective date, respectively, depending on whether a integrated water resources approach is pursued or not.</u></p> <p>Within 6 years of the effective date of the TMDL, each defined beach region (as identified in Table 7-4.5b) must achieve a 10% cumulative percentage reduction from the total exceedance day reductions required for that beach region. Within 10 years of the effective date, each beach region must achieve a 25% reduction, and within 15 years of the effective date, a 50% reduction. The final implementation targets in terms of allowable wet weather exceedance days must be achieved at each individual beach location within 18 years of the effective date as identified in Table 7-4.5a. In addition, the geometric mean targets must be achieved for each individual beach location within 18 years of the effective date.</p>

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<i>Margin of Safety</i>	<p>An explicit margin of safety is included, as the waste load allocations and load allocations allow exceedances of the single sample targets no more than 5% of the time on an annual basis (based on the cumulative allocations of this TMDL and the Santa Monica Bay Beaches Dry-Weather Bacteria TMDL). The Regional Board <u>previously concludes concluded</u> that there is-was water quality impairment if more than 10% of samples over the assessment period exceeded the single sample bacteria objectives.</p> <p>An implicit margin of safety is included by assuming no dilution between the storm drain and the wave wash, the point of compliance. This is a conservative assumption since studies have shown that there is a high degree of variability in the amount of dilution between the storm drain and wave wash temporally, spatially and among indicators, ranging from 100% to 0%.</p>
<i>Seasonal Variations and Critical Conditions</i>	<p>Seasonal variations are addressed by developing separate waste load allocations for three time periods (wet weather, summer dry weather and winter dry weather) based on public health concerns and observed natural background levels of exceedance of bacterial indicators. (The two dry-weather periods are addressed in the Santa Monica Bay Beaches Dry-Weather Bacteria TMDL.)</p> <p>The critical condition for this bacteria TMDL is wet weather generally, when historic shoreline monitoring data for the reference beach indicate that the single sample bacteria objectives are exceeded on 22% of the wet-weather days sampled. To more specifically identify a critical condition within wet weather in order to set the allowable exceedance days shown in Tables 7-4.5a and 7-4.5b, the 90th percentile ‘storm year’⁶ in terms of wet days is used as the reference year. Selecting the 90th percentile year avoids a situation where the reference beach is frequently out of compliance. It is expected that because responsible jurisdictions and agencies will be planning for this ‘worst-case’ scenario, that there will be fewer exceedance days than the maximum allowed in drier years. <u>Conversely, in the 10% of wetter years, it is expected that there may be more than the allowable number of exceedance days.</u></p>
<i>Compliance Monitoring</i>	<p>Responsible jurisdictions and agencies as defined in Footnote 2 shall conduct daily or systematic weekly sampling in the wave wash at all major drains⁷ and creeks or at existing monitoring stations at beaches without storm drains or freshwater outlets to determine compliance.⁸ At all locations, samples shall be taken at ankle depth and on an incoming wave. At locations where there is a freshwater outlet, during wet weather, samples should be taken as close as possible to the wave wash,</p>

⁶ For purposes of this TMDL, a ‘storm year’ means November 1 to October 31. The 90th percentile storm year was 1993 with 75 wet days at the LAX meteorological station.

⁷ Major drains are those that are publicly owned and have measurable flow to the beach during dry weather.

⁸ The frequency of sampling (i.e., daily versus weekly) will be at the discretion of the implementing agencies. However, the number of sample days that may exceed the objectives will be scaled accordingly.

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	<p>and no further away than 10 meters down current of the storm drain or outlet.⁹ At locations where there is a freshwater outlet, samples shall be taken when the freshwater outlet is flowing into the surf zone.</p> <p>If the number of exceedance days is greater than the allowable number of exceedance days for any beach region <u>jurisdictional group</u> at the interim implementation milestones taking into account the minimum 85% compliance provision as described in Footnote ** of Table 7 4.5a, the responsible <u>jurisdictions and agencies</u> shall be considered out-of-compliance with the TMDL. If the number of exceedance days exceeds the allowable number of exceedance days for a target beach at the final implementation deadline, the subwatershed and <u>responsible jurisdictions and agencies within the contributing subwatershed</u> shall be considered out-of-compliance with the TMDL. Responsible jurisdictions or agencies shall not be deemed out of compliance with the TMDL if the investigation described in the paragraph below demonstrates that bacterial sources originating within the jurisdiction of the responsible agency have not caused or contributed to the exceedance.</p> <p>If a single sample shows the discharge or contributing area to be out of compliance, the Regional Board may require, through permit requirements or the authority contained in Water Code section 13267, daily sampling in the wave wash or at the existing open shoreline monitoring location (if it is not already) until all single sample events meet bacteria water quality objectives. Furthermore, if a beach location is out-of-compliance as determined in the previous paragraph, the Regional Board shall require responsible agencies to initiate an investigation, which at a minimum shall include daily sampling in the wave wash or at the existing open shoreline monitoring location until all single sample events meet bacteria water quality objectives. If bacteriological water quality objectives are exceeded in any three weeks of a four-week period <u>when weekly sampling is performed</u>, or, for areas where testing is done more than once a week, 75% of testing days that produce an exceedance of bacteria water quality objectives, the responsible agencies shall conduct a source investigation of the subwatershed(s) pursuant to protocols established under Water Code 13178. If a beach location without a freshwater outlet is out-of-compliance or if the outlet is diverted or being treated, the adjacent municipality, County agency(s), or State or federal agency(s) shall be responsible for conducting the investigation <u>and shall submit its findings to the Regional Board to facilitate the Regional Board exercising further authority to regulate the source of the exceedance in conformance with the Porter-Cologne Water Quality Control Act.</u></p>

Note: The complete staff report for the TMDL is available for review upon request.

⁹ Safety considerations during wet weather may preclude taking a sample in the wave wash.

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Table 7-4.5a. ~~Interim Compliance Targets by Beach Region and~~ Final Allowable Wet-Weather Exceedance Days by Beach Location

Beach Monitoring Location	Estimated no. of wet weather exceedance days in critical year (90 th percentile)*	Interim Compliance Targets** (Allowable Exceedance Days during Wet-Weather)			Final allowable no. of wet weather exceedance days (daily sampling)*
		Based on 10% reduction from critical year (6 years after effective date)	Based on 25% cumulative reduction from critical year (10 years after effective date)*	Based on 50% cumulative reduction from critical year (15 years after effective date)*	
DHS 010 - Leo Carrillo Beach, at 35000 PCH	17	n/a	n/a	n/a	17
DHS 009 - Nicholas Beach- 100 feet west of lifeguard tower	14	n/a	n/a	n/a	14
DHS 010a - Broad Beach	15	n/a	n/a	n/a	15
DHS 008 - Trancas Beach entrance, 50 yards east of Trancas Bridge	19	n/a	n/a	n/a	17
DHS 007 - Westward Beach, east of Zuma Creek	17	n/a	n/a	n/a	17
DHS 006 - Paradise Cove, adjacent to west side of Pier	23	n/a	n/a	n/a	17
DHS 005 - Latigo Canyon Creek entrance	33	n/a	n/a	n/a	17
DHS 005a - Corral State Beach	17	n/a	n/a	n/a	17
DHS 001a - Las Flores Beach	29	n/a	n/a	n/a	17
DHS 001 - Big Rock Beach, at 19900 PCH	30	n/a	n/a	n/a	17
NORTH BAY BEACHES SUBTOTAL	214	210	202	190	n/a
DHS 003 - Malibu Point	18	N/a	n/a	n/a	17
DHS 003a - Surfrider Beach (second point)- weekly	45	N/a	n/a	n/a	17
S1 - Surfrider Beach (breach point)- daily	47	N/a	n/a	n/a	17
DHS 002 - Malibu Pier- 50 yards east	45	N/a	n/a	n/a	17
MALIBU BEACHES SUBTOTAL	155	***	***	***	n/a
S2 - Topanga State Beach	26	n/a	n/a	n/a	17

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Beach Monitoring Location	Estimated no. of wet weather exceedance days in critical year (90 th percentile)*	Interim Compliance Targets** (Allowable Exceedance Days during Wet Weather)			Final allowable no. of wet weather exceedance days (daily sampling)*
		Based-on-10% reduction from critical year (6 years after effective date)	Based-on-25% cumulative reduction from critical year (10 years after effective date)*	Based-on-50% cumulative reduction from critical year (15 years after effective date)*	
DHS 101 - PCH and Sunset Bl.- 400 yards east	25	n/a	n/a	n/a	17
DHS 102 - 16801 Pacific Coast Highway, Bel Air Bay Club (chain fence)	28	n/a	n/a	n/a	17
S3 - Pulga Canyon storm drain- 50 yards east	23	n/a	n/a	n/a	17
DHS 103 - Will Rogers State Beach- Temescal Canyon (25 yds. so. of drain)	31	n/a	n/a	n/a	17
S4 - Santa Monica Canyon, Will Rogers State Beach	25	n/a	n/a	n/a	17
DHS 104a - Santa Monica Beach at San Vicente Bl.	34	n/a	n/a	n/a	17
DHS 104 - Santa Monica at Montana Av. (25 yds. so. of drain)	31	n/a	n/a	n/a	17
DHS 105 - Santa Monica at Arizona (in front of the drain)	31	n/a	n/a	n/a	17
S5 - Santa Monica Municipal Pier- 50 yards southeast	35	n/a	n/a	n/a	17
S6 - Santa Monica Beach at Pico/Kenter storm drain	42	n/a	n/a	n/a	17
DHS 106 - Santa Monica Beach at Strand St. (in front of the restrooms)	36	n/a	n/a	n/a	17
DHS 106a - Ashland Av. storm drain- 50 yards north	39	n/a	n/a	n/a	17
S7 - Ashland Av. storm drain- 50 yards south	22	n/a	n/a	n/a	17
DHS 107 - Venice City Beach at Brooks Av. (in front of the drain)	40	n/a	n/a	n/a	17
S8 - Venice City Beach at Windward Av.- 50 yards north	13	n/a	n/a	n/a	13
DHS 108 - Venice Fishing Pier- 50 yards south	17	n/a	n/a	n/a	17
DHS 109 - Venice City Beach at Topsail St.	38	n/a	n/a	n/a	17
S11 - Dockweiler State Beach at Culver Bl.	23	n/a	n/a	n/a	17

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		Based-on-10% reduction from critical year (6 years after effective date)	Based-on-25% cumulative reduction from critical year (10 years after effective date)*	Based-on-50% cumulative reduction from critical year (15 years after effective date)*	
DHS 110 - Dockweiler State Beach- south of D&W jetty	30	n/a	n/a	n/a	17
S12 - Imperial HWY storm drain- 50 yards north	17	n/a	n/a	n/a	17
DHS 111 - Hyperion Treatment Plant One Mile Outfall	18	n/a	n/a	n/a	17
DHS 112 - Dockweiler State Beach at Grand Av. (in front of the drain)	25	n/a	n/a	n/a	17
CENTRAL BAY BEACHES SUBTOTAL	649	623	584	518	n/a
S10 - Ballona Creek entrance- 50 yards south	34	n/a	n/a	n/a	17
BALLONA CREEK OUTLET SUBTOTAL	34	***	***	***	n/a
S13 - Manhattan State Beach at 40th Street	4	n/a	n/a	n/a	4
S14 - Manhattan Beach Pier- 50 yards south	5	n/a	n/a	n/a	5
DHS 114 - Hermosa City Beach at 26th St.	12	n/a	n/a	n/a	12
S15 - Hermosa Beach Pier- 50 yards south	8	n/a	n/a	n/a	8
DHS 115 - Herondo Street storm drain- (in front of the drain)	19	n/a	n/a	n/a	17
S16 - Redondo Municipal Pier- 50 yards south	14	n/a	n/a	n/a	14
DHS 116 - Redondo State Beach at Topaz St. - north of jetty	19	n/a	n/a	n/a	17
SOUTH BAY BEACHES SUBTOTAL	81	81	80	79	n/a
S17 - Redondo State Beach at Avenue I	6	n/a	n/a	n/a	6
S18 - Malaga Cove, Palos Verdes Estates-daily	3	n/a	n/a	n/a	3
LACSDM - Malaga Cove, Palos Verdes Estates-weekly	14	n/a	n/a	n/a	14
LACSDB - Palos Verdes (Bluff) Cove, Palos Verdes Estates	0	n/a	n/a	n/a	0

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		Based on 10% reduction from critical year (6 years after effective date)	Based on 25% cumulative reduction from critical year (10 years after effective date)*	Based on 50% cumulative reduction from critical year (15 years after effective date)*	
LACSD1 - Long Point, Rancho Palos Verdes	5	n/a	n/a	n/a	5
LACSD2 - Abalone Cove Shoreline Park	1	n/a	n/a	n/a	1
LACSD3 - Portuguese Bend Cove, Rancho Palos Verdes	2	n/a	n/a	n/a	2
LACSD5 - Royal Palms State Beach	6	n/a	n/a	n/a	6
LACSD6 - Wilder Annex, San Pedro	2	n/a	n/a	n/a	2
LACSD7 - Cabrillo Beach, oceanside	3	n/a	n/a	n/a	3
PALOS VERDES BEACHES SUBTOTAL	42	42	42	42	n/a

Notes: * The compliance targets are based on existing shoreline monitoring data and assume daily sampling. If systematic weekly sampling is conducted, the compliance targets will be scaled accordingly. These are the compliance targets until additional shoreline monitoring data are collected prior to revision of the TMDL. Once additional shoreline monitoring data are available, the following will be re-evaluated when the TMDL is revised 1) estimated number of wet-weather exceedance days in the critical year at all beach locations, including the reference system(s); 2) interim compliance targets for each beach region, and 3) final allowable wet-weather exceedance days for each beach location. ** During the implementation period, the Regional Board will evaluate whether adequate progress was made toward meeting the interim compliance targets by recognizing adequate progress as being at least 85% of the targeted reduction. The 85% value will be applied to the targeted reduction from the critical-year baseline (e.g., Central Beaches have a year-6 milestone of a 10% reduction (or 26 days), which would mean that a minimum reduction of 22 days would need to be achieved to demonstrate compliance). *** Interim milestones for the Malibu and Ballona beach regions will be identified in subsequent bacteria TMDLs to be developed for these two watersheds.

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Table 7-4.5b6. Interim Compliance Targets by Beach Region/Jurisdictional Group

<u>Jurisdiction Group</u>	<u>Primary Jurisdiction</u>	<u>Additional Responsible Jurisdictions & Agencies</u>	<u>Subwatershed(s)</u>	<u>Monitoring Site(s)***</u>	<u>Interim Compliance Targets as Maximum Allowable Exceedance Days during Wet Weather***</u>		
					<u>10% Reduction Milestone</u>	<u>25% Reduction Milestone</u>	<u>50% Reduction Milestone</u>
1	County of Los Angeles	Caltrans Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	DHS 010	221	212	197
			Carbon Canyon	none			
			Corral Canyon	DHS 005a			
			Encinal Canyon	DHS 010a			
			Escondido Canyon	none			
			Las Flores Canyon	DHS 001a			
			Latigo Canyon	DHS 005			
			Los Alisos Canyon	none			
			Pena Canyon	none			
			Piedra Gorda Canyon	DHS 001			
			Ramirez Canyon	DHS 006			
			Solstice Canyon	none			
			Topanga Canyon	S2			
			Trancas Canyon	DHS 008			
			Tuna Canyon	none			
Zuma Canyon	DHS 007						
2	City of Los Angeles	Caltrans County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	none	342	324	294
			Dockweiler	S11, DHS 110, S12, DHS 111, DHS 112			
			Marina del Rey	DHS 107, S8, DHS 108, DHS 109			
			Pulga Canyon	S3, DHS 103			
			Santa Monica Canyon	S4			
			Santa Ynez Canyon	DHS 101, DHS 102			

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<u>Jurisdiction Group</u>	<u>Primary Jurisdiction</u>	<u>Additional Responsible Jurisdictions & Agencies</u>	<u>Subwatershed(s)</u>	<u>Monitoring Site(s)***</u>	<u>Interim Compliance Targets as Maximum Allowable Exceedance Days during Wet Weather***</u>		
					<u>10% Reduction Milestone</u>	<u>25% Reduction Milestone</u>	<u>50% Reduction Milestone</u>
3	<u>Santa Monica</u>	<u>Caltrans</u> <u>City of Los Angeles</u> <u>County of Los Angeles</u>	<u>Santa Monica</u>	<u>DHS 104a, DHS 104, DHS 105, S5, S6, DHS 106, DHS 106a, S7</u>	<u>257</u>	<u>237</u>	<u>203</u>
4	<u>Malibu</u>	<u>Caltrans</u> <u>County of Los Angeles</u>	<u>Nicholas Canyon</u>	<u>DHS 009</u>	<u>14</u>	<u>14</u>	<u>14</u>
5	<u>Manhattan Beach</u>	<u>Caltrans</u> <u>El Segundo</u> <u>Hermosa Beach</u> <u>Redondo Beach</u>	<u>Hermosa</u>	<u>S13, S14, DHS 114, S15</u>	<u>29</u>	<u>29</u>	<u>29</u>
6	<u>Redondo Beach</u>	<u>Caltrans</u> <u>Hermosa Beach</u> <u>Manhattan Beach</u> <u>Torrance</u> <u>County of Los Angeles</u>	<u>Redondo</u>	<u>DHS 115, S16, DHS 116, S17</u>	<u>58</u>	<u>57</u>	<u>56</u>

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<u>Jurisdiction Group</u>	<u>Primary Jurisdiction</u>	<u>Additional Responsible Jurisdictions & Agencies</u>	<u>Subwatershed(s)</u>	<u>Monitoring Site(s)***</u>	<u>Interim Compliance Targets as Maximum Allowable Exceedance Days during Wet Weather***</u>		
					<u>10% Reduction Milestone</u>	<u>25% Reduction Milestone</u>	<u>50% Reduction Milestone</u>
<u>7</u>	<u>Rancho Palos Verdes</u>	<u>Caltrans</u> <u>City of Los Angeles</u> <u>Palos Verdes Estates</u> <u>Redondo Beach</u> <u>Rolling Hills</u> <u>Rolling Hills Estates</u> <u>Torrance</u> <u>County of Los Angeles</u>	<u>Palos Verdes Peninsula</u>	<u>S18, LACSDM,</u> <u>LACSDB, LACSD1,</u> <u>LACSD2, LACSD3,</u> <u>LACSD5, LACSD6,</u> <u>LACSD7</u>	<u>36</u>	<u>36</u>	<u>36</u>

<u>Beach Region</u>	<u>Watersheds</u>	<u>Responsible Agencies</u>	<u>Interim Compliance Targets (Cumulative Allowable Wet Weather Exceedance Days for all Beaches in a Region)</u>		
			<u>Year 6</u>	<u>Year 10</u>	<u>Year 15</u>

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Beach Region	Watersheds	Responsible Agencies	Interim Compliance Targets (Cumulative Allowable Wet Weather Exceedance Days for all Beaches in a Region)		
			Year 6	Year 10	Year 15
North Bay Beaches	Arroyo Sequit	Malibu	210	202	190
	Nicholas Canyon	Unincorporated			
	Los Alisos Canyon	Caltrans			
	Encinal Canyon				
	Trancas Canyon				
	Zuma Canyon				
	Ramirez Canyon				
	Escendido Canyon				
	Latigo Canyon				
	Solstice Canyon				
	Corral Canyon				
	Carbon Canyon				
	Las Flores Canyon				
	Piedra Gorda Canyon				
	Pena Canyon				
Tuna Canyon					

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Beach Region	Watersheds	Responsible Agencies	Interim Compliance Targets (Cumulative Allowable Wet Weather Exceedance Days for all Beaches in a Region)		
			Year 6	Year 10	Year 15
Malibu Beaches	Malibu Canyon	Agoura Hills Calabasas Malibu Thousand Oaks Unincorporated Westlake Village Hidden Hills Simi Valley Caltrans	*	*	*
Central Bay Beaches	Topanga Canyon Castlerock Santa Ynez Canyon Pulga Canyon Santa Monica Canyon Santa Monica Marina del Rey Dockweiler	El Segundo Los Angeles Santa Monica Unincorporated Calabasas Culver City Manhattan Beach Caltrans	623	584	518

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Beach Region	Watersheds	Responsible Agencies	Interim Compliance Targets (Cumulative Allowable Wet Weather Exceedance Days for all Beaches in a Region)		
			Year 6	Year 10	Year 15
Ballona Cr Outlet	West Los Angeles Westwood Village Culver City Hollywood Cienega Windsor Hills	Beverly Hills Culver City Inglewood Los Angeles Unincorporated West Hollywood Caltrans	*	*	*
South Bay Beaches	Hermosa Redondo	Hermosa Beach Manhattan Beach Redondo Beach Torrance El Segundo Unincorporated Caltrans	81	80	79
Palos Verdes Beaches	Palos Verdes	Palos Verdes Estates Rancho Palos Verdes Rolling Hills Torrance Los Angeles Redondo Beach Rolling Hills Estates Unincorporated Caltrans	42	42	42

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Notes: *Interim milestones will be re-calculated during the revision of the TMDL based on shoreline monitoring data collected from the wave wash and a re-evaluation of the most appropriate reference system and reference year. Furthermore, if an integrated water resources approach is pursued, as demonstrated by the implementation plans to be submitted to the Regional Board by the primary jurisdictions within one year of the effective date of the TMDL, the interim milestones will be re-evaluated on the basis of the implementation plan, considering planning, engineering and construction tasks. **Interim milestones for the Malibu and Ballona beach regions shoreline monitoring locations will be ~~addressed~~ identified in the subsequent bacteria TMDLs to be developed for these two watersheds. ***For those subwatersheds without an existing shoreline monitoring site, responsible jurisdictions and agencies must establish a shoreline monitoring site if there is measurable flow from a creek or publicly owned storm drain to the beach during dry weather.

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Table 7-4.67. Santa Monica Bay Beaches Bacteria TMDL (Wet Weather Only): Significant Dates

Date	Action
120 days after the effective date of the TMDL	Pursuant to a request from the Regional Board, responsible jurisdictions and responsible agencies must submit coordinated shoreline monitoring plan(s) <u>to be approved by the Executive Officer</u> , including a list of new sites* <u>and/or sites relocated to the wave wash at which time responsible jurisdictions and responsible agencies shall select between daily or systematic weekly shoreline sampling.</u>
3 years <u>One year</u> after effective date of TMDL	Responsible jurisdictions and agencies shall provide a written report to the Regional Board outlining how each intends to individually or cooperatively <u>(through Jurisdictional Groups)</u> achieve compliance with the TMDL. <u>The report shall include implementation methods, an implementation schedule, and proposed milestones.</u>
5-4 years after effective date of TMDL	The Regional Board shall revise the TMDL to: (1) refine allowable wet weather exceedance days based on additional data on bacterial indicator densities in the wave wash, (2) re-evaluate the reference system selected to set allowable exceedance levels, including a reconsideration of whether the allowable number of exceedance days should be adjusted annually dependent on the rainfall conditions and an evaluation of natural variability in exceedance levels in the reference system(s) and (3) re-evaluate the reference year used in the calculation of allowable exceedance days.
<u>Significant Dates for Responsible Jurisdictions and Agencies <i>Not</i> Pursuing an Integrated Water Resources Approach</u>	
<u>6 years after effective date of the TMDL</u>	<u>Each defined jurisdictional group must achieve a 25% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.</u>
<u>8 years after effective date of the TMDL</u>	<u>Each defined jurisdictional group must achieve a 50% cumulative percentage reduction from the total exceedance-day reductions required for that jurisdictional group as identified in Table 7-4.6.</u>
<u>10 years after effective date of the TMDL</u>	<u>Final implementation targets in terms of allowable wet-weather exceedance days must be achieved at each individual beach as identified in Table 7-4.5. In addition, the geometric mean targets must be achieved for each individual beach location.</u>

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<u>Significant Dates for Responsible Jurisdictions and Agencies Pursuing an Integrated Water Resources Approach to Implementation**</u>	
6 years after effective date of the TMDL	Each defined beach region jurisdictional group (as identified in Table 7-4.5b) must achieve a 10% cumulative percentage reduction from the total exceedance-day reductions required for that beach region jurisdictional group as identified in Table 7-4.6.
10 years after effective date of the TMDL	Each defined beach region jurisdictional group (as identified in Table 7-4.5b) must achieve a 25% cumulative percentage reduction from the total exceedance-day reductions required for that beach region jurisdictional group as identified in Table 7-4.6.
15 years after effective date of the TMDL	Each defined beach region jurisdictional group (as identified in Table 7-4.5b) must achieve a 50% cumulative percentage reduction from the total exceedance-day reductions required for that beach region jurisdictional group as identified in Table 7-4.6.
18 years after effective date of the TMDL	Final implementation targets in terms of allowable wet-weather exceedance days must be achieved at each individual beach as identified in Table 7-4.5a. In addition, the geometric mean targets must be achieved for each individual beach location.

Notes: *For those subwatersheds without an existing shoreline monitoring site, responsible jurisdictions and agencies must establish a shoreline monitoring site if there is measurable flow from a creek or publicly owned storm drain to the beach during dry weather. **If an integrated water resources approach is pursued, as demonstrated by the implementation plans to be submitted to the Regional Board by the primary jurisdictions within one year of the effective date of the TMDL, the interim milestones will be re-evaluated on the basis of the implementation plan, considering planning, engineering and construction tasks.