Heal the Bay

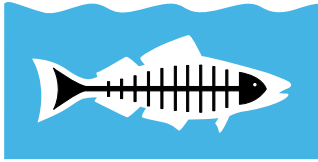*2022-2023*
Beach Report Card

Heal the Bay

2022-2023
Beach Report Card

We would like to acknowledge that Heal the Bay is located on the traditional lands of the Tongva and Chumash People and pay our respects to elders past, present, and emerging.

Heal the Bay is an environmental non-profit dedicated to making the coastal waters and watersheds of Greater Los Angeles safe, healthy and clean. To fulfill our mission, we use science, education, community action, and advocacy.

The Beach Report Card program is funded by grants from:

SIMA SURF INDUSTRY MANUFACTURERS ASSOCIATION   SONY PICTURES   World Surf League

We at Heal the Bay believe the public has the right to know the water quality at their beaches. We are proud to provide West Coast residents and visitors with this information in an easy-to-understand format. We hope beachgoers will use this information to make the decisions necessary to protect their health.

Cover: Cowell Ranch Beach / Santa Cruz County / photo: Michael Vi

2022–2023
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WELCOME

EXECUTIVE SUMMARY

Moonlight State Beach / San Diego County

Heal the Bay is proud to release the 33rd annual Beach Report Card. This report examines amounts of fecal pollution measured at ocean beaches along the West Coast. The main goal of the Beach Report Card is to keep people safe when they go to the beach. We accomplish this by turning water quality data into easy-to-understand grades. 2022 Summer Dry Grades were excellent across the State with 95% of California beaches receiving A and B grades, which is on par with the average. Winter Dry Grades were below average with 83% of the beaches receiving A and B grades. Wet Weather Grades for the past year were also below average with 56% of the beaches receiving A and B grades.

Coastal counties in California received 50% more rainfall than the 10 year average during the winter months. California experienced 19 large storm events (called atmospheric rivers) from October 2022 to March 2023, which is far higher than the six the state typically gets.[1] The seemingly continuous deluge came at a time when most coastal counties were experiencing moderate or extreme drought so it was a welcomed temporary relief from those conditions. However, the extreme amounts of precipitation caused landslides, floods, power outages, blizzards, and other hazardous conditions for millions of Californians. The rainfall also had multiple negative impacts on water quality. Rain washes pollutants, including bacteria, into the ocean, resulting in an overall decline in Wet Weather Grades.

The decrease in wet weather water quality meant that only two beaches qualified for the Honor Roll this year, which is the shortest Honor Roll we've ever seen (compared to 50 Honor Roll beaches last year). Additionally, an alarming 45 million gallons of sewage were spilled into the ocean and coastal waterways, in part due to the increased rainfall. Sewage lines are commonly flooded with rainwater causing them to overflow. We urge local officials to invest significantly in sewage infrastructure updates and public notification protocols to ensure the safety of all beach visitors.

This year's Beach Bummers are:

- **Santa Monica Pier (Los Angeles County)**
  Tied for number one is Santa Monica Pier, which unfortunately returns to the Beach Bummer list for a second consecutive year. Being a perpetual Beach Bummer was the norm for the pier until 2018 when

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[1] https://water.ca.gov/News/Blog/2020/October/Atmospheric-Rivers-and-Their-Impact-on-California-Reservoirs

the city of Santa Monica installed a stormwater capture system next to the pier.[2] Unfortunately, it appears that Santa Monica Pier's water quality woes go beyond polluted runoff. The city is in the process of replacing the bird deterrent netting underneath the pier because bird feces is suspected to be the main culprit for the poor water quality. The City of Santa Monica is also installing a trash removal device in the large storm drain south of the pier at Pico Boulevard, which could help reduce bacteria levels around the pier.[3] The City recently completed a large stormwater capture project that will keep polluted water from entering the ocean and increase local water resilience.[4]

- **Playa Blanca (Baja California, Mexico)** Tied for number one is Playa Blanca located south of the City of Tijuana, and remaining as our number one Beach Bummer from last year. This beach and others in the area are impacted by sewage-contaminated runoff from the Tijuana area, which has insufficient and, in some places, nonexistent sewage infrastructure. This beach may also receive influxes of sewage contamination from the Punta Bandera treatment plant outfall, north of the beach. This treatment plant discharges millions of gallons of lightly treated wastewater into the ocean. However, some research has found that ocean currents predominantly carry this contamination northward so additional pollution sources for this beach may need to be identified.

- **San Mateo County** San Mateo County is home to five of this year's Beach Bummers: Erckenbrack Park, Marlin Park, Gull Park, Linda Mar Beach, and Pillar Point Harbor. Four of the beaches are

categorized as enclosed beaches that do not receive sufficient water circulation. Linda Mar Beach is impacted by pollution from San Pedro Creek. This marks the fifth consecutive report where San Mateo County has multiple Beach Bummers. The one bright spot for San Mateo County this year is that it has one of only two Honor Roll beaches across the entire state. Bean Hollow State Beach did not experience a single bacterial exceedance this past year.

- **Tijuana River Mouth (San Diego County)** The Tijuana River discharges tens of millions of gallons of sewage into the ocean every year. This issue originates within the City of Tijuana, which has impaired and insufficient sewage infrastructure. Also, recent research has shown that partially-treated sewage discharges from the Punta Bandera treatment plant, located south of the city, flow north from the Tijuana area and impact beaches in the border region.[5] The USEPA is in the process of funding infrastructure improvements in Tijuana and the Punta Bandera treatment plant, which will be a big first step towards addressing water quality in the area.

- **Marina del Rey Mother's Beach (Los Angeles County)** Regrettably, the name Mother's Beach is now synonymous with the term Beach Bummer. The characteristics that make this beach a great destination for families also make it prone to bacteria pollution. This beach is enclosed within Marina del Rey so there is little wave action and water circulation. Similar to the San Mateo Beach Bummers, pollution does not get flushed away from the shore as it does at beaches on the open ocean. In 2022, L.A. County Department of Beaches and Harbors conducted a study that concluded that most fecal pollution at the beach comes from birds. The

2 https://www.santamonica.gov/blog/santa-monica-draws-line-in-the-sand-on-water-infrastructure-innovation

3 https://pubmed.ncbi.nlm.nih.gov/35635882/

4 https://www.santamonica.gov/sustainable-water-infrastructure-project-swip

5 https://www.frontiersin.org/articles/10.3389/fmicb.2021.674214/full

Department of Beaches and Harbors is currently planning to install bird deterrents around the beach. Mother's Beach was closed for a few days this past January due to a 64,000 gallon sewage spill, which was another unfortunate setback for Mother's Beach visitors.

- **Poche Beach (Orange County)** Representing Orange County on this year's Beach Bummer list is Poche Beach, which is a periodic Bummer. Poche Beach receives polluted runoff from a storm drain that flows directly onto the beach. Equipment designed to clean runoff from the storm drain was running at partial capacity in summer 2022, which was likely the cause. However, it may be time for Orange County to reassess its water quality improvement strategy for this beach since it is no stranger to the Beach Bummer list.

No Oregon beaches were monitored frequently enough to receive a Summer Dry Grade, and no beaches were monitored during the winter months. Only six counties received Wet Weather grades, and only 61% of the beaches received A and B grades, which is lower than the state's historical average of 73%. This is the second straight year we have not been able to issue Summer Dry grades, which is a major disappointment.

Washington Summer Dry Grades were excellent with 98% of the beaches receiving A and B grades, which is far above the average of 93%. Wet Weather Grades were equally outstanding and above average with 97% of beaches receiving A and B grades. Unfortunately, most Washington beaches were not monitored during the winter months so we could not calculate Winter Dry Grades.

Tijuana beaches El Vigia and El Faro received C grades while Playa Blanca (the number one Beach Bummer) received an F for Summer Dry Grades. The three Tijuana beaches received straight F's for all other

grades, with the exception of El Faro, which received a lowly D for a Winter Dry grade.

The good news about water quality at our beaches is that we know how to reduce the most common inputs of fecal pollution. A watershed-wide nature-based approach is our best bet for keeping our waters clean and safe in addition to sewage infrastructure upgrades. Green infrastructure spaced throughout our communities will provide cleaner water; green space for communities to enjoy; and habitat for wildlife. Los Angeles County has created a model program for improving coastal and inland water quality. Los Angeles County's Safe, Clean Water Program aims to increase local water supply, improve water quality, and protect public health by focusing efforts on multi-benefit projects in communities that have been identified as severely disadvantag ed with regards to access to green space and other socioeconomic factors. The Los Angeles County Board of Supervisors has approved $1 billion in stormwater investments for 144 projects under the Safe, Clean Water Program to date.

Alarmingly, we have observed an increase in the number of attempts to loosen or rollback fecal pollution regulations in California. When waterways become polluted with contaminants such as bacteria and viruses (as measured through fecal indicator bacteria or FIB), the USEPA holds the surrounding municipalities responsible for that pollution and requires them to keep pollution out of those waterways or face penalties. Unfortunately, we have seen the entities responsible for pollution in our waterways try to weaken the standards they are held to in order to achieve compliance more readily. Heal the Bay is adamantly against the efforts to circumvent California's water quality objectives, and we urge the State Water Resources Control Board (SWRCB) to firmly reassert that local governments and other pollution dischargers are responsible for keeping all fecal matter originating from human activities out of the ocean and surrounding waterways.

INTRODUCTION

Life in coastal areas of the West Coast is tied to the beach. Beaches serve as vital spaces where people can relax, have fun, and connect with each other. We are fortunate to have beaches that are beautiful and clean most days of the year, but unfortunately, there are times and conditions when the water at the beach can make folks sick. Our coastal waters can be contaminated with pollutants such as chemicals, trash, and fecal matter, which are harmful to human health and the ocean ecosystem.

To help keep the beach-going public safe, Heal the Bay created The Beach Report Card over 30 years ago. The Beach Report Card is an important and comprehensive public health tool, providing weekly and annual water quality grades based on bacterial pollution at over 700 beaches from Washington to Tijuana. We provide this information to the public through a website and app — all free of charge. Further, the Beach Report Card has been used for advocacy by Heal the Bay to protect and improve water quality and has spurred municipalities and agencies to take action, resulting in numerous success stories.

Grades in the Beach Report Card are based on concentrations of fecal indicator bacteria (FIB) measured at ocean beaches. While not harmful themselves, the bacteria measured for the Beach Report Card indicate the presence of pathogen-containing fecal matter. Organizations like Heal the Bay, the United States Environmental Protection Agency (USEPA), and all water recreation stakeholders are most concerned about fecal pollution over other pollutants because fecal pollution poses an *acute* health risk, meaning one exposure can make someone sick. Other contaminants like metals pose a *chronic* health risk, meaning illness only sets in if someone suffers prolonged exposure. The average beachgoer does not get enough exposure to contaminants that pose a chronic health risk. Therefore, only bacteria standards are used to assess recreational water quality. Some beachgoers are privileged enough to have frequent access to the beach (surfers for example). These folks are in the water more than a weekend beach visitor, so they may potentially have higher rates of exposure to harmful pollution.

For all beach users, we recommend using the Beach Report Card to understand the risk of getting sick. If beachgoers avoid the water at beaches with a poor water quality grade based on fecal matter levels, they're also likely avoiding other pollutants in addition to that bacteria. This is because most pollutants enter the ocean through the same routes: storm drains, rivers, and streams. Pollution flows off our streets and into these waterways, which subsequently discharge the contaminants into the ocean. We advise people to avoid contact with ocean water around storm drains and river outlets, and avoid all ocean contact for at least three days following a significant rain event. Heal the Bay does not support restricting access to the beach or the water, except in rare cases, but we want people to have access to water quality information to make informed decisions on where or when to get in.

BEACH REPORT CARD BASICS

The BRC uses a simple A-to-F letter grading system to provide water quality information to the public. This annual report issues cumulative grades for beaches on the West Coast, and provides information about other important water quality events that occurred in the past year such as sewage spills and major rainfall events.

Grades are based on routine water quality sampling conducted by County health agencies, State agencies, Tribal agencies, sanitation departments, and dischargers on the West Coast. For recreational health protection, water samples are analyzed for three fecal indicator bacteria (FIB): total coliform, fecal coliform (*E. coli*), and *Enterococcus* species. These FIB, in significant quantities, indicate the presence of harmful pathogens in the water.

This report assigns three separate grades for each beach:

Summer Dry Grade (April through October 2022)

This is the prime recreation season in California when beaches are most active. County governments are required to sample during this period according to the California Beach Bathing Water Quality Standards, as defined in Assembly Bill 411 (AB 411, Wayne 1997).[6] Samples taken during wet weather are not used for these grades.

6 https://www.waterboards.ca.gov/bacterialobjectives/

Winter Dry Grade (November 2022 through March 2023)

AB411 does not mandate water quality monitoring for recreational purposes during winter months leading many Counties and States to halt water quality monitoring in the winter season. Additionally, recreation generally decreases at beaches during the winter. Therefore, the winter season is graded separately. Samples taken during wet weather are not used for these grades.

Wet Weather Grade (April 2022 through March 2023)

Rain flushes contaminants and pollution, including bacteria over impermeable surfaces such as concrete and from our streets directly into the ocean through storm drains, rivers, and streams. This untreated stormwater decreases water quality by increasing the amount of pathogens in the ocean to potentially unsafe levels. Wet Weather Grades consist of samples taken during or three days following a rain event greater than 0.1 inches.

Beachgoers who visit beaches during or after a rain event have an increased risk of contracting ear infections, eye infections, upper respiratory infections, skin rashes, and gastrointestinal illnesses.[7,8,9] Swimmers are advised to stay out of the water for a minimum of three days following a significant rain event (0.1 inches or greater).[10]

7 Haile, R.W., J.S. Witte, M. Gold, R. Cressey, C. McGee, R.C. Millikan, A. Glasser, N. Harawa, C. Ervin, P. Harmon, J. Harper, J. Dermand, J. Alamillo, K. Barrett, M. Nides, G. Wang. The health effects of swimming in ocean water contaminated by storm drain runoff. 1999. Epidemiology Vol. 10 No.4 355-363.

8 Colford, J.M., T.J. Wade, K.C. Schiff, C.C. Wright, J.F. Griffith, S.K. Sandhu, S. Burns, M. Sobsey, G. Lovelace, S.B. Weisberg. 2007. Water quality indicators and the risk of illness at beaches with nonpoint sources of fecal contamination. Epidemiology Vol. 10 No. 1 27-35.

9 Arnold, B.F., K.C. Schiff, A. Ercumen, J. Benjamin-Chung, J.A. Steele, J.F. Griffith, S.J. Steinberg, P. Smith, C.D. McGee, R. Wilson, C. Nelsen, S.B. Weisberg, J.M. Colford. 2017. Acute illness among surfers after exposure to seawater in dry-and wet-weather conditions. American Journal of Epidemiology Vol. 186 No. 7 866-875.

10 https://healthebay.org/time-to-rethink-the-3-day-rain-advisory-rule/

West Coast Summary

CALIFORNIA OVERVIEW

Newport Beach / Orange County

Note: All averages below refer to the five-year-average unless otherwise indicated.
All percentages are rounded to the nearest whole number.

Summer Dry Grades were excellent across the State with 95% of California beaches receiving A and B grades, which is on par with the average. Winter Dry Grades were below average with 83% of the beaches receiving A and B grades. Wet Weather Grades for the past year were also below average with 56% of the beaches receiving A and B grades.

Coastal counties in California received 52% more rainfall than the 10 year average, with some coastal counties breaking their historical precipitation records. This record-setting year came at a time when most coastal California counties were experiencing drought conditions not seen in California in the last 1,200 years.[11] While the winter storms helped temporarily alleviate California's water supply concerns, they simultaneously had a negative impact on beach water quality across the state. This is evidenced by the below average Wet Weather grades and the almost nonexistent Honor Roll list. Unfortunately, we can expect large annual swings in precipitation and water quality across Coastal California as climate change continues to disrupt earth's patterns.

The immense amount of rain also likely contributed to the higher than average amount of sewage that spilled

CALIFORNIA

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	381	87%	129	70%	201	45%
B	35	8%	24	13%	48	11%
C	8	2%	6	3%	35	8%
D	3	1%	8	4%	33	7%
F	12	3%	17	9%	128	29%
A+B	416	95%	153	83%	249	56%
C,D,F	23	5%	31	17%	196	44%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	404	87%	290	81%	231	51%
B	33	7%	31	9%	46	10%
C	13	3%	17	5%	31	7%
D	7	1%	7	2%	27	6%
F	9	2%	15	4%	116	26%
A+B	438	94%	321	89%	277	61%
C,D,F	28	6%	39	11%	174	39%

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11 https://www.nature.com/articles/s41558-022-01290-z

into coastal California waterways this past year. During storms, sewage lines are commonly flooded with rainwater causing them to overflow. In this reporting year, over 45 million gallons of sewage entered the ocean, rivers, lakes, and streams throughout coastal California. That is 16 million gallons more than what was reported in last year's Beach Report Card, which was also considered high. California has now experienced two consecutive years of elevated sewage spill amounts, likely a result of faulty or failing sewage infrastructure, which is under more stress in wet weather. We urge local officials to invest significantly in infrastructure updates and public notification protocols to ensure the safety of all beach visitors.

Sewage contains contaminants harmful to aquatic life such as pharmaceuticals, nutrients, caffeine, and petroleum compounds as well as pathogens harmful to humans. Beach closures resulting from the spills disrupted quality of life for oceangoers and financially damaged businesses that operate on the coast. Therefore, it is alarming to witness this uptick in human waste entering our waterways.

Northern California Overview

Northern California consists of all counties from Del Norte County to Marin County.

Summer Dry Grades in this region were very good with 93% of beaches receiving A and B grades, which is on par with average. No Northern California beaches were sampled enough in winter months to receive Winter Dry Grades.

Wet Weather Grades in the northern part of the state were surprisingly excellent with 93% of beaches receiving A's and B's.

The Northern California region received more rainfall than average, but the increase was not as large as what we saw in Central and Southern California. Usually,

Crab Cove / Alameda County / photo: Sabrina Sexton

NORTHERN CALIFORNIA

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	40	91%	0	NA	37	84%
B	1	2%	0	NA	4	9%
C	1	2%	0	NA	2	5%
D	1	2%	0	NA	1	2%
F	1	2%	0	NA	0	0%
A+B	41	93%	0	NA	41	93%
C,D,F	3	7%	0	NA	3	7%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	38	88%	1	100%	23	68%
B	2	5%	0	0%	3	10%
C	1	3%	0	0%	2	7%
D	1	1%	0	0%	1	4%
F	1	2%	0	0%	4	11%
A+B	40	93%	1	100%	26	78%
C,D,F	3	7%	0	0%	7	22%

higher than average rainfall results in decreased Wet Weather Grades because more pollutants, including bacteria, are flushed into the ocean. However, we observed higher than average rainfall coupled with better than average Wet Weather Grades. This result is likely due to the fact that most precipitation fell during winter months when Northern California beaches were not monitored.

Central California Overview

Central California consists of all counties from San Francisco County to San Luis Obispo County.

Summer Dry Grades were good with 91% of beaches receiving A and B marks, which is close to the average.

Winter Dry Grades were above average with 88% of the beaches receiving A and B grades.

Wet Weather Grades were very low with 51% of the region's beaches receiving A and B grades. That is below the lackluster 61% average.

Central California Counties saw 85% more rainfall than average, which likely accounts for the below average Wet Weather Grades this past year.

Southern California Overview

Southern California consists of all counties from Santa Barbara County to San Diego County.

Outstandingly, 96% of the region's Summer Dry Grades were A and B grades, which is slightly above the average.

Winter Dry Grades were below average with 82% of SoCal beaches receiving A and B grades.

Wet Weather Grades were slacking and below average. Only 52% of the beaches in Southern California received A and B grades when it rained.

Southern California experienced the largest increase in precipitation with a rainfall total that was 102% greater than the average. The record-setting rainfall washed more bacteria into the ocean, which caused lower Wet Weather Grades and the near disappearance of SoCal beaches from the Honor Roll.

CENTRAL CALIFORNIA

2022–2023	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	68	78%	32	74%	33	36%
B	11	13%	6	14%	13	14%
C	1	1%	0	0%	7	8%
D	1	1%	2	5%	7	8%
F	6	7%	3	7%	31	34%
A+B	79	91%	38	88%	46	51%
C,D,F	8	9%	5	12%	45	49%

5 YEAR AVERAGE	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	60	76%	47	71%	45	49%
B	11	14%	7	11%	12	13%
C	3	3%	5	7%	9	9%
D	2	2%	2	3%	5	5%
F	4	5%	6	8%	22	24%
A+B	71	89%	54	82%	57	61%
C,D,F	8	11%	12	18%	36	39%

SOUTHERN CALIFORNIA

2022–2023	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	273	89%	97	69%	131	42%
B	23	7%	18	13%	31	10%
C	6	2%	6	4%	26	8%
D	1	0%	6	4%	25	8%
F	5	2%	14	10%	97	31%
A+B	296	96%	115	82%	162	52%
C,D,F	12	4%	26	18%	148	48%

5 YEAR AVERAGE	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	307	89%	243	83%	163	50%
B	20	6%	23	8%	31	10%
C	9	3%	12	4%	20	6%
D	4	1%	5	2%	21	6%
F	4	1%	9	3%	90	28%
A+B	327	95%	266	91%	193	60%
C,D,F	17	5%	27	9%	130	40%

IMPACT OF BEACH TYPE

Cowells Beach / Santa Cruz County

Not all beaches are the same when it comes to water quality. We have categorized California's beaches into three groups for analysis: 1) open beaches, 2) storm drain, stream, and river beaches, and 3) enclosed beaches.
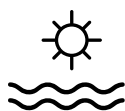
Open Beaches

Open beaches do not have obstructions between the beach and open water. They experience more wave action and greater water circulation than an enclosed beach. These beaches do not have storm drains, streams, or rivers flowing into them. As a result, open beaches tend to have better water quality than enclosed or storm drain, stream, or river beaches. Seventy-nine open beaches received grades this year.

- Summer Dry Grades were phenomenal with 99% of the beaches receiving A and B grades.

- Winter Dry Grades were good with 90% of the beaches receiving A and B grades.

- Wet Weather Grades were below average with 70% of the beaches receiving A and B grades.

- As indicated by the poorer Wet Weather Grades, open beaches are still impacted by stormwater. We advise people to avoid contact with ocean water for at least three days at all beaches following a significant rain event.
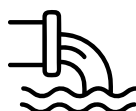
Storm Drain, Stream, and River Beaches

Beaches with storm drains, streams, or rivers flowing into them receive runoff that carries bacteria. We recommend swimming at least 100 yards away from storm drains, streams, and rivers at the beach. Also, avoid contact with the water for at least three days following a rain event. This year we issued grades to 218 of these beaches.

- Summer Dry Grades were superb with 94% of the beaches receiving A and B grades.

- Winter Dry Grades were below average with 84% of the beaches receiving A and B grades.

- Wet Weather Grades were abysmal and below average with only 50% of the beaches receiving A and B grades.

- Four of this year's Beach Bummers were impacted by runoff from a nearby storm drain, river, or stream.

Mother's Beach / Los Angeles County

Enclosed Beaches

Enclosed beaches have obstructions like a land mass or jetty blocking the beach from the open water. They are often associated with lagoons, marinas, and harbors. Enclosed beaches have little wave action and poor water circulation, which leads to generally worse water quality. Due to their calm waters, enclosed beaches are inviting for small children, and they are frequently preferred by parents and given names like Mother's Beach. We calculated grades for 80 enclosed beaches this year.

- Summer Dry Grades for enclosed beaches were about average with 91% receiving A and B grades.

- Winter Dry Grades were exceptionally below average with only 58% of enclosed beaches receiving A and B grades.

- Wet Weather Grades were surprisingly above average with 51% of enclosed beaches receiving A and B grades. Despite being above average for enclosed beaches, these are still very poor marks, which is typical for this beach type.

- Five of this year's Beach Bummers were enclosed beaches.

GRADES BY TIME PERIOD & BEACH TYPE

OPEN

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	73	92%	33	80%	48	57%
B	5	6%	4	10%	11	13%
C	1	1%	1	2%	11	13%
D	0	0%	1	2%	4	5%
F	0	0%	2	5%	10	12%
A+B	78	99%	37	90%	59	70%
C,D,F	1	1%	4	10%	25	30%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	82	93%	57	89%	57	67%
B	4	4%	3	4%	10	12%
C	1	2%	2	3%	5	6%
D	0	0%	1	2%	3	3%
F	0	0%	1	2%	10	12%
A+B	86	98%	60	93%	68	78%
C,D,F	2	3%	5	7%	19	22%

STORM DRAIN

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	189	87%	72	72%	81	37%
B	17	8%	12	12%	28	13%
C	4	2%	3	3%	17	8%
D	1	0%	4	4%	22	10%
F	7	3%	9	9%	72	33%
A+B	206	94%	84	84%	109	50%
C,D,F	12	6%	16	16%	111	50%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	197	85%	142	80%	119	53%
B	17	7%	16	9%	22	10%
C	9	4%	9	5%	15	7%
D	4	2%	4	2%	14	6%
F	4	2%	6	3%	56	25%
A+B	214	93%	158	89%	140	62%
C,D,F	17	7%	19	11%	84	38%

ENCLOSED

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	62	78%	4	21%	41	51%
B	11	14%	7	37%	0	0%
C	1	1%	2	11%	4	5%
D	2	3%	2	11%	3	4%
F	4	5%	4	21%	32	40%
A+B	73	91%	11	58%	41	51%
C,D,F	7	9%	8	42%	39	49%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	78	81%	49	70%	29	32%
B	10	10%	10	14%	8	9%
C	3	3%	5	7%	6	7%
D	2	2%	1	2%	6	7%
F	3	4%	5	8%	40	45%
A+B	88	92%	58	84%	37	41%
C,D,F	8	8%	11	16%	52	59%

A+

HONOR ROLL

Bean Hollow State Beach / San Mateo County / photo: Sarunas Burdulis

To earn a spot on the Honor Roll, a beach must be monitored weekly all year and must receive an A+ for all seasons and weather conditions (Summer Dry, Winter Dry, Wet Weather).

This year, only two out of over 500 monitored beaches made it on the Honor Roll compared to 51 last year. Unfortunately, the unprecedented amount of rain that fell across California during the 2022–2023 winter led to an enormous dip in water quality and a very short Honor Roll list.

The record rainfall impacted the Honor Roll list in two ways: 1) fewer beaches received Winter Dry Grades because most of the winter data was collected during wet weather, and 2) increased precipitation negatively impacted water quality. In order to get on the Honor Roll, a beach must have zero bacterial exceedances all year under all conditions, which is extremely difficult to do with so much rainfall. The unsettlingly short Honor Roll was also impacted by our inability to grade one third of San Diego County's beaches, which usually comprise a large portion of the Honor Roll (15 in the last report).

The Honor Roll is typically dominated by Southern California beaches, in part, because many Northern and Central California Counties do not monitor beach water quality year-round. However, it appears that the wet weather from this past winter took its toll everywhere.

The Point Loma Lighthouse in San Diego and Bean Hollow State Beach are the sole Honor Roll beaches this year. Bean Hollow State Beach is notable because it is located in San Mateo County, which is home to half of this year's Beach Bummers.

HONOR ROLL 2022-2023

BEACH NAME	COUNTY
Point Loma, Lighthouse	San Diego
Bean Hollow State Beach	San Mateo

F

BEACH BUMMERS

El Faro Beach / Tijuana

The beaches that received the ten poorest Summer Dry Grades are called Beach Bummers. This year's Beach Bummers are:

1. Playa Blanca
(Baja California, Mexico)

Tied for number one is Playa Blanca located south of the City of Tijuana, and remaining as our number one Beach Bummer from last year. This beach and others in the area are impacted by sewage-contaminated runoff from the Tijuana area, which has insufficient and, in some places, nonexistent sewage infrastructure. This beach may also receive influxes of sewage contamination from the Punta Bandera treatment plant outfall, north of the beach. This treatment plant discharges millions of gallons of lightly treated wastewater into the ocean. However, some research has found that ocean currents predominantly carry this contamination northward so additional pollution sources for this beach may need to be identified.

1. Santa Monica Pier
(Los Angeles County)

Tied for number one is Santa Monica Pier, which unfortunately returns to the Beach Bummer list for a second consecutive year. Being a perpetual Beach Bummer was the norm for the pier until 2018 when the city of Santa Monica installed a stormwater capture

system next to the pier.[12] Unfortunately, it appears that Santa Monica Pier's water quality woes go beyond polluted runoff. The city is in the process of replacing the bird deterrent netting underneath the pier because bird feces is suspected to be the main culprit for the poor water quality. The City of Santa Monica is also installing a trash removal device in the large storm drain south of the pier at Pico Boulevard, which could help reduce bacteria levels around the pier.[13] The City recently completed a large stormwater capture project that will keep polluted water from entering the ocean and increase local water resilience.[14]

3. Linda Mar Beach
(San Mateo County)

Linda Mar Beach is no stranger to the Beach Bummer list, last earning Beach Bummer designation in our 2020 report. Unlike the other San Mateo Beach Bummers, this beach is on the Pacific Ocean, and it receives pollution-ridden runoff via San Pedro Creek.

12 https://www.santamonica.gov/blog/santa-monica-draws-line-in-the-sand-on-water-infra-structure-innovation

13 https://pubmed.ncbi.nlm.nih.gov/35635882/

14 https://www.santamonica.gov/sustainable-water-infrastructure-project-swip

Pillar Point Harbor / San Mateo County / photo: Brocken Inaglory

4. Marlin Park
(San Mateo County)

The second of five San Mateo Beach Bummers, Marlin Park has now earned Bummer status for a third consecutive year. This beach sits within a series of human engineered channels near Foster City that allow very little water circulation so pollution from the surrounding developed areas lingers in the water.

5. Erckenbrack Park
(San Mateo County)

Erckenbrack Park has recently become a perennial Beach Bummer having received official Bummer designation for a fourth straight year. This beach is within the same network of channels that is home to Marlin Park and Gull Park and is unfortunately prone to water quality issues. The lack of water circulation and high amount of nearby human development makes the Foster City area a perfect incubator for Beach Bummers.

6. Tijuana River Mouth
(San Diego County)

The Tijuana River discharges tens of millions of gallons of sewage into the ocean every year. This issue originates within the City of Tijuana, which has problems with impaired and insufficient sewage infrastructure. Also, recent research has shown that partially-treated sewage discharges from the Punta Bandera treatment plant, located south of the city, flow north from the Tijuana area and impact beaches in the border region.[15] The USEPA is in the process of funding infrastructure improvements in Tijuana and the Punta Bandera treatment plant, which will be a big first step towards addressing water quality in the area.[16]

7. Pillar Point Harbor at Capistrano Ave.
(San Mateo County)

This beach is one of a half-dozen beaches enclosed within Pillar Point Harbor, which sits on the Pacific Ocean side of San Mateo County. The harbor is dotted with storm drain outfalls that discharge polluted water, which does not get flushed away from the beach by ocean currents or waves due to the harbor's seawalls.

8. Marina del Rey Mother's Beach
(Los Angeles County)

Regrettably, the name Mother's Beach is now synonymous with the term Beach Bummer. The characteristics that make this beach a great destination for families also make it prone to bacteria pollution. This beach is enclosed within Marina del Rey so there is little wave action and water circulation. Similar to the San Mateo Beach Bummers, pollution does not get flushed away from the shore as it does at beaches on the open ocean. In 2022, L.A. County Department of Beaches and Harbors conducted a study concluding that most fecal pollution at the beach comes from birds. The Department of Beaches and Harbors is planning to install bird deterrents around the beach. Mother's Beach was closed for a few days this past January due to a 64,000 gallon sewage spill, which was another unfortunate setback for Mother's Beach visitors.

15 https://www.frontiersin.org/articles/10.3389/fmicb.2021.674214/full

16 https://www.epa.gov/sustainable-water-infrastructure/tijuana-river-watershed-nepa-implementation

9. Poche Beach
(Orange County)

Representing Orange County on this year's Beach Bummer list is Poche Beach, which is a periodic Bummer. Poche Beach receives polluted runoff from a storm drain that flows directly onto the beach. Orange County Public Works stated that equipment designed to clean runoff from the storm drain was out of order for a couple months and running inefficiently after some rare summer rain events last summer. Orange County officials have stated that the equipment is now in good working order, and they expect better water quality moving forward.[17]

10. Gull Park
(San Mateo County)

Rounding out the Beach Bummer list is Gull Park, which is the fifth San Mateo Beach Bummer this year. Gull Park last earned the title of Beach Bummer in 2021. Gull Park is close to Marlin Park and Erckenbrack Park and it suffers from the same water quality issues those beaches do. San Mateo County officials need to develop ways to capture urban runoff before it can flow into the ocean, and they should explore ways to improve water circulation in the channels around Foster City.

17 https://www.southocwqip.org/documents/1148982b045643c887f67b06ef85ff25/explore

BEACH BUMMERS 2022–2023

RANK	LOCATION	SUMMER DRY GRADE	COUNTY/AREA	BEACH TYPE
1	Playa Blanca	F	Tijuana	
1	Santa Monica Pier	F	Los Angeles	Storm Drain Impacted
3	Linda Mar Beach, at San Pedro Creek	F	San Mateo	Storm Drain Impacted
4	Marlin Park, Foster City	F	San Mateo	Enclosed
5	Erckenbrack Park, Foster City	F	San Mateo	Enclosed
6	Tijuana Slough, Tijuana River mouth	F	San Diego	Storm Drain Impacted
7	Pillar Point Harbor, Capistrano Ave Beach	F	San Mateo	Enclosed
8	Marina del Rey Mothers' Beach, between Lifeguard Tower and Boat dock	F	Los Angeles	Enclosed
9	Poche Creek Outlet	F	Orange	Storm Drain Impacted
10	Gull Park, Foster City	F	San Mateo	Enclosed

CALIFORNIA COUNTY SUMMARIES

Kiddie Beach / Ventura County
photo: Genelle Guzman

Note: All averages below refer to the five-year-average unless otherwise indicated.
All percentages are rounded to the nearest whole number.

Del Norte County

Del Norte County is the northernmost coastal county in California, and there is only one beach that was monitored: Crescent City Beach at Battery Point Lighthouse. This beach received an A+ for its Summer Dry Grade, which is normal for this site. There were no Winter Dry Grades issued for this site due to undersampling, and it received a B for its Wet Weather Grade.

This County received 62 inches of rain this past year, which is more than any other County in California and 16% greater than the historical average of 53 inches.

There were no sewage spills in Del Norte County that impacted recreational beaches or other waters during this past year.

DEL NORTE COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	NO DATA	NO DATA	0	0%
B	0	0%	NO DATA	NO DATA	1	100%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	1	100%	NO DATA	NO DATA	1	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	1	100%	1	55%
B	0	0%	0	0%	0	0%
C	0	0%	0	0%	0	23%
D	0	0%	0	0%	0	23%
F	0	0%	0	0%	0	0%
A+B	1	100%	1	100%	1	55%
C,D,F	0	0%	0	0%	1	45%

Humboldt County

Summer Dry Grades were very poor this year with only 40% of the beaches receiving A and B grades, which is below average. Wet Weather Grades were poor but better than average with 60% of the beaches receiving A and B grades.

Humboldt County does not monitor its beaches in the winter months so there were no Winter Dry Grades and no beaches were eligible for the Honor Roll.

Humboldt County received 55 inches of cumulative rainfall, which is 52% higher than the historical average of 36 inches. Most of the rain fell during the winter months when the beaches are not monitored, so we do not know the full impact the increased rainfall had on water quality.

Humboldt County did not have any sewage spills that impacted ocean beaches this past year. However, there were 18 spills totaling 805,123 gallons that reached lakes, rivers, or streams.

HUMBOLDT COUNTY

2022–2023	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
GRADE	#	%	#	%	#	%
A	2	40%	NO DATA	NO DATA	1	20%
B	0	0%	NO DATA	NO DATA	2	40%
C	1	20%	NO DATA	NO DATA	1	20%
D	1	20%	NO DATA	NO DATA	1	20%
F	1	20%	NO DATA	NO DATA	0	0%
A+B	2	40%	NO DATA	NO DATA	3	60%
C,D,F	3	60%	NO DATA	NO DATA	2	40%

5 YEAR AVERAGE	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
GRADE	#	%	#	%	#	%
A	2	36%	NO DATA	NO DATA	1	25%
B	1	12%	NO DATA	NO DATA	1	30%
C	1	20%	NO DATA	NO DATA	0	10%
D	1	12%	NO DATA	NO DATA	1	15%
F	1	20%	NO DATA	NO DATA	1	20%
A+B	2	48%	NO DATA	NO DATA	2	55%
C,D,F	3	52%	NO DATA	NO DATA	2	45%

Mendocino County

Mendocino County's water quality was very good with all beaches receiving A's and B's for Summer Dry Grades. Beaches in this county have not received a Summer Dry Grade lower than a B in the last six years. All Mendocino beaches received A's for their Wet Weather Grades, which is outstanding. Mendocino County does not monitor its beaches in the winter months so there were no Winter Dry Grades and no beaches were eligible for the Honor Roll.

Mendocino County is one of two coastal counties this year that actually experienced lower than average rainfall. The County received 20 inches of rain, which is 43% lower than the average of 35 inches.

Mendocino County beach lovers experienced a sewage free summer. Three spills totaling 4,540 gallons reached a body of water, but none were close to ocean beaches.

MENDOCINO COUNTY

2022–2023	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
GRADE	#	%	#	%	#	%
A	4	80%	NO DATA	NO DATA	5	100%
B	1	20%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	5	100%	NO DATA	NO DATA	5	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
GRADE	#	%	#	%	#	%
A	5	96%	0	NA	3	74%
B	0	4%	0	NA	1	13%
C	0	0%	0	NA	0	9%
D	0	0%	0	NA	0	4%
F	0	0%	0	NA	0	0%
A+B	5	100%	0	NA	4	87%
C,D,F	0	0%	0	NA	1	13%

Sonoma County

Sonoma County beaches got straight A's for Summer Dry Grades, and all beaches got either an A or a B for Wet Weather, which is typical for this stretch of coastline. Sonoma County does not monitor its beaches in winter months so no Winter Dry Grades were generated and no beaches from this county were eligible for the Honor Roll.

Sonoma County is one of two coastal counties that received lower than average precipitation. In total, 17 inches of rain fell across Sonoma County, which is 35% lower than the historical average of 27 inches. This is now the third straight year of below average rainfall for Sonoma County.

All 376,352 gallons of sewage spilled throughout Sonoma County this past year flowed into inland waters and did not impact ocean beaches.

Marin County

Summer Dry Grades were top of the class with all beaches receiving A's. Wet Weather Grades were above average with 96% receiving either an A or a B. Marin County does not monitor its beaches in winter months so no Winter Dry Grades were calculated and no beaches from this County were eligible for the Honor Roll.

Marin County received 37 inches of rain, which is 93% above the historical average of 19 inches. However, most of the rain fell during the winter months when the beaches are not monitored, so we do not know if there was an impact on water quality.

Close to 35,000 gallons of sewage flowed into Marin County waterways this past year. Two spills totaling 8,025 gallons flowed into the Corte Madera Marsh Ecological Reserve. While no recreational beaches are in the area, we are concerned about the ecological impacts of these spills.

SONOMA COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	100%	NO DATA	NO DATA	6	86%
B	0	0%	NO DATA	NO DATA	1	14%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	7	100%	NO DATA	NO DATA	7	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	97%	NO DATA	NO DATA	5	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	3%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	7	97%	NO DATA	NO DATA	5	100%
C,D,F	0	3%	NO DATA	NO DATA	0	0%

MARIN COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	26	100%	NO DATA	NO DATA	25	96%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	1	4%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	26	100%	NO DATA	NO DATA	25	96%
C,D,F	0	0%	NO DATA	NO DATA	1	4%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	23	94%	NO DATA	NO DATA	13	68%
B	1	6%	NO DATA	NO DATA	2	8%
C	0	0%	NO DATA	NO DATA	1	7%
D	0	0%	NO DATA	NO DATA	0	1%
F	0	0%	NO DATA	NO DATA	3	15%
A+B	24	100%	NO DATA	NO DATA	15	77%
C,D,F	0	0%	NO DATA	NO DATA	5	23%

San Francisco County

100% of San Francisco's Summer Dry Grades were either A's or B's this year, which is exceptional and above average.

Wet Weather Grades were slightly below average with 44% of beaches receiving A and B grades. However, this is an improvement over last year when no beaches received an A and only 17% received a B.

Winter Dry Grades were excellent as all beaches received either an A or a B.

San Francisco County received 37 inches of rain, which is a 93% increase from the historical average of 19 inches. San Francisco has a combined sewer system meaning rain runoff flows into the sewer system and gets treated instead of flowing into the ocean. Therefore, we did not see a major decrease in Wet Weather Grades this past year.

One spill sent 2.3 million gallons of sewage into the San Francisco Bay near Crissy Field and Aquatic Park, which were both closed for several days as a result. This single massive spill accounts for most of the sewage that reached surface water across San Francisco in 2022–2023.

SAN FRANCISCO COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	15	94%	16	100%	4	22%
B	1	6%	0	0%	4	22%
C	0	0%	0	0%	2	11%
D	0	0%	0	0%	3	17%
F	0	0%	0	0%	5	28%
A+B	16	100%	16	100%	8	44%
C,D,F	0	0%	0	0%	10	56%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	13	85%	11	75%	5	26%
B	2	13%	2	12%	4	21%
C	0	1%	0	3%	2	11%
D	0	0%	0	3%	1	4%
F	0	1%	1	7%	7	37%
A+B	15	97%	13	88%	9	47%
C,D,F	0	3%	2	12%	10	53%

Crane Cove/San Francisco / Credit: Corey Chrisman

Keller Beach, Richmond / Contra Costa County

East Bay: Alameda County and Contra Costa County

The East Bay had outstanding water quality over the last year with 100% of the beaches earning either an A or a B for Summer Dry Grades. For Wet Weather Grades, 75% of the beaches received A and B grades, which is substantially higher than average. East Bay beaches are monitored in winter months, but no Winter Dry Grades were calculated this year because most winter data was categorized as wet weather.

Alameda County and Contra Costa County received 37 inches of rain, which is a 93% increase from the historical average of 19 inches. More rainfall usually results in worse water quality because more pollutants are washed into the ocean, but the East Bay has bucked that trend this year.

The East Bay tied with Ventura County in having the most sewage spilled into waterways this past year (11 million gallons). Keller Beach was closed for several days after 17,000 gallons of sewage were spilled near the beach. Over 4 million gallons of sewage spilled into the marina south of downtown Oakland — while no ocean beaches were impacted in this instance, we are alarmed by the large amount spilled.

EAST BAY COUNTIES

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	88%	NO DATA	NO DATA	5	63%
B	1	13%	NO DATA	NO DATA	1	13%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	2	25%
A+B	8	100%	NO DATA	NO DATA	6	75%
C,D,F	0	0%	NO DATA	NO DATA	2	25%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	72%	2	70%	3	41%
B	1	18%	1	20%	1	18%
C	0	5%	0	10%	1	15%
D	0	5%	0	0%	0	6%
F	0	0%	0	0%	1	21%
A+B	7	90%	3	90%	4	59%
C,D,F	1	10%	0	10%	3	41%

San Mateo County

Summer Dry Grades were mediocre with only 71% of beaches earning A and B grades. This is still slightly above the average for this county, which has struggled with water quality in recent years.

Wet Weather Grades were bottom of the class as only 31% of beaches earned A and B grades.

Winter Dry Grades fared better with 76% receiving A and B grades, which is well above average for this county.

San Mateo County is home to five of this year's Beach Bummers: Erckenbrack Park, Marlin Park, Gull Park, Linda Mar Beach, and Pillar Point Harbor. Four of the beaches are categorized as enclosed, which means they do not receive sufficient water circulation. Linda Mar Beach is impacted by pollution from San Pedro Creek. This marks the fifth consecutive report where San Mateo County has multiple Beach Bummers.

The one bright spot for San Mateo County this year is that it has one of only two Honor Roll beaches. Bean Hollow State Beach did not experience a single bacterial exceedance this past year making it one of the cleanest beaches in the state.

San Mateo County received 37 inches of rain, which is a 93% increase from the historical average of 19 inches. Wet Weather Grades were substantially lower than average as a result of the increase in rainfall.

Over 3.2 million gallons of sewage were spilled upcoast of Fitzgerald Marine Reserve in February. We did not find records of beach closures for the spill. Miramar Beach experienced three separate sewage spills totaling 81,500 gallons, resulting in beach closures. These spills still account for less than half of the 7.5 million gallons of sewage spilled into the ocean, lakes, rivers, and streams in San Mateo County this past year.

SAN MATEO COUNTY

2022–2023	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	12	50%	12	57%	4	15%
B	5	21%	4	19%	4	15%
C	1	4%	0	0%	2	8%
D	1	4%	2	10%	2	8%
F	5	21%	3	14%	14	54%
A+B	17	71%	16	76%	8	31%
C,D,F	7	29%	5	24%	18	69%

5 YEAR AVERAGE	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	7	42%	9	40%	8	32%
B	4	24%	3	13%	2	10%
C	1	8%	3	15%	3	11%
D	1	6%	2	7%	2	10%
F	3	20%	6	26%	9	37%
A+B	11	66%	11	52%	10	42%
C,D,F	6	34%	10	48%	14	58%

Tunitas Beach / San Mateo County / photo: David Baron

Santa Cruz County

Summer Dry Grades were great and a little higher than average this year with 93% of the beaches receiving A and B grades.

Wet Weather Grades were disappointing as only 21% of the beaches received an A or B grade; this is far lower than the average of 59%.

Winter Dry Grades were outstanding and above average with 100% of the County's beaches receiving A and B grades.

Santa Cruz County received 42 inches of rain, which is 63% above the historical average of 26 inches. This had a dramatic negative impact on Wet Weather Grades.

Seven separate spills sent a total of 553,150 gallons of sewage into waterways. Thirty-six thousand gallons of sewage flowed into the San Lorenzo River less than half a mile upstream from Main Beach in January. We are alarmed as we could not find a record of a beach closure due to the spill.

Monterey County

Monterey County's beaches received all A's for Summer Dry grades, which is better than average.

Wet Weather Grades were decent and equal to average with 83% of the County's beaches receiving A and B grades.

Monterey County does not monitor its beaches in winter months so no Winter Dry Grades were generated and no beaches from this county were eligible for the Honor Roll.

Monterey County received 27 inches of rain, which is 62% higher than the historical average of 17 inches. We do not know the full impact this increase in precipitation had on water quality because Monterey County does not monitor its beaches in the winter when most rainfall occurs.

Two small spills of 50 gallons each occurred near San Carlos Beach in the City of Monterey. Overall, 109,605 gallons of sewage were spilled into waterways across the county in this reporting year.

SANTA CRUZ COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	10	71%	4	67%	1	7%
B	3	21%	2	33%	2	14%
C	0	0%	0	0%	2	14%
D	0	0%	0	0%	2	14%
F	1	7%	0	0%	7	50%
A+B	13	93%	6	100%	3	21%
C,D,F	1	7%	0	0%	11	79%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	9	69%	6	65%	8	45%
B	3	20%	2	20%	2	14%
C	1	5%	1	10%	2	13%
D	0	3%	0	2%	1	6%
F	0	3%	0	2%	4	23%
A+B	11	89%	8	86%	10	59%
C,D,F	1	11%	1	14%	7	41%

MONTEREY COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	100%	NO DATA	NO DATA	5	83%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	1	17%
A+B	6	100%	NO DATA	NO DATA	5	83%
C,D,F	0	0%	NO DATA	NO DATA	1	17%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	92%	4	92%	5	83%
B	1	8%	0	8%	0	0%
C	0	0%	0	0%	0	7%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	1	10%
A+B	7	100%	4	100%	5	83%
C,D,F	0	0%	0	0%	1	17%

San Luis Obispo County

In typical fashion, 100% of San Luis Obispo County's Summer Dry Grades were either A's or B's.

Wet Weather Grades were lower than average with 84% of the beaches receiving A and B grades.

San Luis Obispo County beaches are monitored in the winter. However, this past winter was so rainy that most of the winter samples were categorized under wet weather. Therefore, we were not able to issue Winter Dry Grades.

San Luis Obispo County received 24 inches of rain, which is 117% higher than the average of 11 inches. The exceptionally large increase in precipitation likely caused the below average Wet Weather Grades.

558,826 gallons of sewage spilled into San Luis Obispo County waterways in 2022–2023. Morro Beach and Vaila Beach experienced closures due to separate 10,000 gallon sewage spills.

Santa Barbara County

Summer Dry Grades were exceptionally good this past year with 100% of beaches receiving an A.

Wet Weather Grades were flunking with a dismal 50% earning A and B grades, which is typical for Santa Barbara County.

Winter Dry Grades were superb and above average with 100% of the beaches earning A and B grades for a third straight year.

Santa Barbara County received 20 inches of rainfall this past year, which was 83% higher than the average of 11 inches. However, there was not a noticeable dip in wet weather water quality as a result.

Nine sewage spills totaling 51,180 gallons flowed into the ocean, rivers, lakes, and streams throughout the county. 28,034 gallons of sewage were spilled into the ocean near the Santa Barbara Pier resulting in temporary closures of the surrounding beaches.

SAN LUIS OBISPO COUNTY

2022–2023	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	18	95%	NO DATA	NO DATA	14	74%
B	1	5%	NO DATA	NO DATA	2	11%
C	0	0%	NO DATA	NO DATA	1	5%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	2	11%
A+B	19	100%	NO DATA	NO DATA	16	84%
C,D,F	0	0%	NO DATA	NO DATA	3	16%

5 YEAR AVERAGE	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	19	98%	18	95%	16	85%
B	0	2%	1	3%	2	9%
C	0	0%	0	2%	0	2%
D	0	0%	0	0%	0	2%
F	0	0%	0	0%	0	1%
A+B	19	100%	19	98%	18	95%
C,D,F	0	0%	0	2%	1	5%

SANTA BARBARA COUNTY

2022–2023	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	16	100%	6	50%	3	19%
B	0	0%	6	50%	5	31%
C	0	0%	0	0%	3	19%
D	0	0%	0	0%	3	19%
F	0	0%	0	0%	2	13%
A+B	16	100%	12	100%	8	50%
C,D,F	0	0%	0	0%	8	50%

5 YEAR AVERAGE	Summer Dry #	%	Winter Dry #	%	Wet Weather #	%
A	14	86%	13	84%	7	43%
B	1	8%	1	9%	1	8%
C	1	5%	0	3%	1	9%
D	0	1%	0	0%	2	13%
F	0	0%	1	4%	5	29%
A+B	15	94%	14	94%	8	50%
C,D,F	1	6%	1	6%	8	50%

Ventura County

True to form, 100% of Ventura County's beaches received A and B Summer Dry Grades.

Wet Weather Grades took a plunge below average this past year with only 53% earning A's and B's.

Winter Dry grades were unusually poor in Ventura County. Only 67% of the beaches receive A's or B's.

Ventura County received 22 inches of rain, which is 111% higher than the historical average of 10 inches. This increase likely resulted in the below average Wet Weather Grades.

The 11 million gallons of sewage spilled into waterways throughout Ventura County is the most spilled within a single county this past year. No ocean beaches were impacted by the six total sewage spills, but nearly all 11 million gallons spilled into San Antonio Creek in one spill event, which is highly concerning.

Los Angeles County

Los Angeles County had superlative Summer Dry Grades with 94% of the County's beaches receiving A and B grades, which is above average.

Wet Weather Grades were appalling with only 30% earning A's and B's, which is well below the already poor average of 44%.

Winter Dry Grades dipped below average with only 74% earning A and B grades.

Two of L.A. County's chronic Beach Bummers returned to the list this year. Marina del Rey Mother's Beach and Santa Monica Pier have unfortunately kept their streak of poor water quality alive for another year.

L.A. County received 23 inches of rain, which is 143% above the historical average of 10 inches. L.A. County experienced the most dramatic increase in precipitation, and that unfortunately led to particularly poor Wet Weather Grades.

Los Angeles County experienced 95 sewage spills that added up to 330,396 gallons, which is far less than the 20 million gallons spilled the previous year. Mother's Beach was closed for several days due to a 64,000 gallon spill in January.

VENTURA COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	31	97%	5	56%	18	47%
B	1	3%	1	11%	2	5%
C	0	0%	1	11%	2	5%
D	0	0%	1	11%	6	16%
F	0	0%	1	11%	10	26%
A+B	32	100%	6	67%	20	53%
C,D,F	0	0%	3	33%	18	47%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	38	99%	12	91%	23	77%
B	0	0%	1	4%	2	5%
C	0	1%	0	3%	2	5%
D	0	0%	0	1%	0	1%
F	0	0%	0	0%	3	11%
A+B	38	99%	13	96%	24	82%
C,D,F	0	1%	1	4%	5	18%

LOS ANGELES COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	67	81%	28	61%	17	22%
B	11	13%	6	13%	7	9%
C	2	2%	3	7%	8	10%
D	1	1%	3	7%	11	14%
F	2	2%	6	13%	36	46%
A+B	78	94%	34	74%	24	30%
C,D,F	5	6%	12	26%	55	70%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	78	85%	66	75%	33	34%
B	7	8%	9	11%	10	11%
C	3	4%	6	7%	7	7%
D	2	2%	2	2%	8	8%
F	1	2%	4	5%	40	40%
A+B	85	92%	76	86%	43	44%
C,D,F	7	8%	13	14%	54	56%

Orange County

Summer Dry Grades surpassed the average with 98% of the beaches receiving A and B grades.

Wet Weather Grades were also better than average with 63% of the beaches receiving A and B grades.

Winter Dry Grades were stellar with 94% of the beaches receiving A and B grades.

Poche Beach returns to the Beach Bummer list after a brief two year hiatus. This beach has now earned Beach Bummer status four times in the last 10 years.

Orange County received 19 inches of rain, which is 116% higher than the historical average of 9 inches. However, the very large increase in rainfall did not appear to have a negative impact on Wet Weather Grades.

A total of 28,845 gallons of sewage were spilled into Orange County Waterways in 2022–2023. In March 2023, Doheny State Beach near San Juan Creek was closed for several days after a 4,000 gallon sewage spill close to the beach.

ORANGE COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	123	94%	44	85%	63	53%
B	6	5%	5	10%	13	11%
C	1	1%	1	2%	10	8%
D	0	0%	0	0%	3	3%
F	1	1%	2	4%	31	26%
A+B	129	98%	49	94%	76	63%
C,D,F	2	2%	3	6%	44	37%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	113	92%	106	88%	54	47%
B	6	5%	8	6%	11	10%
C	2	2%	3	3%	7	6%
D	1	0%	1	1%	8	7%
F	1	1%	2	2%	34	30%
A+B	119	97%	113	94%	65	57%
C,D,F	4	3%	7	6%	49	43%

Newport Harbor / Orange County

San Diego County

In May 2022, San Diego County began using a new bacteria testing method at the beaches it manages (approximately 33% of all the beaches in the county). This new method uses a type of polymerase chain reaction (PCR) to measure bacterial genetic material in the water. Unfortunately, PCR data is not compatible with our grading methodology, which was designed to use data generated by culturing bacteria. Heal the Bay has been a proponent of using PCR-based methods because they yield results faster and more accurately than culture methods. Heal the Bay is currently exploring ways to incorporate this new PCR data into the Beach Report Card.

In order to provide some information on water quality at San Diego beaches, we decided to analyze how frequently beaches monitored by San Diego County exceeded standards approved by the State of California. We found that beaches monitored using PCR exceeded standards in 50%-76% of the samples collected. Previously, these beaches exceeded standards in 5%–10% of samples analyzed using cultured bacteria methods. We do not have evidence that these beaches are more heavily polluted, rather, we think the

SAN DIEGO *ENTEROCOCCUS* EXCEEDANCE RATES USING TWO DIFFERENT METHODS
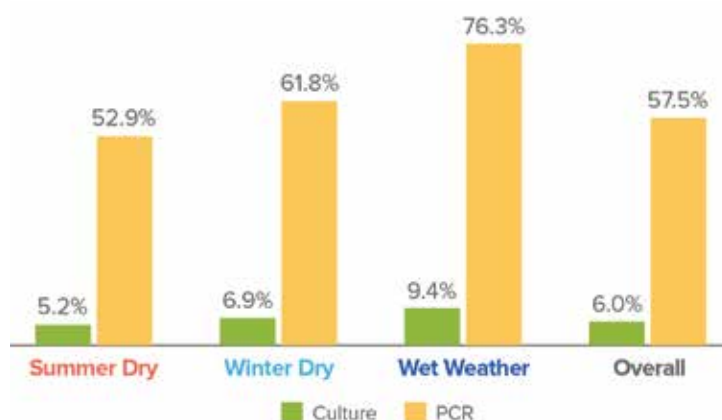
major discrepancy in bacterial exceedances is due to the high sensitivity of the new PCR method. We urge San Diego County to collect bacteria using culture methods until this discrepancy can be rectified.

We were still able to grade most of San Diego County's beaches. And among those beaches, Summer Dry Grades were good and slightly higher than average with 95% of the beaches receiving A and B grades.

Wet Weather Grades were poor and below average with only 63% of the beaches receiving A and B grades.

Winter Dry Grades were below average with 74% of beaches receiving A and B grades.

The Tijuana River Mouth ended up on the Beach Bummer list this year. Millions of gallons of untreated sewage regularly flow into the ocean via the Tijuana River. San Diego County was also home to one of two Honor Roll beaches: Point Loma Lighthouse.

San Diego County received 14 inches of rain last year, which is 59% higher than the historical average of 9 inches. This increase in rainfall may account for the below average Wet Weather Grades.

Ten million gallons of sewage spilled into San Diego Bay near Tidelands Park, Spanish Landing, and Shelter Island, resulting in closures for those beaches. This one spill comprised nearly all the sewage spilled into San Diego County waterways in 2022–2023.

SAN DIEGO COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	36	84%	14	74%	30	56%
B	5	12%	0	0%	4	7%
C	1	2%	1	5%	3	6%
D	0	0%	1	5%	2	4%
F	1	2%	3	16%	15	28%
A+B	41	95%	14	74%	34	63%
C,D,F	2	5%	5	26%	20	37%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	64	86%	44	82%	45	70%
B	6	8%	4	8%	6	10%
C	3	4%	2	3%	2	3%
D	1	1%	2	3%	3	4%
F	1	1%	2	3%	8	13%
A+B	69	94%	48	91%	51	79%
C,D,F	4	6%	5	9%	13	21%

OREGON COUNTY SUMMARIES

Seaside Beach / Clatsop County

Note: All averages below refer to the five-year-average unless otherwise indicated.

Oregon's Department of Environmental Quality monitors water quality at ocean beaches between Memorial Day and Labor Day and tests for one fecal indicator bacteria, *Enterococcus*. This is in contrast to California, which requires three indicator bacteria to be tested from April 1 to October 31 every year. Funding for ocean beach monitoring in Oregon comes entirely from the U.S. Environmental Protection Agency's (EPA) Beaches Environmental Assessment and Coastal Health Act (BEACH Act).

Most years, we are unable to grade the majority of Oregon beaches due to a lack of sampling. Our methodology requires that beaches must be sampled for at least 75% of the weeks in their summer season — defined as Memorial Day through Labor Day. We encourage the State of Oregon to provide additional funding for increased ocean water quality monitoring to meet this minimum requirement and be more protective of public health. No Oregon beaches were monitored frequently enough to receive a Summer Dry Grade, and no beaches were monitored during the winter months. Only six counties received Wet Weather grades, and only 61% of the beaches received A and B grades, which is lower than the state's historical average of 73%. This is the second straight year we have not been able to issue Summer Dry grades, which is a major disappointment. We urge Oregon officials to devote more resources to beach monitoring because people deserve to know when and where they might be exposed to sewage pollution.

OREGON

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	38	59%
B	NO DATA	NO DATA	NO DATA	NO DATA	1	2%
C	NO DATA	NO DATA	NO DATA	NO DATA	7	11%
D	NO DATA	NO DATA	NO DATA	NO DATA	9	14%
F	NO DATA	NO DATA	NO DATA	NO DATA	9	14%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	39	61%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	25	39%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	92%	NO DATA	NO DATA	12	66%
B	0	0%	NO DATA	NO DATA	1	8%
C	0	0%	NO DATA	NO DATA	1	7%
D	0	4%	NO DATA	NO DATA	1	4%
F	0	4%	NO DATA	NO DATA	3	16%
A+B	6	92%	NO DATA	NO DATA	13	73%
C,D,F	1	8%	NO DATA	NO DATA	5	27%

CLATSOP COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	7	70%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	1	10%
D	NO DATA	NO DATA	NO DATA	NO DATA	1	10%
F	NO DATA	NO DATA	NO DATA	NO DATA	1	10%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	7	70%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	3	30%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	100%	NO DATA	NO DATA	2	58%
B	0	0%	NO DATA	NO DATA	0	5%
C	0	0%	NO DATA	NO DATA	0	5%
D	0	0%	NO DATA	NO DATA	0	5%
F	0	0%	NO DATA	NO DATA	1	26%
A+B	2	100%	NO DATA	NO DATA	2	63%
C,D,F	0	0%	NO DATA	NO DATA	1	37%

COOS COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	8	89%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	1	11%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	8	89%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	11%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	NO DATA	NO DATA	1	43%
B	0	0%	NO DATA	NO DATA	1	29%
C	0	0%	NO DATA	NO DATA	0	7%
D	0	0%	NO DATA	NO DATA	0	7%
F	0	0%	NO DATA	NO DATA	0	14%
A+B	1	100%	NO DATA	NO DATA	2	71%
C,D,F	0	0%	NO DATA	NO DATA	1	29%

LINCOLN COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	12	60%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	2	10%
D	NO DATA	NO DATA	NO DATA	NO DATA	3	15%
F	NO DATA	NO DATA	NO DATA	NO DATA	3	15%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	12	60%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	8	40%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	82%	NO DATA	NO DATA	5	76%
B	0	0%	NO DATA	NO DATA	0	6%
C	0	0%	NO DATA	NO DATA	1	9%
D	0	9%	NO DATA	NO DATA	0	6%
F	0	9%	NO DATA	NO DATA	0	3%
A+B	2	82%	NO DATA	NO DATA	5	82%
C,D,F	1	18%	NO DATA	NO DATA	1	18%

TILLAMOOK COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	9	53%
B	NO DATA	NO DATA	NO DATA	NO DATA	1	6%
C	NO DATA	NO DATA	NO DATA	NO DATA	1	6%
D	NO DATA	NO DATA	NO DATA	NO DATA	4	24%
F	NO DATA	NO DATA	NO DATA	NO DATA	2	12%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	10	59%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	7	41%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	NO DATA	NO DATA	2	92%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	8%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	1	100%	NO DATA	NO DATA	2	92%
C,D,F	0	0%	NO DATA	NO DATA	0	8%

CURRY COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	3	100%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	3	100%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	0	25%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	1	75%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	0	25%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	75%

LANE COUNTY

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	2	50%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	2	50%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	2	50%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	2	50%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	1	57%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	1	43%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	1	57%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	43%

Heceta Head Lighthouse / Lane County / photo: Rick Obst

WASHINGTON COUNTY SUMMARIES

Point No Point Beach / Kitsap County

Note: All averages below refer to the five-year-average unless otherwise indicated.

Washington's Department of Ecology monitors water quality at ocean beaches between Memorial Day and Labor Day and tests for one fecal indicator bacteria, *Enterococcus*. This is in contrast to California, which requires three indicator bacteria to be tested from April 1 to October 31 every year. Approximately 80% of the funding for ocean beach monitoring in the State comes from the BEACH Act, and the remaining 20% of funding comes from the U.S. EPA's National Estuary Program's Pathogen Prevention, Reduction, and Control Grant. The Makah Tribe in Clallam County also conducts beach monitoring through separate BEACH Program Tribal funding. Unlike the rest of the state, the Makah Tribe monitors beaches on a weekly basis. We commend the Makah Tribe for their robust monitoring, and we call on the Washington Department of Ecology to increase monitoring across the rest of the state.

Summer Dry Grades were excellent with 98% of the beaches receiving A and B grades, which is above the average of 93%. Wet Weather Grades were equally outstanding and above average with 97% of beaches receiving A and B grades.

The Makah Tribe is the only entity that monitors beaches in the winter months so Makah monitored beaches are usually the only ones to receive Winter Dry Grades. Unfortunately, we were not able to obtain Makah Tribe winter monitoring data in time to create this report so we do not have any Winter Dry Grades to report. We hope to resolve this issue in the future.

WASHINGTON

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	111	94%	NO DATA	NO DATA	166	97%
B	5	4%	NO DATA	NO DATA	1	1%
C	2	2%	NO DATA	NO DATA	2	1%
D	0	0%	NO DATA	NO DATA	2	1%
F	0	0%	NO DATA	NO DATA	1	1%
A+B	116	98%	NO DATA	NO DATA	167	97%
C,D,F	2	2%	NO DATA	NO DATA	5	3%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	137	90%	NO DATA	NO DATA	122	91%
B	5	3%	NO DATA	NO DATA	4	3%
C	4	3%	NO DATA	NO DATA	4	3%
D	4	2%	NO DATA	NO DATA	2	1%
F	4	2%	NO DATA	NO DATA	3	2%
A+B	142	93%	NO DATA	NO DATA	126	94%
C,D,F	11	7%	NO DATA	NO DATA	8	6%

CLALLAM COUNTY

2022–2023	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	8	100%	NO DATA	NO DATA	9	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	8	100%	NO DATA	NO DATA	9	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	10	93%	8	100%	13	93%
B	1	6%	0	0%	1	7%
C	0	2%	0	0%	0	0%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	0	0%
A+B	11	98%	8	100%	14	100%
C,D,F	0	2%	0	0%	0	0%

KITSAP COUNTY

2022–2023	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	27	100%	NO DATA	NO DATA	30	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	27	100%	NO DATA	NO DATA	30	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	31	92%	NO DATA	NO DATA	30	89%
B	1	3%	NO DATA	NO DATA	1	4%
C	0	1%	NO DATA	NO DATA	1	3%
D	1	4%	NO DATA	NO DATA	1	3%
F	0	0%	NO DATA	NO DATA	0	1%
A+B	32	95%	NO DATA	NO DATA	31	93%
C,D,F	2	5%	NO DATA	NO DATA	2	7%

SKAGIT COUNTY

2022–2023	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	4	100%	NO DATA	NO DATA	4	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	4	100%	NO DATA	NO DATA	4	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	2	92%	NO DATA	NO DATA	2	73%
B	0	0%	NO DATA	NO DATA	0	7%
C	0	8%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	1	20%
A+B	2	92%	NO DATA	NO DATA	2	80%
C,D,F	0	8%	NO DATA	NO DATA	1	20%

SNOHOMISH COUNTY

2022–2023	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	10	91%	NO DATA	NO DATA	21	100%
B	1	9%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	11	100%	NO DATA	NO DATA	21	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry ☀		Winter Dry ❄		Wet Weather ☁	
GRADE	#	%	#	%	#	%
A	14	95%	NO DATA	NO DATA	15	92%
B	0	0%	NO DATA	NO DATA	1	3%
C	0	3%	NO DATA	NO DATA	0	2%
D	0	1%	NO DATA	NO DATA	1	3%
F	0	1%	NO DATA	NO DATA	0	0%
A+B	14	95%	NO DATA	NO DATA	15	95%
C,D,F	1	5%	NO DATA	NO DATA	1	5%

WHATCOM COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	3	100%	NO DATA	NO DATA	9	75%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	2	17%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	1	8%
A+B	3	100%	NO DATA	NO DATA	9	75%
C,D,F	0	0%	NO DATA	NO DATA	3	25%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	2	42%	NO DATA	NO DATA	6	79%
B	1	13%	NO DATA	NO DATA	0	3%
C	1	13%	NO DATA	NO DATA	0	5%
D	0	8%	NO DATA	NO DATA	0	3%
F	1	25%	NO DATA	NO DATA	1	10%
A+B	3	54%	NO DATA	NO DATA	6	82%
C,D,F	2	46%	NO DATA	NO DATA	1	18%

ISLAND COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	3	60%	NO DATA	NO DATA	9	100%
B	2	40%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	5	100%	NO DATA	NO DATA	9	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	6	71%	NO DATA	NO DATA	8	92%
B	1	12%	NO DATA	NO DATA	0	3%
C	1	7%	NO DATA	NO DATA	0	3%
D	0	2%	NO DATA	NO DATA	0	0%
F	1	7%	NO DATA	NO DATA	0	3%
A+B	7	83%	NO DATA	NO DATA	9	94%
C,D,F	1	17%	NO DATA	NO DATA	1	6%

KING COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	9	100%	NO DATA	NO DATA	29	97%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	1	3%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	9	100%	NO DATA	NO DATA	29	97%
C,D,F	0	0%	NO DATA	NO DATA	1	3%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	21	91%	NO DATA	NO DATA	27	93%
B	1	3%	NO DATA	NO DATA	1	3%
C	0	2%	NO DATA	NO DATA	1	3%
D	0	2%	NO DATA	NO DATA	0	1%
F	1	3%	NO DATA	NO DATA	0	0%
A+B	21	94%	NO DATA	NO DATA	28	96%
C,D,F	1	6%	NO DATA	NO DATA	1	4%

JEFFERSON COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	12	100%	NO DATA	NO DATA	12	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	12	100%	NO DATA	NO DATA	12	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	5	73%	NO DATA	NO DATA	7	93%
B	0	6%	NO DATA	NO DATA	0	0%
C	0	6%	NO DATA	NO DATA	1	7%
D	1	9%	NO DATA	NO DATA	0	0%
F	0	6%	NO DATA	NO DATA	0	0%
A+B	5	79%	NO DATA	NO DATA	7	93%
C,D,F	1	21%	NO DATA	NO DATA	1	7%

MASON COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	9	100%	NO DATA	NO DATA	9	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	9	100%	NO DATA	NO DATA	9	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	8	89%	NO DATA	NO DATA	7	100%
B	0	2%	NO DATA	NO DATA	0	0%
C	1	9%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	8	91%	NO DATA	NO DATA	7	100%
C,D,F	1	9%	NO DATA	NO DATA	0	0%

GRAY'S HARBOR COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	6	67%	NO DATA	NO DATA	9	100%
B	1	11%	NO DATA	NO DATA	0	0%
C	2	22%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	7	78%	NO DATA	NO DATA	9	100%
C,D,F	2	22%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	9	100%	NO DATA	NO DATA	9	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	9	100%	NO DATA	NO DATA	9	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

THURSTON COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	3	100%	NO DATA	NO DATA	6	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	3	100%	NO DATA	NO DATA	6	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	2	80%	NO DATA	NO DATA	2	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	1	20%	NO DATA	NO DATA	0	0%
A+B	2	80%	NO DATA	NO DATA	2	100%
C,D,F	1	20%	NO DATA	NO DATA	0	0%

PIERCE COUNTY

2022–2023	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	17	94%	NO DATA	NO DATA	19	90%
B	1	6%	NO DATA	NO DATA	1	5%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	1	5%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	18	100%	NO DATA	NO DATA	20	95%
C,D,F	0	0%	NO DATA	NO DATA	1	5%

5 YEAR AVERAGE	Summer Dry #	Summer Dry %	Winter Dry #	Winter Dry %	Wet Weather #	Wet Weather %
GRADE	#	%	#	%	#	%
A	25	98%	NO DATA	NO DATA	14	90%
B	0	0%	NO DATA	NO DATA	0	3%
C	0	1%	NO DATA	NO DATA	1	5%
D	0	1%	NO DATA	NO DATA	0	1%
F	0	0%	NO DATA	NO DATA	0	1%
A+B	25	98%	NO DATA	NO DATA	15	93%
C,D,F	0	2%	NO DATA	NO DATA	1	8%

TIJUANA MEXICO SUMMARY

photo: Cesar Bojorquez

The Tijuana area has many beaches that are important for recreation and tourism in a city of over 2 million people. We obtained weekly monitoring data from the County of San Diego for three beaches in the Tijuana area: Playa El Faro, Playa El Vigia, and Playa Blanca. During summer months when it's dry, El Vigia and El Faro received C grades while Playa Blanca (the number one Beach Bummer) received an F. The three Tijuana beaches received straight F's for all other grades, with the exception of El Faro, which received a D for a Winter Dry grade.

These poor marks indicate a serious health risk to local beachgoers and spell trouble for the local tourism economy. This stretch of coastline is heavily impacted by sewage pollution year-round, even during dry weather due to failing or insufficient sewage infrastructure. One major source of fecal contamination at Tijuana beaches is the Punta Bandera treatment plant located south of the city. This plant collects sewage from the city in several large ponds near the ocean, and periodically releases the untreated or partially treated sewage into the ocean.[18] Prevailing ocean currents carry sewage pollution north to the Tijuana beaches as well as Imperial Beach. The USEPA is moving forward with plans to improve sewage infrastructure on both sides of the border that are expected to improve water quality in the area.[19] However, the sewage infrastructure problems in the Tijuana River Watershed are complex and widespread so this should be seen as a first step.

TIJUANA, MEXICO

2022–2023	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	0	0%	0	0%	0	0%
B	0	0%	0	0%	0	0%
C	2	67%	0	0%	0	0%
D	0	0%	1	33%	0	0%
F	1	33%	2	67%	3	100%
A+B	0	0%	0	0%	0	0%
C,D,F	3	100%	3	100%	3	100%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	0	0%	NO DATA	NO DATA	NO DATA	NO DATA
B	0	0%	NO DATA	NO DATA	NO DATA	NO DATA
C	0	0%	NO DATA	NO DATA	NO DATA	NO DATA
D	2	67%	NO DATA	NO DATA	NO DATA	NO DATA
F	1	33%	NO DATA	NO DATA	NO DATA	NO DATA
A+B	0	0%	NO DATA	NO DATA	NO DATA	NO DATA
C,D,F	3	100%	NO DATA	NO DATA	NO DATA	NO DATA

18 https://wildcoast.org/wp-content/uploads/2019/08/Issue-Briefing-Tijuana-River-Pollution.pdf

19 https://www.epa.gov/sustainable-water-infrastructure/tijuana-river-watershed-nepa-implementation

BEACH NEWS

Mission Bay Park / San Diego County

Efforts to Weaken Water Quality Objectives

Heal the Bay has been at the forefront of ensuring water quality protections for visitors to West Coast beaches since our founding. Our goals and motivations have always been to protect the public and the environment from the harmful impacts of sewage pollution. Heal the Bay supported mandated beach monitoring through AB 411 (Wayne, 1997); we have advocated for millions of dollars in investments for water quality improvements; our Beach Report Card has spurred local action to improve water quality; and most recently, we prompted the state to define freshwater recreation sites and develop guidance on monitoring them for fecal pollution through our sponsorship of AB 1066 (Bloom, 2021).

Alarmingly, we have observed an increase in the number of attempts to loosen or rollback fecal pollution regulations in California. When waterways become polluted with contaminants such as FIB, the USEPA holds the surrounding municipalities and pollution producing facilities responsible for that pollution and requires them to keep contaminants out of our waterways or face penalties. Unfortunately, we have seen the entities responsible for pollution in our waterways try to weaken the standards they are held to in order to achieve compliance more readily. Municipalities are claiming with increased frequency that they are only responsible for fecal pollution originating from human bodies, which inappropriately disregards fecal pollution from indirect human activities such as pets, livestock, and certain flocks of birds, which contribute fecal contamination to our watersheds as a result of human activity. Human fecal waste does pose the largest health risk to humans, but research has shown that fecal matter from other animals is also hazardous to human health.[20] Heal the Bay is adamantly against the efforts to circumvent

California's water quality objectives, and we urge the State Water Resources Control Board (SWRCB) to firmly reassert that local governments and other pollution dischargers are responsible for keeping all fecal matter originating from human activities out of the ocean and waterways. Some recent efforts to weaken water quality restrictions include:

- In September 2022, The SWRCB hosted the California Bacteria Summit, which was co-hosted by the California Stormwater Quality Association (CASQA).[21] CASQA is effectively a lobbying alliance that represents the interests of the municipalities responsible for keeping pollution out of the water. The summit was comprehensive, but a significant amount of time was spent discussing strategies that would allow municipalities and pollution dischargers to get off the hook for fecal pollution. Heal the Bay and other groups boycotted the Bacteria Summit because the organizers failed to include many crucial stakeholders in their discussion such as Indigenous and environmental justice organizations. The SWRCB did acknowledge this shortcoming and is in the process of planning a second summit that will include Indigenous, environmental justice, and nonprofit organizations.

- Under the Clean Water Act of 1972, some polluted waterbodies have limits on the amount of pollution that can be discharged into them. These limits are called Total Maximum Daily Loads (TMDL), and they are defined as the maximum amount of pollution that a waterbody can handle before people get sick, aquatic life is harmed, or other beneficial uses are impacted. A local government is usually given 20 to 30 years to achieve compliance with a TMDL. San Diego County has numerous bacterial TMDLs in place for its beaches, and the local government agencies responsible for those TMDLs recently sought an extension for the compliance deadline at

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20 https://www.sciencedirect.com/science/article/abs/pii/S2352352220300451

21 https://www.casqa.org/

20 beaches. In addition to the extended deadline, the responsible parties sought to adjust their interim milestones to only include fecal matter from human bodies, which is not health protective. San Diego County municipalities have actually made a lot of progress towards reaching the TMDLs set for their beaches so we are confused and disappointed as to why they are taking this strategy.

Keeping Our Ocean Safe and Clean

The good news about water quality at our beaches is that we know how to reduce the most common inputs of fecal pollution. A watershed-wide nature-based approach is our best bet for keeping our waters clean and safe in addition to sewage infrastructure upgrades. Green infrastructure spaced throughout our communities will provide cleaner water; green space for communities to enjoy; and habitat for wildlife. Los Angeles County has created a model program for improving coastal and inland water quality using a multi-benefit approach. In 2018, Los Angeles County voters set Measure W into law, which created the Safe, Clean Water Program.[22] This funding program aims to increase local water supply, improve water quality, and protect public health by focusing efforts on multi-benefit projects in communities that have been identified as severely disadvantaged with regards to access to green space and other socioeconomic factors. Multi-benefit projects are an efficient and effective use of our taxpayer dollars that serve both community and environmental needs. Programs such as this will be increasingly important for creating local water supplies as climate whiplash and drought conditions in California continue to worsen. The Los Angeles County Board of Supervisors has approved $1 billion in stormwater investments for 144 projects under the Safe, Clean Water Program to date.

Funding Shoreline Monitoring Programs

The U.S. EPA's Beaches Environmental Assessment and Coastal Health Act[23] (BEACH Act) was passed in 2000 and provides funding for recreational water quality monitoring at ocean and Great Lakes beaches. Some states, such as Oregon, rely solely on this funding to sustain their monitoring program. Without the BEACH Act funding, many states would abandon their beach monitoring programs, which would be devastating to public health. Millions of people could get sick by unknowingly exposing themselves to poor water quality. The economic cost would also be severe as coastal recreation and tourism generates well over $100 billion annually.[24]

Unfortunately, the amount of money Congress allocates to the BEACH Act has not increased significantly since it was adopted in 2000. The Federal Government must increase funding for the BEACH Act so coastal states can keep their communities and visitors safe and healthy. Surfrider Foundation is leading the effort to increase federal spending for water quality monitoring.[25]

We also urge states like Oregon to take local action to maintain a robust recreational water quality program moving forward. California funds statewide beach monitoring programs with BEACH Act resources as well as Senate Bill 482 (SB 482, Kehoe 2011), which funds two-thirds of the non-regulatory based shoreline monitoring in the State. SB 482 allocation is overseen by the State Water Resources Control Board (SWRCB). However, the funds provided are not sufficient as there are many beaches that do not get monitored, and many counties do not conduct monitoring year round.

22 https://safecleanwaterla.org/

23 https://www.epa.gov/beach-tech/about-beach-act

24 https://coast.noaa.gov/data/digitalcoast/pdf/econ-report.pdf

25 https://www.surfrider.org/pages/support-clean-water-programs-in-epas-fy2023-budget

NowCast Update

For the ninth summer, Heal the Bay is providing daily water quality predictions for California beaches at the Beach Report Card with NowCast website and application. NowCast predicts concentrations of bacteria in the water on a daily basis, thus providing additional information to the public and filling in the time gaps of traditional bacteria sampling. To make daily predictions, we use computer models to examine correlations between environmental conditions (such as temperature and tide) and historical bacteria concentrations. Our NowCast models then predict with a high accuracy how much bacteria is present in the water given the current local conditions and are verified with sampling data. Visit beachreportcard.org[26] to find daily summer predictions for 20 beaches in California. The Beach Report Card with NowCast app is available for free on iOS[27] and Android[28] devices.

Justice 40 Initiative

In 2022, the Biden Administration created the Justice 40 Initiative which will redirect up to 40% of certain government funds to investments in disadvantaged communities.[29] This Initiative prompted the USEPA to create a list of California beaches that are near working class communities with high proportions of residents that identify as Black, Indigenous, Latinx, Asian, or other people of color. Thus far, we do not know how the list will be used by the USEPA, but it will potentially serve as a tool to prioritize water quality improvement projects and monitoring in the future. Heal the Bay is sharing feedback and recommendations with USEPA in order to ensure that beaches are accurately and equitably prioritized based on demographics of actual visitors, accessibility, amenities, water quality, and more.

The Beach Report Card and Access to Recreation

Recreation, whether it be at a park or a beach, is vital to good quality of life and public health. While we believe the Beach Report Card and River Report Card programs are important tools for keeping water recreators safe, we must acknowledge that the report cards have, thus far, been limited in scope. Our report cards are only useful for individuals who have access to recreation areas and folks who are comfortable going in the water. Working class communities that are majority Black, Indigenous, Latinx, Asian, and other people of color experience many barriers when it comes to accessing recreational spaces and activities. These barriers include an inability to take time off from work; physical distance from recreation opportunities; and a lack of exposure to certain types of recreation, among many others. We believe it is an inherent right for everyone to have access to recreation opportunities and spaces regardless of their identity, and therefore, we need to reduce and remove barriers to recreation.

We acknowledge that recreation justice has been a major shortcoming in our work. Heal the Bay is currently taking steps to expand the user base of our Beach and River Report cards by working with organizations that are taking down barriers to water recreation for working class communities of color.

26 https://beachreportcard.org/

27 https://apps.apple.com/us/app/beach-report-card/id472446703

28 https://play.google.com/store/apps/details?id=org.healthebay.brc&pli=1

29 https://www.whitehouse.gov/environmentaljustice/justice40/

**Nick Gabaldón Day /
Santa Monica Beach**

For the last decade, Heal the Bay began teaming up with organizations such as The Black Surfers Collective,[30] Surf Bus Foundation,[31] Santa Monica Conservancy,[32] and Swim Up Hill[33] to celebrate Nick Gabaldón — a trailblazing surfer of African American and Mexican American descent and the first

documented surfer of color in Santa Monica Bay. Nick Gabaldón Day introduces people young and old from inland communities to the magic of the coast through free surf and ocean safety lessons, beach ecology exploration, and a history lesson about a man who followed his passion and a community who challenged anti-Black discrimination to enjoy the beach. Heal the Bay will continue to celebrate Nick Gabaldón Day, and we will continue to look for opportunities to expand access to beach recreation.

30 http://www.blacksurferscollective.org/

31 https://www.surfbusfoundation.org/

32 https://www.smconservancy.org/

33 https://www.swimuphill.org/

APPENDICES
2022-2023

Emerald Bay, Catalina Island / Los Angeles County

Last 10 Years Beach Bummers: 2012–2022

2012–2013	2013–2014	2014–2015	2015–2016
Avalon Catalina Island LOS ANGELES COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY
Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Marina Lagoon, Aquatic Park & Lakeshore Park SAN MATEO COUNTY	Marina del Rey, Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY
Poche Beach ORANGE COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	San Diego Bay Shelter Island, Shoreline Beach Park SAN DIEGO COUNTY
Cabrillo Beach Harborside LOS ANGELES COUNTY	Cabrillo Beach Harborside I LOS ANGELES COUNTY	Aquatic Park SAN MATEO COUNTY	Monarch Beach, at Salt Creek ORANGE COUNTY
Malibu Pier LOS ANGELES COUNTY	Stillwater Cove MONTEREY COUNTY	Mission Bay, Visitor's Center at Clairemont Dr. SAN DIEGO COUNTY	Santa Monica Pier LOS ANGELES COUNTY
Marina Lagoon, Aquatic Park & Lakeshore Park SAN MATEO COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY
Doheny State Beach, at San Juan Creek ORANGE COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Candlestick Point, Sunnydale Cove SAN FRANCISCO COUNTY	Redondo Municipal Pier, 100 yards south LOS ANGELES COUNTY
Redondo Beach Pier LOS ANGELES COUNTY	Pillar Point Harbor, at Westpoint Ave. LOS ANGELES COUNTY	Stillwater Cove, at Beach and Tennis Club MONTEREY COUNTY	Candlestick Point Sunnydale Cove SAN FRANCISCO COUNTY
Windsurfer Circle SAN FRANCISCO COUNTY	Capitola Beach, west of jetty I SANTA CRUZ COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY	Pillar Point Harbor, end of Westpoint Ave. SAN MATEO COUNTY
Tijuana River Mouth SAN DIEGO COUNTY	Windsurfer Circle SAN FRANCISCO COUNTY	Huntington State Beach, projection of Brookhurst Street ORANGE COUNTY	Pismo Beach Pier, 40 feet south of the pier SAN LUIS OBISPO COUNTY

Candlestick Point / San Francisco County

2016–2017	2017–2018	2018–2019
Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Poche Beach, at creek outlet ORANGE COUNTY	San Clemente Pier ORANGE COUNTY
San Clemente Pier ORANGE COUNTY	Lakeshore Park, behind Rec Center SAN MATEO COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY
Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Linda Mar Beach, at San Pedro Creek SAN MATEO COUNTY	Linda Mar Beach, at San Pedro Creek SAN MATEO COUNTY
Newport Bay Abalone Avenue Beach ORANGE COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Long Beach City Beach, projection of Coronado Ave. LOS ANGELESCOUNTY
Lakeshore Park, behind Rec Center SAN MATEO COUNTY	Roosevelt Beach, south end of parking lot SAN MATEO COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY
La Jolla Cove SAN DIEGO COUNTY	Luffenholtz Beach, near Luffenholtz Creek HUMBOLDT COUNTY	Monarch Beach, at Salt Creek ORANGE COUNTY
Santa Monica Pier LOS ANGELES COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Marina del Rey, Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY
Capitola Beach, west of jetty SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY
Luffenholtz Beach, near Luffenholtz Creek HUMBOLDT COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY	Keller Beach South Beach CONTRA COSTA COUNTY
Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Surfer's Beach, southend of riprap SAN MATEO COUNTY	Aquatic Park SAN MATEO COUNTY

2019–2020	2020–2021	2021–2022
Fitzgerald Marine Reserve, at San Vicente Creek Outlet SAN MATEO COUNTY	Tijuana Slough NWRS, Tijuana River mouth SAN DIEGO COUNTY	Playa Blanca TIJUANA
Poche Beach, at Creek Outlet ORANGE COUNTY	Erckenbrack Park, Foster City SAN MATEO COUNTY	Erckenbrack Park, Foster City SAN MATEO COUNTY
Pillar Point Harbor, at Capistrano Ave. SAN MATEO COUNTY	Capitola Beach, west of jetty. SANTA CRUZ COUNTY	Marlin Park, Foster City SAN MATEO COUNTY
Erckenbrack Park, Foster City SAN MATEO COUNTY	Gull Park, Foster City SAN MATEO COUNTY	Santa Monica Pier LOS ANGELES COUNTY
Topanga Beach, at Creek Outlet LOS ANGELES COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Marina del Rey Mother's Beach, at Lifeguard Tower LOS ANGELES COUNTY
Pillar Point Harbor Beach SAN MATEO COUNTY	Tijuana Slough NWRS, 3/4 miles north of Tijuana River SAN DIEGO COUNTY	Moonstone County Park (Little River State Beach) HUMBOLDT COUNTY
Linda Mar, at San Pedro Creek Outlet SAN MATEO COUNTY	Clam Beach County Park, at Strawberry Creek HUMBOLDT COUNTY	Newport Bay, Vaughns Launch ORANGE COUNTY
Mission Bay, Vacation Isle North Cove SAN DIEGO COUNTY	Marlin Park, Foster City SAN MATEO COUNTY	Lakeshore Park, behind Rec Center SAN MATEO COUNTY
San Clemente Pier ORANGE COUNTY	Candlestick Point, Windsurfer Circle SAN FRANCISCO COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY
Pillar Point Harbor, at Westpoint Ave. SAN MATEO COUNTY	East Beach, at Mission Creek SANTA BARBARA COUNTY	Tijuana Slough, north of Tijuana River SAN DIEGO COUNTY

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
ALAMEDA COUNTY				
	Crown Beach, at Bath House	A		A
	Crown Beach, at Windsurfer Corner	A+		A
	Crown Beach, at Sunset Rd.	A+		A
	Crown Beach, at 2001 Shoreline Dr.	A		B
	Crown Beach, at Bird Sanctuary	A		F
	Crown Beach, Crab Cove	B		F
CONTRA COSTA COUNTY				
	Keller Beach, North Beach	A		A+
	Keller Beach, South Beach	A		A
DEL NORTE COUNTY				
	Crescent City, Battery Point Lighthouse	A+		B
HUMBOLDT COUNTY				
	Trinidad State Beach, at Mill Creek	A		C
	Luffenholtz Beach, at Luffenholtz Creek	D		D
	Moonstone County Park	C		B
	Clam Beach County Park, at Strawberry Creek	F		B
	Mad River Mouth	A+		A
LOS ANGELES COUNTY				
	Long Beach City Beach, at 55th Place	A		C
	Long Beach City Beach, at 72nd Place	A		D
	Alamitos Bay, at shore float	A+		F
	Long Beach Mothers' Beach, north	A		F
	Colorado Lagoon, south	A		F
	Colorado Lagoon, north	A		F
	Alamitos Bay, at 56th Place on bayside	A+		F
	Long Beach City Beach, at 5th Place	A	A	F
	Long Beach City Beach, at 10th Place	A	A	F
	Long Beach City Beach, at Molino Av.	B	B	F
	Long Beach City Beach, at Granada Av.	B		D
	Alamitos Bay, at 2nd St. Bridge and Bayshore	A		F
	Long Beach City Beach, at Coronado Ave.	B	A	F
	Belmont Pier, west side	B	A	F
	Long Beach City Beach, at Prospect Ave.	C		D
	Cabrillo Beach, harborside at boat launch	A	B	D
	Cabrillo Beach, harborside at restrooms	B	C	D
	Malibu Pier, 50 yards east of pier	A+		A+
	Malibu Point	A		A+
	Santa Monica Beach, at Strand St.	A+		D
	Venice City Beach, at Brooks Ave. drain	A+		A+
	Venice Beach, 50 yards south of Fishing Pier	A+		B
	Venice Beach, at Topsail St.	A		F
	Marina del Rey Mothers' Beach, at playground	B	F	F
	Marina del Rey Mothers' Beach, between Lifeguard Tower and Boat dock	F	F	F
	Dockweiler State Beach, at World Way	A+		A+
	Hyperion Treatment Plant, at One Mile Outfall	A+		B
	Dockweiler State Beach, at Grand Ave.	A+		F
	Hermosa City Beach, at 26th Street	A+		A+

(CONTINUED)

Redondo State Beach, at Topaz Street	A+		D
Avalon Beach, 50 feet east of the Green Pleasure Pier	A		
Avalon Beach, 50 feet west of the Green Pleasure Pier	A		
Avalon Beach, 100 feet west of the Green Pleasure Pier	A		
Avalon Beach, east of the Casino Arch at the steps	A		
Manhattan Beach, at 28th Street	A	C	F
Herondo Street (Redondo Breakwater)	A	A	F
Rancho Palos Verdes, Long Point	A	A	A
Rancho Palos Verdes, Abalone Cove Shoreline Park	A+	A+	A
Rancho Palos Verdes, Portuguese Bend Cove	A	A+	B
Royal Palms State Beach	A	A	A
Cabrillo Beach, ocean side	A	A+	A
Palos Verdes Estates, at Palos Verdes Cove	A	A	A
Palos Verdes Estates, at Malaga Cove rocks	A	B	C
Surfrider Beach, at lagoon breach	A	D	F
Dockweiler State Beach, at Culver Blvd.	A	A+	F
Manhattan State Beach, at 40th Street	A	A	B
Hermosa Beach Pier, 50 yards south of pier	B	A	C
Palos Verdes Estates, at Malaga Cove trail outlet	A	B	C
Topanga Beach, at creek mouth	B	D	F
Marina del Rey Mothers' Beach, at lifeguard tower	D	F	F
Leo Carrillo Beach, at Arroyo Sequit Creek	A+		A+
Dan Blocker County Beach, at Solstice Canyon	A+	A	B
Puerco State Beach, at creek mouth	A+		C
Marie Canyon storm drain, at Puerco Beach	A	C	F
Carbon Beach, at Sweetwater Canyon	A+	A+	D
Las Flores State Beach, at Las Flores Creek	A+	A+	F
Las Tunas County Beach, at Pena Creek	A+	A+	F
Tuna Canyon			A+
Broad Beach, at Trancas Creek	A		A+
Zuma Beach, at Zuma Creek	A+		A+
Walnut Creek Outlet, at Wildlife Road	A+	A	F
Paradise Cove Pier, at Ramirez Canyon Creek	A+		F
Escondido State Beach, at Escondido Creek	A+	D	D
Latigo Canyon Creek mouth	A		A+
Castle Rock Beach, at storm drain	B	A	F
Dockweiler State Beach, at North Weschester storm drain	A+	A	D
Dockweiler State Beach, at Imperial Highway storm drain	A+	A	D
Will Rogers State Beach, at Pulga Canyon storm drain	A+	A+	F
Will Rogers State Beach, Bel Air Bay Club	A		A+
Will Rogers State Beach, at Temescal Canyon	A		A+
Will Rogers State Beach, at Santa Monica Canyon	A	F	F
Santa Monica Beach, at Montana Ave.	A+		B
Santa Monica Beach, at Wilshire Blvd.	A		F
Santa Monica Pier	F	F	F
Santa Monica Beach, at Pico-Kenter storm drain	A	F	F
Ocean Park Beach, at Ashland Ave. storm drain	A	A	F
Venice Beach, at Rose Ave.	A+	A	F

(CONTINUED)

Venice Beach, at Windward Ave.	A	A	F
Nicholas Beach, at San Nicholas Canyon Creek	A+		
Manhattan Beach Pier	B	A	C
Redondo Beach Pier, 100 yards south of pier	C	B	F
Redondo State Beach, at Sapphire Street	B	B	B
Torrance Beach, at Avenue I storm drain	A	A	C
Dockweiler State Beach, at Ballona Creek mouth	A		C
MARIN COUNTY			
Dillon Beach	A+		A+
Millerton Point	A+		A+
Drakes Beach	A		A+
Drakes Estero	A+		A+
Bolinas Beach, at Wharf Rd.	A		A+
Stinson Beach, North	A+		A+
Stinson Beach, Central	A+		A+
Stinson Beach, South	A+		A+
Lawson's Landing	A		C
Muir Beach, North	A+		A+
Muir Beach, Central	A+		A+
Muir Beach, South	A+		A+
Rodeo Beach, North	A+		A+
Rodeo Beach, Central	A+		A+
Rodeo Beach, South	A+		A+
Baker Beach, Horseshoe Cove South West	A+		A+
Baker Beach, Horseshoe Cove North West	A		A+
Baker Beach, Horseshoe Cove North East	A		A
Schoonmaker Beach	A+		A+
Miller Park	A		A+
Paradise Cove	A+		A+
China Camp	A		A+
McNears Beach	A		A+
Heart's Desire	A		A+
Shell Beach	A+		A+
Chicken Ranch Beach, at Creek mouth	A		A+
MENDOCINO COUNTY			
Pudding Creek Outlet	B		A
Hare Creek	A		A+
Caspar Beach, at Caspar Creek	A+		A+
Big River at PCH	A+		A+
Van Damme State Park, at Little River	A		A+
MONTEREY COUNTY			
San Carlos Beach, at San Carlos Beach Park	A		A+
Lover's Point Park, at 16th Street	A		A+
Asilomar State Beach, at Arena Av.	A		A+
Spanish Bay (Moss Beach), at 17 mile drive	A+		A+
Stillwater Cove, at Beach and Tennis Club	A+		F
Carmel City Beach, at Ocean Ave.	A		A+

ORANGE COUNTY			
Dana Point Harbor Fuel Dock	A+		A+
Dana Point Harbor Pier	A		A+
Dana Point Harbor Baby Beach, West End	A		C
Dana Point Harbor Baby Beach, Buoy Line	A		A+
Dana Point Harbor Baby Beach, Swim Area	A		A+
Dana Point Harbor Baby Beach, East End	A		A+
Dana Point Harbor, Pilgrim Dock	A		A+
Dana Point Harbor Youth Dock	A+		A+
Huntington Harbor, 11th Street Beach	A+		F
Huntington Harbour, Anaheim Bay-Gas Dock	A+		A+
Huntington Harbor, Humboldt Beach	A		F
Huntington Harbor, Seagate Lagoon	A+		C
Huntington Harbour, Admiralty Drive Beach	A+		F
Huntington Harbor, Trinidad Lane Beach	A		F
Huntington Harbour, Channel Beach	A		F
Huntington Harbor, Mothers Beach-Orange County	A		F
Huntington Harbor, Coral Cay Beach	A+		F
Newport Bay, Park Avenue Beach	A+	C	A+
Newport Bay, Onyx Avenue Beach	A		A+
Newport Bay, Ruby Avenue Beach	A+		A+
Newport Bay, Bayshore Beach	B		A+
Newport Bay, Via Genoa Beach	A		A+
Newport Bay, 43rd Street Beach	B		A+
Newport Bay, 38th Street Beach	A+		A+
Newport Bay, 33rd Street Beach	A	B	B
Newport Bay, Rhine Channel Beach	A		A+
Newport Bay, 19th Street Beach	A		A+
Newport Bay, 15th Street Beach	A		A+
Newport Bay, 10th Street Beach	A		A+
Newport Bay, Alvarado/Bay Isle Beach	A		A+
Newport Bay, Sapphire Avenue Beach	A		A+
Newport Bay, Abalone Avenue Beach	B		A+
Newport Bay, N Street Beach	A		A+
Newport Bay, Newport Dunes-East	A	B	A+
Newport Bay, Newport Dunes-Middle	A		A+
Newport Bay, Newport Dunes-North	A	B	A+
Newport Bay, Newport Dunes-West	A		A+
Newport Bay, North Star Beach	A		A+
Newport Bay, Promontory Point	A+		A+
Newport Bay, De Anza Beach	A+		A+
Newport Bay, Garnet Avenue Beach	A		A+
Newport Bay, Lido Yacht Club Beach	A+		A+
Newport Bay, Harbor Patrol Beach at Bayside Drive	B		A+
Newport Bay, Grand Canal	A+		
Newport Bay, Newport Blvd Bridge	A		A+
Newport Slough at Lancaster/62nd Street Beach	A		F
Newport Slough, Grand Street Beach	A+		B

Location			
Dana Point Harbor, Harbor Patrol Dock	A		D
Dana Point Harbor Guest Dock	A		A+
Dana Point Harbor, M Dock (East Basin)	A		C
Huntington Harbour, Clubhouse Marina	A+		A+
Huntington Harbour, Sunset Aquatic Park Beach	A		F
Huntington Harbor, Davenport Beach	A+		F
Huntington Harbour, Anderson Street Marina	A		F
Dana Point, at Camino Estrella	A+		
Dana Point, South Capistrano Bay Community Beach	A		A+
Poche Beach	A		F
Diver's Cove	A+		A+
Pico drain at North Beach	B		A+
Linda Lane Beach	A+		
San Clemente Pier	A		
Riviera Beach	A+		
Cleo Street	A+		A+
Aliso Creek Ocean Interface	A	A	F
West Street	A+	A+	C
San Juan Creek	B	F	F
Doheny Beach	A	A	F
Poche Creek Outlet	F		F
Little Corona Beach	A+	A	F
Monarch Beach at north	C		B
Doheny State Beach, North Beach	A	F	F
Doheny State Beach, End of the Park	A+	A+	F
San Clemente Trafalgar Canyon	A		
Pelican Point Beach	A+	A	B
Muddy Creek Beach	A+	A+	D
El Moro Beach	A+		A+
Emerald Bay Beach	A+		A+
Laguna Main Beach	A		A+
Laguna Hotel	A		A+
Projection of Bluebird Canyon	A+		A+
Victoria Beach	A+		A+
Doheny State Beach, at San Juan Creek	A	A	F
Doheny State Beach, at Last Campground	A+	A	F
Laguna Beach, at Goff Island Beach	A+	A+	A
Corona Del Mar	A+	A+	B
2000 feet south of SERRA Outfall	A	B	F
Crystal Cove	A+	A+	A
Marine Science Institute Beach	A+		A+
Dana Point, Capistrano County Beach	A+		
Doheny State Beach, Pedestrian Bridge	A+	A+	F
Doheny State Beach, Mid Beach north of San Juan Creek	A+	A	F
Dana Strands Beach	A+		A+
Huntington State Beach, at Brookhurst Street	A	A	C
Huntington State Beach, at Magnolia Street	A	A	C
Huntington State Beach, at Newland St.	A	A+	B

Location			
Huntington City Beach, at Beach Blvd.	A+	A+	A
Huntington City Beach, at Huntington St.	A+	A+	B
Huntington City Beach, at 17th Street	A	A+	C
Huntington City Beach, at Bluffs	A+	A+	C
Bolsa Chica Reserve, at south end of beach	A+	A+	A
Bolsa Chica Reserve, at Flood Gates	A+	B	A
Crescent Bay Beach	A+		A+
Santa Ana River Mouth	A	A	F
Newport Beach, at Orange Street	A	A	F
Newport Beach, at 52nd/53rd Street	A+	A	F
Newport Beach, at 38th Street	A+	A+	F
Balboa Beach, at 15th/16th Street	A	A+	F
Balboa Beach Pier	A+	A+	B
Balboa Beach, The Wedge	A+	A+	B
Crystal Cove at Los Trancos	A+	A	A
Surfside Beach, at Sea Way	A+	A+	A
Seal Beach, at 1st Street	A		A+
Seal Beach, at 8th Street	A	A+	F
Seal Beach, at 14th Street	A	A+	C
Seal Beach Pier, 100 yards south of pier	A	A	F
San Clemente, North beach at Avenida Pico	A+		
San Clemente, South Linda Lane storm drain	A+		
San Clemente Pier, Lifeguard Building north	A+		
San Clemente, at Avenida Calafia	A+		
Salt Creek Beach	A		A+
Three Arch Bay	A+	A	A
1000 Steps Beach, at 9th St.	A+	A+	A
Laguna Lido	A+	A+	A
Table Rock	A+	A+	B
Camel Point	A+	A+	B
Aliso Creek, 1000 south of creek mouth	A+	A	D
Aliso Creek, at mouth	A	A+	C
North Aliso County Beach	A+	A+	B
Treasure Island Beach	A+	A	A
Monarch Beach, 150 feet north of Salt Creek mouth	A		A+
Sunset Beach, at Broadway	A	A+	B
SAN DIEGO COUNTY			
Coronado, at North Beach near Ocean Blvd.	A		F
San Diego Bay, Tidelands Park at Mullinix Dr.	B		F
San Diego Bay, Glorietta Bay Park at boat launch			F
San Diego Bay, Spanish Landing Park beach			F
San Diego Bay, Shelter Island (Shoreline Beach Park)	C		F
Pacific Beach, at Grand Ave.	A+		A+
La Jolla, at Palomar Av.	A		A+
Windansea Beach, at Playa Del Norte	A		A+
La Jolla, at Vista De La Playa	A+		A+
La Jolla Ravina, south of Nicholson Pt.	A+		A+
La Jolla, South Casa Beach	A		A+

(CONTINUED)

La Jolla, projection of Vallecitos			A+
La Jolla Shores Beach, Del Oro	A		A+
La Jolla Shores, El Paseo Grande	A		A+
Del Mar, San Dieguito River Beach	A		A+
Encinitas, San Elijo State Park, Pipes surf break			A
Encinitas, Moonlight Beach, Cottonwood Creek	A+		
Carlsbad, at Poinsettia Lane	A+	A+	A
Carlsbad, at Poinsettia Lane		A+	A
Carlsbad, at Ponto Drive	A+		A
Carlsbad, at Encina Creek	A+		A
Carlsbad, at Palomar Airport Rd.	A+		A
Carlsbad, at Cerezo Drive	A+		A
Ocean Beach, San Diego River outlet (Dog Beach)			A+
Pacific Beach, Tourmaline Surf Park at Tourmaline St.	A		A+
La Jolla, Windansea Beach at Bonair St.	A+		A+
La Jolla Shores, at Ave De La Playa	A		A+
Torrey Pines, Los Penasquitos Lagoon outlet	A		A+
Border Field State Park, north side of Border Fence	B	F	F
Border Field State Park, at Monument Rd.	B	F	F
Tijuana Slough, Tijuana River mouth	F	F	F
Tijuana Slough, north of Tijuana River	B	D	F
Imperial Beach, at Seacoast Dr.	B	C	F
Imperial Beach, at Carnation Ave.	A	A	F
Coronado, Silver Strand	A	A+	F
Coronado, at Ave del Sol	A	A	B
Oceanside, St. Malo Beach downcoast from St. Malo Road	A+		C
Oceanside, at Cassidy Street	A+	A+	F
Oceanside, Buccaneer Beach at Loma Alta Creek			F
Oceanside, 500 feet North of Loma Alta Creek	A+	A+	F
Oceanside, at Forster Street	A		D
Oceanside, at Tyson Street	A+		C
Oceanside, San Luis Rey River outlet			B
Point Loma, Lighthouse	A+	A+	A+
Point Loma, Point Loma Treatment Plant	A+	A+	B
Sunset Cliffs, at Ladera Street	A+	A	A
Ocean Beach, Ocean Pier at Narragansett Ave.	A+	A+	A
Ocean Beach Pier, northside at Newport Ave.	A	A+	B
Ocean Beach, Stub Jetty	A	A+	D
Mission Beach, Belmont Park	A	A+	A+
Solana Beach, Fletcher Cove			A
Solana Beach, Tide Beach Park			A
Cardiff State Beach, Seaside State Park			A
Cardiff State Beach, Las Olas			A
Cardiff State Beach Charthouse parking			C
Encinitas, San Elijo State Park			A+

	Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
SAN DIEGO BEACH			
Imperial Beach, projection of Cortez Ave.	83.2%	93.4%	100.0%
Imperial Beach, Imperial Beach Pier	79.0%	92.0%	100.0%
Coronado, projection of Loma Ave.	50.0%	70.3%	80.0%
Coronado at North Beach (near navy fence at Ocean Blvd.)	52.3%	44.4%	90.0%
San Diego Bay, Tidelands Park (at Mullinix Dr.)	72.2%	50.0%	50.0%
San Diego Bay, Glorietta Bay Park at boat launch			100.0%
San Diego Bay, Silver Strand	4.5%	36.8%	66.7%
Del Mar, projection of 15th Street	0.0%		100.0%
Del Mar, San Dieguito River Beach			100.0%
Del Mar Shores	0.0%		0.0%
Encinitas, Swami's Beach (Seacliff Park)	0.0%		0.0%
Carlsbad, Batiquitos Lagoon outlet		8.7%	47.4%
Carlsbad, projection of Carlsbad Village Drive	0.0%		0.0%
Ocean Beach, San Diego River outlet (Dog Beach)		46.7%	100.0%
Pacific Beach, Tourmaline Surf Park (at Tourmaline St.)		33.3%	0.0%
La Jolla, La Jolla Cove	57.7%	58.3%	66.7%
La Jolla Shores, projection of Ave De La Playa	4.0%	16.7%	66.7%
Torrey Pines, Los Penasquitos Lagoon outlet	10.3%		100.0%
Tijuana Slough, Tijuana Rivermouth	85.0%		
Imperial Beach, southend of Seacoast Dr.	85.1%	96.0%	100.0%
Imperial Beach, projection of Carnation Ave.	72.0%	82.7%	100.0%
Silver Strand - Guard Shack, Silver Strand State Beach	39.3%	71.6%	91.7%
Silver Strand - Lifeguard Tower, Silver Strand State Beach	61.3%	87.5%	81.8%
Coronado, Silver Strand	55.7%	84.4%	90.9%
Avenida Lunar, Coronado City beaches	25.3%	34.9%	87.5%
Mission Bay, Campland (west of Rose Creek)	25.0%		100.0%
South Mission Beach Jetty	4.0%		0.0%
Mission Bay, Vacation Isle North Cove Beach	34.6%		33.3%
Mission Point Park			33.3%
Oceanside, projection of Surfrider Way	4.2%		0.0%
Oceanside, San Luis Rey River outlet		25.0%	
Oceanside, Harbor Beach (projection Harbor Dr.)	8.0%		0.0%
Mission Beach, Belmont Park			0.0%
Cardiff State Beach, San Elijo Lagoon outlet			100.0%

SAN MATEO COUNTY			
Pillar Point #9 Harbor Beach	B	B	F
Surfer's Beach, south end of riprap	A	A	D
Gull Park, Foster City	F	F	F
Roosevelt Beach, south end of parking lot	A	A	D
Dunes Beach	A+		C
Venice Beach at Frenchman's Creek	C		F
Francis Beach at the foot of the steps	A+	A+	B
San Gregorio State Beach at San Gregorio Creek	B	A	B
Pomponio State Beach at Pomponio Creek	A	A	B
Pescadero State Beach at Pescadero Creek	A+	A	A
Bean Hollow State Beach	A+	A+	A+
Sharp Park Beach, projection of Birch Ln.	A+		A+
Gazos Beach at Gazos Creek	A		B
Oyster Point		A+	F
Coyote Point	A	A	F
Aquatic Park	B	B	F
Lakeshore Park, behind Rec Center	D	B	F
Kiteboard Beach			F
Erckenbrack Park, Foster City	F	D	F
Marlin Park, Foster City	F	D	F
Rockaway Beach, at Calera Creek	A	A+	A+
Linda Mar Beach, at San Pedro Creek	F	F	F
Fitzgerald Marine Reserve, at San Vicente Creek	A	A	F
Pillar Point #8 Mavericks Beach Westpoint Ave.	B	A	C
Pillar Point Harbor, end of Westpoint Ave.	B	B	F
Pillar Point Harbor, Capistrano Ave Beach	F	F	F
SANTA BARBARA COUNTY			
Guadalupe Dunes	A		A
Hope Ranch Beach	A+	B	B
Arroyo Burro Beach	A+	B	F
Leadbetter Beach	A	A	B
East Beach, at Mission Creek	A+	B	F
East Beach, at Sycamore Creek	A+	A+	D
Butterfly Beach	A+	B	C
Hammond's Beach	A+	B	C
Summerland Beach	A+	A	A
Carpinteria State Beach	A	A	D
Jalama Beach	A		B
Gaviota State Beach	A+		B
Refugio State Beach	A	A	D
El Capitan State Beach	A		A+
Sands, at Coal Oil Point	A+	A+	B
Goleta Beach	A	B	C

SANTA CRUZ COUNTY			
Cowell Beach, west of the wharf	A	A	F
Santa Cruz Main Beach, at the Boardwalk	B	B	F
Santa Cruz Main Beach, at the San Lorenzo River	B		F
Seabright Beach	A	A	F
Twin Lakes Beach	A		C
Capitola Beach, west of jetty	F		F
Capitola Beach, east of jetty	A		D
New Brighton Beach	A+		B
Seacliff State Beach	A		F
Rio Del Mar Beach	A		A
Natural Bridges State Beach	A	A+	C
Mitchell's Cove Beach	A	B	F
Cowell Beach, at the Stairs	A		B
Cowell Beach Lifeguard Tower 1	B	A	D
SAN FRANCISCO COUNTY			
Ocean Beach, at Pacheco St.			D
Ocean Beach at Vicente St.			F
Hyde Street Pier	A+	A+	A
Aquatic Park Beach	A+	A	B
China Beach, at Sea Cliff Ave.	A+	A+	A
Ocean Beach, at Balboa Ave.	A+	A+	C
Ocean Beach, at Lincoln Way	A+	A+	D
Ocean Beach, at Sloat Blvd.	A+	A+	B
Candlestick Point, Jackrabbit Beach	A	A	B
Candlestick Point, Windsurfer Circle	A+	A+	F
Candlestick Point, Sunnydale Cove	A	A	F
Islais Landing at Islais Creek	A+	A	F
Mission Creek Park, at Mission Creek	A+	A	F
Crissy Field Beach East	A	A	C
Crissy Field Beach West	A	A+	D
Baker Beach East, Ocean	A	A+	A+
Baker Beach, Lobos Creek	B	A	B
Baker Beach West	A+	A+	A

SAN LUIS OBISPO COUNTY				
	Avila Beach 350 yards west of pier, at Creek	B		F
	Avila Beach, at San Luis Street	A		A+
	Studio Drive parking lot near Old Creek	A		A+
	Cayucos State Beach, downcoast of the pier	A+		A+
	Cayucos Beach, North of pier at storm drain	A+		A+
	Hearst Memorial State Beach, 100 yards west of the pier at creek outfall	A+		A+
	Olde Port Beach (Harford Beach), North	A		B
	Pismo Beach, at Ocean View	A+		A+
	Pismo Beach, 40 feet south of the pier	A+		A+
	Pismo Beach, at Wadsworth Street	A+		A+
	San Simeon State Beach, at Pico Ave.	A+		A+
	Sewers at Silver Shoals Dr.	A		A+
	Morro Bay City Beach, 75 feet north of main parking lot	A+		A+
	Morro Bay City Beach, at Morro Creek	A+		F
	Morro Bay City Beach, at Atascadero	A+		C
	Morro Strand State Beach, at Beachcomber Drive	A+		B
	Pismo State Beach, 571 yards south of Pier Ave.	A+		A+
	Pismo State Beach, at Pier Ave.	A+		A+
	Pismo State Beach, 330 yards north of Pier Ave.	A		A+
SONOMA COUNTY				
	Gualala Regional Park Beach	A+		A+
	Black Point Beach	A+		A+
	Stillwater Cove Regional Park Beach	A+		A+
	Goat Rock State Park Beach	A+		A
	Salmon Creek State Park Beach	A+		A+
	Campbell Cove State Park Beach	A		B
	Doran Regional Park Beach	A+		A+
TIJUANA				
	Playas Blanca	F	F	F
	El Vigia	C	F	F
	El Faro	C	D	F

VENTURA COUNTY			
Rincon Beach, 25 yards south of the creek mouth	A	D	D
Solimar Beach, south at end of gate access road	A+	B	D
Rincon Beach- at the end of the footpath			A+
Emma Wood State Beach, 50 yards South of first drain	A+	A+	B
Surfer's Point at Seaside	B	A	F
Promenade Park, at Figueroa St.	A	A	F
Promenade Park, at Redwood Apts.	A		F
Promenade Park, south of drain at California St.	A+		F
San Buenaventura Beach- south of drain at Kalorama St.			F
San Buenaventura Beach, south of drain at San Jon Rd.	A	F	F
San Buenaventura Beach, south of drain at Dover Ln.	A+		D
San Buenaventura Beach, south of drain at Weymouth Ln.	A+		C
Marina Park, north end of playground	A		F
Peninsula Beach, North of South Jetty	A+		D
La Conchita Beach, Ocean View Rd.			A+
Surfer's Knoll, at parking lot	A	A	C
Oxnard Beach - 5th Street			A
Oxnard Beach, at Outrigger Way	A+		D
Oxnard Beach Park, at Falkirk Ave.	A		A+
Oxnard Beach Park, at Starfish Dr.	A+		
Hollywood Beach, at La Crescenta St.	A+		A+
Hollywood Beach, at Los Robles St.	A		A+
C.I. Harbor, at Hobie Beach Lakshore Dr.	A		F
C. I. Harbor, Beach Park at South end of Victoria Ave.	A	A	F
Silverstrand , at San Nicholas Ave.	A+		A+
Silverstrand, at Santa Paula Dr.	A+		A+
Oil Piers Beach, south of storm drain	A+		A+
Silverstrand, at Sawtelle Ave.	A+		A+
Port Hueneme Beach Park, 50 yards north of the pier	A+		A+
Ormond Beach- J Street drain			B
Ormond Beach- Oxnard Industrial drain, 50 yds. no. of the drain			A+
Ormond Beach- Arnold Rd.			A+
Point Mugu Beach, at parking lot	A+		
Thornhill Broome Beach, at parking lot	A+		A+
Sycamore Cove Beach, 50 yards south of the creek mouth	A+		A+
County Line Beach	A+		A+
Hobson County Park, at stairs	A+		A+
Staircase Beach, bottom of staircase	A+		A+
Faria County Park, at stairs	A+	C	F
Mandos Cove			D

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
CLATSOP COUNTY				
	Seaside Beach at Broadway turn around			A+
	Seaside Beach at 12th Avenue			A+
	Seaside Beach at U Avenue			F
	Cannon Beach at Ecola Creek mouth (2nd Avenue)			A+
	Cannon Beach projection of Gower Ave. storm outflow			A+
	Tolovana State Park Beach			D
	Ecola Court pipe at Gower Street discharge to Cannon Beach			C
	Tolovana State Park Beach 50m north of Chisana Creek			A+
	Tolovana State Park Beach 50m south of Chisana Creek			A+
	Tolovana SP Beach in Chisana Creek at the pipe outflow			A+
COOS COUNTY				
	Sunset Bay State Park Beach South Cove			A+
	Sunset Bay State Park Beach at Restroom			C
	Sunset Bay State Park Beach at North Beach Access			A+
	Bastendorff Beach at Minor Creek Mouth			A+
	Bastendorff Beach Middle Access			A+
	Bastendorff Beach North at Jetty			A+
	Big Creek at Sunset Bay SP footbridge			A+
	Miner Creek 200m upstream from Bastendorff Beach			A+
	Bastendorff Beach South of Minor Creek			A+
CURRY COUNTY				
	Hubbard Creek Beach at Hubbard Creek			F
	Hubbard Creek Beach 50m north of Hubbard Creek			F
	Hubbard Creek Beach 50m south of Hubbard Creek			F
LANE COUNTY				
	Heceta Beach middle			A+
	Heceta Beach at north runoff			C
	Heceta Beach at south runoff			C
	Heceta Beach at the south end pipe runoff			A+

LINCOLN COUNTY			
D River at Hwy. 101 Bridge			F
Spencer Creek at Beverly Beach at Hwy 101 bridge			C
Beverly Beach 0.2 km South of ramp at beach access			F
Beverly Beach 0.2 km West of creek mouth			A+
Beverly Beach 0.1 km North of ramp			A+
D River Beach 200 M South of Restroom			A+
D River Beach West of Restroom			D
D River Beach at North corner of parking lot			F
Ecola Creek at the mouth of Logan Creek			A
Nye Beach turnaround at discharge pipe			A+
Nye Beach Turnaround west of discharge pipe			D
Big Creek at Agate Beach Wayside at footbridge			A+
Agate Beach at mouth of Big Creek			A+
Nye Beach at war memorial west of Olive Street			D
Nye Beach 100m north Nye Creek outflow			A+
Seal Rock State Wayside Beach at north access			A+
Seal Rock State Wayside Beach at mouth of Hill Creek			A+
Seal Rock State Wayside Beach at mouth of Little Creek			A+
Hill Creek at Seal Rock Beach at outflow			C
Little Creek at Seal Rock Beach at outflow			A+
TILLAMOOK COUNTY			
Watseco Creek 100 m upstream from the mouth			D
Kiwanda Beach at Dory Launch			A+
Oceanside Beach State Wayside at parking access			D
Oceanside Beach State Wayside at headland			A+
Oceanside Beach State Wayside at seep (250 Meters South)			D
Rockaway Beach at creek (South 6th Avenue)			A+
Rockaway Beach at South 1st Avenue Creek			F
Short Sand Beach at Short Sand creek (Oswald State Park)			A+
Short Sand Beach middle (Oswald State Park)			A+
Short Sand Beach North End (Oswald State Park)			A+
Twin Rocks Beach			D
Neskowin Beach Middle at Creek Mouth			D
Short Sand Creek Oswald State Park at dowstream footbridge			A+
Kiwanda Beach at Mid Mound			F
Kiwanda Beach at South Site			A+
Neskowin Beach south side of Proposal Rock			B
Rock Creek at Rockaway Beach at South 1st Avenue parking area			A
Saltair Creek at Rockaway Beach at south 6th Avenue			C

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
CLALLAM COUNTY				
	Salt Creek Recreation Area - south	A		A+
	Salt Creek Recreation Area - north			A+
	Salt Creek Recreation Area	A+		A+
	Cline Spit County Park - north	A+		A+
	Cline Spit County Park - mid	A+		A+
	Cline Spit County Park - south	A+		A+
	Hollywood Beach - west	A+		A+
	Hollywood Beach - mid	A		A+
	Hollywood Beach - east	A		A+
GRAYS HARBOR COUNTY				
	Westport - The Groynes - west	C		A
	Westport - The Groynes - mid	B		A+
	Westport - The Groynes - east	A		A+
	Westhaven State Park Half Moon Bay - south	A		A+
	Westhaven State Park Half Moon Bay - mid	A+		A+
	Westhaven State Park Half Moon Bay - north	A+		A+
	Westhaven State Park South Jetty - south	A		A+
	Westhaven State Park South Jetty - mid	A		A+
	Westhaven State Park South Jetty - north	C		A+
ISLAND COUNTY				
	Oak Harbor Lagoon - north west	A		A+
	Oak Harbor Lagoon - mid	A+		A+
	Oak Harbor Lagoon - south east	A+		A+
	Freeland County Park Holmes Harbor - west			A+
	Freeland County Park Holmes Harbor - mid			A+
	Freeland County Park Holmes Harbor - east			A+
	Dave Mackie Park Beach north	B		A+
	Dave Mackie Park Beach in tidal lagoon			A+
	Freeland County Park Holmes Harbor - mid	B		A+
JEFFERSON COUNTY				
	Fort Worden State Park - north	A		A+
	Fort Worden State Park - mid	A+		A+
	Fort Worden State Park - south	A		A+
	Fort Flagler State Park - west entrance north	A		A+
	Fort Flagler State Park - west entrance boat launch	A+		A+
	Fort Flagler State Park - west entrance south of dock	A+		A+
	Irondale Beach Park - south	A+		A+
	Irondale Beach Park - mid	A+		A+
	Irondale Beach Park - north	A		A+
	Herb Beck Marina - east	A		A+
	Herb Beck Marina - mid	A+		A+
	Herb Beck Marina - west	A+		A+

KING COUNTY			
Richmond Beach Saltwater Park - south			A+
Richmond Beach Saltwater Park - mid			A+
Richmond Beach Saltwater Park - north			A+
Carkeek Park - south			A+
Carkeek Park - mid			A+
Carkeek Park - north			A+
Golden Gardens - south			A+
Golden Gardens - mid			A+
Golden Gardens - north			A+
Alki Beach Park - south			A+
Alki Beach Park - mid			A+
Alki Beach Park - north			A+
Richey Viewpoint - south			A+
Richey Viewpoint - mid			A+
Richey Viewpoint - north			A+
Lincoln Park - south			A+
Lincoln Park - mid			A+
Lincoln Park - north			A+
Seahurst (Ed Munro) Park - south			A+
Seahurst (Ed Munro) Park - mid			A+
Seahurst (Ed Munro) Park - north			A+
Saltwater State Park - south	A		A+
Saltwater State Park - mid	A		A+
Saltwater State Park - north	A		A+
Redondo County Park - south	A+		A+
Redondo County Park - mid	A+		A+
Redondo County Park - north	A		A+
Dash Point State Park - west	A+		A+
Dash Point State Park - mid	A		A+
Dash Point State Park - east	A		D
KITSAP COUNTY			
Point No Point Lighthouse Park north	A		A+
Point No Point Lighthouse Park mid	A		A+
Point No Point Lighthouse Park south	A		A+
Arness County Park - north			A+
Arness County Park - mid			A+
Arness County Park - south			A+
Indianola Dock - east	A		A+
Indianola Dock - mid	A+		A+
Indianola Dock - west	A		A+
Fay Bainbridge State Park - north	A		A+
Fay Bainbridge State Park - mid	A+		A+
Fay Bainbridge State Park - south	A+		A+
Scenic Beach State Park west	A+		A+
Scenic Beach State Park mid	A+		A+
Scenic Beach State Park east	A		A+
Silverdale County Park - east	A		A+

(CONTINUED)

	Silverdale County Park - mid	A		A+
	Silverdale County Park - west	A		A+
	Illahee State Park - north	A+		A+
	Illahee State Park - mid	A+		A+
	Illahee State Park - south	A+		A+
	Lions Park - south	A+		A+
	Lions Park - mid	A+		A+
	Lions Park - north	A		A+
	Pomeroy Park - Manchester Beach - north	A		A+
	Pomeroy Park - Manchester Beach - mid	A+		A+
	Pomeroy Park - Manchester Beach - south	A+		A+
	Joel Pritchard Park - west	A+		A+
	Joel Pritchard Park - mid	A		A+
	Joel Pritchard Park - east	A+		A+
MASON COUNTY				
	Belfair State Park	A+		A+
	Twanoh State Park - west of dock	A+		A+
	Twanoh State Park - point	A+		A+
	Twanoh State Park - west of point	A		A+
	Potlatch State Park - north	A		A+
	Potlatch State Park - mid	A+		A+
	Potlatch State Park - south	A		A+
PIERCE COUNTY				
	Purdy Sandspit County Park - west	A+		A+
	Purdy Sandspit County Park - mid	B		A+
	Purdy Sandspit County Park - east	A		D
	Dash Point County Park - west of pier	A		A+
	Dash Point County Park - east of pier	A		A+
	Dash Point County Park - east	A		A+
	Owens Beach - Point Defiance Park - north			A+
	Owens Beach - Point Defiance Park - mid			B
	Owens Beach - Point Defiance Park - south			A+
	Ruston Way north - projection of Warner St	A		A+
	Waterfront Dock/ Ruston Way - south	A		A+
	Waterfront Dock/ Ruston Way - north	A		A+
	Titlow Park - south	A		A+
	Titlow Park - mid	A+		A+
	Titlow Park - north	A+		A+
	Sunnyside Beach Park - south	A+		A+
	Sunnyside Beach Park - mid	A+		A+
	Sunnyside Beach Park - north	A		A+
	Jack Hyde Park - west	A+		A+
	Jack Hyde Park - mid	A+		A+
	Jack Hyde Park - east	A		A+

SKAGIT COUNTY			
	Bayview State Park - south	A	A+
	Bayview State Park - north	A+	A+
	Bayview State Park - mid	A	A+
	Bayview State Park	A	A+
SNOHOMISH COUNTY			
	Kayak Point County Park - south		A+
	Kayak Point County Park - mid		A+
	Kayak Point County Park - north		A+
	Jetty Island - south		A+
	Jetty Island - mid		A+
	Jetty Island - north		A+
	Howarth Park - south		A+
	Howarth Park - mid		A+
	Howarth Park - north		A+
	Mukilteo Lighthouse Park south		A+
	Mukilteo Lighthouse Park mid	A	A+
	Mukilteo Lighthouse Park north	B	A+
	Picnic Point County Park - south	A+	A+
	Picnic Point County Park - mid	A	A+
	Picnic Point County Park - north	A+	A+
	Edmonds Underwater Park - south	A+	A+
	Edmonds Underwater Park - mid	A+	A+
	Edmonds Underwater Park - north	A+	A+
	Marina Beach Edmonds - south	A+	A+
	Marina Beach Edmonds - mid	A+	A+
	Marina Beach Edmonds - north	A+	A+
THURSTON COUNTY			
	Burfoot County Park - north	A	A+
	Burfoot County Park - mid	A+	A+
	Burfoot County Park - south	A+	A+
	Priest Point Park		A+
	Priest Point Park		A
	Priest Point Park		A+
WHATCOM COUNTY			
	Birch Bay County Park - south		A+
	Birch Bay County Park - mid		A+
	Birch Bay County Park - north		A+
	Little Squalicum Park east		A+
	Little Squalicum Park at creek outlet		A+
	Little Squalicum Park far west of pier		A+
	Bellingham Marine Park outer		A+
	Port of Bellingham Marine Park		A+
	Port of Bellingham Marine Park		A
	Larrabee State Park Wildcat Cove - west	A	C
	Larrabee State Park Wildcat Cove - mid	A	C
	Larrabee State Park Wildcat Cove - south	A+	F

About Heal the Bay's Annual Beach Report Card

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

What is the Beach Report Card?

The Beach Report Card transforms complicated water quality data into an easy-to-understand A–F grading format so the public can know where and when it is safe to go in the ocean. Grades are based on fecal bacteria pollution concentrations in the wave-wash. 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 BRC should be used like the SPF ratings in sunblock — beachgoers should determine what they are comfortable with in terms of relative risk, and then make the necessary decisions to protect their health. Heal the Bay urges coastal beachgoers to use this information before they visit beaches on the West Coast.

What is the history of the BRC?

Heal the Bay's first Beach Report Card was published in 1991 (with data from 1989 & 1990) and covered about 50 monitoring locations in Los Angeles County from Leo Carrillo Beach (near the Ventura County line) to Cabrillo Beach in San Pedro. At that time, beachgoers knew little about the health risks of swimming in polluted waters or the water quality at any of their favorite beaches in Los Angeles County. Beach water quality was a known public issue only when a substantial sewage spill occurred. Although beaches were routinely monitored, the data were either inaccessible or incomprehensible to the general public.

Since then, an immense amount of work has been completed and resources invested to reduce urban runoff pollution and sewage spills at our local beaches. Heal the Bay is proud to have played an active role in putting legislation and policies in place to help protect public health.

What do the grades mean to the beach user?

Coming into contact with waters with elevated bacteria concentrations has been associated with increased risks to human health. The higher the grade a beach receives, the better the water quality at that beach. The lower the grade, the greater the health risks. Potential illnesses include gastrointestinal illness, eye/ear infections, upper respiratory infection and major skin rash (full body). The known risks of contracting illnesses associated with each threshold are based on a one-time, single event of exposure (head immersed while swimming) to polluted water. Increasing frequency of exposure or the magnitude of bacteria densities may significantly increase an ocean user's risk of contracting any of these illnesses.

Summer Dry (Apr–Oct)	Winter Dry (Nov–Mar)	Wet Weather Year-Round
A	**A**	**F**

Beach Report Card's water quality grade
(See Appendix D for complete methodology)
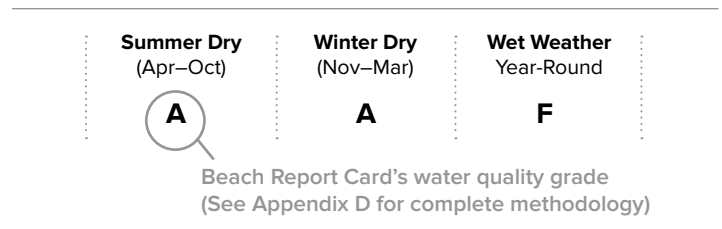
How are grades calculated?

Heal the Bay's grading system takes into consideration the magnitude and frequency of exceedances above allowed bacterial levels over the course of the specified time period. Each BRC year contains three time/weather periods:

- Summer Dry = Samples taken during dry weather between April 1 and October 31
- Winter Dry = Samples taken during dry weather between November 1 and March 31
- Wet Weather = Samples taken during or within 72 hours of a rain event*

Water quality typically drops dramatically during and immediately after a rainstorm but often rebounds to its previous level within a few days. For this reason, year-round wet weather data throughout California were analyzed separately in order to avoid artificially lowering a location's grade, and to provide a better understanding of statewide beach water quality impacts. For complete methodology, see Appendix D.

NOTE: *Heal the Bay utilizes a definition of a 'rain event' in California as precipitation greater than or equal to one tenth of an inch (≥ 0.1") accumulated over a period of 72 hours. Oregon and Washington criteria for a rain event is ≥0.2" of precipitation

How current are the weekly grades?

It is important to note that the grades from the Beach Report Card represent the most current information available to the public, but they do not represent real-time water quality conditions. Currently, laboratory analyses of beach water quality samples take 18 to 24 hours to complete; then the data must be entered into a database before they are sent to Heal the Bay for a grade calculation. For weekly grades, Heal the Bay releases grades every Friday throughout the year based on the most recent available sample data for the entire west coast. Weekly grades and more can be found at www.beachreportcard.org.

What type of pollution is measured?

Pollution is measured by sampling types of fecal indicator bacteria (FIB) including total coliform, fecal coliform, and *Enterococcus* spp. California requires measurement of all three FIB, but Oregon and Washington only require *Enterococcus*. Runoff from creeks, rivers and storm drains are sources of pollution to California, Oregon, and Washington beaches. Runoff may contain toxic heavy metals, pesticides, fertilizers, petroleum hydrocarbons, animal waste, trash, and even human sewage..

The amounts of fecal indicator bacteria present in runoff, and consequently at the beach, is currently the best indication of whether or not a beach is safe for recreational water contact. The link between swimming in waters containing elevated levels of indicator bacteria and health risk was confirmed in the 1995 epidemiological study conducted by the University of Southern California, Orange County Sanitation District, the City of Los Angeles and Heal the Bay, under the auspices of the Santa Monica Bay Restoration Project.

Indicator bacteria themselves do not usually cause bather illness. Instead, their presence indicates the potential for water contamination with other pathogenic microorganisms such as bacteria, viruses, and protozoa that do pose a health risk to humans. At present, the report card contains no information on toxins or trash in the water or on the beach.

ABOUT INDICATOR BACTERIA

The most common types of indicator bacteria include:

- **Total coliform**
- **Fecal coliform (or *E. coli*)**
- ***Enterococcus***

Total coliform, which contains coliform of all types, originates from many sources including soil, plants, animals, and humans. Fecal coliform and *Enterococcus* bacteria are found in the fecal matter of mammals and birds. This fecal bacteria does not always come from humans; however, human sewage does regularly end up in the ocean through sewage infrastructure failure and storm drains.

Why is storm drain pollution so significant?

Storm drain runoff is the largest source of pollution for ocean beaches. Storm drains flow untreated to the coast and are often contaminated with motor oil, animal waste, pesticides, yard waste and trash. After a rain, FIB densities often far exceed state health criteria for recreational water use. Health officials and Heal the Bay recommend that beach users never swim within 100 yards on either side of a flowing storm drain, creek, or river in any coastal waters during a rainstorm, and to stay out of the water for at least three days after a storm has ended.

Children often play directly in front of storm drains and in runoff-filled ponds and lagoons. Monitoring at "point zero" (the mouth of storm drains or creeks) is the best way to ensure that the health risks to all swimmers are minimized. This Heal the Bay recommendation was finally adopted by the State Water Resources Control Board (SWRCB) for the 2015 swimming season. In fact, the SWRCB made point zero monitoring a criterion for receiving beach water quality monitoring funds. This was great news for beachgoers and families going to the beach last summer. For more on storm drain impacted beaches, see "Analysis of Beach Types".

Are beaches monitored year-round?

In California, water quality samples are collected by the appropriate health agency at a minimum of once a week from April through October as required under the California Beach Bathing Water Quality Standards (AB 411) and recommended by EPA's National Beach Guidance and Performance Criteria for Recreational Waters (EPA's BEACH program). Some agencies conduct year-round sampling, while others scale back their monitoring programs dramatically from November through March, despite the fact that many oceangoers are in the water year-round.

The majority of Oregon and Washington water quality monitoring occurs during the summer swimming season (Memorial Day through Labor Day). The Makah Tribe in Clallam County Washington monitors water quality on a weekly basis year-round.

Why not test for viruses?

A common question asked by beachgoers is: "if viruses cause many of the swimming-associated illnesses, why don't health agencies monitor directly for viruses instead of indicator bacteria?" Although virus monitoring is incredibly useful in identifying sources of fecal pollution, there are a number of drawbacks to available virus measurement methods. There have been tremendous breakthroughs in the use of DNA to analyze water samples for virus or human pathogenic bacteria, but these techniques are still relatively expensive. In addition, interpretation of virus monitoring data is difficult because, unlike bacterial indicators, there is little data available to link health risks associated with swimming in beach water to virus densities.

Many epidemiology studies have been conducted on the West Coast and have found a strong correlation between illness rates and FIB concentrations so measuring FIB is a robust way to protect public health. However, research must be continued to refine how water quality is measured.

Beach Report Card Grading and Methodology

The Beach Report Card Grading Methodology translates complex shoreline bacteria data into a grade format that is meaningful and useable by all California beachgoers.

METHODOLOGY: CALIFORNIA

Heal the Bay's Beach Report Card grading system is endorsed by the SWRCB and the Beach Water Quality Workgroup as an effective way to communicate beach water quality to the public

Past amendments to the grading methodology have included:

- The inclusion of the geometric mean into the calculation
- A firm zero-to-100 point scale
- Greater weight for *Enterococcus* and the total to fecal ratio relative to total coliform and fecal coliform

The methodology retains past modifications to the report card, such as the inclusion of new indicator bacteria thresholds (namely the total-to-fecal ratio), developed by the Santa Monica Bay Restoration Commission in the 1996 health effects studies of Santa Monica Bay beachgoers. It also retains the implementation of standard deviations for each indicator bacteria threshold, which was developed by the Southern California Coastal Water Research Project and Orange County Sanitation Districts during the 1998 Southern California Bight Study. Each threshold is based on the prescribed standards set in the California Department Health Service's Beach Bathing Water Standards.

As seen in Table 5-1 the methodology uses a standard A through F grading system, and grades are based on the following formula:

$$\% \text{ Grade} = \frac{\text{'TOTAL POINTS AVAILABLE'} - \text{'TOTAL POINTS LOST'}}{\text{'TOTAL POINTS AVAILABLE'}}$$

[Note: The Annual and End-of-Summer Beach Report Card methodology is modified slightly to accommodate the longer time period. For example: no greater significance is given to the most recent samples.]

Total Points Available

'Total Points Available' is derived from adding together two point components (if applicable): the Geometric Mean and the Single Sample Standard. The points for each component are listed in Table 5-2.

In order for the points in each component to become available, certain criteria must be met. (For example, the geometric mean points will be added to the 'Total Points Available' only if there are a minimum of four dry weather samples collected within the allotted time frame). Wet weather data is graded separately from dry weather data, and does not currently include a geometric mean component. Therefore, it is possible for 'Total Points Available' to be less than 100. The new grading methodology allows for a relative grade to be determined based on the actual monitoring completed.

Once the 'Total Available Points' has been determined for a specific location, then the 'Total Points Lost' can be calculated for the applicable grade components.

Total Points Lost

Separate calculations are used to quantify 'Total Points Lost' for each applicable component from the 'Total Available Points'. The following describes the two calculations.

Geometric Mean

Calculating the 'Total Points Lost' for the geometric mean component involves using the rolling 30-day geometric mean values calculated for each sample day (see Table 5-3).

Each geometric mean criterion exceeded is assigned a specific percentage of points lost. Non-exceedances are given 0%. The percentage of points lost from each of the three criteria divided by the number of sample days are multiplied by the 'Total Available Points' (any sum of percentages exceeding 100% automatically loses all 50 points available in the geometric mean component).

Single Sample Standard

Calculating the 'Total Points Lost' for the Single Sample Standard component is similar to the calculation used for deriving the points lost for the Geometric Mean. However, the Single Sample Standard component uses a gradient to calculate the 'Total Points Lost'. The gradient of percentage points lost used in calculating the number of points lost is derived from work completed by the Southern California Coastal Water Research Project and Orange County Sanitation District as part of the 1998 Southern California Coastal Bight Study (see Table 5-4).

'Percentage of points lost' is allocated depending upon the threshold exceeded by each of the four criteria. Each single sample criterion exceeded is given a 'percentage of points lost'. These amounts are presented in Table 5-4.

The 'percentage of points lost' from each of the four criteria for each sample during the time period are added together and divided by the total number of samples. Once this number is calculated (total 'percentage of points lost' divided by total number of samples), it is multiplied by the 'Total Available Points'. In the Single Sample Standard component, more points are lost as the magnitude or frequency of exceedances increases.

Points lost from the Single Sample Standard component are added to the points lost in the Geometric Mean component (if applicable) and this sum becomes 'Total Points Lost'. Once the 'Total Points Available' and the 'Total Points Lost' are calculated, a grade for a particular sample site can be determined.

Determining a Grade

$$\% \text{ Grade} = \frac{\text{'TOTAL POINTS AVAILABLE'} - \text{'TOTAL POINTS LOST'}}{\text{'TOTAL POINTS AVAILABLE'}}$$

Most dry and wet weather annual grades are calculated with 100 'Total Available Points', although there is no Geometric Mean component for wet weather grading. Wet weather grades are calculated by the total 'percentage of points lost' divided by the total number of samples and then multiplied by 100. This gives the location's score for wet weather 'Total Points Lost'. This number is then subtracted from 100 to give the percentage grade.

METHODOLOGY: OREGON AND WASHINGTON

The Oregon and Washington state grade methodology (using *Enterococcus* standards) was adapted from the seven standard California methodology (see Appendix A1).

Total Points Available

As seen in Table 5-2, the methodology uses a standard A through F grading system, and grades are based on the following formula:

$$\% \text{ Grade} = \frac{\text{'TOTAL POINTS AVAILABLE'} - \text{'TOTAL POINTS LOST'}}{\text{'TOTAL POINTS AVAILABLE'}}$$

Note: The Annual and End-of-Summer Beach Report Card methodology is modified slightly to accommodate the longer time period. (For example: no greater significance is given to the most recent samples.)

Wet weather data (>=0.2 inches of rain in previous 72 hours) is graded separately from dry weather data and does not currently include a geometric mean component.

'Total Points Available' is derived from adding together two point components (if applicable): the Geometric Mean and the Single Sample Standard. The points for each component are listed in Table 5-2. In order for the points in each component to become available certain criteria must be met. Oregon and Washington Summer Beach Report Card methodology calculations only include Geometric Mean scores when four or more dry weather samples are available in determining a location's 30-day geometric mean. Therefore, it is possible for 'Total Points Available' to be less than 100. The grading methodology allows for a relative grade to be determined based on the actual monitoring completed.

Once the 'Total Available Points' has been determined for a specific location, then the 'Total Points Lost' is calculated for the applicable grade components.

Total Points Lost

Separate calculations are used to quantify 'Total Points Lost' for each applicable component from the 'Total Available Points'. The following describes the two calculations:

Geometric Mean

Calculating the 'Total Points Lost' for the Geometric Mean component involves using EPA's beach bathing indicator density of 35 for the geometric mean. If there are four or more samples included in the 30-day geometric mean calculation then the 50 points for the Geometric Mean component become available. Oregon and Washington Beach Report Card methodology calculates the percentage of geometric mean exceedance days based on the number of valid (four or more) geometric means scored during the extended time period. The percentage of geometric exceedance sample days out of valid geometric mean sample days is multiplied by the 50 available points to determine the 'Total Points Lost' for the Geometric Mean component.

Single Sample Standard

The Single Sample Standard component uses a gradient to calculate the 'Total Points Lost'. The gradient of percentage of points lost used in calculating the number of points lost is derived from the EPA's Ambient Water Quality Criteria for Bacteria and is found in Table 5-6.

'Percentage of points lost' is allocated depending upon the threshold exceeded. The penalties for threshold exceedances are presented in Table 5-7. Non-exceedances lose zero points. The 'percentage of points lost' for each sample during the time period are added together and divided by the total number of samples and multiplied by the 'Total Available Points'. More points are lost as the magnitude or frequency of exceedances increases.

Points lost from the Single Sample Standard component are added to the points lost in the Geometric Mean component (if applicable) and this sum becomes 'Total Points Lost'. Once the 'Total Points Available' and the 'Total Points Lost' are calculated a grade for a particular sample site can be determined.

Determining a Grade

$$\% \text{ Grade} = \frac{\text{'TOTAL POINTS AVAILABLE'} - \text{'TOTAL POINTS LOST'}}{\text{'TOTAL POINTS AVAILABLE'}}$$

Most dry and wet weather annual grades are calculated with 100 'Total Available Points', although there is no Geometric Mean component for wet weather grading. Wet weather grades are calculated by the total 'percentage of points lost' divided by the total number of samples and then multiplied by 100. This gives the location's score for wet weather 'Total Points Lost'. This number is then subtracted from 100 to give the percentage grade.

TABLE 5-1: GRADING SYSTEM

A	B	C	D	F
100%–90%	89%–80%	79%–70%	69%–60%	<60%

TABLE 5-2: TOTAL POINTS AVAILABLE BY COMPONENT

Geometric Mean	50 points
Single Sample Standard	50 points
Total	100 points

TABLE 5-3: CALCULATING THE TOTAL POINTS LOST FOR THE GEOMETRIC MEAN COMPONENT

Indicator Exceeded	Calif. Beach Bathing Water Standard	% of Total Available Points Lost** Due to Exceedance	Total Avail. Points
Enterococcus	35	80%	
Fecal Coliform	200	40%	50
Total Coliform	1000	20%	

* Colony forming units per 100 milliliters of ocean water

TABLE 5-4: SINGLE SAMPLE GRADIENT THRESHOLDS IN CFU/100ML*

Indicator Bacteria	SLIGHT T − 1 SD	MODERATE T + 1 SD	HIGH > T + 1 SD	EXTREME Very High Risk
Total Coliform	6,711–9,999	**10,000**–14,900	> 14,900	N/A
Fecal Coliform	268–399	**400**–596	> 596	N/A
Enterococcus	70–103	**104**–155	> 155	N/A
Total: Fecal Ratio (when total ≥ 1,000)	10.1–13	7.1–**10**	2.1–7	< 2.1

* Colony forming units per 100 milliliters of ocean water. N/A = Not applicable
*SD = Standard Deviation. **Bold** = California State Health Department standards for a single sample*

TABLE 5-5: CALCULATING THE TOTAL POINTS LOST FOR THE SINGLE SAMPLE STANDARD COMPONENT

Indicator Exceeded	SLIGHT % Points Lost	MODERATE % Points Lost	HIGH % Points Lost	EXTREME % Points Lost	Total Available Points
Total Coliform	10%	30%	40%	N/A	
Fecal Coliform	10%	30%	40%	N/A	50
Enterococcus	20%	40%	60%	N/A	
Ratio (when total > 1,000)	25%	50%	75%	100%	

TABLE 5-6: SINGLE SAMPLE GRADIENT THRESHOLDS IN CFU/100ML*

Indicator Bacteria	SLIGHT T − 1 SD	MODERATE T + 1 SD	HIGH > T + 1 S
Enterococcus	70–103	**104**–155	>155

* Colony forming units per 100 milliliters of ocean water
*SD = Standard Deviation. **Bold** = California State Health Department standards for a single sample*

TABLE 5-7: CALCULATING THE TOTAL POINTS LOST FOR THE SINGLE SAMPLE STANDARD COMPONENT

Indicator Exceeded	SLIGHT % Points Lost	MODERATE % Points Lost	HIGH % Points Lost	Total Available Points
Enterococcus	25%	75%	100%	50

Acknowledgements

The entire Beach Report Card program would not be possible without the cooperation of the many monitoring agencies across the West Coast. These agencies include:

2022–23 Beach Report Card
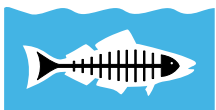
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