



Heal the Bay

Heal the Bay's 2008
California Summer Beach Report CardSM

Celebrating the 10th summer of AB411

With the completion of this year's End of Summer Beach Report Card, Heal the Bay draws attention to the 10th anniversary of the implementation of California Assembly Bill 411. In the fall of 1997, California took huge steps forward in protecting public health by adopting AB411, a bill designed to create minimum bacteria standards and monitoring requirements for ocean water quality at public beaches in California. The bill went into effect two years later, and beginning on April 1, 1999, all frequently visited beaches in California were required to be monitored on at least a weekly basis during the summer months (April 1 – Oct. 31). California has been operating under AB411 for 10 summers and Heal the Bay is proud to say that as co-authors of the bill, we have seen extensive water quality improvement during the summer months.

Under AB411's monitoring requirements, organizations like Heal the Bay, the State Water Resources Control Board and local health agencies were able to keep track of beaches that frequently exceeded beach water quality standards. This public watchdog effort brought attention to the well-publicized beach closures in Huntington Beach during the summer of 1999. For two months, large sections of Huntington Beach were closed due to excessive levels of indicator bacteria in the water. This led the Executive Officer of the state water board to direct Orange County to investigate, identify, and remediate the sources of microbial contamination. The following year, Gov. Gray Davis proposed \$34 million in the state budget for protecting and restoring the health of California's beaches. This funding became known as the Clean Beach Initiative (CBI). The fund finances research on rapid pathogen indicators and pathogen source identification efforts in addition to projects to improve water quality at polluted beaches. Huntington Beach became one of the first recipients of this money, using the funds to divert runoff away from the beach and ensure no repetitions of poor summer water quality.

California beaches have progressed substantially since the implementation of the CBI. Dozens of projects have been completed or are on their way to completion, and millions of dollars more in funding (a total of over \$100 million) have been appropriated to ensure that these vital projects can continue.

In Los Angeles County alone, over 22 low-flow diversions have been installed within 10 years, contributing to the 91% of A and B grades that were achieved within the state this summer. A number of counties even achieved 100% A and B grades this summer. Since 1999, changes in beach grading methodology, sample location sites and the huge increase in monitoring locations have all helped ensure greater health protection for beach goers.

Unfortunately, California's current budget crisis has resulted in drastic funding cuts to AB 411 implementation programs. Among Governor Schwarzenegger's line item vetoes in the approved budget is a complete elimination of state beach water quality monitoring funds for local entities. The results of such a severe cut are that coastal counties will likely have to completely eliminate or radically reduce their ocean water quality monitoring programs, unless local governments take on the slack created by the cut. Beaches that have improved significantly over the last ten years will no longer benefit from routine monitoring, and public health may once again be jeopardized by polluted beaches that public health officials are no longer able to track and remediate. Heal the Bay is hopeful that local governments will continue to prioritize monitoring and fight to ensure that funds will be reinstated in the next budget cycle.

End of Summer Beach Report Card™ 2008

Heal the Bay's tenth annual California End of Summer Beach Report Card™ coincides with the tenth anniversary of the implementation of AB411. The report provides beachgoers with essential water quality information by grading nearly 500 monitoring locations from Humboldt County through San Diego County. The grades are based on dry weather water quality data provided by over 20 different entities throughout California. The data presented in this report was collected from Memorial Day through Labor Day 2008. This report is intended to give an overview of California's beach water quality during the summer of 2008.

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 ocean 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 the state.

California: Water Quality data collected at California beaches this past summer showed overall that this was one of the cleanest summers in monitoring history. Southern California's second summer of drought likely contributed to the second year of excellent overall summer grades. Long Beach water quality showed only a slight improvement from last year; still by far the worst water quality in the state, with just under half of monitoring locations receiving C to F grades. However, even with Long Beach still suffering from problematic water quality, statewide water quality was very good with 91% A and B grades. Santa Monica Bay monitoring locations fared slightly lower than last summer, exhibiting water quality of 86% As and Bs. There were only 44 locations (9%) throughout the state that received fair-to-poor water quality grades (8 Cs, 10 Ds and 20 Fs), a 1% increase from 2007.

San Diego County: Water quality data collected at beaches in San Diego County resulted in 100% A or B grades. Over the last few years, San Diego has completed multiple projects to improve its beach water quality, including numerous storm drain diversions into their sewage systems during the summer months. A few years ago, Mission Bay was experiencing such high indicator bacteria concentrations that it was used as the site for a health effects epidemiology study. However, these diversions and other source abatement actions appear to have greatly reduced the problem and there has been a steady increase of A grades over the last couple of years.

Despite having such good grades this summer, it is important to remember that San Diego preemptively closes Imperial Beach and border beach sites following rain events or sewage spills into the Tijuana River. While they are to be commended for protecting human health in such a way, it is important to remember that they do not intensify monitoring efforts during these known sewage spills. The downside of less monitoring is that it gives an incomplete water quality picture for the Beach Report Card, status and trends analysis, State and Regional Water Board water quality assessments, impaired waters determinations and Total Maximum Daily Load (water body specific standards) development.

There were eight sewage spills this summer that led to multiple San Diego County beach closures. The majority of these closures occurred due to massive spills into the Tijuana River in Baja, Mexico, which flowed down into California to Border Field State Park and Tijuana Slough and impacted the beach. Tijuana River and Border Field locations were closed for five days total during the time period for pre-emptive closures due to sewage spill/release. Other smaller spills closed beaches in Carlsbad, Encinitas and Coronado.

Orange County: Overall water quality at beaches in Orange County this past summer was even better than last summer. Of the 106 water quality monitoring locations covered by the Beach Report Card, 104 (98%) received A or B grades. The notorious hot spots of nine years ago at Huntington Beach at Magnolia Street and Brookhurst Street received A and B grades respectively.

There were only two locations that received poor grades (D or F). These locations were: San Juan Creek/Ocean Interface at Doheny (F), and Poche Creek Beach in San Clemente (F). All other historically poor beaches in Dana Point received A or B grades (all of the Baby beaches).

The San Juan Creek monitoring location frequently receives F grades on Heal the Bay's weekly Beach Report Card. However, for the first time in a number of years this location received an F on the End of Summer report. This low grade is likely due to flow from the creek entering the ocean during the beginning of the summer. The formation of a berm between the creek and ocean interface usually occurs in the spring, and leads to greatly improved water quality during the summer months. However, during this summer the berm was broken a couple of times in May and June causing the overall poor grade seen this summer. These chronic problems are the main reason that Doheny State Beach was chosen as the site for an epidemiological study that has been taking place over the past two summers.

Poche Beach has been another recipient of CBI funding. After the installation of an inadequately sized water treatment facility, Orange County began construction of a new facility. Construction was intended to be completed by June, with the plant operational for summer weather. Unfortunately a number of delays with UV treatment equipment meant that the county was given an extension with plans to complete construction by fall and begin post construction monitoring by October 2009

There were seven sewage spills in Orange County that resulted in beach closures. One of these spills occurred at Dana Point beaches during the busy August season and resulted in four days of closure.

Los Angeles County: Overall, Los Angeles beach water quality grades were fair. Long Beach and Avalon beaches again exhibited extremely poor water quality. Santa Monica Bay beaches showed a significant drop from last summer with far fewer beaches receiving A or B grades.

Long Beach's poor water quality was slightly better than last summer. This summer there were 52% A and B grades in Long Beach; last summer the percentage was 48%. The City of Long Beach has spent the last year conducting an extensive source tracking study to determine the cause of their continual beach postings and closures. Preliminary results have shown that while some storm drains may have a small secondary impact, the vast majority of the contamination stems from the Los Angeles River. This river stretches over 40 miles inland, with numerous sources creating high bacteria concentrations. This is especially detrimental to the city's beaches following a rain event, which can impact water quality for a number of days. In general, the San Pedro Bay facing beaches south of Belmont Pier had excellent water quality while those north of the pier had poor water quality.

Avalon beaches continue to suffer from poor water quality. None of the five monitoring locations have received good grades (A or B) for the last four summers. Numerous studies have shown that Avalon beaches are seriously impacted by old leaking sewer infrastructure within the town. Avalon has received state funds to help make these repairs, but more resources are needed to expand and expedite this much needed work.

Overall, Santa Monica Bay beaches fared slightly worse than last summer, with 50 (86%) of 63 monitoring locations receiving A or B grades (last year this number was 93%). Last summer Temescal Canyon received an F on the End of Summer Report. This bad grade was the result of a malfunctioning diversion. The problem was fixed and water quality in the area vastly improved to an A grade this summer. Another beach that has exhibited improved water quality following the completion of a project is Santa Monica Canyon. In 2005, Heal the Bay reported that Santa Monica Canyon had received an F on the end of summer report. A CBI funded diversion was completed that year to remove urban runoff from the beach during the summer months. The beach has received an A grade on Heal the Bay's End of Summer report ever since.

Beaches receiving poor to failing grades this summer are Solstice Canyon at Dan Blocker Beach (D), the notorious Surfdrider Beach at the breach point (D), Paradise Cove (F), Venice City Beach at Topsail (D), and Dockweiler Beach at Ballona Creek Mouth (D). Marie Canyon storm drain at Puerco Beach in Malibu still earned an F grade this summer,

despite a treatment plant that was installed last year. Heal the Bay alerted county officials to dropping grades at this location. Officials found that one of the pumps had failed. Although the pump system was fixed, the beach at Marie Canyon continues to get poor grades. Further investigation by the county is critically needed. Santa Monica Beach at Wilshire Boulevard was another surprising F grade this summer. Heal the Bay is currently investigating to determine why this beach has gone from an A grade to an F grade, despite the construction of a new diversion at this location before the summer.

Chronic Exceeders

Paradise Cove is one of the most chronically polluted beaches in Los Angeles County. Septic systems utilized by the mobile home park have suffered from repeated leaks and overflows, proving to be extremely detrimental to the ocean water quality. These sewage overflows have continued to impact the beach, causing postings, closures and associated human health risks. In addition, there could be other potential upstream sources of fecal bacteria to Ramirez Creek, which drains to Paradise Cove. L.A. County, Heal the Bay and the Southern California Coastal Water Research Project are conducting an intensive source tracking study. Paradise Cove Café has also been found in repeated violation of numerous provisions of its waste discharge requirements. Heal the Bay would like to acknowledge the planning commission meeting that took place on Sept. 2 and commend the City of Malibu for adopting the resolution to begin construction on a new CBI funded treatment facility in Ramirez Creek.

The Santa Monica Pier is a historic landmark, attracting over 3 million tourists each year. But it is plagued by poor water quality. In 2006, a study was conducted to determine the source of the chronic bacteria issues experienced on the south side of the pier. Consultants to Santa Monica determined that a series of stormdrain rehabilitation projects were required to alleviate these water quality problems. Heal the Bay has been urging Santa Monica to expedite completion of the pier stormdrain and diversion upgrades before the 2009 summer beach season.

Cabrillo Beach has been funded by the CBI to create ways to increase circulation in the Cabrillo section of San Pedro Bay and thus lower indicator bacteria concentrations. Last year, two pumps were installed in the bay, but due to a number of factors, including insufficient pump size, and incomplete submersion of the pump, the desired increase in circulation was not achieved. Heal the Bay will continue to urge the Port of Los Angeles to expedite planned projects to remove the boat launch groin, install upgraded bird excluder devices, and if necessary, install new water circulation devices at Cabrillo Beach.

Despite receiving generally positive grades this summer, many Santa Monica beaches remain in exceedance of the Santa Monica Bay Beach Bacteria Total Maximum Daily Load (TMDL). Santa Monica beaches are not allowed to exceed state water quality standards for fecal indicator bacteria during summer dry weather. Below is a table of SM Bay beaches water quality exceedances between 4/1/08 and 9/3/08. (Those dates mark this year's TMDL dry weather compliance time-frame through Labor Day weekend)

SM Bay beach exceedances 4/1/08 through 9/3/2008		
Exceedances	Location	Location Description
60	SMB-3-3	Santa Monica Municipal Pier (point zero)
42	SMB-BC-1	Dockweiler State Beach at Ballona Creek mouth (point zero)
36	SMB-MC-2	Surfrider Beach (breach point)- daily
19	SMB-1-12	Marie Canyon storm drain at Puerco Beach, at 24572 Malibu Rd.
12	SMB-1-10	Solstice Canyon at Dan Blocker County Beach
10	SMB-3-2	Santa Monica Beach at Wilshire Blvd. drain (point zero)
8	SMB-1-7	Paradise Cove Pier at Ramirez Canyon Creek mouth (point zero)
7	SMB-6-2	Redondo Municipal Pier - 100 yards south
6	MdRH-1	Marina del Rey, Mothers' Beach-Playground area
6	SMB-2-9	Venice City Beach at Topsail St.
5	SMB-1-8	Escondido Creek, just east of Escondido State Beach

5	SMB-1-18	Topanga State Beach at creek mouth
5	SMB-1-9	Latigo Canyon Creek mouth (point zero)
4	SMB-2-10	Dockweiler State Beach at Culver Blvd. drain
4	SMB-MC-3	Malibu Pier- 50 yards east
4	SMB-2-7	Will Rogers State Beach at Santa Monica Canyon drain (point zero)
2	SMB-1-15	Big Rock Beach at 19948 PCH stairs
2	SMB-3-1	Santa Monica Beach at Montana Ave. drain (point zero)
2	SMB-3-9	Santa Monica Beach at Strand St. (in front of the restrooms)
2	SMB-2-8	Venice Fishing Pier- 50 yards south
2	SMB-7-6	Royal Palms State Beach
2	SMB-2-1	Castlerock Storm Drain at Castle Rock Beach
1	SMB-2-4	Will Rogers State Beach at Pulga Canyon storm drain (point zero)
1	SMB-3-4	Santa Monica Beach at Pico/Kenter storm drain (point zero)
1	SMB-3-6	Venice City Beach, at the Rose Ave. storm drain
1	SMB-5-2	Manhattan Beach at 28th St. drain
1	SMB-6-1	Herondo Street storm drain- (in front of the drain)
1	SMB-6-4	Redondo State Beach at Topaz St. - north of jetty
1	SMB-7-9	Cabrillo Beach, oceanside

A sewage spill of approximately 9,000 gallons entered Ballona Creek on April 24 from a complex on Centinela Avenue. The spill resulted in a beach closure stretching over half a mile of Venice Beach and half a mile of Dockweiler. In addition to this, four spills occurred in the inland area of Los Angeles County. These spills flowed into the L.A. River and caused preemptive closures at multiple Long Beach locations.

Ventura County: Overall water quality at beaches throughout Ventura County was excellent again this summer. 51 (94%) monitoring locations received A or B grades. Rincon Beach at 100 yards from the creek received a C grade, with a D at 25 yards from the creek. Surfers Point at Seaside also received a D grade, but exceedances at this location were found to be mainly total coliform, which is rarely associated with human or animal fecal matter when there are no exceedances of enterococcos or fecal coliform standards.

There were no known sewage spills in Ventura County that led to beach closures.

Santa Barbara County: Water quality at beaches in Santa Barbara County saw an improvement from the summer of 2007. This year, 90% of Santa Barbara monitoring locations received an A or B grade. (Last year this percentage was 85%). Only two locations scored fair-to-poor grades this summer, one less than in the summer of 2007. The locations with problematic water quality were Goleta Beach (C) and Arroyo Burro Beach (F). In response to the poor grade at Arroyo Burro, Santa Barbara conducted a sanitary survey to determine the cause of chronic, high indicator bacteria concentrations. Results have so far been inconclusive, but it is possible that algal blooms in the estuary may have contributed to these numbers.

Santa Barbara is currently conducting two new CBI projects to help improve water quality in the area. The first is aimed at identifying projects to improve water quality coming out of the Laguna Channel prior to mixing with Mission Lagoon. This could ultimately improve East Beach. The second is a study that could potentially develop new, better methods for conducting sanitary surveys, an unfulfilled legal requirement under AB 538. The latter will be of great importance to all coastal communities.

There were no known sewage spills in Santa Barbara County that led to beach closures.

San Luis Obispo County: Overall 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 (F) again received

the county's only poor grade, with the highest percent exceedance rate in the state. This pier is currently undergoing an extensive CBI funded study, using DNA to identify the sources of high indicator bacteria in the ocean. This is a multiyear study, and results will not be seen for some time.

There were no known sewage spills that led to beach closures in San Luis Obispo County.

Monterey County: Beach water quality in Monterey County was excellent this year. 100% of eight monitoring locations received high grades, with seven A grades and one B grade at Monterey Municipal Beach.

There were no known sewage spills that led to beach closures in Monterey County this summer.

Santa Cruz County: Overall water quality in Santa Cruz this past summer was very good. Of the 13 weekly sampled locations, 12 (92%) received A or B grades. Once again Cowell was the only problematic beach, scoring an F grade this summer. The beach received a D last summer.

There were no known sewage spills in Santa Cruz County that led to beach closures this summer.

San Mateo County: This summer, San Mateo's overall ocean water quality was very good. Of the 25 regularly monitored locations, 24 (96%) received A or B grades. Kiteboard Beach received the county's only C grade, exceeding fecal coliform and enterococcus a couple of times at the beginning of the summer.

There were no sewage spills that led to beach closures in San Mateo County.

Alameda County: For the second year in a row, Heal the Bay was able to obtain Alameda County recreational beach water quality monitoring data. All seven monitoring locations (100%) received an A grade.

A 75-gallon sewage spill stemming from a clogged pipe closed all Crown beaches for two days in mid June.

San Francisco County: Overall beach water quality in San Francisco County was very good this year. Out of 14 monitoring locations that were sampled regularly over the summer, 12 received A grades. Candlestick Point at Sunnydale Cove received a C grade and Baker Beach Lobos Creek received the county's only F.

There were no known sewage spills or combined sewage overflows that resulted in beach closures this past summer.

Contra Costa County: Last summer, Contra Costa's first on the Report Card, all three new locations at Keller Beach received A grades. However, this year, Contra Costa County's monitoring locations received fair to poor grades. Keller Beach North and Keller Beach Mid both received a D grade, while Keller Beach South received a C. There were no known sewage spills in Contra Costa County this summer.

Marin County: All 27 monitoring locations received either A or B grades. A near-perfect 26 (96%) earned A grades.

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

Sonoma County: Of the seven monitoring locations that were sampled over the summer, all seven locations (100%) received A grades.

No known sewage spills during this summer were reported to Heal the Bay.

Mendocino: All seven locations monitored throughout the summer received A grades.

No known sewage spills during this summer were reported to Heal the Bay.

Humboldt County: Following the pattern of excellent water quality in the northern counties this summer, Humboldt County also received 100% A grades.

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

Del Norte County: Once again, 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 these counties that led to beach closures.

Standardized Monitoring

Before the recent beach water quality monitoring funding fiasco, Heal the Bay had planned on addressing the following standardized monitoring issue in California. However we hope that this funding problem will be addressed quickly and California will be able to focus on their standardization efforts as soon as possible.

While some beaches have seen dramatic improvement in water quality over the past 10 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.

Each year, Heal the Bay issues our weekly, annual and end of summer beach report cards, grading almost 500 beaches along California's coast. Most counties and cities monitor for fecal indicator bacteria using monitoring plans that have been developed without collaboration with other regions. Approximately five years ago, Heal the Bay partnered with the Southern California Beach Water Quality Workgroup to formulate a standardized monitoring plan. This plan would require counties to each monitor 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 at point zero, while other counties are 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 protective of the public health. Further efforts will be made this 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 healthebay.org/brc and text messaging system are 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. Beaches are graded using an A-F scale based on the risk of ocean users becoming ill. Samples are analyzed for three indicator bacteria. 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 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.

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.

CALIFORNIA SUMMER BEACH WATER QUALITY

Summary	A	B	C	D	F	A-B	C-F
Humboldt	5	0	0	0	0	5	0
Mendocino	4	0	0	0	0	4	0
Sonoma	7	0	0	0	0	7	0
Marin	26	1	0	0	0	27	0
Contra Costa	0	0	1	2	0	0	3
San Francisco	12	1	0	0	1	13	1
Alameda	7	0	0	0	0	7	0
San Mateo	23	1	1	0	0	24	1
Santa Cruz	11	1	0	0	1	12	1
Monterey	7	1	0	0	0	8	0
San Luis Obispo	19	0	0	0	1	19	1
Santa Barbara	17	1	1	0	1	18	2
Ventura	51	0	1	2	0	51	3
Los Angeles	72	6	2	8	21	78	31
LA without Long Beach	60	5	1	5	13	65	19
Long Beach only	12	1	1	3	8	13	12
SM Bay beaches	50	4	1	4	4	54	9
Orange County	98	6	0	0	2	104	2
San Diego	89	3	0	0	0	92	0
State	448	21	6	12	27	469	45
State without LA County	376	15	4	4	6	391	14

Summary	A	B	C	D	F	A-B	C-F
Humboldt	100%	0%	0%	0%	0%	100%	0%
Mendocino	100%	0%	0%	0%	0%	100%	0%
Sonoma	100%	0%	0%	0%	0%	100%	0%
Marin	96%	4%	0%	0%	0%	100%	0%
Contra Costa	0%	0%	33%	67%	0%	0%	100%
San Francisco	86%	7%	0%	0%	7%	93%	7%
Alameda	100%	0%	0%	0%	0%	100%	0%
San Mateo	92%	4%	4%	0%	0%	96%	4%
Santa Cruz	85%	8%	0%	0%	8%	92%	8%
Monterey	88%	13%	0%	0%	0%	100%	0%
San Luis Obispo	95%	0%	0%	0%	5%	95%	5%
Santa Barbara	85%	5%	5%	0%	5%	90%	10%
Ventura	94%	0%	2%	4%	0%	94%	6%
Los Angeles	64%	5%	2%	7%	19%	72%	28%
LA without Long Beach	71%	6%	1%	6%	15%	77%	23%
Long Beach only	48%	4%	4%	12%	32%	52%	48%
SM Bay beaches	79%	6%	2%	6%	6%	86%	14%
Orange County	92%	6%	0%	0%	2%	98%	2%
San Diego	97%	3%	0%	0%	0%	100%	0%
State	87%	4%	1%	2%	5%	91%	9%
State without LA County	93%	4%	1%	1%	1%	97%	3%