# Amendment to the Water Quality Control Plan—Los Angeles Region to incorporate the Harbor Beaches of Ventura County (Kiddie Beach, Hobie Beach, and Harbor Cove Beach) Bacteria TMDL

Proposed for adoption by the California Regional Water Quality Control Board, Los Angeles Region on XXXX, XX, 2007.

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#### Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries, Section 7-28 (<u>Harbor</u> <u>Beaches of Ventura County (Kiddie Beach, Hobie Beach, and Harbor Cove Beach)</u> <u>Bacteria TMDL</u>)

This TMDL was adopted by the Regional Water Quality Control Board on [Insert Date].

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 includes the elements of this TMDL.

 Table 7-28.1. Harbor Beaches of Ventura County Bacteria TMDL: Elements

Element	Findings and Regulatory Provisions
Problem Statement	Elevated bacteria indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Hobie Beach, Kiddie Beach (also known as Channel Islands Harbor Beach and Channel Islands Beach Park), and Harbor Cove Beach (also known as Peninsula Beach). Hobie and Kiddie Beach are referenced in the Staff Report as the Channel Islands Harbor Beaches. Swimming in marine waters with elevated bacteria indicator densities has 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 bacteria indicator densities.
Numeric Target	The TMDL has a multi-part numeric target based on the
(Interpretation of the numeric water quality objective, used to calculate allocations)	bacteriological water quality objectives for marine water to protect the water contact recreation use. These targets are the most appropriate indicators of public health risk in recreational waters.
	Bacteriological objectives are set forth in Chapter 3 of the Basin Plan. The objectives are based on four bacteria indicators and include both geometric mean limits and single sample limits. The Basin Plan objectives that serve as the numeric targets for this TMDL are:
	<ol> <li><u>Rolling 30-day Geometric Mean Limits</u></li> <li>a. Total coliform density shall not exceed 1,000/100 ml.</li> <li>b. Fecal coliform density shall not exceed 200/100 ml.</li> <li>c. Enterococcus density shall not exceed 35/100 ml.</li> </ol>
	<ol> <li>Single Sample Limits         <ul> <li>Total coliform density shall not exceed 10,000/100 ml.</li> <li>Fecal coliform density shall not exceed 400/100 ml.</li> <li>Enterococcus density shall not exceed 104/100 ml.</li> <li>Total coliform density shall not exceed 1,000/100 ml.</li> <li>Total coliform density shall not exceed 1,000/100 ml.</li> <li>It is a state of the state</li></ul></li></ol>
	These objectives are based on health risk for marine recreational waters of 19 illnesses per 1,000 exposed individuals as set by the United States Environmental Protection Agency (USEPA, 1986). For the Harbor Beaches of Ventura County, the targets will apply at existing monitoring sites, with samples taken at ankle to knee-high depths. These targets apply during both dry- and wet-weather.
	This TMDL uses a "reference system/anti-degradation approach" which means that on the basis of historical exceedance levels at existing monitoring locations, including a local reference beach

Element	Findings and Regulatory Provisions
	within the Los Angles Region, 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 bacteriological water quality. This approach recognizes that there are natural sources of bacteria that may cause or contribute to exceedances of the bacteriological 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.
	The geometric mean targets may not be exceeded at any time. The rolling 30-day geometric mean will be calculated on each sample day. For the single sample targets, each existing monitoring site is assigned an allowable number of exceedance days for three time periods (1) summer dry-weather (April 1 to October 31), (2) winter dry-weather (November 1 to March 31), and (3) wet-weather (defined as days with 0.1 inch of rain or greater and the three days following the rain event.)
Source Analysis	Bacteria sources in the Harbor Beaches of Ventura County include anthropogenic and non-anthropogenic sources and point and non-point sources. Each of these sources contributes to the elevated levels of bacteria indicator densities at the Harbor Beaches of Ventura County during dry- and wet-weather. As of December 2006, there are nine active, National Pollutant Discharge Elimination System (NPDES) permits or Waste Discharge Requirements (WDRs) for discharges to Channel Islands Harbor and Ventura Harbor. Of the nine active NPDES permits and WDRs, discharge associated with the Ventura Port District's individual NPDES permit is a potentially significant source of bacteria loading.
	Discharges from the Statewide MS4 Permit for the California Department of Transportation (Caltrans) are a potentially significant source of bacteria loading.
	Discharges from general NPDES permits, individual NPDES permits, WDRs, the Statewide Industrial Storm Water General Permit, and the Statewide Construction Activity Storm Water General Permit are not expected to be a significant source of bacteria.
	While a source identification study conducted at the Channel Islands Harbor indicated that local non-point sources are the majority contributor in summer dry-weather, high bacteria densities and exceedances during wet-weather may be more indicative of urban and agricultural run-off.

Element	Findings and Regulatory Provisions
	Potential non-point sources of bacteria contamination at the Harbor Beaches of Ventura County include: marina activities such as waste disposal from boats, boat deck and slip washing, swimmer "wash-off", and restaurant washouts; natural sources including birds, waterfowl, and feral cat; and agricultural sources.
Loading Capacity	Loading capacity for the Harbor Beaches of Ventura County are defined in terms of bacteria 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 shall be met at the specific sampling locations, which are representative of the corresponding beaches, no degradation or dilution allowance is provided.
Waste Load Allocations (for point sources)	Waste load allocations (WLAs) are expressed as allowable exceedance days.
(ior point sources)	The allowable number of exceedance days for a monitoring site for each time period is based on the more stringent 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 bacteriological water quality is at least as good as that of a largely undeveloped system and that there is no degradation of existing water quality.
	For each beach, allowable exceedance days are set on an annual basis as well as for three time periods. These three periods are:
	<ol> <li>Summer dry-weather (April 1 to October 31)</li> <li>Winter dry-weather (November 1 to March 31)</li> <li>Wet-weather days (defined as days of 0.1 inch of rain or more plus three days following the rain event)</li> </ol>
	For the Channel Islands Harbor Beaches, the County of Ventura, the Ventura County Watershed Protection District (VCWPD) and associated Municipal Separate Storm Sewer System (MS4) permittees, the City of Oxnard, and Caltrans are assigned WLAs. For Harbor Cove Beach, the Ventura Port District, the County of Ventura, the City of Ventura, the VCWPD and associated MS4 permittees, and Caltrans are assigned WLAs.
	All WLAs for summer dry-weather single sample bacteria densities at the Harbor Beaches of Ventura County are zero (0) days of allowable exceedances.
	The WLA for the rolling 30-day geometric mean during any time period or monitoring site at the Harbor Beaches of Ventura County is zero (0) days of allowable exceedances.

Element	Findings and Regulat	ory Provisi	ons				
	The WLA for winter dry-weather and wet-weather single sample bacteria densities for Hobie Beach, Kiddie Beach, and Harbor Cove Beach are listed in Table 7-28.2.						
	General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR permittees in the Channel Islands Harbor and Ventura Harbor subwatersheds are assigned WLAs of zero (0) days of allowable exceedances for all three time periods and for the single sample limits and the rolling 30-day geometric mean.						
	Any future enrollees under a general NPDES permit, individual NPDES permit, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR will also be subject to a WLA of zero (0) days of allowable exceedances.						
	The Harbor Beaches of Ventura County are assigned interim WLAs upon the effective date of the TMDL. Interim WLAs for single sample and the 30-day rolling geometric mean are expressed in terms of an exceedance day and listed below.						
	Single Sample Exceed	dances:					
	Summer Dry-Weather						
	Location	Daily Sampling	Weekly Sampling				
	Harbor Cove Beach Kiddie Beach Hobie Beach	11 54 40	2 8 6				
	Winter Dry-Weather						
	Location	Daily Sampling	Weekly Sampling				
	Harbor Cove Beach51Kiddie Beach233Hobie Beach254						
	Wet-Weather						
	Location Daily Weekly Sampling Sampling						
	Harbor Cove Beach334Kiddie Beach325Hobie Beach386						
	<u>i</u>						

Element	Findings and Regulat	ory Provisi	ons			
	30-day Rolling Geometric Mean Exceedances:					
	Cummer Meether					
	Summer Weather	1				
	Location	Daily Sampling	Weekly Sampling			
	Harbor Cove Beach	13	2			
	Kiddie Beach	35	12			
	Hobie Beach	80	8			
	Winter Weather					
	Location	Daily Sampling	Weekly Sampling			
	Harbor Cove Beach	62	9			
	Kiddie Beach	92	13			
Load Allocations (for non- point sources)	LocationDaily SamplingWeekly SamplingHarbor Cove Beach629					

Element	Findings and Regulatory Provisions							
	Single Sample Exceedances:							
	Summer Dry-Weather							
	Location	Daily	Weekly					
		Sampling	Sampling					
	Harbor Cove Beach	11	2					
	Kiddie Beach	54	8					
	Hobie Beach	40	6					
	Winter Dry-Weather							
	Location	Daily	Weekly					
	Harbor Cove Beach	Sampling 5	Sampling 1					
	Kiddie Beach	23	3					
	Hobie Beach	25	4					
		20	Г	]				
	Wet-Weather							
	Leastien	Daily	Weekly					
	Location	Sampling	Sampling					
	Harbor Cove Beach	33	4					
	Kiddie Beach	32	5					
	Hobie Beach 38 6							
	30-day Rolling Geometric Mean Exceedances:							
	Summer Weather Daily Weekly							
	Location Daily Weekly Sampling Sampling							
	Harbor Cove Beach	13	2					
	Kiddie Beach	35	12					
	Hobie Beach 80 8							
	Winter Weather							
	Location	Daily	Weekly					
		Sampling	Sampling					
	Harbor Cove Beach	62	9					
	Kiddie Beach	92	13					
	Hobie Beach 91 14							
Implementation	The regulatory mechanisms used to implement the TMDL will							
	include general NPDES permits, individual NPDES permits,							
	WDRs, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, the							
	Conditional Waiver for Dischargers from Irrigated Lands, the							
	Statewide MS4 Permit for Caltrans, and the authority contained							
	in Sections 13263 and 13267 of the Water Code. Each NPDES							
	permit, assigned a WLA, shall be reopened or amended when							
	the permit is reissued, in accordance with applicable laws, to							
	incorporate the applicable WLAs as a permit requirement. LAs							
	for non-point sources will be implemented within the context of							

Element	Findings and Regulatory Provisions
	this TMDL.
	This TMDL will be implemented in accordance with two separate implementation schedules for the Channel Islands Harbor Beaches and Harbor Cove Beach.
	The compliance and implementation schedules are detailed in Table 7-28.3 and Table 7-28.4.
	Responsible parties are not specifically required to conduct pilot projects for Best Management Practices (BMPs), though conducting pilot projects is within their discretion. The Regional Board recognizes the long duration required to conduct a pilot project. As such, time is allocated in the implementation schedule for the option of piloting structural BMPs, which include but are not limited to enhanced circulation devices.
	Special studies are not required for implementation of the TMDL, though conducting special studies is within the discretion of the responsible parties. Time is allocated in the implementation schedule for the option of conducting species studies at Harbor Cove Beach, which include but are not limited to source identification and harbor circulation.
	The Regional Board shall reconsider this TMDL four years after the effective date of the TMDL for the Harbor Beaches of Ventura County to re-evaluate WLAs and LAs based on monitoring data; to re-evaluate the implementation schedule based on results from pilot projects and special studies for Harbor Cove Beach, if special studies indicate significant source loading is associated with the Ventura Harbor Keys, the Harbor Cove Beach implementation schedule may be revised with respect to the future bacteria TMDL for the Ventura Harbor Keys; to re-evaluate allowable exceedance levels, including whether the allowable number of exceedance days maybe adjusted based on a Ventura County rainfall record; to re-evaluate the selection of the reference beach if additional, appropriate reference beach options have been developed; to consider recommendations for delisting based on data collected during the TMDL monitoring program after BMPs are instituted by responsible parties for Harbor Cove Beach; and to assigned LAs to agricultural lands in the Chanel Islands Harbor and Ventura Harbor subwatersheds based on monitoring in the Conditional Waiver for Dischargers from Irrigated Lands.
	Five years after the effective date of the TMDL, there shall be no allowable exceedances of the single sample limits, in excess of the allowable exceedances listed in Table 7-28.2, at any monitoring location at the Harbor Beaches of Ventura County

Element	Findings and Regulatory Provisions
	during summer dry-weather, winter dry-weather, and the rolling 30-day geometric mean targets shall be achieved. Ten years after the effective date of the TMDL there shall be no allowable exceedances of the single sample limits, in excess of the allowable exceedances listed in Table 7-28.2, at any monitoring location during dry-weather or wet-weather at the Harbor Beaches of Ventura County, and the rolling 30-day geometric mean targets shall be achieved.
Margin of Safety	An implicit margin of safety is included through several conservative assumptions, such as the assumption that no dilution takes place between the on-shore sources and where the effluent initially mixes with the receiving water, and that bacteria degradation rates are sufficient to affect bacteria densities in the receiving water. In addition, an explicit margin of safety has been incorporated, as the load allocations will allow exceedances of the single sample targets no more than 5% of the time on an annual basis, based on the cumulative allocations for dry- and wet-weather. The Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List concludes that there are water quality impairments using a binomial distribution method which lists waterbodies when the exceedances are between approximately 8 and 10 percent.
Seasonal Variations and Critical Conditions	Seasonal variations are addressed by developing separate waste load allocations for summer dry-weather, winter dry- weather, and wet-weather based on public health concerns and observed natural background levels of exceedance of bacteria indicators.
	Historic monitoring data for the Harbor Beaches of Ventura County and the reference beach indicate that the critical condition for bacteria loading is during wet-weather due to greater exceedance probabilities of the single sample bacteria objectives then during dry-weather. To more specifically identify a critical condition within wet-weather, in order to set the allowable exceedance days shown in Table 7-28.2, the 90 <sup>th</sup> percentile 'storm year' <sup>1</sup> in terms of wet days <sup>2</sup> is used as the reference year for the reference system. Selecting the 90 <sup>th</sup> percentile year avoids a situation where the reference system is frequently out of compliance. Selecting the 90 <sup>th</sup> percentile year is a more conservative approach that will accommodate a 'worst- case' scenario resulting in fewer exceedance days than the maximum allowed in drier years. Conversely, in the 10% of wetter years, there may be more than the allowable number of exceedance days.

<sup>&</sup>lt;sup>1</sup> For purposes of this TMDL, a 'storm year' means November 1 to October 31. The 90<sup>th</sup> percentile storm year was 1993 with 75 wet days at the LAX meteorological station. <sup>2</sup> A wet day is defined as a day with rainfall of 0.1 inch or more plus the 3 days following the rain event.

Element	Findings and Regulatory Provisions
Compliance Monitoring	Compliance and monitoring for Channel Islands Harbor Beaches and Harbor Cove Beach is based on existing monitoring protocols and locations.
	Monitoring shall continue at sampling locations (VCEHD 23000, VCEHD 36000, and VCEHD 37000) and at the current weekly monitoring frequency, consistent with AB411 compliance monitoring. Monitoring shall be conducted on a year-round basis at the current monitoring locations including the summer months (i.e., April to October) and winter months (i.e., November to March). Bacteria sampling shall be conducted in ankle- to knee- high water, consistent with AB411. However, if additional monitoring stations are added or if changes are made to the sampling frequencies or existing monitoring locations, then submittal of a monitoring plan is required for Executive Officer approval.
	For agricultural dischargers, the Conditional Waiver for Dischargers from Irrigated Lands shall be revised to include monitoring for enrollees in the Channel Islands Harbor and Ventura Harbor subwatersheds.

	Summer dry- weather*			Winter dry-weather			Wet-weather**		
Location	Daily sampling (No. days)	Weekly sampling (No. days)	Compliance Deadline	Daily sampling (No. days)	Weekly sampling (No. days)	Compliance Deadline	Daily sampling (No. days)	Weekly sampling (No. days)	Compliance Deadline
Harbor Cove Beach	0	0	Five years after effective date of the TMDL	3	1	Five years after effective date of the TMDL	17	3	Ten years after effective date of the TMDL
Hobie Beach	0	0	Five years after effective date of the TMDL	3	1	Five years after effective date of the TMDL	17	3	Ten years after effective date of the TMDL
Kiddie Beach	0	0	Five years after effective date of the TMDL	3	1	Five years after effective date of the TMDL	17	3	Ten years after effective date of the TMDL

#### Table 7-28.2. Harbor Beaches of Ventura County Bacteria TMDL: Final Allowable Exceedance Days by Location

\*A dry day is defined as a non-wet day.

\*\*A wet day is defined as a day with 0.1-inch or more of rain and the three days following the rain event.

Table 7-28.3 Harbor Beaches of Ventura County Bacteria TMDL (Channel Islands Harbor
Beaches): Implementation Table

Implementation Action	Responsible Parties	Date
Compliance (WLAs):	1. County of Ventura	Effective date
There shall be no exceedances of the interim WLAs (see the WLAs section in Table 7-28.1).	<ol> <li>Ventura County Watershed Protection District (VCWPD) and associated MS4 Co-permittees<sup>3</sup></li> </ol>	of the TMDL.
	3. City of Oxnard	
	4. Caltrans	
Compliance (LAs):	1. County of Ventura	Effective date
There shall be no exceedances of the interim LAs (see the LAs section in Table 7-28.1).	2. City of Oxnard	of the TMDL.
Monitoring:	1. County of Ventura	Effective date
Continue monitoring at stations VCEHD 36000 and VCEHD 37000, at a weekly monitoring frequency, and on a year-round basis. Extend	2. VCWPD and associated MS4 Co-permittees	of the TMDL.
the monitoring period for Hobie Beach to include winter months.	3. City of Oxnard	
include winter months.	4. Caltrans	
Monitoring <sup>4</sup> :	1. County of Ventura	Prior to the
Submit a monitoring plan for the Channel Islands Harbor Beaches (CIHB) for approval by the Executive Officer.	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	modification of existing monitoring
	3. City of Oxnard	locations or frequencies.
	4. Caltrans	nequencies.
Implementation:	1. County of Ventura	Six months
Submit draft work plan to implement source control and BMPs, including but not limited to structural and non-structural BMPs, at the	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	after the effective date of the TMDL.
CIHB during dry-weather for Executive Officer	3. City of Oxnard	
approval.	4. Caltrans	
Monitoring: Submit monitoring plan for agricultural discharges into the Channel Islands Harbor subwatershed for approval by the Executive	1. Agricultural Dischargers	One year after the effective date of the TMDL.

<sup>&</sup>lt;sup>3</sup> Co-permittees of Municipal Separate Storm Sewer System (MS4) permit for Channel Islands Harbor subwatershed include the County of Ventura and incorporated cities therein. The incorporated cities for Channel Islands Harbor subwatershed include the City of Oxnard.

City of Oxnard. <sup>4</sup> Submittal of a monitoring plan is required if additional monitoring stations are added or if changes are made to the sampling frequencies or existing monitoring locations VCEHD 36000 and VCEHD 37000).

### Table 7-28.3 Harbor Beaches of Ventura County Bacteria TMDL (Channel Islands Harbor Beaches): Implementation Table

Implementation Action	Responsible Parties	Date
Officer.		
Monitoring: Monitor agricultural discharges at the frequency and monitoring locations approved by the Executive Officer in the monitoring plan.	1. Agricultural Dischargers	One year and six months after the effective date of the TMDL.
Pilot Project:	1. County of Ventura	One year and six months after
Submit a work plan piloting Structural BMPs, including but not limited to enhanced circulation devices, for Executive Officer	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	the effective date of the
approval (optional).	3. City of Oxnard	TMDL.
	4. Caltrans	
Implementation:	1. County of Ventura	One year and
Submit draft work plan to implement source control and BMPs, including but not limited to structural and non-structural BMPs, at the	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	six months after the effective date of the
CIHB during wet-weather for Executive Officer approval.	3. City of Oxnard	TMDL.
	4. Caltrans	
Pilot Project:	1. County of Ventura	Two years and
Completion of Structural BMP pilot projects, including but not limited to enhanced circulation devices (optional).	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	six months after the effective date of the
	3. City of Oxnard	TMDL.
	4. Caltrans	
Implementation:	1. County of Ventura	Three years
Submit final work plan; to implement source control and BMPs, including but not limited to structural and non-structural BMPs, at the	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	and six months after the effective date of
CIHB during dry-weather for Executive Officer approval.	3. City of Oxnard	the TMDL.
appioval.	4. Caltrans	
Regional Board Reconsideration:	Regional Board	Four years after
<ul> <li>Re-evaluate WLAs and LAs based on data.</li> </ul>		effective date of the TMDL.
<ul> <li>Re-evaluate the implementation schedule based on results from pilot projects.</li> </ul>		
c. Re-evaluate allowable exceedance levels,		

### Table 7-28.3 Harbor Beaches of Ventura County Bacteria TMDL (Channel Islands Harbor Beaches): Implementation Table

Implementation Action	Responsible Parties	Date
including whether the allowable number of exceedance days maybe adjusted based on a Ventura County rainfall record.		
d. Re-evaluate the selection of the reference beach if additional, appropriate reference beach options have been developed.		
e. Assign LAs to agricultural lands in the Channel Islands Harbor subwatershed based on monitoring in the Conditional Waiver for Dischargers from Irrigated Lands.		
Implementation:	1. County of Ventura	Four years after
Submit final work plan to implement source control and BMPs, including but not limited to structural and non-structural BMPs, at the	2. VCWPD and associated MS4 Co-permittees	the effective date of the TMDL.
CIHB during wet-weather for Executive Officer approval.	3. City of Oxnard	
	4. Caltrans	
Compliance (WLAs):	1. County of Ventura	Five years after the effective date of the TMDL.
There shall be no exceedances in excess of the numbers in Table 7-28.2 of the single sample limits at any location during dry-	2. VCWPD and associated MS4 Co-permittees	
weather, and the rolling 30-day geometric mean targets shall be achieved.	3. City of Oxnard	
mean largels shan be achieved.	4. Caltrans	
Compliance (LAs):	1. County of Ventura	Five years after
There shall be no exceedances in excess of the numbers in Table 7-28.2 of the single sample limits at any location during dry- weather, and the rolling 30-day geometric mean targets shall be achieved.	2. City of Oxnard	the effective date of the TMDL.
Compliance:	1. County of Ventura	the effective date of the TMDL. Five years after the effective date of the TMDL. Five years after the effective date of the
Submit Compliance Report for Executive Officer approval. The Compliance Report shall include an evaluation of compliance with	2. VCWPD and associated MS4 Co-permittees	
dry-weather allocations, interim wet-weather allocations, and rolling 30-day geometric mean	3. City of Oxnard	
targets.	4. Caltrans	
Compliance:	1. County of Ventura	Ten years after
Submit Final Compliance Report for Executive Officer approval. The Compliance Report	2. VCWPD and associated	the effective date of the

### Table 7-28.3 Harbor Beaches of Ventura County Bacteria TMDL (Channel Islands Harbor Beaches): Implementation Table

Implementation Action	Responsible Parties	Date
shall include an evaluation of compliance with	MS4 Co-permittees	TMDL.
dry-weather allocations, wet-weather allocations, and the rolling 30-day geometric	3. City of Oxnard	
mean targets.	4. Caltrans	
There shall be no allowable exceedances of	1. County of Ventura	Ten years after
	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	the effective date of the TMDL.
limits at any location during any periods and the rolling 30-day geometric mean targets	3. City of Oxnard	
shall be achieved.	4. Caltrans	
Final Compliance (LAs): There shall be no allowable exceedances of single sample limits in excess of the numbers listed in Table 7-28.2 of the single sample limits at any location during any periods and the rolling 30-day geometric mean targets shall be achieved.	1. County of Ventura	Ten years after the effective
	2. City of Oxnard	date of the TMDL.

#### Table 7-28.4 Harbor Beaches of Ventura County Bacteria TMDL (Harbor Cove Beach): Implementation Table

Implementation Action	Responsible Parties	Date
Compliance (WLAs):	1. Ventura Port District	Effective date
There shall be no exceedances of the interim WLAs (see WLAs section in Table 7-28.1).	2. County of Ventura	of the TMDL.
	<ol> <li>Ventura County Watershed Protection District (VCWPD) and associated MS4 Co-permittees<sup>5</sup></li> </ol>	
	4. City of Ventura	
	5. Caltrans	
Compliance (LAs):	1. Ventura Port District	Effective date
There shall be no exceedances of the interim LAs (see LAs section in Table 7-28.1).	2. County of Ventura	of the TMDL.
	3. VCWPD	
	4. City of Ventura	
Monitoring:	1. Ventura Port District	Effective date
Continue monitoring at stations VCEHD 26000, at a weekly monitoring frequency, and on year-round basis.	2. County of Ventura	of the TMDL.
	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	
	4. City of Ventura	
	5. Caltrans	
Monitoring Plan <sup>6</sup> :	1. Ventura Port District	Prior to the
Submit a monitoring plan for Harbor Cove Beach (HCB) for approval by the Executive	2. County of Ventura	modification of existing
Officer.	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	monitoring locations or frequencies.
	4. City of Ventura	nequencies.
	5. Caltrans	
Implementation:	1. Ventura Port District	Six months
Submit draft work plan to implement source control and BMPs, including but not limited to	2. County of Ventura	after the effective date of
structural and non-structural BMPs, at the HCB during dry-weather for Executive Officer	3. VCWPD and associated	the TMDL.

<sup>&</sup>lt;sup>5</sup> Co-permittees of Municipal Separate Storm Sewer System (MS4) permit for Ventura Harbor subwatershed include the County of Ventura and incorporated cities therein. The incorporated cities for Ventura Harbor subwatershed include the City of Ventura. <sup>6</sup> Submittal of a monitoring plan is required if additional monitoring stations are added or if changes are made to the sampling frequencies or existing monitoring locations VCEHD 26000).

Implementation Action	Responsible Parties	Date
approval.	MS4 Co-permittees	
	4. City of Ventura	
	5. Caltrans	
Monitoring: Submit monitoring plan for agricultural discharges into the Ventura Harbor subwatershed for approval by the Executive Officer.	1. Agricultural Dischargers	One year after the effective date of the TMDL.
Special Studies:	1. Ventura Port District	One year after the effective
Submit work plan for special studies, including but not limited to, source identification and	2. County of Ventura	date of the
harbor circulation, for Executive Officer approval (optional).	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	TMDL.
	4. City of Ventura	
	5. Caltrans	
Monitoring: Monitor agricultural discharges at the frequency and monitoring locations approved by the Executive Officer in the monitoring plan.	1. Agricultural Dischargers	One year and six months after the effective date of the TMDL.
Pilot Project:	1. Ventura Port District	One year and
Submit a work plan piloting Structural BMP, including but not limited to enhanced	2. County of Ventura	six months after the effective
circulation devices, for Executive Officer approval (optional).	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	date of the TMDL.
	4. City of Ventura	
	5. Caltrans	
Implementation:	1. Ventura Port District	One year and
Submit draft work plan to implement source control and BMPs, including but not limited to	2. County of Ventura	six months after the effective date of the TMDL.
structural and non-structural BMPs, at the HCB during wet-weather for Executive Officer	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	
approval.	4. City of Ventura	
	5. Caltrans	
Special Studies: Completion of special studies, including but	1. Ventura Port District	Three year after the effective

### Table 7-28.4 Harbor Beaches of Ventura County Bacteria TMDL (Harbor Cove Beach): Implementation Table

Im	plementation Action	Re	sponsible Parties	Date
	t limited to, source identification and culation (optional).	2. 3. 4. 5.	County of Ventura VCWPD and associated MS4 Co-permittees City of Ventura Caltrans	date of the TMDL.
Co inc	ot Project: ompletion of Structural BMP pilot projects, cluding but not limited to structural and non- ructural BMPs (optional).	1. 2.	Ventura Port District County of Ventura VCWPD and associated MS4 Co-permittees City of Ventura Caltrans	Three years and six months after the effective date of the TMDL.
Su co str H0	plementation: Ibmit final work plan; to implement source Introl and BMPs, including but not limited to Fuctural and non-structural BMPs, at the CB during dry-weather for Executive Officer proval.		Ventura Port District County of Ventura VCWPD and associated MS4 Co-permittees City of Ventura Caltrans	Four years after the effective date of the TMDL.
a.	egional Board Reconsideration: Re-evaluate WLAs and LAs based on data. Re-evaluate the TMDL implementation schedule for Harbor Cove Beach based on results from pilot projects and special studies. If special studies indicate significant source loading is associated with the Ventura Harbor Keys, the implementation schedule may be revised with respect to the future bacteria TMDL for the Ventura Harbor Keys.	Re	gional Board	Four years after effective date of the TMDL.
c. d.	Re-evaluate allowable exceedance levels, including whether the allowable number of exceedance days maybe adjusted based on a Ventura County rainfall record. Re-evaluate the selection of the reference beach if additional, appropriate reference			

### Table 7-28.4 Harbor Beaches of Ventura County Bacteria TMDL (Harbor Cove Beach): Implementation Table

# Table 7-28.4 Harbor Beaches of Ventura County Bacteria TMDL (Harbor Cove Beach): Implementation Table

Implementation Action	<b>Responsible Parties</b>	Date
beach options have been developed.		
e. Assign LAs to agricultural lands in the Ventura Harbor subwatershed based on monitoring in the Conditional Waiver for Dischargers from Irrigated Lands.		
<ul> <li>f. Consider recommendations for delisting HCB based on data collected during the TMDL monitoring program after BMPs are instituted.</li> </ul>		
Implementation:	1. Ventura Port District	Four years and
Submit final work plan to implement source control and BMPs, including but not limited to	2. County of Ventura	six months after the effective
structural and non-structural BMPs, at the HCB during wet-weather for Executive Officer approval.	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	date of the TMDL.
approval.	4. City of Ventura	
	5. Caltrans	
Compliance (WLAs):	1. Ventura Port District	Five years after the effective date of the TMDL.
There shall be no exceedances in excess of the numbers in Table 7-28.2 of the single sample limits at any location during dry- weather, and the rolling 30-day geometric	2. County of Ventura	
	<ol> <li>VCWPD and associated MS4 Co-permittees</li> </ol>	
mean targets shall be achieved.	4. City of Ventura	
	5. Caltrans	
Compliance (LAs):	1. Ventura Port District	Five years after
There shall be no exceedances in excess of the numbers in Table 7-28.2 of the single	2. County of Ventura	the effective date of the
sample limits at any location during dry- weather, and the rolling 30-day geometric	3. VCWPD	TMDL.
mean targets shall be achieved.	4. City of Ventura	
Compliance:	1. Ventura Port District	Six and Eight
Submit Compliance Report for Executive Officer approval. The Compliance Report	2. County of Ventura	year after the effective date of
shall include an evaluation of compliance with dry-weather allocations, interim wet-weather allocations, and rolling 30-day geometric mean	3. VCWPD and associated the TM MS4 Co-permittees	the TMDL.
targets.	4. City of Ventura	

# Table 7-28.4 Harbor Beaches of Ventura County Bacteria TMDL (Harbor Cove Beach): Implementation Table

Implementation Action	Responsible Parties	Date
Compliance: Submit Final Compliance Report for Executive Officer approval. The Compliance Report shall include an evaluation of compliance with dry-weather allocations, wet-weather allocations, and the rolling 30-day geometric mean targets.	<ol> <li>Ventura Port District</li> <li>County of Ventura</li> <li>VCWPD and associated MS4 Co-permittees</li> <li>City of Ventura</li> <li>Caltrans</li> </ol>	Ten years after the effective date of the TMDL.
Final Compliance (WLAs): There shall be no allowable exceedances of single sample limits in excess of the numbers listed in Table 7-28.2 of the single sample limits at any location during any periods and the rolling 30-day geometric mean targets shall be achieved.	<ol> <li>Ventura Port District</li> <li>County of Ventura</li> <li>VCWPD and associated MS4 Co-permittees</li> <li>City of Ventura</li> <li>Caltrans</li> </ol>	Ten year after the effective date of the TMDL.
Final Compliance (LAs): There shall be no allowable exceedances of single sample limits in excess of the numbers listed in Table 7-28.2 of the single sample limits at any location during any periods and the rolling 30-day geometric mean targets shall be achieved.	<ol> <li>Ventura Port District</li> <li>County of Ventura</li> <li>VCWPD</li> <li>City of Ventura</li> </ol>	Ten year after the effective date of the TMDL.