



Heal the Bay

2010 End of Summer Beach Report Card

Executive Summary

Heal the Bay's End of Summer Beach Report Card provides beachgoers with essential water quality information by grading 453 monitoring locations in California, from Humboldt County south through San Diego County. This summer also marks the debut of beach water quality grades from our northern neighbors, Oregon and Washington. The 2010 End of Summer Beach Report Card incorporates approximately 150 additional monitoring locations along the coast of Washington and Oregon.

The grades are based on dry weather water quality data provided by over 20 different entities throughout California, Oregon and Washington. The data presented in this report was collected from Memorial Day through Labor Day 2010. This is the first Beach Report Card to cover the entire west coast. The Beach Report Card is intended to give an overview of summer water quality for beaches throughout California, Oregon and Washington.

The Beach Report Card is based on the routine monitoring of beaches conducted by local health agencies and dischargers. Water samples are analyzed for bacteria that indicate pollution from numerous sources, including fecal waste. The better the grade a beach receives, the lower the risk of illness to beach users. The report is not designed to measure the amount of trash or toxins found at beaches. The Beach Report Card would not be possible without the cooperation of all of the shoreline monitoring agencies in California, Oregon and Washington.

This was the fourth consecutive summer that California earned excellent water quality grades statewide, with 92% of sites receiving A or B grades during the high-traffic beach-going season. Pacific Northwest ocean users also saw very good water quality this summer. While 60 beaches were monitored throughout the summer in Oregon, only 13 beaches were monitored frequently enough (at least weekly) to be considered for this report. All of Oregon's 13 regularly monitored beaches received A grades. Washington beaches were also clean with 93% of the 141 monitored beaches receiving A and B grades.

Beach Report Card's Expansion to Oregon and Washington

This summer was our first foray into collecting water quality data from outside of California. Heal the Bay has partnered with Oregon and Washington state agencies to provide grades for these areas. As a result, Heal the Bay's Beach Report Card now covers coastal water quality from Washington through California on a weekly basis during the summer months.

Heal the Bay would like to give special thanks to Oregon's Department of Human Services and Oregon's Department of Environmental Quality for providing water quality data, in order to make the Beach Report Card possible in Oregon. We would also like to equally thank our friends at Washington's Department of Health and Department of Ecology, who jointly manage Washington's beach program. All agencies provided valuable advice and showed a willingness to collaborate, making water quality and public health protection a priority in Oregon and Washington.

Oregon: For Oregon's first End of Summer Beach Report Card, the state exhibited excellent water quality, earning all A grades this summer. However, even though Oregon monitored over 60 beach locations throughout the state this summer, only 13 (22%) of these locations were monitored frequently enough (at least once a week) to receive a grade in this report. Heal the Bay looks forward to working with Oregon agencies to increase the number of monitoring locations covered by the Beach Report Card.

Washington: The State of Washington also made a very good End of Summer Beach Report Card debut by earning 93% A and B grades this summer. 10 out of 141 monitoring locations received fair to poor water quality grades with only 3 of these locations receiving F grades: Oak Harbor City Beach Park (west), Freeland County Park Holmes Harbor (east), and Pomeroy Park's Manchester Beach (north). Heal the Bay looks forward to working with Washington to highlight and address those monitoring locations that demonstrate poor water quality.

California: California's beach monitoring programs continue to be severely threatened by a lack of sustainable funding beyond 2010. For the last 3 years, over \$1 million in general funding has not been available for the State's beach water quality monitoring program. These funds were used for the collection and processing of beach water samples, as well as posting water quality notification signs alerting the public of potential health risks. To cover the loss of general funding, the State Water Resources Control Board has provided supplemental bond money through the end of 2010. It is unknown if the State Board will continue to fund California's beach monitoring program with this bond money. There is currently no secured source of funding beginning in 2011.

Water quality data collected at California beaches this past summer shows it was one of the cleanest summers on record. Despite a few problem areas, statewide water quality was very good with 92% A and B grades. There were 37 locations (8%) throughout the state that received fair-to-poor water quality grades (10 Cs, 9 Ds and 18 Fs).

San Diego County: Overall water quality at beaches in San Diego has been excellent, and slightly better than last year, with all locations receiving an A or B grade. Of the 77 water monitoring locations, 76 received A grades with only one location earning a B grade. The historically problematic Pacific Beach Point, which received an F grade in last summer's report, received an A+ this summer by exhibiting no exceedances of state standards for bacteria. This may be due to a change in monitoring location. In June 2009, the location was moved further away from the massive amounts of beach wrack (kelp) and wildlife that tends to congregate there (shorebirds, flies, etc).

There were three known sewage spills in San Diego County that led to beach closures this summer. The Imperial Beach shoreline was closed for two days in early May due to sewage contaminated runoff from the Tijuana Estuary. Beaches were also closed for two days at the San Diego river-mouth, from Dog Beach to Stub Jetty from an approximately 3,400 gallon spill near the San Diego River in which at least 1500 gallons entered the river. The third spill, caused by blockage of debris, was approximately 6,000 gallons at Fallbrook Creek between Brandon Road and Vine Street. Warning signs were posted at the storm outlet from August 7th until August 10th. A number of spills occurring across the border in Tijuana, Mexico have impacted water quality in southern San Diego County. California regulators have little control to issue cleanup orders or fines, as they would in a local city. Despite recent improvements made to Tijuana's sewage system, these dry weather spills are evidence for additional improvements.

Orange County: Water quality at beaches in Orange County this past summer was just slightly lower than last summer, but still excellent overall with 97% of beaches receiving an A or B grade. Poche Beach still continues to have poor water quality and received an F grade this summer. This is most likely due to technical problems with the year-old UV treatment facility at the mouth of Poche Creek. San Clemente has recently initiated a source tracking effort for the beach. Newport Bay (Garnet Avenue Beach) earned the other F grade for Orange County. The historically poor water quality at Doheny's Dana Point (North Beach) earned another poor grade (C) for Orange County. All other historically poor beaches in Dana Point received A grades (all of the Baby beaches) for the second summer in a row.

Notably, Orange County conducted a rapid methods pilot project for eight weeks this summer, with the goal of generating same-day beach water quality results to increase public health protection. Current water quality methods (for measuring bacteria) take 18 to 24 hours to process results, meaning that the most current beach water quality information is from the day before. During the pilot project, a total of 9 beaches were sampled daily with the goal of having results no later than noon of the same day. LCD screens were placed at these pilot beaches to display the most current water quality results of the day to beach users. Results from the eight weeks of daily sampling are currently being analyzed and will be made available to the public this fall.

There were four known sewage spills in Orange County during the summer of 2010. Three sites along Laguna Beach were closed for five days in late June due to a sewage spill. On July 21st, another sewage spill resulted in a one day beach closure 150 feet up-coast and down-coast of Aliso Creek at Aliso County Beach. In early July, all of Little Corona Beach in Newport Bay was closed for one day as a result of a sewage spill. On August 7th a 1,125 gallon sewage spill was caused by a line blockage in the City of La Habra. This spill resulted in the closure of Seal Beach from the San Gabriel River to 300 feet down coast for three days.

Los Angeles County: Similar to last summer, Los Angeles water quality grades were fair, with 79% of beaches receiving A and B grades. Avalon Beach once again exhibited extremely poor water quality with all five monitoring sites receiving F grades. Despite this chronic problem and human sewage contributions to poor beach water quality here, neither the Los Angeles County health department nor the Regional Water Board has stepped in to require additional fecal bacteria elimination efforts in Avalon. This is the sixth summer in a row that none of the five monitoring locations have received A or B grades. Even though partial sewer infrastructure

improvements were made through CBI funding, Avalon's water quality is showing no signs of improvement. It is imperative that the City of Avalon continues its Water Quality Improvement Project to replace all aging sewer and lateral lines throughout the city. This approach may seem aggressive, but after a decade of extremely poor water quality, this may be the only option towards improving water quality at Avalon Beach.

Santa Monica Bay beaches had slightly poorer water quality than last summer, with 58 (87%) of 67 monitoring locations receiving A or B grades (compared to 91% last year). However, overall water quality at Santa Monica Bay beaches was very good. A definite highlight this summer is that the chronically polluted Santa Monica Pier, plagued by many years of F grades, earned an A grade with dramatically improved water quality: the result of a storm drain and runoff diversion replacement project and the installation of bird exclusion nets under part of the pier. The dry weather runoff diversion projects at Temescal Canyon and on PCH (16800 Pacific Coast Highway) experienced intermittent construction problems this summer resulting in an F and D grade respectively. Normally these beaches receive A grades. Other beaches receiving poor grades this summer were Cabrillo Beach, harborside at restrooms (F), Solstice Canyon in Malibu (D), Surfrider Beach near the Malibu Pier (D), Dockweiler near Ballona Creek (D), Topanga Canyon (C) and Redondo Pier (C).

Long Beach's water quality has improved the past two summers. This summer Long Beach received 73% A and B grades while last summer only 60% of Long Beach beaches received good to excellent grades. In general, beach water quality in Long Beach tends to be impacted by the Los Angeles River. This idea is supported by an extensive source tracking study which showed the vast majority of bacterial contamination at Long Beach beaches was a result of pollution from the Los Angeles River. The Los Angeles Regional Water Quality Control Board has since developed a Los Angeles River Bacteria Dry and Wet Weather Total Maximum Daily Load (TMDL). A TMDL is the maximum amount of pollutant a water body can receive in order to still meet water quality standards. However, the pollution limits won't be implemented for another 25 years. Heal the Bay fought unsuccessfully for a separate and shorter implementation deadline for dry weather. Hopefully through effective implementation, this pollution limit will lead to long-term improved water quality for beaches in Long Beach. There were two poor grades (F) in Long Beach this summer at Colorado Lagoon (north and south).

Although Paradise Cove Pier (at Ramirez Canyon Creek mouth) earned a D grade overall for this summer's dry months, it has received straight A weekly grades since early July. In early June, the City of Malibu completed an urban runoff treatment facility located next to the Ramirez Creek mouth. The new treatment facility is designed to divert and treat water from the existing adjacent concrete-lined channel that flows year-round with water from the Ramirez Canyon watershed. This three-stage treatment facility consists of a sediment removal system, filtration system, and UV disinfection system. Even though the treatment facility was completed and fully functioning by late June, the earlier exceedances brought down the overall summer grade. We expect grades to remain consistently good in the future.

Cabrillo Beach in San Pedro Bay has recently undergone two failed attempts at improving water quality within the past three years, including the addition of a water circulation system and the removal of a rock jetty in an attempt to improve water circulation. This past year, bird exclusion

devices, consisting of tall permanent metal rods in the sand connected at the top by multiple metal wires, were installed over a large portion of the beach to deter birds from landing. After consistently poor grades this summer at Cabrillo Beach (harborside at restrooms) and hundreds of birds observed on the beach despite the exclusion devices, this may yet be another failed attempt at improving water quality at this location. This is the first summer that Cabrillo Beach must meet fecal bacteria water quality standards 100% of the time during summer dry weather (April 1st –October 31st), under a TMDL imposed in 2005 by the Los Angeles Regional Water Quality Control Board. A different strategy to improve water quality must be identified due to the 103 TMDL Clean Water Act violations just from this summer alone.

Below is a table of Santa Monica Bay beaches water quality exceedances so far this AB411 (the number of times the beach exceeded legal bacteria levels) between April 1st, 2010 and September 6th, 2010. Notably, last AB411 there were 103 bacterial pollution limit violations at the Santa Monica Municipal Pier by Labor Day 2009 versus eight violations this year.

Santa Monica Bay Beach TMDL Exceedance Count 4/1/2010 -- 9/6/2010	
Exceedances	Location
102	Cabrillo Beach - harborside at restrooms
60	Topanga State Beach at creek mouth
36	Redondo Municipal Pier - south side
34	Dockweiler State Beach at Ballona Creek mouth
29	Surfrider Beach daily
17	Santa Monica Municipal Pier
15	Marina del Rey, Mothers' Beach-Playground area
13	Will Rogers State Beach at Bel Air Bay Club
13	Solstice Canyon at Dan Blocker County Beach
11	Herondo Street storm drain
11	Will Rogers State Beach at Temescal Canyon drain
11	Paradise Cove Pier at Ramirez Canyon Creek mouth
9	Marie Canyon storm drain at Puerco Beach, at 24572 Malibu Rd.
8	Cabrillo Beach - harborside at boat launch
8	Malibu Pier- 50 yards east
6	Will Rogers State Beach at Santa Monica Canyon drain
6	Puerco State Beach at creek mouth
6	Las Flores State Beach at Las Flores Creek
4	Big Rock Beach at 19948 PCH stairs
4	Escondido Creek, just east of Escondido State Beach
3	Marina del Rey, Mothers' Beach-lifeguard tower
3	Redondo State Beach at Topaz St. - north of jetty
3	Dockweiler State Beach at Culver Blvd. drain
2	Manhattan Beach at 28th St. drain
2	Torrance Beach at Avenue I drain
2	Dockweiler State Beach at Imperial Hwy drain
2	Will Rogers State Beach at Pulga Canyon storm drain
2	Dockweiler State Beach at Grand Ave. drain
2	Santa Monica Beach at Pico/Kenter storm drain

2	Venice City Beach at Windward Ave. drain
1	Santa Monica Beach at Wilshire Blvd. drain
1	Santa Monica Beach at Montana Ave. drain
1	Ocean Park Beach at Ashland Ave. drain
1	Will Rogers State Beach at 17200 PCH
1	Royal Palms State Beach
1	Nicholas Beach at San Nicholas Canyon Creek mouth
1	Castlerock Storm Drain at Castle Rock Beach
1	Hermosa Beach Pier- 50 yards south

This summer, Avalon’s waste water treatment plant, United Water Services Inc., had technical problems with one of its pumps, causing beach closures at Pebbly Beach. This beach is not a monitored beach by the County of Los Angeles. There were no additional known sewage spills in Los Angeles County affecting beach water quality.

Ventura County: Overall water quality at beaches throughout Ventura County remains among the best in the state. All monitored beaches received A grades in this report. Due to state budget cuts, this is the second summer that the number of monitoring locations in Ventura County remained at 40, which is a 26% decrease from prior years (54 locations).

There were no known sewage spills in Ventura County reported to Heal the Bay this summer.

Santa Barbara County: The water quality at beaches in Santa Barbara County was slightly lower than last summer’s, with 88% of beaches receiving A or B grades (compared to 94% last summer), but overall water quality was very good. Goleta Beach (C) and Arroyo Burro (F) were the only two locations that did not earn an A or B grade for Santa Barbara County this summer.

There were no known sewage spills in Santa Barbara County reported to Heal the Bay this summer.

San Luis Obispo County: Water quality at beaches in San Luis Obispo County was excellent again this past summer, with only one monitoring location receiving lower than an A or B grade. Pismo Beach Pier (C) again received the county’s only poor grade. This is a slight improvement from last year’s D grade. Overall 95% of beaches in San Luis Obispo received A or B grades, exactly the same amount as last summer.

There were no known sewage spills in San Luis Obispo County reported to Heal the Bay this summer.

Monterey County: Overall Beach water quality in Monterey County was pretty good, with 75% of beaches earning an A or B grade. Last summer 88% of beaches earned A or B grades, Six out the eight monitoring locations received an A grade with only two locations, Monterey Municipal Beach at the commercial wharf and Lovers Point Park, both earning the lowest overall county grade (C).

One known sewage spill, estimated at up to 10,000 gallons, occurred in Monterey County in mid-July after roots growing into the sewer main caused a blockage. The sewage spilled into a

nearby creek and stormdrain system, with an outfall at Monterey Municipal Beach. The beach was closed from July 8th and July 9th.

Santa Cruz County: Overall Santa Cruz beach water quality made a slight improvement from last year, with 71% of beaches receiving A or B grades (over 69% from last summer). Cowell Beach had extensive periods of high bacteria that contributed to three out of the four F grades for Santa Cruz County. Santa Cruz Environmental Health Service has been tracking the problem the past two summers and is fairly certain that quantities of decaying kelp on the beach are a major source of high bacteria in the area. Urban runoff may also be a potential source contributing to increased bacteria concentrations. Repeating the water quality trend from last summer, Capitola Beach, west of the jetty, received the county's only other F grade. All other Santa Cruz county beaches scored good grades (A or B).

There were no known sewage spills in Santa Cruz County reported to Heal the Bay this summer.

San Mateo County: Overall, San Mateo's ocean water quality was excellent and exhibited a slight improvement from last summer. The lowest grades in the county were found at bayside locations. Of the 21 regularly monitored locations, 19 (90%) received A or B grades. Water quality at Aquatic Park (D) and Lakeshore Park (D) earned the county's only poor grades despite a slight improvement from their F grades last summer.

There were no known sewage spills in San Mateo County reported to Heal the Bay this summer.

Alameda County: This is the fourth year in a row that Alameda County beaches have shown nearly perfect summer-time water quality, with all seven monitoring locations receiving (100%) A grades.

There were no known sewage spills in Alameda County reported to Heal the Bay this summer.

San Francisco County: Beach water quality in San Francisco County this summer was excellent, with 93% of beaches earning an A or B grade. Of 14 monitoring locations that were sampled regularly over the summer, 12 received A grades. Candlestick Point (at Sunnydale Cove) received a B grade, and Baker Lobos Creek once again received the county's only poor grade (D); a slight improvement from last summer's F grade.

There were no known sewage spills in San Francisco County reported to Heal the Bay this summer.

Contra Costa County: This year, two Keller Beach locations received F grades and one received a D grade for repeated exceedances of the geometric mean standard for total coliforms. Total coliforms are generally not associated with human source contamination (sewage) or increased human health risk, but are more indicative of decomposing marine vegetation (eel grass, seaweed, etc.) that tends to be routinely deposited at the Keller Beach site due to San Francisco Bay tidal action.

There were no known sewage spills in Contra Costa County reported to Heal the Bay this summer.

Marin County: Water quality grades at beaches throughout Marin County were excellent again this summer and among the best in the state, with all 23 monitoring locations (100%) receiving A or B grades (21 receiving As).

There were no known sewage spills in Marin County reported to Heal the Bay this summer.

Sonoma County: Due to lack of adequate funding for the monitoring program, Sonoma County didn't begin monitoring all locations until July 6, 2010. With the same excellent water quality as the last two summers, all seven monitoring locations that were sampled in Sonoma County received A grades.

Campbell Cove again avoided its historical late summer water quality problems and had zero exceedances of state standards during the timeframe of this report. CBI improvement projects, including a fecal bacteria source identification study, tidal circulation study, various source abatement measures and the replacement of a failing septic system at Oceanfront Park (adjacent to Campbell Cove Beach), may be responsible for the drastic water quality improvement at this location.

There were no known sewage spills in Sonoma County reported to Heal the Bay this summer.

Mendocino: Five locations were monitored in Mendocino County frequently enough to earn grades in this report. All monitoring locations received A grades.

There were no known sewage spills in Mendocino County reported to Heal the Bay this summer.

Humboldt County: Similar to the last two summers, all six monitoring locations received A grades in this report.

There were no known sewage spills in Humboldt County reported to Heal the Bay this summer.

Del Norte County: Heal the Bay was unable to obtain the data from Del Norte County in time for this analysis.

There were no known sewage spills in this county that led to beach closures.

Standardized Monitoring

While some beaches have seen dramatic improvement in water quality over the years, others still have a long way to go. Vital beach water quality issues that still need to be tackled include improving coordinated monitoring between counties, guaranteeing that beaches are monitored year-round in a standardized fashion, and ensuring that chronically polluted beaches receive the necessary funding for remediation and are able to use this funding to complete projects in a timely manner. Another water quality issue brought to our attention during our expansion to

Oregon and Washington was the inconsistency in water quality criteria among states. Heal the Bay believes that water quality criteria should be uniform between states for constancy in public health protection. Heal the Bay will continue to work with health agencies to bring awareness and implementation of these criteria.

Most public agencies monitor for fecal indicator bacteria using monitoring plans that have been developed without collaboration with other regions. Seven years ago, Heal the Bay worked with the United States Environmental Protection Agency (USEPA) to formulate a model monitoring and public notification program. This plan recommended for public agencies to monitor beaches at a certain depth and distance from a storm drain and ensure the appropriate posting of warning signs to the public. A number of these measures were incorporated into health department monitoring plans. But there are still disparities among counties with regards to the distance at which their samples are taken from a storm drain. Some counties, such as Los Angeles, measure right in front of the storm drain, while other counties are ignoring plan recommendations by measuring at 25, 50, or even 83 yards from the storm drain. This discrepancy makes it difficult to compare results from county to county or even beach to beach, and is not adequately protective of the public health. Further efforts will be made in the coming year to unite all stakeholders in a standardized monitoring process. Heal the Bay will work to implement a standardized monitoring plan that can be applied statewide to allow more accurate comparison of beach water quality and improve public health protection.

About the Beach Report Card

Heal the Bay's Beach Report Card website beachreportcard.org is updated every Friday with weekly Beach Report Card grades for all sampled locations. Heal the Bay's Beach Report Card is based on weekly water quality monitoring data provided by dischargers and health agencies. Data is analyzed as soon as it is made available by these agencies. The report is a comprehensive examination of coastal water quality throughout California, Oregon, and Washington. Beaches are graded using an A-F scale based on the risk of ocean users becoming ill. Samples are analyzed for three indicator bacteria in California (total coliform, fecal coliform, and Enterococci) and one indicator bacteria (Enterococci) in Oregon and Washington (water quality bacteria standards are decided on a state-to-state basis). A fact sheet detailing the exact methodology used in determining grades for each location is available from the Heal the Bay office or online at www.healthebay.org/brc/methodology.

The report is not designed to measure the amount of trash or toxins found at local beaches. Heal the Bay reminds you not to swim or surf within 100 yards of any flowing storm drain or for three days after a rainstorm. After a rain, indicator bacteria counts at beaches throughout California usually *far exceed* health criteria stipulated in the state's Beach Closure and Health Warning Protocol. Data analysis is currently in process to analyze rainfall thresholds and effects in Oregon and Washington.

Table 1

California, Oregon, and Washington's Summer Beach Water Quality 2010							
Summary	A	B	C	D	F	A-B%	C-F%
California	398	18	10	9	18	92%	8%
Oregon	13	0	0	0	0	100%	0%
Washington	124	7	2	5	3	93%	7%

Table 2

California's County Summer Beach Water Quality 2010							
Summary	A	B	C	D	F	A-B%	C-F%
Humboldt	6	0	0	0	0	100%	0%
Mendocino	5	0	0	0	0	100%	0%
Sonoma	7	0	0	0	0	100%	0%
Marin	21	2	0	0	0	100%	0%
Contra Costa	0	0	0	1	2	0%	100%
San Francisco	12	1	0	1	0	93%	7%
Alameda	7	0	0	0	0	100%	0%
San Mateo	16	3	0	2	0	90%	10%
Santa Cruz	9	1	0	0	4	71%	29%
Monterey	6	0	2	0	0	75%	25%
San Luis Obispo	17	1	1	0	0	95%	5%
Santa Barbara	14	0	1	0	1	88%	13%
Ventura	40	0	0	0	0	100%	0%
Los Angeles	67	6	5	5	9	79%	21%
LA without Long Beach	60	2	3	5	7	84%	16%
Long Beach only	7	4	2	0	1	73%	27%
LA TMDL beaches	59	2	5	3	1	87%	13%
Orange County	95	3	1	0	2	97%	3%
San Diego	76	1	0	0	0	100%	0%
State without LA County	331	12	5	4	9	95%	5%

Table 3

Oregon's County Summer Beach Water Quality 2010							
Summary	A	B	C	D	F	A-B%	C-F%
Clatsop	10	0	0	0	0	100%	0%
Tillamook	3	0	0	0	0	100%	0%

Table 4

Washington's County Summer Beach Water Quality 2010							
Summary	A	B	C	D	F	A-B%	C-F%
Clallam	22	2	0	0	0	100%	0%
Grays Harbor	9	0	0	0	0	100%	0%
Island	6	0	0	1	2	67%	33%
Jefferson	5	2	1	1	0	78%	22%
King	21	0	0	0	0	100%	0%
Kitsap	20	0	1	2	1	83%	17%
Mason	6	0	0	0	0	100%	0%
Pierce	12	0	0	0	0	100%	0%
Snohomish	12	3	0	0	0	100%	0%
Thurston	3	0	0	0	0	100%	0%
Whatcom	8	0	0	1	0	89%	11%

Heal the Bay is a nonprofit environmental organization dedicated to making Southern California coastal waters and watersheds, including Santa Monica Bay, safe, healthy and clean. We use research, education, community action and advocacy to pursue our mission.

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