



CALIFORNIA † See Additional Information About California's Beach Data Management

22nd in Beachwater Quality

10% of samples exceeded national standards in 2010

Polluted urban and suburban runoff is a major threat to water quality at the nation's coastal beaches. Runoff from storms and irrigation carries pollution from parking lots, yards, and streets directly to waterways. In some parts of the country, stormwater routinely causes overflows from sewage systems. Innovative solutions known as green infrastructure enable communities to naturally absorb or use runoff before it causes problems. The U.S. Environmental Protection Agency is modernizing its national rules for sources of runoff pollution and should develop strong, green infrastructure-based requirements.

California has more than 500 miles of coastal beaches, spread among over 400 beaches along the Pacific Ocean and San Francisco Bay coastline. The California Department of Health Services administers the BEACH Act grant.

Current approved methods for determining fecal indicator bacteria counts in beachwater depend on growth of cultures in samples and take at least 24 hours to process. Because of this, swimmers do not know until the next day if the water they swam in was contaminated. Likewise, beaches may be left closed even after water quality meets standards. There is a great deal of interest in technologies that can provide same-day beachwater quality results. During the 2010 beach season, researchers funded by the California State Water Board and the American Recovery and Reinvestment Act tested a rapid method called quantitative polymerase chain reaction, or qPCR, at nine sampling locations in Orange County five days a week. The method used was specific for enterococcus bacteria. The test locations were at Huntington State Beach, Newport Beach, and Doheny State Beach. During this pilot study, public health decisions were made based on both standard and rapid method results. While the project demonstrated the practicality of issuing beach notifications using qPCR, the qPCR method resulted in higher bacterial counts than traditional culture methods and more postings were issued than would have been issued if only traditional culture methods had informed the notification decisions.¹

Researchers at Stanford, University of California at Los Angeles, University of California at Santa Barbara, and the Southern California Coastal Water Research Project are developing a protocol for identifying the sources of fecal indicator bacteria found in beachwater. This project, funded by the California State Water Board with money from the Clean Beach Initiative, a program that focuses on water quality and swimmer safety projects at popular coastal beaches, will provide guidance for choosing appropriate technologies and sampling strategies for source identification studies. Researchers will select a subset of source identification techniques from among dozens of possibilities to test in detail at twenty to thirty California beaches. At these beaches, samples will be taken in rivers, creeks, and storm drains above the point of tidal influence, at the wave wash zone at the mouth of the outfalls, in sand nearby the outfalls, and in kelp washed up on the beach at the high tide line. The presence of human and other sources of fecal indicator bacteria will be determined. After the initial testing phase concludes, a more thorough source identification study of the watersheds for some of the beaches will be conducted. Plans are to include beaches in California with persistent water quality problems that have not been studied in depth previously, including Surfrider Beach in Malibu, Cowell Beach in Santa Cruz, Arroyo Burro in Santa Barbara, and Doheny Beach in Orange County.²

KEY FINDINGS IN CALIFORNIA

Beachwater Contamination

(% of samples exceeding state standards in 2010)

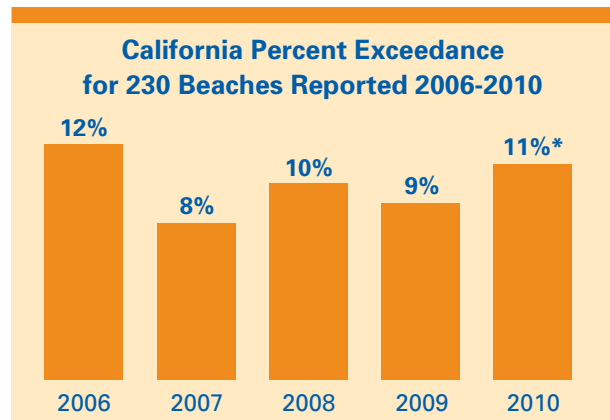
- Avalon Beach north of GP Pier in Los Angeles County (73%)
- Avalon Beach south of GP Pier in Los Angeles County (56%)
- Candlestick Point, Windsurfer Circle in San Francisco County (52%)

Reported Sources of Beachwater Contamination

Statewide (number of closing/advisory days)

- 89% (5125) unknown only
- 4% (237) other unspecified sources
- 3% (163) no information
- 2% (136) sewage spills/leaks
- 2% (95) stormwater

In an effort to reduce the burden associated with beachwater monitoring, several monitoring entities in Orange County have drafted a collaborative, integrated, regional ocean water quality monitoring program proposal for the county.⁴ This proposal would shift most of the monitoring duties in the county to the entities that operate the county's coastal sewage treatment plants and would reduce the number of sampling events in Orange County. Efforts to work collaboratively and eliminate duplication of effort are commendable. But some of the proposed changes will result in less frequent monitoring at beaches that get many visitors and that have a history of exceeding the enterococcus water quality standard, including locations at Doheny State Beach. Frequent monitoring of popular swimming areas where water quality tends to be poor is most protective of public health and there may be cases where frequent monitoring around outfall locations should be preserved.



California's exceedance rate rose substantially from last year to this year. Reasons for this increase may include additional sampling by Los Angeles County at outfalls in order to meet requirements associated with the cleanup of Santa Monica Bay.⁵ California's wet weather season runs from November to April, and most recreational water use occurs during the dry season when water quality is at its best.⁵

Monitoring Results

In 2010, California reported 452 coastal beaches (some of which have multiple segments), 10 (2%) of which were monitored daily, 14 (3%) of which were monitored more than once a week, 282 (62%) of which were monitored once a week, 12 (3%) of which were monitored once a month, 128 (28%) of which were monitored less than once a month, 2 (<1%) of which were not monitored, and there was no monitoring information for 4 (1%) beaches. For this section of the report, NRDC looked at the percent of monitoring samples that exceeded the state's daily maximum bacterial standards (all reported samples were used to calculate the 2010 percent exceedance values, including duplicate samples and samples taken outside the official beach season, if any). As discussed below, California has multiple bacterial standards; accordingly, NRDC considered a sample on a given day at a given beach station to be in exceedance if it exceeded any one of California's bacterial standards. However, even if all bacterial standards were exceeded on a given day at a given station, NRDC counted that as only one exceedance. For example, if a sample exceeded the enterococcus, *E. coli*, and total coliform standards on a given day, NRDC counted that as one exceedance, not three (note that when determining California's national beachwater quality ranking, NRDC analyzed results based on EPA's single-sample maximum standard for designated beach areas of, just as every other coastal state).

In 2010, 11%* of all reported beach monitoring samples exceeded at least one of the state's daily maximum bacterial standards. Seventy-five of California's beaches/beach segments exceeded at least one of the standards at least 20% of the time in 2010. The beaches with the highest percent exceedance rates in 2010 were Avalon Beach north of Green Pleasure Pier (73%) and Avalon Beach south of Green Pleasure Pier (56%) in Los Angeles County, Candlestick Point, Windsurfer Circle (52%) in San Francisco County, Cabrillo Beach (52%) and Avalon Beach Near Busy B Café (51%) in Los Angeles County, Poche County Beach in Orange County (51%), Avalon Beach between Busy B Café and TC (43%) in Los Angeles County, Doheny State Beach north of San Juan Creek in Orange County (42%), and Colorado Lagoon–North (40%) in Los Angeles County.

Contra Costa County had the highest exceedance rate (25%) in 2010 followed by San Francisco (20%), Los Angeles (17%), Santa Barbara (15%), Santa Cruz (15%), Sonoma (13%), San Mateo (12%), Monterey (9%), Orange (9%), Humboldt (7%), Alameda (7%), Ventura (6%), San Diego (6%), San Luis Obispo (5%), Marin (4%), and Mendocino (4%) counties. No beaches in Del Norte County are sampled.

Sampling Practices: Beachwater quality monitoring in California occurs from at least April 1 to October 31, with most beaches in Southern California and in Santa Cruz, San Mateo, and San Francisco Counties monitored year-round.

Individual counties determine sampling locations, while sampling depth and minimum sampling frequency are determined by state law.⁶ Most counties sample at more locations and often more frequently than required by state law.⁵ Samples are taken in ankle-deep water. Monitoring locations in California are selected based on the number of visitors, the location of storm drains, discharge permit requirements to sample at particular places, and legislative requirements (for instance, all beaches along the San Francisco Bay are monitored per legislation). Monitored beaches represent the vast majority of beach day use in California.

Samples are usually collected in the most likely areas of possible contamination. In Los Angeles County, for example, sampling points are located where creeks or storm drains enter the surf zone, which are usually permanently posted as being under advisory. Most other counties may permanently post outfalls and sample 25 yards up or down the coast from the outfall to predict further impacts to beach bathing areas.² Immediate resampling is often conducted after an advisory is issued in order to lift the advisory as soon as possible. When there is a closing, samples must meet standards for two days before the beach can be reopened. States that monitor more frequently after an exceedance is found will tend to have higher percent exceedance rates and lower total closing/advisory days than they would if their sampling schedule did not alter after an exceedance was found.

Closings and Advisories

Total closing/advisory days for 1,062 events lasting six consecutive weeks or less nearly doubled to 5,756 days in 2010 from 2,904 days in 2009. For prior years, there were 4,133 closing/advisory days in 2008, 4,736 days in 2007, 4,644 days in 2006, and 5,199 days in 2005. In addition, there were 14 extended events (811 days total) and 12 permanent events (1,549 days total) in 2010. Extended events are those in effect more than six weeks but not more than 13 consecutive weeks; permanent events are in effect for more than 13 consecutive weeks. For the 1,062 events lasting six consecutive weeks or less, 92% (5,288) of closing/advisory days in 2010 were due to monitoring that revealed elevated bacteria levels, 2% (95) were preemptive (i.e., without waiting for monitoring results) due to heavy rainfall, 2% (136) were preemptive due to known sewage spills/leaks, and 4% (237) were preemptive due to other unspecified reasons.

Standards and Procedures: Local health agencies are responsible for issuing beachwater quality warnings.⁷ There are four types of beachwater quality warnings issued: postings, closings, rain advisories, and permanent postings. Postings that warn swimmers about the potential for illness are issued when a water sample fails to meet bacterial standards. Rain advisories are pre-emptive warnings that people should avoid swimming in ocean waters during a rain event and for three days after rainfall ceases, and permanent postings are sites where historic data show that the beachwater generally contains elevated bacteria levels.³ Beach closings are generally issued due to sewage spills or other serious health hazards, but local health officials sometimes decide to close a beach when more than one standard is exceeded or when exceedances are far in excess of the standards.² This is rare, however, and closings are generally issued only when it is suspected that sewage is impacting a beach.

California employs a variety of bacterial standards.

- For total coliform, the single-sample standard is 1,000 cfu/100 ml if the ratio of fecal/total coliform bacteria exceeds 0.1. Otherwise, the single-sample standard for total coliform is 10,000 cfu/100 ml. The total coliform standard for the geometric mean of at least five weekly samples collected during a 30-day period is 1000 cfu/100 ml.
- For fecal coliform, the single-sample standard is 400 cfu/100 ml and the standard for the geometric mean of at least five weekly samples collected during a 30-day period is 200 cfu/100 ml. In some jurisdictions, *E. coli* is used as a surrogate for fecal coliform; in this case, the standard is the same as for fecal coliform.
- For enterococcus, the single sample standard is 104 cfu/100 ml and the standard for the geometric mean of at least five weekly samples collected during a 30-day period is 35 cfu/100 ml.

Almost all counties monitor for all three organisms (total coliform, fecal coliform, and enterococcus), and an exceedance of the single-sample standard of any one of these three indicators triggers a posting. Geometric mean standards are sometimes used to keep a beach posted after the single-sample maximum has been exceeded, but are rarely used by themselves to trigger a posting.² Unless adjacent sampling stations exceed water quality standards, notifications are issued for the portion of the beach that extends 50 yards in either direction of the sampling location where an exceedance of water quality standards is found.²

Postings are issued without resampling when a single-sample exceedance occurs. There is no protocol for delaying or foregoing a posting when a single-sample exceedance occurs.

Since 2003, San Diego County has used a predictive model to trigger beach closings at three south county beaches near the outlet of the Tijuana River. These beaches are Imperial Beach, Coronado Beach, and Silver Strand State Beach. The model assesses the need for closures based on real-time information about ocean currents in addition to other parameters. Use of the model allows the San Diego County Department of Environmental Health to make more accurate and timely notifications to protect the health of beachgoers.⁸

In addition to advisories triggered by indicator exceedances, three-day-long preemptive rain advisories are automatically issued for all beaches in five counties (Los Angeles, Monterey, Orange, San Diego, and Santa Cruz counties) when rainfall exceeds predetermined levels, regardless of whether bacterial monitoring samples have been collected and analyzed. For example, Los Angeles County advises swimmers that to stay safe when swimming in the ocean, ocean water should be avoided for 72 hours after a rainstorm.⁹ These general advisories affect all beaches in the county. As a general rule, the Los Angeles County Recreational Waters Program issues a rain advisory when there is 0.1 inch or more of rainfall at the University of Southern California rain gauge, but this varies depending on factors such as how long it has been since the last rainfall, how sporadic the rainfall is, and where it is falling; according to the agency, much of the watershed that feeds storm drain flow is in the hills and mountains, which have different rainfall levels than at the rain gauge. Orange County issues preemptive county-wide rain advisories, warning of elevated bacteria levels in the ocean for a period of at least 72 hours after rain events of 0.2 inches or more. San Diego County issues preemptive rain advisories for a period of up to 72 hours after a rain event of 0.2 inches or more.

Preemptive advisories are also issued for reasons other than rain, such as excessive debris on the beach. Finally, preemptive closings are issued when there is a known sewage spill or when sewage is suspected of impacting a beach. Closings are issued immediately upon notification by the agency responsible for the spill.

* Why don't the 2010 percent exceedance values in this summary match? The value at the top of the first page (10%) reflects the proportion of samples exceeding the national single-sample maximum standard for designated beach areas. California applies additional standards, and the value in the "Monitoring Results" section (11%) reflects the proportion of samples exceeding the state standards. Some samples exceeded the state standards but not the national standard.

† Additional Information About California's Beach Data Management

Given California's extensive coastline, dense coastal population, and many potential sources of beach pollution, the percent exceedance rates and number of closing/advisory days in this state can significantly influence the national picture. For that reason, and for the benefit of an informed beach-going public in California, the state's thorough and accurate management of its large dataset of beach monitoring and closing/advisory information is critical. Beachwater monitoring is conducted by multiple county, municipal, and other local agencies, which then report their results to the state. NRDC collects these data from the state, compiles them for this report, and provides the tabulated data to the state to review their accuracy. Although improvements have been made in the state's data collection and organization methods over the past 21 years, inaccuracies and omissions persist.

For example, as this report went to print, NRDC discovered that approximately seven months of beach monitoring data reportedly submitted to the state by Orange County officials were missing from the state's 2010 monitoring database. NRDC was able to identify anomalies in the reported data because of our familiarity with the relevant beach water monitoring programs, and then contacted county officials for additional information. But it is incumbent on the state to perform this type of quality control check and such action should be part of the state's routine data management practices. Among other things, a lack of complete and accurate information hinders effective direction of pollution reduction actions to protect California beach users.

This report contains corrected data from the 2010 beach season to the extent we were able to identify needed changes before the report's release. However, a number of the results presented here for beaches in Orange County remain based on originally-reported state data. We will continue to update the report online as more data become available, but we urge the state agency responsible for administering the beach monitoring data and the agencies that report it to ensure that the data are diligently reported, their accuracy confirmed, and their storage properly managed. Beginning with the 2011 beach season, the Southern California Coastal Water Research Project (SCCWRP) will assume management of California's beach monitoring data from the California State Water Resources Control Board. The transition to SCCWRP management provides an opportunity to assure that these improvements are made.

California 2010 Monitoring Results and Closing or Advisory Days

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Alameda County					
Alameda Point–North	not tier 1	no data	39	10%	21 (102)*
Alameda Point–South	not tier 1	no data	38	5%	21 (102)*
Crown Beach, 2001 Shoreline Dr.	not tier 1	1/wk	39	8%	50
Crown Beach, Bath House	not tier 1	1/wk	38	3%	50
Crown Beach, Bird Sanctuary	not tier 1	1/wk	40	15%	50
Crown Beach, Sunset Rd.	not tier 1	1/wk	38	5%	50
Crown Beach, Windsurf Corner	not tier 1	1/wk	38	3%	50
Contra Costa County					
Keller Beach, Mid Beach	not tier 1	1/wk	46	28%	53
Keller Beach, North Beach	not tier 1	1/wk	46	28%	53
Keller Beach, South Beach	not tier 1	1/wk	42	17%	53
Del Norte County					
Beaches in Del Norte County that were not monitored and that had no closing or advisory days in 2010:					
Beachfront Park	Enderts Beach	Lake Earl Wildlife Area	Point St. George		
Clifford Kamph Memorial Park	High Bluff Beach	Beaches	South Beach		
Crescent Beach	Kellogg Beach	Pebble Beach	Wilson Creek Beach		
		Pelican Bay State Beach			
Humboldt County					
Clam Beach Co. Park	1	1/wk	42	12%	15
Clam Beach Co. Park, North Mad River Mouth	1	1/wk	37	5%	15
Luffenholtz Beach, Luffenholtz Creek	1	1/wk	36	6%	4
Moonstone Beach	1	1/wk	40	10%	7
Old Home Beach	1	1/wk	30	7%	8
Trinidad State Beach, Mill Creek	1	1/wk	37	3%	3
Beaches in Humboldt County that were not monitored and that had no closing or advisory days in 2010:					
Agate Beach	College Cove	Freshwater Lagoon	Mattole River Beach		
Baker Beach	Crab Co. Park	Gold Bluffs Beach	Redwood Creek Beach		
Big Lagoon	Dead Man's Beach	Hidden Beach	Samoa Dunes Rec. Area		
Black Sands Beach	Dry Lagoon	Little Black Sands Beach	Shelter Cove		
Carruthers Cove Beach	Eel River State Wildlife Area	Little River State Beach	South Spit		
Centerville Beach		Mad River Beach Co. Park	Stone Lagoon		

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Los Angeles County					
Alamitos Bay Beach, 2nd St Bridge & Bayshore	1	1/wk	55	33%	8
Alamitos Bay Beach, 56th Place–On Bayside	1	1/wk	58	34%	22
Alamitos Bay Beach, Alamitos–Bay shore float	1	1/wk	56	30%	10
Avalon Beach, bet. BBC and TC	1	1/wk	40	43%	83 (87)*
Avalon Beach, near Busy B Cafe	1	1/wk	41	51%	74
Avalon Beach, near storm drain	1	1/wk	33	24%	28
Avalon Beach, north of GP Pier	1	1/wk	45	73%	63 (49)*
Avalon Beach, south of GP Pier	1	1/wk	41	56%	42 (44)*
Big Rock Beach, Big Rock Beach	1	1/wk	49	12%	35
Cabrillo Beach Station	1	Daily	241	52%	219 (127)*
Colorado Lagoon–Center	1	1/wk	1	0%	0
Colorado Lagoon–North	1	1/wk	60	40%	55
Colorado Lagoon–South	1	1/wk	41	34%	9
Dockweiler State Beach, Ballona Creek	1	1/wk	241	22%	74
Dockweiler State Beach, Culver Blvd	1	1/wk	240	2%	7
Dockweiler State Beach, Hyperion Plant	1	1/wk	49	10%	21
Dockweiler State Beach, Imperial Hwy. storm drain	1	1/wk	240	1%	10
Dockweiler State Beach, World Way	1	1/wk	49	14%	65
El Segundo Beach	1	1/wk	51	16%	42
Hermosa Beach Pier	1	1/wk	240	2%	28
Hermosa Beach, 26th Street	1	1/wk	49	10%	2
Inner Cabrillo Beach	1	Daily	241	17%	66
Leo Carillo State Beach	1	1/wk	49	6%	21
Long Beach, 10th Place–Beach	1	1/wk	56	25%	15
Long Beach, 55th Place–Beach	1	1/wk	52	21%	4
Long Beach, 5th Place–Beach	1	1/wk	55	24%	12
Long Beach, 72nd Place–Beach	1	1/wk	48	19%	2
Long Beach, Coronado Ave–Beach	1	1/wk	57	28%	13
Long Beach, Granada Ave–Beach	1	1/wk	52	23%	4
Long Beach, Molino Ave–Beach	1	1/wk	57	25%	16
Long Beach, Prospect Ave–Beach	1	1/wk	56	23%	13
Long Beach, West side of Belmont Pier	1	1/wk	56	27%	14
Malibu Beach, Latigo Shore Dr.	1	1/wk	49	4%	28
Malibu Beach, Malibu Colony Dr.	1	1/wk	49	10%	35
Malibu Beach, Malibu Pier	1	1/wk	54	20%	75
Malibu Beach, Nicholas Beach	1	1/wk	50	4%	0
Malibu Beach, Paradise Cove	1	1/wk	56	23%	107

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Los Angeles County					
Malibu Beach, Westward Beach	1	1/wk	51	8%	9
Manhattan Beach Pier	1	1/wk	240	1%	12
Manhattan Beach, 27th Street extended	1	1/wk	52	21%	53
Manhattan Beach, 40th Street extended	1	1/wk	240	1%	11
Marina Del Rey Beach	1	1/wk	241	20%	68
Mothers' Beach	1	1/wk	56	32%	17
Outer Cabrillo Beach	1	1/wk	5	20%	0
Palos Verdes Beach, Abalone Cove	1	1/wk	5	20%	0
Palos Verdes Beach, Long Point	1	1/wk	6	0%	0
Palos Verdes Beach, near Busy B Cafe	1	1/wk	240	1%	12
Portuguese Bend	1	Daily	5	20%	0
Puerco Beach	1	1/wk	50	12%	35
Redondo Beach, Avenue I extended	1	1/wk	240	3%	21
Redondo Beach, Herondo Street	1	1/wk	52	25%	78
Redondo Beach, Redondo Pier	1	1/wk	241	27%	108
Redondo Beach, Topaz Street	1	1/wk	52	13%	11
Royal Palms Beach, White Point	1	1/wk	5	0%	2
Santa Monica State Beach, Ashland storm drain	1	1/wk	241	10%	29
Santa Monica State Beach, Montana Ave.	1	1/wk	50	14%	51
Santa Monica State Beach, Pico Kenter storm drain	1	1/wk	241	19%	60
Santa Monica State Beach, Santa Monica Canyon	1	1/wk	241	23%	51
Santa Monica State Beach, Santa Monica Pier	1	1/wk	241	23%	84
Santa Monica State Beach, Strand Street	1	1/wk	48	10%	21
Santa Monica State Beach, Wilshire Blvd.	1	1/wk	49	12%	48
Surfrider Beach	1	1/wk	240	36%	159 (127)*
Topanga State Beach	1	1/wk	241	39%	113 (335)*
Trancas Beach	1	1/wk	49	14%	21
Venice City Beach, Brooks Ave.	1	1/wk	49	16%	28
Venice City Beach, Topsail Street	1	1/wk	51	14%	32
Venice City Beach, Venice Pier	1	1/wk	49	10%	28
Venice City Beach, Windward storm drain	1	1/wk	240	3%	22
Will Rogers State Beach, 17200 Pacific Coast Hwy	1	1/wk	50	12%	48
Will Rogers State Beach, Bel Air Bay Club	1	1/wk	56	25%	86
Will Rogers State Beach, Pulga storm drain	1	1/wk	240	2%	2

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Los Angeles County					
Will Rogers State Beach, Temescal Canyon storm drain	1	1/wk	53	23%	118
Beaches in Los Angeles County that were not monitored and that had no closing or advisory days in 2010:					
Armarillo Beach	El Pescador State Beach	Multiple Beaches	Royal Palms Beach		
Basin H	Escondido Beach	Nicholas Canyon County Beach	South Topanga State Beach		
Bluff Cove	La Costa Beach	No Name	South Will Rogers State Beach		
Broad Beach	La Piedra State Beach	Point Dume County Beach	Torrance Beach		
Carbon Beach	Las Flores Beach	Point Fermin Park	Zuma Beach		
Coral Beach	Las Tunas County Beach	Robert Meyer Memorial State Beach	Zuma Beach–Westward Beach		
Dan Blocker County Beach	Malibu Lagoon State Beach				
El Matador State Beach	Malibu Point				
Marin County					
Bolinas Beach	1	1/wk	29	3%	7
China Camp	1	1/wk	30	10%	21
Dillon Beach	1	1/wk	30	0%	0
Drake's Beach	1	1/wk	30	0%	0
Drake's Beach, Drakes Estero	1	1/wk	18	6%	7
Fort Baker, Horseshoe Cove–Northeast	1	1/wk	29	0%	0
Fort Baker, Horseshoe Cove–Northwest	1	1/wk	29	0%	0
Fort Baker, Horseshoe Cove–Southwest	1	1/wk	29	3%	7
Heart's Desire	1	1/wk	30	3%	7
Lawson's Landing	1	1/wk	30	7%	21
Limantour Beach	1	1/wk	30	0%	0
Miller Point	1	1/wk	30	0%	0
Millerton Point	1	1/wk	30	27%	42
Muir Beach–Central	1	1/wk	30	0%	0
Muir Beach–North	1	1/wk	30	7%	14
Muir Beach–South	1	1/wk	30	0%	0
Rodeo Beach–Central	1	1/wk	29	0%	0
Rodeo Beach–North	1	1/wk	29	0%	0
Rodeo Beach–South	1	1/wk	29	0%	0
Schoonmaker Beach	1	1/wk	30	0%	0
Shell Beach	1	1/wk	30	10%	21
Stinson Beach–Central	1	1/wk	30	0%	0
Stinson Beach–North	1	1/wk	30	3%	7
Stinson Beach South	1	1/wk	30	0%	0
Beaches in Marin County that were not monitored and that had no closing or advisory days in 2010:					
Chicken Ranch Beach at Creek	Fort Baker, Horseshoe Cove–Southwest	McClures Beach	Rodeo Beach–North		
Fort Baker, Horseshoe Cove–Northwest	Golden Hinde	McNears Beach	Rodeo Beach–South		
	Kehoe Beach	Muir Beach–North	Stinson Beach–North		
	Marshall Beach	Muir Beach–South	Stinson Beach–South		
		Paradise Cove			

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Mendocino County					
Big River-Mendocino Bay Headlands SP	1	1/wk	29	0%	0
Caspar Headlands SB	1	1/wk	17	0%	0
Hare Creek	1	1/wk	14	14%	0
MacKerricher State Park	1	1/wk	26	0%	0
MacKerricher State Park, Virgin Creek Beach	1	1/wk	26	12%	0
Pudding Creek Beach, Pudding Creek	1	1/wk	28	4%	0
Pudding Creek Beach, Pudding Lagoon	1	1/wk	1	0%	0
Van Damme SP	1	1/wk	29	0%	0
Beaches in Mendocino County that were not monitored and that had no closing or advisory days in 2010:					
Albion River	Greenwood SB	Manchester SB	Schooner Gulch		
Anchor Bay	Gualala River	Navarro River Redwood SP	Ten Mile River		
Arena Cove	Irish Beach	Noyo River	Westport/Union Landing		
Chadbourne Gulch	Jug Handle State Reserve	Russian Gulch SP			
Monterey County					
Asilomar State Beach, Sunset Dr. at Arena	1	1/wk	34	0%	0
Carmel Beach at Ocean Ave	1	1/wk	35	6%	0
Lover's Point	1	1/wk	40	15%	0 (45)*
Marina State Beach	1	4/yr	1	0%	0
Monterey Beach Hotel	1	1/wk	37	5%	0
Monterey State Beach, Del Monte Beach	1	1/wk	41	20%	0
San Carlos Beach	1	1/wk	36	6%	0 (79)*
Spanish Bay	1	1/wk	34	0%	0
Stillwater Cove	1	1/wk	38	16%	0 (108)*
Zmudowski State Beach	1	4/yr	0	NA	3
Beaches in Monterey County that were not monitored and that had no closing or advisory days in 2010:					
Andrew Molera State Beach	Heritage Harbor	Maccabee Beach	State Beach		
Fort Ord Dunes State Beach	John Little State Beach	Monastery Beach	Point Sur SHP		
Garrapata State Beach	Julia Pfeiffer Burns State Beach	Moss Landing State Beach	Salinas River State Beach		
	Limekiln	Pacific Grove City Beaches	Seal Rock, Pebble Beach		
		Point Lobos State Reserve	Seaside Beach		
Orange County					
Aliso County Beach, Aliso Beach	not tier 1	no data	30	13%	0
Aliso County Beach, Aliso Beach–South	not tier 1	no data	30	7%	0
Aliso County Beach, Camel Point	not tier 1	no data	30	3%	0
Aliso County Beach, Crystal Cove Ramp	not tier 1	no data	74	7%	0
Aliso County Beach, Table Rock	not tier 1	no data	30	7%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Orange County					
Aliso County Beach, Treasure Island Ramp	not tier 1	no data	30	3%	0
Aliso County Beach, Treasure Island Stairs	not tier 1	no data	30	3%	0
Bolsa Chica State Beach, Bolsa Chica Beach	1	Daily	74	4%	3
Bolsa Chica State Beach, Bolsa Chica Reserve	1	Daily	74	8%	3
Capistrano Bay District, 10000' South Outfall	1	2/wk	27	15%	43
Capistrano Bay District, 7500' South Outfall	1	2/wk	25	16%	43
Capistrano Beach, 5000' South Outfall	1	2/wk	26	15%	19
Crystal Cove State Park, Crystal Cove	1	Daily	9	0%	3
Dana Point Harbor, Buoy Line/Baby Beach	1	1/wk	8	0%	77
Dana Point Harbor, East End/Baby Beach	1	1/wk	14	21%	77
Dana Point Harbor, Fuel Dock	1	1/wk	9	0%	77
Dana Point Harbor, Guest Dock	1	1/wk	9	0%	77
Dana Point Harbor, Harbor Entrance	1	1/wk	25	0%	77
Dana Point Harbor, Harbor Patrol Dock	1	1/wk	15	20%	77
Dana Point Harbor, MDP18	1	1/wk	9	0%	77
Dana Point Harbor, Pier	1	1/wk	9	0%	77
Dana Point Harbor, Pilgrim	1	1/wk	9	0%	77
Dana Point Harbor, Swim Area/Baby Beach	1	1/wk	13	15%	77
Dana Point Harbor, West End/Baby Beach	1	1/wk	11	9%	77
Dana Point Harbor, Youth Dock	1	1/wk	9	0%	77
Dana Point, Ocean Institute Beach	1	4/yr	25	4%	0
Doheny State Beach, 1000' South Outfall	1	3/wk	26	38%	252 (57)*
Doheny State Beach, 2000' South Outfall	1	3/wk	31	35%	252 (57)*
Doheny State Beach, 3000' South Outfall	1	3/wk	25	24%	252 (57)*
Doheny State Beach, 4000' South Outfall	1	3/wk	25	12%	252 (57)*
Doheny State Beach, North Beach	1	3/wk	1	0%	252 (57)*
Doheny State Beach, North of San Juan Creek	1	3/wk	26	42%	252 (57)*
Doheny State Beach, Surfzone at Outfall	1	3/wk	27	48%	252
Huntington City Beach, 17th Street	1	Daily	74	7%	28
Huntington City Beach, Beach Hut	1	Daily	74	8%	28
Huntington City Beach, Bluffs	1	Daily	74	9%	28
Huntington City Beach, Jack's Snack Bar	1	Daily	74	8%	28
Huntington Harbour, 11th Street Beach	1	1/wk	10	20%	6

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Orange County					
Huntington Harbour, Admiralty Drive	1	1/wk	9	11%	6
Huntington Harbour, Anaheim Bay	1	1/wk	9	11%	6
Huntington Harbour, Anderson Street	1	1/wk	9	11%	6
Huntington Harbour, Clubhouse	1	1/wk	9	11%	6
Huntington Harbour, Coral Cay	1	1/wk	10	20%	6
Huntington Harbour, Davenport Beach	1	1/wk	9	11%	6
Huntington Harbour, Harbour Channel	1	1/wk	9	11%	6
Huntington Harbour, Humboldt Beach	1	1/wk	9	11%	6
Huntington Harbour, Mothers Beach	1	1/wk	9	22%	6
Huntington Harbour, Sea Gate	1	1/wk	9	11%	6
Huntington Harbour, Sunset Aquatic Park	1	1/wk	9	11%	6
Huntington Harbour, Trinidad Lane	1	1/wk	9	11%	6
Huntington State Beach, 50' N of Santa Ana River	1	Daily	74	4%	35
Huntington State Beach, Brookhurst Street	1	Daily	75	3%	35
Huntington State Beach, Magnolia Street	1	Daily	74	1%	35
Huntington State Beach, Santa Ana River –North	1	Daily	74	1%	35
Huntington State Beach, SCE Plant	1	Daily	74	9%	35
Laguna Beach, Blue Lagoon	1	2/wk	30	7%	22
Laguna Beach, Bluebird Canyon	1	2/wk	31	13%	22
Laguna Beach, Crescent Bay	1	2/wk	9	0%	22
Laguna Beach, Laguna Hotel	1	2/wk	31	19%	22
Laguna Beach, Laguna Lido Apartment	1	2/wk	30	3%	22
Laguna Beach, Victoria Beach	1	2/wk	30	7%	22
Monarch Beach–North	1	Daily	2	0%	7
Newport Bay, 10th Street	1	1/wk	16	0%	124
Newport Bay, 15th Street	1	1/wk	16	6%	124
Newport Bay, 19th Street	1	1/wk	16	6%	124
Newport Bay, 33rd Street	1	1/wk	17	29%	124
Newport Bay, 43rd Street	1	1/wk	16	6%	124
Newport Bay, Abalone Avenue	1	1/wk	16	0%	124
Newport Bay, Alvarado/Bay Island	1	1/wk	16	0%	124
Newport Bay, Bayshore Beach	1	1/wk	16	6%	124
Newport Bay, Bayside Drive Beach	1	1/wk	16	6%	124
Newport Bay, De Anza	1	1/wk	16	0%	124
Newport Bay, Garnet Avenue	1	1/wk	16	0%	124
Newport Bay, Grand Canal	1	1/wk	16	6%	124
Newport Bay, Lido Yacht Club	1	1/wk	16	19%	124
Newport Bay, N Street Beach	1	1/wk	16	0%	124

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Orange County					
Newport Bay, Newport Blvd Bridge	1	1/wk	16	25%	124
Newport Bay, Newport Dunes East	1	1/wk	17	24%	124
Newport Bay, Newport Dunes Middle	1	1/wk	16	25%	124
Newport Bay, Newport Dunes North	1	1/wk	17	29%	124
Newport Bay, Newport Dunes West	1	1/wk	16	25%	124
Newport Bay, Northstar Beach	1	1/wk	16	25%	124
Newport Bay, Onyx Avenue	1	1/wk	16	6%	124
Newport Bay, Park Avenue	1	1/wk	16	0%	124
Newport Bay, Promontory Point	1	1/wk	16	6%	124
Newport Bay, Rhine Channel	1	1/wk	16	13%	124
Newport Bay, Rocky Point	1	1/wk	16	0%	124
Newport Bay, Ruby Avenue	1	1/wk	16	6%	124
Newport Bay, Sapphire Avenue	1	1/wk	16	0%	124
Newport Bay, Ski Zone	1	1/wk	2	50%	124
Newport Bay, Vaughs Launch	1	1/wk	8	38%	124
Newport Bay, Via Genoa	1	1/wk	16	6%	124
Newport Beach, 15th/16th Street	1	Daily	74	3%	28
Newport Beach, 38th Street (9S)	1	Daily	74	1%	28
Newport Beach, 38th Street (BNB10)	1	Daily	16	13%	28
Newport Beach, 52nd/53rd Street	1	Daily	74	3%	28
Newport Beach, Balboa Pier	1	Daily	74	5%	28
Newport Beach, Corona Del Mar	1	Daily	74	1%	28
Newport Beach, Grant Street	1	Daily	9	11%	28
Newport Beach, Lancaster/62nd	1	Daily	9	11%	28
Newport Beach, Orange Street	1	Daily	74	1%	28
Newport Beach, Santa Ana River–South	1	Daily	74	4%	28
Newport Beach, The Wedge	1	Daily	74	0%	28
Poche County Beach, Poche Beach	1	2/wk	26	54%	81 (130)*
Salt Creek County Beach Park, Dana Strands–Selva Ramp	not tier 1	3/wk	30	3%	0
Salt Creek County Beach Park, Salt Creek Beach	not tier 1	3/wk	30	7%	0
San Clemente City Beach, 20000' South Outfall	1	2/wk	26	23%	2
San Clemente City Beach, 450' North of Pier	1	2/wk	25	4%	2
San Clemente State Beach, Avenida Calafia	1	2/wk	25	0%	0
San Clemente State Beach, Las Palmeras	1	2/wk	25	0%	0
Seal Beach Surfside, 100 Yds S of Pier	1	1/wk	17	6%	26
Seal Beach Surfside, 14th Street	1	1/wk	17	12%	26
Seal Beach Surfside, 1st Street	1	1/wk	18	28%	26

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Orange County					
Seal Beach Surfside, 8th Street	1	1/wk	17	12%	26
Seal Beach Surfside, Sea Way	1	1/wk	16	0%	26
South Laguna, Thousand Steps Beach	1	2/wk	30	3%	9
South Laguna, Three Arch Bay	1	2/wk	31	6%	9
South Laguna, Treasure Island Pier	1	2/wk	31	6%	9
Sunset Beach, Broadway	1	1/wk	16	0%	0
Beaches in Orange County that were not monitored and that had no closing or advisory days in 2010:					
Aliso Creek		Emerald Bay (drain)	Newport Beach (Santa Ana River)	Riviera Beach	
San Diego County					
Baja California, Mexico	1	1/wk	24	25%	0
Bayside Park	no data	no data	28	11%	0
Bird Rock (NR)	1	4/yr	2	0%	6
Border Field State Park	1	1/wk	108	23%	65 (158)*
Buccaneer Beach	1	4/yr	60	3%	2
Cardiff State Beach	1	1/wk	202	0%	15
Carlsbad City Beach	1	1/wk	20	0%	3
Carlsbad State Beach	1	1/wk	57	0%	9
Coronado Cays (NR)	1	4/yr	115	0%	0
Coronado City beaches	1	3/wk	97	1%	4
Coronado, Central beach	1	2/wk	58	0%	0
Dog Beach, O.B.	1	4/yr	77	8%	26
Fletcher Cove	1	4/yr	45	2%	0
Harbor Beach	1	4/yr	79	13%	28
Imperial Beach municipal beach, other	1	1/wk	90	16%	2
Imperial Beach pier area	1	1/wk	38	5%	0
La Jolla Cove	1	1/wk	29	0%	0
La Jolla Shores Beach	1	1/wk	28	7%	0
Mission Bay	1	4/yr	1	100%	0
Mission Bay, Bahia Point	1	1/wk	27	7%	5
Mission Bay, Campland On The Bay	1	1/wk	34	15%	16
Mission Bay, Crown Point Shores	1	1/wk	54	4%	2
Mission Bay, De Anza Cove	1	1/wk	29	14%	10
Mission Bay, Fanuel Park	1	1/wk	27	4%	12
Mission Bay, Leisure Lagoon	1	1/wk	53	0%	0
Mission Bay, Mariners Basin	1	1/wk	29	10%	5
Mission Bay, Vacation Isle	1	1/wk	60	10%	18
Mission Bay, Visitor's Center	1	1/wk	30	20%	20
Mission Beach	1	1/wk	50	2%	0
Moonlight Beach	1	2/wk	70	6%	6

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
San Diego County					
North Imperial Beach	1	4/yr	52	12%	0
Ocean Beach	1	1/wk	182	2%	2
Oceanside municipal beach, other	1	1/wk	135	5%	0
Oceanside Pier area	1	1/wk	45	4%	10
Powerhouse Park 15th Street	1	4/yr	34	0%	0
San Diego Bay	1	4/yr	26	0%	0
San Diego Bay Coronado Cays	1	4/yr	28	14%	0
San Diego Bay Glorietta Bay	1	1/wk	26	0%	0
San Diego Bay Shelter Is	1	1/wk	0	NA	14
San Dieguito River Beach	1	2/wk	67	4%	11
San Elijo State Beach	1	1/wk	90	1%	0
San Onofre State Beach	1	1/wk	1	100%	0
Seascape Beach Park	1	1/wk	23	0%	0
Shoreline Park	0	2/wk	29	14%	0
Silver Strand State Beach	1	1/wk	47	4%	52
South Carlsbad State Beach	1	1/wk	269	3%	11
South Casa Beach S.D.	1	4/yr	24	8%	0
Spanish Landing Park	1	1/wk	28	7%	0
Sunset Cliffs Park	1	1/wk	49	2%	0
Swami's Park	1	1/wk	25	0%	0
Tecolote Shores	1	1/wk	57	4%	2
Tide Beach Park	1	4/yr	45	2%	0
Tijuana River	1	1/wk	1	100%	80
Tijuana Slough National Wildlife Refuge	1	1/wk	122	20%	0
Torrey Pines State Beach	1	1/wk	69	4%	14
Tourmaline Surfing Park	1	1/wk	60	2%	0
USMC Camp Pendleton	1	1/wk	6	0%	11
Whispering Sands Nicholson Pt.	1	4/yr	42	5%	0
WindanSea Beach	1	1/wk	29	0%	0
Beaches in San Diego County that were not monitored and that had no closing or advisory days in 2010:					
Agua Hedionda Lagoon	Marine Street Beach	Mission Bay,	Pacific Beach		
Carlsbad municipal beach	Mission Bay,	San Juan Cove	San Diego Bay Chula Vista		
Del Mar City Beach	North Pacific Passage	Mission Bay,	Shell Beach		
La Jolla Community Beach	Mission Bay, Quivera Basin	Santa Barbara Cove	Solana Beach City Beaches		
Leucadia	Mission Bay, Riviera Shores	Mission Bay,	Torrey Pines City Beach		
	Mission Bay, Sail Bay	Ventura Cove	Tourmaline Surfing Park		
		Oceanside Harbor			
San Francisco County					
Aquatic Park, Aquatic Park, Mid-beach	1	1/wk	63	14%	5
Aquatic Park, Hyde Street Pier	1	1/wk	56	5%	5
Baker Beach, Baker Beach, Lobos Creek at Lower Parking Lot	1	1/wk	84	32%	77

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
San Francisco County					
Baker Beach, Baker Beach, Opposite Seacliff 2 Pumping Station	1	1/wk	60	7%	77
Baker Beach, Baker Beach, Upper Parking Lot	1	1/wk	84	6%	77
Candlestick Point, Jack Rabbit Beach	1	1/wk	56	7%	29
Candlestick Point, Sunnydale Cove	1	1/wk	76	32%	29
Candlestick Point, Windsurfer Circle	1	1/wk	100	52%	29
China Beach	1	1/wk	59	8%	7
Crissy Field, Crissy Field West	1	1/wk	65	18%	22
Crissy Field, New Beach	1	1/wk	68	22%	22
Fort Funston	1	1/wk	6	17%	8
Ocean Beach, at Balboa St.	1	1/wk	59	8%	19
Ocean Beach, at Lincoln Ave.	1	1/wk	64	16%	19
Ocean Beach, at Pacheco St.	1	1/wk	7	29%	19
Ocean Beach, at Sloat Blvd.	1	1/wk	62	11%	19
Ocean Beach, at Vicente St.	1	1/wk	10	60%	19
San Luis Obispo County					
Avila Beach, AB8	1	1/wk	50	6%	2
Avila Beach, AB9	1	1/wk	58	17%	2
Cayucos Beach, CAY13	1	1/wk	47	0%	1
Cayucos Beach, CAY14	1	1/wk	47	2%	1
Cayucos Beach, CAY15	1	1/wk	47	2%	1
Montana De Oro, HAZ10	not tier 1	1/wk	47	0%	0
Morro Bay City Beach, MB11	1	1/wk	47	0%	0
Morro Bay City Beach, MB12	1	1/wk	48	2%	0
Morro Bay City Beach, MB13	1	1/wk	48	2%	0
Morro Strand State Beach, MB14	1	1/wk	49	4%	1
Oceano Dunes State Rec Area, OCB10	1	4/yr	1	0%	0
Olde Port Beach, OLDE12	1	1/wk	54	13%	2
Pismo State Beach, Oceano, OCB11	1	1/wk	45	0%	1
Pismo State Beach, Oceano, OCB12	1	1/wk	48	2%	1
Pismo State Beach, Oceano, OCB13	1	1/wk	47	0%	1
Pismo State Beach, PB3	1	1/wk	50	6%	8
Pismo State Beach, PB4	1	1/wk	59	20%	8
Pismo State Beach, PB5	1	1/wk	49	4%	8
San Simeon Beach, PICO23	1	1/wk	47	0%	4
San Simeon Beach, SEW7	1	1/wk	49	8%	4
Beaches in San Luis Obispo County that were not monitored and that had no closing or advisory days in 2010:					
Hearst Memorial State Beach	Moonstone Beach	S Morro Strand State Beach	Shell Beach		
Leffingwell Beach	N Morro Strand State Beach	Sewers	Spyglass Park		

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
San Mateo County					
Aquatic Park	1	1/wk	45	33%	58 (50)*
Bean Hollow State Beach	1	1/wk	29	3%	28
Coyote Point County Park	1	1/wk	44	9%	63
Dunes State Beach	1	1/wk	45	4%	13
Fitzgerald Marine (Moss Beach)	1	1/wk	43	19%	55
Francis State Beach	1	1/wk	44	2%	13
Gazos Creek Access	1	1/wk	30	0%	0
Kiteboard Beach	not tier 1	no data	28	29%	57
Lakeshore Park Rec Center	1	4/yr	46	37%	93
Montara State Beach	1	1/wk	45	2%	7
Oyster Point Marina	not tier 1	1/wk	38	24%	96
Pacifica State Beach, Linda Mar Beach #5	1	1/wk	47	13%	35
Pescadero State Beach	1	1/wk	30	10%	27
Pillar Point #7	1	1/wk	48	35%	145 (51)*
Pillar Point #8	1	1/wk	48	23%	145 (51)*
Pomponio State Beach	1	1/wk	30	0%	0
Rockaway Beach	1	1/wk	46	4%	16
Roosevelt State Beach	1	1/wk	45	7%	20
San Gregorio State Beach	1	1/wk	18	6%	7
Sharp Park Beach #3	1	1/wk	33	0%	0
Sharp Park Beach #6	1	1/wk	32	0%	0
Surfers Beach	1	1/wk	47	2%	8
Venice State Beach	1	1/wk	45	7%	27
Beaches in San Mateo County that were not monitored and that had no closing or advisory days in 2010:					
Ano Nuevo State Refuge	Martin's Beach	Pigeon Point Beach	Sand Beach		
Capistrano Blvd. Beach	Maverick's Beach	Pillar Point 2	Thornton State Beach		
El Grandada	Miramar Beach	Pillar Point Harbor	Tunitas Beach		
Elmar Beach	Mori Point	Poplar Beach	Vallejo Beach		
Gray Whale State Beach	Naples Beach	Redondo Beach			
Manor Beach	Pebble Beach	Ross's Cove			
Santa Barbara County					
Arroyo Burro	1	1/wk	41	39%	53 (58)*
Butterfly Beach	1	1/wk	35	14%	17
Carpinteria State	1	1/wk	34	9%	4
East Beach- Mission Creek	1	1/wk	35	20%	33
East Beach Sycamore Creek	1	1/wk	33	9%	33
El Capitan State Beach	1	1/wk	35	14%	9
Gaviota State Beach	1	1/wk	33	9%	5
Goleta Beach	1	1/wk	37	27%	32 (58)*

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Santa Barbara County					
Guadalupe Dunes Beach	1	1/wk	28	4%	7
Hammonds	1	1/wk	36	17%	17
Hope Ranch Beach	1	1/wk	34	9%	13
Jalama Beach	1	1/wk	30	10%	7 (63)*
Leadbetter	1	1/wk	37	19%	15 (65)*
Refugio State Beach	1	1/wk	34	15%	14
Sands at Coal Oil Point	1	1/wk	34	12%	8
Summerland Beach	1	1/wk	34	12%	9
Beaches in Santa Barbara County that were not monitored and that had no closing or advisory days in 2010:					
1,000 Steps	Depressions	Loon Point	Rincon Beach		
Arroyo Quemado	Devereaux	Mesa Lane	Santa Claus Lane		
Campus Pt.	Ellwood	Miramar	Surf Beach		
Carpinteria City	Haskell's	Ocean Beach	West Beach		
Coal Oil Point	Isla Vista Beach	Padaro Lane			
Santa Cruz County					
Aptos Creek Mouth	1	1/wk	25	16%	0
Capitola Beach east of Jetty	1	1/wk	23	22%	21
Capitola Beach west of Jetty	1	1/wk	23	30%	21
Corcoran Lagoon Beach	1	1/mo	4	0%	0
Cowell Beach West of the Wharf	1	1/wk	26	12%	0 (150)*
Cowell's Beach at the Stairs	1	1/wk	19	0%	0 (150)*
Hidden Beach	1	1/mo	7	14%	0
Lighthouse Beach	1	1/mo	4	0%	0
Main Beach at Boardwalk	1	1/wk	24	4%	11
Main Beach at San Lorenzo River	1	1/wk	23	13%	11
Manresa Beach	1	1/mo	7	29%	10
Mitchell's Cove Beach	1	1/mo	4	25%	0
Moran Lake, County Beach	1	1/mo	4	0%	0
Natural Bridges Beach	1	1/wk	22	9%	0
New Brighton Beach	1	1/wk	22	14%	9
Pajaro Dunes Beach	1	1/wk	6	17%	0
Pleasure Point Beach	1	1/mo	5	20%	0
San Vicente Beach	1	1/mo	3	0%	0
Scott Creek Beach	1	1/mo	4	25%	0
Seabright Beach	1	1/wk	23	22%	0
Seacliff Beach	1	1/wk	25	16%	0
Sunny Cove Beach	1	1/mo	4	0%	8
Sunset Beach	1	1/mo	7	0%	0
Twin Lakes Beach	1	1/wk	23	26%	0
Waddell Creek Beach	1	1/mo	4	0%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Santa Cruz County					
Beaches in Santa Cruz County that were not monitored and that had no closing or advisory days in 2010:					
Beercan Beach		Hooper's Beach	Schwan Lake	Trestle Beach	
		Neary Lagoon mouth	Seascape Beach		
Sonoma County					
Black Point	1	1/wk	7	0%	0 (191)*
Campbell Cove State Beach	1	1/wk	7	29%	0
Doran Park County Regional Park	1	1/wk	7	0%	0
Goat Rock State Beach	1	1/wk	6	0%	0
Gualala Regional Park Beach	1	1/wk	7	0%	0
Salmon Creek State Beach	1	1/wk	7	43%	29
Still Water Cove Regional Park	1	1/wk	7	14%	0 (191)*
Beaches in Sonoma County that were not monitored and that had no closing or advisory days in 2010:					
Still Water Cove Regional Park Beach					
Ventura County					
County Line Beach	1	1/wk	25	0%	0
Deer Creek Beach	1	1/wk	1	0%	0
Emma Wood State Beach	1	1/wk	48	2%	0
Faria County Park	1	1/wk	51	4%	0
Hobie Beach	1	1/wk	46	4%	1
Hobson County Park	1	1/wk	26	0%	0
Hollywood Bch–La Crescen.	1	1/wk	26	0%	14
Hollywood Bch–Los Robles	1	1/wk	51	10%	14
Kiddie Beach	1	1/wk	52	13%	15
La Conchita Beach	1	1/wk	1	0%	0
Mandos Cove Beach	1	1/wk	26	0%	0
Marina Park Beach	1	1/wk	29	10%	3
Mussel Shoals Beach	1	1/wk	26	0%	0
Oil Piers Beach	1	1/wk	52	4%	1
Ormond Bch–Indust. Drain	1	1/wk	45	13%	13
Ormond Beach–J St.	1	1/wk	53	13%	13
Ormond Beach–Arnold Rd.	1	1/wk	42	10%	13
Oxnard Bch Pk–Falkirk Ave	1	1/wk	26	0%	0
Oxnard Bch Pk–Starfish Dr	1	1/wk	26	0%	0
Oxnard Bch–5th St.	1	1/wk	26	4%	0
Oxnard Bch–Outrigger Way	1	1/wk	26	0%	0
Peninsula Bch/Harbor Cove	1	1/wk	29	14%	3
Point Mugu Beach	1	1/wk	27	4%	0
Port Hueneme Beach Pk.	1	1/wk	52	8%	5
Promenade Pk–Calif. St.	1	1/wk	27	4%	1
Promenade Pk–Figueroa St.	1	1/wk	51	6%	1

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Ventura County					
Promenade Pk–Redwood Apts	1	1/wk	26	4%	1
Rincon Beach–Creek Mouth	1	1/wk	52	8%	1
Rincon Beach–Flagpole	1	1/wk	26	8%	1
San Buenaventura State Beach, Dover Lane	1	1/wk	28	7%	19
San Buenaventura State Beach, Kalorama St.	1	1/wk	27	7%	19
San Buenaventura State Beach, San Jon Rd.	1	1/wk	52	13%	19
San Buenaventura State Beach, Weymouth Ln.	1	1/wk	27	4%	19
Silverstrand Bch–S. Paula	1	1/wk	50	6%	0
Silverstrand Bch–San Nic.	1	1/wk	51	4%	0
Silverstrand Bch–Sawtelle	1	1/wk	51	4%	0
Solimar Beach	1	1/wk	51	8%	6
Staircase Beach	1	1/wk	26	0%	0
Surfer's Knoll Beach	1	1/wk	51	6%	0
Surfer's Point at Seaside	1	1/wk	51	10%	0
Sycamore Cove Beach	1	1/wk	26	0%	0
Thornhill Broome Beach	1	1/wk	26	0%	0
Beaches in Ventura County that were not monitored and that had no closing or advisory days in 2010:					
McGrath State Beach	Rincon Parkway North	South Jetty Beach	Ventura River		
Rincon Creek	Seaside Wilderness Park Beach	Surfers Point at Seaside			

*Reported closing or advisory days are for events lasting six consecutive weeks or less. Number of days in parentheses are for events lasting more than six consecutive weeks.

NOTES

- 1 Larry Honeybourne, Orange County Health Care Agency. EPA Beach Conference. Miami, FL. March 2011.
- 2 Alexandria Boehm, Stanford University. Personal communication. April 2011.
- 3 California Regional Water Quality Control Board Santa Ana Region. Time Schedule Order No. R8-2004-0067 for Orange County Sanitation District. September 17, 2004.
- 4 County of Orange Health Care Agency. A Collaborative, Integrated, Regional Ocean Water Quality Monitoring Program for Orange County. May 13, 2010.
- 5 Michael Gjerde, California State Water Resources Control Board, personal communication, May 2011.
- 6 Michael Gjerde, California State Water Resources Control Board, personal communication, April 2011.
- 7 California State Water Resources Control Board. Beach Water Quality Information, accessed at www.swrcb.ca.gov/water_issues/programs/beaches/beach_water_quality. February 2011.
- 8 San Diego County Department of Environmental Health. San Diego County 2004 Beach Closure & Advisory Report. May 2008.
- 9 Los Angeles County Department of Public Health, Beach Advisories, available at http://publichealth.lacounty.gov/phcommon/public/eh/water_quality/beach_grades.cfm.

Testing the Waters 2011 reflects data as of June 27, 2011.