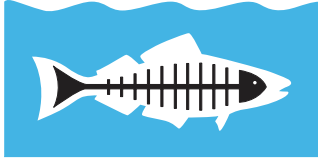


Heal the Bay

# *2021-2022* Beach Report Card





**Heal the Bay**

**2021-2021**

# Beach Report Card

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

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:



**SWAIN BARBER**  
FOUNDATION



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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: Newport Beach / Orange County / photo: Art Wager**

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# WELCOME





**Summer Dry Grades were excellent across the State with 94% of California beaches receiving A and B grades, which is on par with the average. Winter Dry Grades were slightly below average with 88% of the beaches receiving A and B grades. Wet Weather Grades for the past year were a little above average with 66% of the beaches receiving A and B grades.**

Coastal counties in California received 24% less rainfall than the historical average, and all coastal counties are experiencing moderate or extreme drought. Below average rainfall may have resulted in the slight improvements to Wet Weather Grades because reduced amounts of pollutants, including bacteria, were flushed into the ocean. However, reduced rainfall does not always result in improved grades; and in our last report, we found California's rainfall to be 41% lower than the historical average and Wet Weather Grades lower than average. Research has found that the length and frequency of storms can have a large impact on bacteria concentrations in the ocean, which may account for the differences between Wet Weather Grades in this report and the previous one.

- **Playa Blanca near Tijuana** is the number one Beach Bummer this year. This beach and others in the area are impacted by sewage-contaminated runoff from the Tijuana metropolitan 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.
- **San Mateo County** has produced more Beach Bumpers than any other county in recent years. This year Erckenbrack Park is a Beach Bummer for a third straight year; Marlin Park is making its second consecutive appearance; and Lakeshore Park has been a Beach Bummer five times in the last 10 years. These beaches are enclosed in an engineered patchwork of channels that do not allow much water circulation so pollution is not easily flushed away from the beaches.

- **Santa Monica Pier**, once a mainstay on the Beach Bummer list, has unfortunately returned as the number four Beach Bummer after a brief hiatus. The last time Santa Monica Pier appeared on the list was in 2018. City of Santa Monica officials have stated that they plan on replacing the deteriorating bird-excluding netting under the pier because birds attracted by the pier are a potential source of fecal pollution.
- **Marina del Rey Mother's Beach** is home to two Beach Bummer locations this year, which is not a surprise given this beach's history. Poor water quality has persisted at this beach since the Beach Report Card began over 30 years ago. 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 or water circulation. That means bacteria pollution does not get flushed away from the shore as it does at open ocean beaches. Los Angeles County has implemented many water quality improvement projects in the area, but the physical features here make it hard to eliminate the high levels of pollution.



- **Moonstone County Park** in Humboldt County is making its first appearance as a Beach Bummer. This beach receives pollution inputs from the Little River which flows into the ocean at this location. A study conducted at nearby Clam Beach found that birds, cows, and dogs were sources of fecal pollution, but more research is needed to assess the health risks at Moonstone County Park.
- **Vaughn's Launch in Orange County** is a sampling location within the Newport Bay Ecological Reserve and State Marine Conservation area. Swimming and fishing are not allowed here but kayaking and paddleboarding are; the nearest location to launch a boat is at the Newport Bay Aquatic Center. Vaughn's Launch is impacted by a nearby creek that carries runoff from the surrounding neighborhoods. Local officials have worked on addressing certain pollutants in the runoff by funneling the potentially polluted water through a retention basin containing natural vegetation. However, the retention basin was not constructed for filtering out fecal indicator bacteria so they do not know how effective it is against fecal pollution. Natural populations of birds are suspected to be the reason for the high bacteria concentrations, but more investigation is necessary to support that claim.
- **Tijuana Slough**, approximately one mile North of Tijuana River Mouth, is impacted by sewage pollution which is carried into the ocean by the Tijuana River. Impaired and insufficient sewage infrastructure in the City of Tijuana sends millions of gallons of sewage into the Tijuana River and out into the Pacific Ocean every year. Recent research has also shown that partially-treated sewage discharges from the Punta Bandera treatment plant in Tijuana flow north from and impact beaches in the border region.



Tijuana, Mexico  
photo: Roberto Cordova-Leiva

three beaches that are monitored. El Faro and El Vigia both received a D for Summer Dry Grades, while Playa Blanca received a F and ended up on our Beach Bummer list. All three beaches received F's for Wet Weather and Winter Dry Grades.

Over the last year, West Coast waters suffered from several catastrophic pollution discharges that endangered public health and our coastal ecosystems. This 'summer of spills' was the result of multiple infrastructure failures, further exacerbated by failures in public notification by public agencies. A ruptured sewer main sent seven million gallons of sewage into the Dominguez Channel which flows into the ocean near Long Beach, California. Unfortunately, that incident was eclipsed by another pipe rupture at The International Wastewater Treatment Plant north of Tijuana, on the United States side of the border. That pipe failure sent nearly one billion gallons of sewage-contaminated water into the Pacific Ocean over the course of several weeks. A 13 million gallon sewage spill from Los Angeles' Hyperion Water Reclamation Plant was the result of a failure in the Plant's trash removal system. Los Angeles County beachgoers were not notified of the potential health

risks until approximately 20 hours after the spill occurred. In October, 25,000 gallons of oil leaked from a pipeline off the coast of Huntington Beach, California. The oil spill closed beaches due to the toxic nature of crude oil and its fumes. In an all too common narrative, Orange County residents and visitors were not notified about the spill until the morning after it happened.

Sewage spills and oil spills have a multitude of negative impacts in addition to the health risk they pose. Sewage and oil contain contaminants harmful to aquatic life such as pharmaceuticals, nutrients, caffeine, and petroleum compounds among others. Beach closures resulting from the spills disrupted quality of life for oceangoers and financially damaged businesses that operate on the coast. The full impact these spills had on the environment and economy is difficult to assess because the number of potential impacts is so large, and the research is expensive and time consuming. However, we do know that more needs to be done to keep sewage and oil out of the ocean. Investments in infrastructure and updated public notification strategies are necessary for keeping our coast and its visitors safe.

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 57% of the beaches received A and B grades, which is lower than the state's historical average of 79%.

Washington Summer Dry Grades were mediocre with 79% of the beaches receiving A and B grades, which is far below the average of 96%. Wet Weather Grades were exceptional and equal to the historical average with 94% receiving A and B grades. Unfortunately, no Washington beaches were monitored during the winter months so we could not calculate Winter Dry Grades.

In the Tijuana area, we found concerning levels of pollution at all

# 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 are regularly 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.

Crystal Cove / Orange County

Grades in the Beach Report Card are based on concentrations of fecal indicator bacteria 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. Your average beachgoer does not get enough exposure to contaminants that pose a chronic health risk. Therefore, only bacteria standards are used for recreational water quality. Some beachgoers are privileged enough to have frequent access to the beach (surfers for example). These folks are definitely in the water more than a weekend beach visitor, so they can potentially have higher rates of exposure to harmful pollution.

For all beach users, we recommend using the Beach Report Card to understand your risk of getting sick. If beachgoers avoid the water at beaches with a poor water quality

*continued*



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 believe in keeping people away from the beach or the water, but we want people 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 2021)



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)<sup>1</sup>. Samples taken during wet weather are not used for these grades.

### Winter Dry Grade (November 2021 through March 2022)



AB 411 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 2021 through March 2022)



Rain flushes contaminants and pollution, including bacteria from our streets directly into the ocean through storm drains, rivers and streams, and over impermeable surfaces such as concrete. 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<sup>2,3,4</sup>. 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)<sup>5</sup>.

1 <https://www.waterboards.ca.gov/bacterialobjectives/>

2 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. *Epidemiology* Vol. 10 No.4 355-363.

3 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.

4 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.

5 <https://www.ioes.ucla.edu/wp-content/uploads/2013healththebayproject-1.pdf>

# WEST COAST SUMMARY





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

**Summer Dry Grades were excellent across the State with 94% of California beaches receiving A and B grades, which is on par with the average. Winter Dry Grades were slightly below average with 88% of the beaches receiving A and B grades. Wet Weather Grades for the past year were a little above average with 63% of the beaches receiving A and B grades.**

Coastal counties in California received 24% less rainfall than than the historical average, and all coastal counties are experiencing moderate or extreme drought.<sup>6</sup> Below average rainfall may have resulted in the slight improvement for Wet Weather Grades because reduced amounts of pollutants, including bacteria, were flushed into the ocean. In our last report, we found California’s rainfall to be 41% lower than the historical average, and Wet Weather Grades were actually lower than average. Research has found that the length and frequency of storms can have a large impact on bacteria concentrations in the ocean, which may account for the differences between Wet Weather Grades in this report and the previous one.<sup>7</sup>

Unfortunately, this past year saw an unprecedented 30 million gallons of sewage enter waterways in coastal areas of California, and this figure does not include the millions of gallons of sewage that regularly enter the

CALIFORNIA

2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
<b>A</b>	430	89%	258	81%	259	52%
<b>B</b>	24	5%	25	8%	57	11%
<b>C</b>	10	2%	12	4%	50	10%
<b>D</b>	10	2%	7	2%	29	6%
<b>F</b>	10	2%	18	6%	104	21%
<b>A+B</b>	454	94%	283	88%	316	63%
<b>C,D,F</b>	30	6%	37	12%	183	37%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
<b>A</b>	401	88%	293	81%	219	49%
<b>B</b>	32	7%	31	8%	48	11%
<b>C</b>	12	3%	17	5%	31	7%
<b>D</b>	6	1%	6	2%	30	7%
<b>F</b>	8	2%	15	4%	119	27%
<b>A+B</b>	432	94%	324	90%	266	60%
<b>C,D,F</b>	26	6%	38	10%	180	40%

<sup>6</sup> <https://www.drought.gov/states/california>

<sup>7</sup> Ackerman, D., S.B. Weisberg. Relationship between rainfall and beach bacterial concentrations on Santa Monica bay beaches. 2003. Journal of Water and Health. 1(2):85-9.

ocean through the Tijuana River. Aside from sewage spills, a major oil spill impacted ocean beaches for the first time since 2015. Sewage spills and oil spills have a multitude of negative impacts in addition to the health risk they pose. Sewage and oil contain contaminants harmful to aquatic life such as pharmaceuticals, nutrients, caffeine, and petroleum compounds among others. Beach closures resulting from the spills disrupted quality of life for oceangoers and financially damaged businesses that operate on the coast. The full impact these spills had on the environment and economy is difficult to assess because the number of potential impacts is so large, and the research is expensive and time consuming. However, we do know that more needs to be done to keep sewage and oil out of the ocean. Investments in infrastructure and updated public notification strategies are necessary for keeping our coast and its visitors safe.



Bodega Bay / Sonoma County

### Northern California

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

Summer Dry Grades in this region were very good with 91% of beaches receiving A and B grades, which is slightly below 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 disappointing with only 60% receiving A's and B's.

That is well below the average of 82% A and B grades during wet weather.

The Northern California region received 42 percent less rainfall than the historical average. Usually, below average rainfall results in improved Wet Weather Grades because fewer pollutants, including bacteria, are flushed into the ocean. However, we observed lower than average rainfall coupled with below average Wet Weather Grades. Research has found that the length and frequency of storms can have a large impact on bacteria concentrations in the ocean, which may account for this deviation from the typical trend we see.

#### NORTHERN CALIFORNIA

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	39	89%	0	NO DATA	19	48%
B	1	2%	0	NO DATA	5	13%
C	1	2%	0	NO DATA	3	8%
D	2	5%	0	NO DATA	2	5%
F	1	2%	0	NO DATA	11	28%
A+B	40	91%	0	NO DATA	24	60%
C,D,F	4	9%	0	NO DATA	16	40%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	38	90%	1	100%	25	73%
B	2	5%	0	0%	3	9%
C	1	2%	0	0%	2	6%
D	0	1%	0	0%	2	5%
F	1	2%	0	0%	2	6%
A+B	40	94%	1	100%	28	82%
C,D,F	2	6%	0	0%	6	18%

## Central California

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

Summer Dry Grades were good and equal to the average with 90% of beaches receiving A and B marks. Winter Dry Grades were also on par with the average with 83% of the beaches receiving A and B grades.

Wet Weather Grades were woeful as only 48% of the region’s beaches received A and B grades. That is well below the very bad 64% average.

Central California Counties saw 5% less rainfall compared to the historical average. Six of the counties in this region actually received above average rainfall, but those increases were balanced out by decreased rainfall in others. The increased rainfall in some counties may account for the dip in Wet Weather Grades.

### CENTRAL CALIFORNIA

2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
A	67	81%	36	67%	36	40%
B	8	10%	9	17%	7	8%
C	3	4%	1	2%	13	14%
D	2	2%	3	6%	7	8%
F	3	4%	5	9%	27	30%
A+B	75	90%	45	83%	43	48%
C,D,F	8	10%	9	17%	47	52%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
A	60	76%	51	74%	47	49%
B	11	14%	6	9%	14	15%
C	3	3%	5	7%	8	9%
D	2	2%	1	2%	5	6%
F	4	5%	5	8%	21	22%
A+B	71	90%	57	83%	61	64%
C,D,F	8	10%	11	17%	35	36%



Piedras Blancas Light Station / San Luis Obispo County



Del Mar Dog Beach / San Diego County

## Southern California

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

Summer Dry Grades were stellar with 95% of the beaches receiving A and B grades, which is close to the average for this region.

Winter Dry Grades were excellent and just a hair below average with 89% of SoCal beaches receiving A and B grades.

Wet Weather Grades were lackluster yet above average this past year as 67% of the beaches in Southern California received A and B grades when it rained.

Southern California Counties received 7% less rainfall over the last rainy season compared to the historical average. The decrease in rainfall may explain the improvement observed in Wet Weather Grades.

### SOUTHERN CALIFORNIA

2021–2022	Summer Dry		Winter Dry		Wet Weather	
	#	%	#	%	#	%
<b>A</b>	324	91%	221	84%	204	55%
<b>B</b>	15	4%	15	6%	45	12%
<b>C</b>	6	2%	11	4%	34	9%
<b>D</b>	6	2%	4	2%	20	5%
<b>F</b>	6	2%	13	5%	66	18%
<b>A+B</b>	339	95%	236	89%	249	67%
<b>C,D,F</b>	18	5%	28	11%	120	33%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
	#	%	#	%	#	%
<b>A</b>	303	90%	242	83%	147	47%
<b>B</b>	18	5%	24	8%	30	10%
<b>C</b>	9	3%	12	4%	20	6%
<b>D</b>	4	1%	5	2%	23	7%
<b>F</b>	3	1%	10	3%	95	30%
<b>A+B</b>	321	96%	266	91%	177	56%
<b>C,D,F</b>	15	4%	27	9%	139	44%

A+

# HONOR ROLL

Treasure Island Beach / Orange County

**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, 51 out of over 500 monitored beaches made it on the Honor Roll compared to 35 last year. 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.

Orange County had the most beaches on the Honor Roll for a second straight year with 19. Dana Point and Doheny State Beach each have multiple locations on the Honor Roll. Treasure Island Beach has now appeared on the Honor Roll for a third consecutive year, and Crystal Cove is making a second consecutive appearance.

San Diego County had 15 beaches on the Honor Roll this year, which is up from three in the last report. The Carlsbad area is home to five of this year's Honor Roll beaches, and La Jolla Shores has three.

Six Los Angeles County beaches earned top marks over the last year. Keeping with the trend of the last few years,

most of Los Angeles County's Honor Roll beaches are located on the Palos Verdes Peninsula or the Malibu Area. Venice City Beach at Brooks Ave. also made the cut this year.

San Luis Obispo County made a strong showing this year with seven Honor Roll beaches. Four of those beaches are from the Pismo Beach area. Cayucos, Morro Bay, and San Simeon all had some high scorers.

Guadalupe Dunes in Santa Barbara County continues to lead the class with a fourth straight appearance on the Honor Roll. Overall, four Santa Barbara County beaches made it on the Honor Roll.

Each year we typically have several Ventura County beaches on the Honor Roll; however, no beaches were monitored sufficiently to receive Winter Dry Grades. We urge Ventura County to return to their historical winter monitoring schedule.



# HONOR ROLL 2021-2022

BEACH NAME	COUNTY
Venice City Beach, at Brooks Ave. drain	Los Angeles
Rancho Palos Verdes, Long Point	Los Angeles
Royal Palms State Beach	Los Angeles
Palos Verdes Estates, at Malaga Cove trail outlet	Los Angeles
Las Tunas County Beach, at Pena Creek	Los Angeles
Nicholas Beach, at San Nicholas Canyon Creek	Los Angeles
Dana Point Harbor Youth Dock	Orange
Dana Point Harbor Guest Dock	Orange
Poche Beach	Orange
Doheny Beach	Orange
Doheny State Beach, End of the Park	Orange
Doheny State Beach, at Last Campground	Orange
Corona Del Mar	Orange
Crystal Cove	Orange
Marine Science Institute Beach	Orange
Dana Point, Capistrano County Beach	Orange
Doheny State Beach, Pedestrian Bridge	Orange
Dana Strands Beach	Orange
Huntington City Beach, at 17th Street	Orange
Bolsa Chica Reserve, at Flood Gates	Orange
Surfside Beach, at Sea Way	Orange
San Clemente, at Avenida Calafia	Orange
Salt Creek Beach	Orange
Laguna Lido	Orange
Treasure Island Beach	Orange
Del Mar, at 15th Street	San Diego

BEACH NAME	COUNTY
Carlsbad, at Tamarack Ave.	San Diego
Carlsbad, at Poinsettia Lane	San Diego
Carlsbad, at Encina Creek	San Diego
Carlsbad, at Palomar Airport Rd.	San Diego
Carlsbad, at Cerezo Drive	San Diego
Oceanside, at Forster Street	San Diego
Oceanside, Harbor Beach at Harbor Drive	San Diego
Point Loma, Lighthouse	San Diego
Point Loma, Point Loma Treatment Plant	San Diego
Sunset Cliffs, at Ladera Street	San Diego
Mission Beach, Belmont Park	San Diego
La Jolla Shores Beach, 1000 ft south of Scripps Pier	San Diego
La Jolla Shores Beach, 250 feet south of Scripps Pier	San Diego
La Jolla Shores Beach, 500 feet north of Scripps Pier	San Diego
Guadalupe Dunes	Santa Barbara
East Beach, at Sycamore Creek	Santa Barbara
El Capitan State Beach	Santa Barbara
Sands, at Coal Oil Point	Santa Barbara
Cayucos State Beach, downcoast of the pier	San Luis Obispo
Pismo Beach, at Ocean View	San Luis Obispo
Pismo Beach, at Wadsworth Street	San Luis Obispo
San Simeon State Beach, at Pico Ave.	San Luis Obispo
Morro Strand State Beach, at Beachcomber Drive	San Luis Obispo
Pismo State Beach, 571 yards south of Pier Ave.	San Luis Obispo
Pismo State Beach, 330 yards north of Pier Ave.	San Luis Obispo



Venice Beach / Los Angeles County





Foster City / San Mateo County

**Unfortunately, not every beach makes the Honor Roll. The beaches that received the ten poorest Summer Dry Grades are called Beach Bummers. This year's summer Beach Bummers are:**

### 1. Playa Blanca

(Tijuana Mexico)

The number one Beach Bummer this year is Playa Blanca located south of the City of Tijuana. 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.

### 2. Erckenbrack Park

(San Mateo County)

Erckenbrack Park is appearing on the Beach Bummer list for a third straight year. This area of the San Francisco Bay has had a known record of poor water quality, and the beaches in this area have now become perennial Beach Bummers. This beach lies within an engineered patchwork of enclosed channels which are impacted by dry weather runoff from the surrounding residential and commercial development. Nearby, Lakeshore Park and Marlin Park are also Beach Bummers this year.

### 3. Marlin Park

(San Mateo County)

Another San Mateo Beach snagged the third spot on the Bummer list this year. Marlin Park made its Beach Bummer debut last year, and it has regrettably suffered another year of poor water quality. The Foster City area has been plagued with poor water quality in recent years, and the physical characteristics of its beaches play a major role. Marlin Park along with Erckenbrack Park and Lakeshore Park experience very little water circulation so pollution from the surrounding landscape sticks around longer.

## 4. Santa Monica Pier

(Los Angeles County)

Santa Monica Pier, once a mainstay on the Beach Bummer list, has unfortunately returned as the number four Beach Bummer after a brief hiatus. The last time Santa Monica Pier appeared on the list was in our 2018 Report Card. There have been many projects aimed at improving water quality at the Pier over the years including a system for capturing and reusing storm drain runoff.<sup>8</sup> City of Santa Monica officials have stated that they plan on replacing the deteriorating bird-excluding netting under the pier because birds attracted by the pier are a source of fecal pollution.

## 5. Marina del Rey Mother's Beach, at lifeguard tower

(Los Angeles County)

Unsurprisingly, Mother's Beach at the lifeguard tower is a Beach Bummer. Poor water quality has persisted at this beach since the Beach Report Card began over 30 years ago. 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 or water circulation. Therefore, bacteria pollution does not get flushed away from the shore as it does at open ocean beaches. Los Angeles County has implemented many water quality improvement projects in the area, but the physical features here make it hard to eliminate the high levels of pollution.

## 6. Moonstone County Park

(Humboldt County)

Making its first appearance as a Beach Bummer is Moonstone County Park in Trinidad California. The Little River flows into the ocean at this beach carrying with it pollution from the surrounding watershed. Humboldt County officials conducted a source identification study<sup>9</sup> designed to identify the origin of fecal pollution at nearby Clam Beach. The study found that most fecal matter in the ocean and throughout the watershed came from birds and bovines. Beach samples used in the study were collected on a single day, and non-human fecal matter can still pose a health risk to humans<sup>10</sup> so more research is needed to assess the health risk at Humboldt County beaches.

## 7. Newport Bay, Vaughn's Launch

(Orange County)

The number seven Beach Bummer is a bit of an outlier when it comes to the list. This is a sampling location within the Newport Bay Ecological Reserve and State Marine Conservation area,<sup>11</sup> and it is not your typical sandy beach. Swimming and fishing are not allowed here but kayaking and paddleboarding are; the nearest location to launch a boat is at the Newport Bay Aquatic Center. Vaughn's Launch is impacted by a nearby creek that carries runoff from the surrounding neighborhoods. Local officials have worked on addressing certain pollutants in the runoff by funneling the potentially polluted water through a retention basin containing natural vegetation. However, the retention basin was not constructed for filtering out fecal indicator bacteria so they do not know how effective it is against fecal pollution. Natural populations of birds are suspected to be the reason for high bacteria concentrations at this location, but more investigation is necessary to support that claim.

<sup>8</sup> <https://www.santamonica.gov/blog/santa-monica-draws-line-in-the-sand-on-water-infrastructure-innovation>

<sup>9</sup> <https://www.mdpi.com/1660-4601/18/13/6901/htm>

<sup>10</sup> Soller, J. A., M. E. Schoen, T. Bartrand, J. E. Ravenscroft, N. J. Ashbolt. Estimated human health risks from exposure to recreational waters impacted by human and non-human sources of faecal contamination. 2010. Water Research 44: 4674-4691.

<sup>11</sup> <https://wildlife.ca.gov/Lands/Places-to-Visit/Upper-Newport-Bay-ER>

## 8. Lakeshore Park

(San Mateo County)

Lakeshore Park is unfortunately making its fifth Beach Bummer appearance in the last 10 years. This beach is similar to Erckenbrack Park and Marlin Park in that all are enclosed within a network of rather stagnant channels in San Francisco Bay. These channels receive urban runoff from surrounding development, and there is very little water circulation which keeps pollution nearshore. This is the third San Mateo County Beach Bummer this year.

## 9. Marina del Rey Mother's Beach, between lifeguard tower and boat dock

(Los Angeles County)

The number nine Beach Bummer is another Marina del Rey Mother's Beach location, and it is just down the shore from the number five Bummer. As described above, Mother's Beach is enclosed in a Marina that experiences very little water circulation so fecal pollution from the surrounding area lingers near the shoreline.

## 10. Tijuana Slough, North of Tijuana River Mouth











(San Diego County)

Tijuana Slough, North of Tijuana River Mouth, is impacted by sewage pollution carried into the ocean by the Tijuana River. Impaired and insufficient sewage infrastructure in the City of Tijuana sends millions of gallons of sewage into the Tijuana River and out into the Pacific Ocean. Also, recent research has shown that partially-treated sewage discharges from the Punta Bandera treatment plant flow north from the Tijuana area and impact beaches in the border region.<sup>12</sup>

<sup>12</sup> <https://www.frontiersin.org/articles/10.3389/fmicb.2021.674214/full>

# BEACH BUMMERS 2021-2022



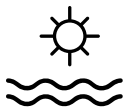
RANK	LOCATION	SUMMER DRY GRADE 	COUNTY/AREA	BEACH TYPE 
1	Playas Blanca	<b>F</b>	Tijuana, Mexico	
2	Erckenbrack Park	<b>F</b>	San Mateo	Enclosed 
3	Marlin Park	<b>F</b>	San Mateo	Enclosed 
4	Santa Monica Pier	<b>F</b>	Los Angeles	Storm Drain Impacted 
5	Marina del Rey Mother's Beach, at lifeguard tower	<b>F</b>	Los Angeles	Enclosed 
6	Moonstone County Park	<b>F</b>	Humboldt	Storm Drain Impacted 
7	Newport Bay, Vaughn's Launch	<b>F</b>	Orange	
8	Lakeshore Park, behind Rec Center	<b>F</b>	San Mateo	Enclosed 
9	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock	<b>F</b>	Los Angeles	Enclosed 
10	Tijuana Slough north of Tijuana River	<b>F</b>	San Diego	Open 



# IMPACT OF BEACH TYPE

Rodeo Beach / Marin County  
photo: Marin 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.**



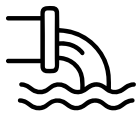
## Open Beaches

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. Eighty-eight 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 excellent with 95% of the beaches receiving A and B grades.
- Wet Weather Grades were rather decent and above average with 82% 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.



Venice Beach storm drain / Los Angeles County



## 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 222 of these beaches.

- Summer Dry Grades were superb and slightly above average with 95% of the beaches receiving A and B grades.
- Winter Dry Grades were excellent and above average with 91% of the beaches receiving A and B grades.
- Wet Weather Grades were mediocre but above average this year with 71% of the beaches receiving A and B grades.
- Two of this year's Beach Bumpers were impacted by runoff through a storm drain, river, or stream.
- Surprisingly, 22 of the 51 beaches on this year's Honor Roll are impacted by a storm drain, stream, or river.



## 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 99 enclosed beaches this year.

- Summer Dry Grades for enclosed beaches were good yet below average with 88% receiving A and B grades.
- Winter Dry Grades were passing but below average with 80% of enclosed beaches receiving A and B grades.
- Wet Weather Grades were abysmal with only 48% of the beaches receiving A and B grades, however, this is still above average for this type of beach.
- Five of this year's Beach Bumpers were enclosed beaches.

GRADES BY TIME PERIOD & BEACH TYPE



OPEN

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	81	92%	49	88%	59	68%
B	6	7%	4	7%	12	14%
C	0	0%	1	2%	7	8%
D	0	0%	1	2%	2	2%
F	1	1%	1	2%	7	8%
A+B	87	99%	53	95%	71	82%
C,D,F	1	1%	3	5%	16	18%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	80	95%	60	89%	51	62%
B	2	3%	3	4%	11	14%
C	1	2%	2	3%	6	7%
D	0	0%	1	1%	4	5%
F	0	0%	2	3%	10	12%
A+B	82	98%	62	93%	63	76%
C,D,F	2	2%	5	7%	20	24%



STORM DRAIN

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	199	90%	124	84%	140	61%
B	11	5%	10	7%	24	10%
C	6	3%	6	4%	16	7%
D	4	2%	2	1%	10	4%
F	2	1%	6	4%	41	18%
A+B	210	95%	134	91%	164	71%
C,D,F	12	5%	14	9%	67	29%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	194	86%	144	80%	108	49%
B	16	7%	16	9%	22	10%
C	8	4%	9	5%	17	8%
D	4	2%	4	2%	15	7%
F	4	2%	7	4%	59	27%
A+B	210	93%	160	89%	130	59%
C,D,F	16	7%	20	11%	91	41%



ENCLOSED

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	81	82%	36	65%	30	29%
B	6	6%	8	15%	19	18%
C	3	3%	4	7%	20	19%
D	4	4%	2	4%	6	6%
F	5	5%	5	9%	28	27%
A+B	87	88%	44	80%	49	48%
C,D,F	12	12%	11	20%	54	52%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	75	82%	49	71%	26	31%
B	10	11%	10	14%	5	6%
C	2	2%	4	6%	4	5%
D	1	2%	1	2%	7	8%
F	3	3%	5	7%	41	50%
A+B	84	93%	59	85%	31	37%
C,D,F	6	7%	10	15%	51	63%



Mission Bay Park / San Diego County



# CALIFORNIA COUNTY SUMMARIES

Clam Beach / Humboldt County  
photo: Nicholas Turland

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

## 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 Summer Dry Grades, which is normal for this site. There were no Winter Dry Grades issued for this site due to undersampling. The D it received for Wet Weather was lower than usual.

This County received 42 inches of rain this past year, which is more than any other County in California. But, this was still 24% below the County’s historical average of 55 inches. All Northern California counties had below average rainfall this year.

There was one sewage spill reported in the County, which discharged 700 gallons into a nearby waterbody. No beaches were impacted by the spill.

### DEL NORTE COUNTY

2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	1	100%	NO DATA	NO DATA	0	0%
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	100%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	1	100%	NO DATA	NO DATA	0	0%
C,D,F	0	0%	NO DATA	NO DATA	1	100%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	1	100%	1	100%	1	76%
B	0	0%	0	0%	0	0%
C	0	0%	0	0%	0	24%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	0	0%
A+B	1	100%	1	100%	1	76%
C,D,F	0	0%	0	0%	0	24%

## Humboldt County

Summer Dry Grades were poor this year with only 40% of the beaches receiving A and B grades. Wet Weather Grades were abysmal with only 20% of the beaches receiving A and B grades. Humboldt County water quality was far below average over the last year.

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.

Moonstone County Park was the number six Beach Bummer this year, marking the first time it became one of California's most polluted beaches.

Humboldt County received 21 inches of rain, which is 46% lower than the historical average of 38 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 reduced rainfall had on water quality.

Three reported sewage spills discharged 1,725 gallons into rivers and streams mainly in Eureka City, but no beaches were impacted by the spills.




## Mendocino County




Mendocino beaches received straight A's for Summer Dry and Wet Weather Grades, which is outstanding. Beaches in this County have not received a grade lower than a B in the last five years. 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 only received 12 inches of rain, which is 68% lower than the average of 37 inches.




Three reported sewage spills impacted waterways in Mendocino County. One spill sent 870 gallons into the Noyo River which drains into Noyo Bay.




### HUMBOLDT COUNTY

2021–2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	2	40%	NO DATA	NO DATA	1	20%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	2	40%	NO DATA	NO DATA	1	20%
F	1	20%	NO DATA	NO DATA	3	60%
A+B	2	40%	NO DATA	NO DATA	1	20%
C,D,F	3	60%	NO DATA	NO DATA	4	80%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	2	40%	NO DATA	NO DATA	1	30%
B	1	12%	NO DATA	NO DATA	1	35%
C	1	20%	NO DATA	NO DATA	1	15%
D	0	8%	NO DATA	NO DATA	0	10%
F	1	20%	NO DATA	NO DATA	0	10%
A+B	3	52%	NO DATA	NO DATA	3	65%
C,D,F	2	48%	NO DATA	NO DATA	1	35%

### MENDOCINO COUNTY

2021–2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	5	100%	NO DATA	NO DATA	5	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	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%	NO DATA	NO DATA	3	71%
B	0	4%	NO DATA	NO DATA	1	13%
C	0	0%	NO DATA	NO DATA	1	13%
D	0	0%	NO DATA	NO DATA	0	4%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	5	100%	NO DATA	NO DATA	4	83%
C,D,F	0	0%	NO DATA	NO DATA	1	17%



## Sonoma County

Sonoma County beaches had good water quality with 86% receiving A's for Summer Dry Grades. However, this stretch of coastline usually receives all A's in the summer months. All monitored beaches received A's for Wet Weather Grades. 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 received 8 inches of rain, which is 71% lower than the historical average of 29 inches and more characteristic of a Southern California county. Sonoma County saw the largest drop in rainfall in California this year.

A total of 571,849 gallons of sewage were spilled into waterways, mainly from two major spills. Both occurred in the same area, sending sewage into Petaluma River and Sonoma Creek which flow into San Pablo Bay.

## Marin County




Summer Dry Grades were exemplary for a fourth consecutive year with all 26 of Marin County beaches receiving A and B grades.




For Wet Weather Grades, 59% of the beaches received A and B grades, which is much lower than the historical average of 81%. 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 20 inches of rain, which is a 5% increase from 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.




A health advisory was issued after a 132,500-gallon sewage spill in Sausalito near Schoonmaker Beach. In total, 34 spills impacted bodies of water, and a total of 381,519 gallons were spilled.




### SONOMA COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	6	86%	NO DATA	NO DATA	2	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	1	14%	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	6	86%	NO DATA	NO DATA	2	100%
C,D,F	1	14%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	7	100%	NO DATA	NO DATA	5	96%
B	0	0%	NO DATA	NO DATA	0	4%
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	6	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

### MARIN COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	25	96%	NO DATA	NO DATA	11	41%
B	1	4%	NO DATA	NO DATA	5	19%
C	0	0%	NO DATA	NO DATA	3	11%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	8	30%
A+B	26	100%	NO DATA	NO DATA	16	59%
C,D,F	0	0%	NO DATA	NO DATA	11	41%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	22	95%	NO DATA	NO DATA	14	76%
B	1	5%	NO DATA	NO DATA	1	5%
C	0	0%	NO DATA	NO DATA	1	4%
D	0	0%	NO DATA	NO DATA	1	6%
F	0	0%	NO DATA	NO DATA	2	9%
A+B	24	100%	NO DATA	NO DATA	15	81%
C,D,F	0	0%	NO DATA	NO DATA	4	19%

## 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 woefully bad this year with 0% receiving A grades and only 17% receiving B grades. This is much lower than the 5-year average of 55% A and B grades. 72% of the beaches even ended up with F grades under wet conditions.

For Winter Dry Grades 60% of the beaches received A and B grades, which is much lower than the historical average.

San Francisco County received 20 inches of rain, which is a 5% 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. Despite this system, water quality is still negatively impacted when it rains because some pollution makes its way to the ocean in creeks and over surfaces. If it rains enough, the sewers can also overflow, sending sewage into the ocean.

Four sewage spills in San Francisco sent a total of 1,406,380 gallons into the ocean. The majority of the sewage was spilled into the Bay from one 1.4 million-gallon spill near Aquatic Park & Crissy Field, and a health advisory was issued in response.

### SAN FRANCISCO COUNTY

2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	15	94%	5	50%	0	0%
B	1	6%	1	10%	3	17%
C	0	0%	0	0%	2	11%
D	0	0%	2	20%	0	0%
F	0	0%	2	20%	13	72%
A+B	16	100%	6	60%	3	17%
C,D,F	0	0%	4	40%	15	83%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	13	83%	12	78%	6	33%
B	2	14%	2	10%	4	22%
C	0	1%	0	3%	2	11%
D	0	0%	0	1%	1	7%
F	0	1%	1	8%	5	27%
A+B	15	97%	14	88%	10	55%
C,D,F	0	3%	2	12%	8	45%



Candlestick Point / San Francisco County



Foster City / San Mateo 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, only 13% of the beaches received A and B grades, which is much lower than the historical average of 64%. East Bay Counties did not monitor their beaches in winter months so no Winter Dry Grades were calculated and no beaches from this area were eligible for the Honor Roll.

Alameda County and Contra Costa County received 20 inches of rain, which is a 5% increase from the historical average of 19 inches. More rainfall usually results in worse water quality because more pollutants are washed into the ocean.

There were 79 sewage spills across both Counties that sent a total of 2,756,894 gallons into bodies of water. One 7,655 gallon spill closed Temescal Lake, a freshwater recreation area. Nine spills totaling 1.3 million gallons entered into San Francisco Bay in Richmond.

### EAST BAY COUNTIES

2021–2022	Summer Dry		Winter Dry		Wet Weather	
	#	%	#	%	#	%
GRADE						
A	7	88%	NO DATA	NO DATA	0	0%
B	1	13%	NO DATA	NO DATA	1	13%
C	0	0%	NO DATA	NO DATA	3	38%
D	0	0%	NO DATA	NO DATA	2	25%
F	0	0%	NO DATA	NO DATA	2	25%
A+B	8	100%	NO DATA	NO DATA	1	13%
C,D,F	0	0%	NO DATA	NO DATA	7	88%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
	#	%	#	%	#	%
GRADE						
A	5	62%	4	70%	3	44%
B	2	23%	1	20%	1	19%
C	1	10%	1	10%	1	11%
D	0	5%	0	0%	0	6%
F	0	0%	0	0%	1	19%
A+B	7	85%	5	90%	5	64%
C,D,F	1	15%	1	10%	3	36%

## San Mateo County

San Mateo County had another disappointing year in terms of water quality. Only 68% of the County’s beaches received an A or B for Summer Dry Grades, which is slightly below average.

Wet Weather Grades were poor, but better compared to the historical average with 44% of the beaches receiving A and B grades.

Winter Dry Grades were also better compared to historical average, with 78% receiving A and B grades.

Three San Mateo County beaches made it on our Beach Bummer list: Erckenbrack Park, Marlin Park, and Lakeshore Park. All are enclosed beaches on the bay side. Erckenbrack Park has been on the Bummer List for three consecutive years and Marlin Park has been on the list for two consecutive years.

We have observed a troubling trend of poor water quality in San Mateo County in recent years. There have been at least two Beach Bumpers from this County in the previous four reports including three last year. No other county has had more beach bumpers in the last three years.

San Mateo County received 20 inches of rain, which is a 5% increase from the historical average of 19 inches. More rainfall usually results in worse water quality because increased amounts of pollutants are washed into the ocean, but we did not observe that trend this year.

There were 38 sewage spills into bodies of water adding up to 3,950,039 gallons. One 2.9-million-gallon spill closed Pacifica State Beach, and one 44,000 gallon spill closed Linda Mar Beach. Another two spills totaling 363,000 gallons were released upstream from Aquatic Park, however no health advisories were issued for the spills.

### SAN MATEO COUNTY

2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
A	11	50%	12	52%	9	36%
B	4	18%	6	26%	2	8%
C	2	9%	1	4%	5	20%
D	2	9%	1	4%	3	12%
F	3	14%	3	13%	6	24%
A+B	15	68%	18	78%	11	44%
C,D,F	7	32%	5	22%	14	56%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
A	8	50%	9	45%	7	30%
B	4	21%	2	11%	2	9%
C	1	7%	3	16%	2	9%
D	1	4%	1	6%	3	12%
F	3	18%	5	23%	9	39%
A+B	12	71%	12	55%	9	39%
C,D,F	5	29%	9	45%	14	61%



Marlin Park / San Mateo County

## Santa Cruz County

Summer Dry Grades were great and a little higher than average this year with 92% 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 66%.

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

Santa Cruz County received 19 inches of rain, which is 28% below the historical average of 26 inches. This did not appear to result in better grades for the County which typically happens in drier years.

Four sewage spills discharged a total of 3,198 gallons into waterbodies across the County. Hidden Beach and Privates Beach were issued health advisories for small spills.




## Monterey County




Monterey County's beaches all received A or B grades for Summer Dry and Wet Grades. Monterey County did 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 13 inches of rain, which is 24% lower than the historical average of 17 inches. This County has historically had very good water quality through both dry and wet years.




Seven sewage spills totaling 1,342 gallons made it into a body of water in Monterey County. One 800-gallon spill in December resulted in a sewage advisory for Asilomar State Beach.




### SANTA CRUZ COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	10	83%	1	50%	2	14%
B	1	8%	1	50%	1	7%
C	1	8%	0	0%	3	21%
D	0	0%	0	0%	2	14%
F	0	0%	0	0%	6	43%
A+B	11	92%	2	100%	3	21%
C,D,F	1	8%	0	0%	11	79%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	9	69%	9	72%	10	48%
B	2	18%	2	15%	3	17%
C	0	3%	1	8%	2	12%
D	1	5%	0	2%	1	3%
F	1	5%	0	3%	4	19%
A+B	11	88%	10	87%	13	66%
C,D,F	2	12%	2	13%	7	34%

### MONTEREY COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	5	83%	NO DATA	NO DATA	6	100%
B	1	17%	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	6	100%	NO DATA	NO DATA	6	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	7	95%	6	92%	5	84%
B	0	5%	1	8%	0	0%
C	0	0%	0	0%	0	6%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	1	9%
A+B	8	100%	6	100%	5	84%
C,D,F	0	0%	0	0%	1	16%

## San Luis Obispo County

Summer Dry Grades were outstanding with 100% of the beaches receiving A grades.

Wet Weather Grades were also exceptional with 100% of the beaches receiving A and B grades, which is above average for this county.




Winter Dry Grades were also exemplary and above average with 100% of the beaches receiving A and B grades.




This excellent performance has resulted in seven beaches on the Honor Roll this year. The majority of them are in the Pismo Beach area.

San Luis Obispo County received 11 inches of rain, which is about the same as the average historical rainfall total.

There were seven sewage spills into water bodies amounting to 2,964 gallons. A 520-gallon sewage spill in June near Palisades Park should have resulted in a public health advisory, but it did not.

### SAN LUIS OBISPO COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	19	100%	18	95%	19	100%
B	0	0%	1	5%	0	0%
C	0	0%	0	0%	0	0%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	0	0%
A+B	19	100%	19	100%	19	100%
C,D,F	0	0%	0	0%	0	0%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	18	97%	18	96%	14	75%
B	1	3%	0	2%	3	18%
C	0	0%	0	2%	0	2%
D	0	0%	0	0%	0	2%
F	0	0%	0	0%	1	3%
A+B	18	100%	19	98%	18	93%
C,D,F	0	0%	0	2%	1	7%

## Santa Barbara County

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

Wet Weather Grades were exceptionally good and far above the average this year with 94% receiving A and B grades.




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




Guadalupe Dunes returned to the Honor Roll for a fourth consecutive year. El Capitan also made its return for the second time. East Beach at Sycamore Creek along with Sands at Coal Oil Point also made it on the list of cleanest beaches in the state.

Santa Barbara County received nine inches of rain, which is below the historical average of 11 inches. This may account for the improved Wet Weather Grades.

Three sewage spills totaling 5,634 gallons flowed into storm drains, rivers, lakes, or the ocean. No ocean beaches were impacted by these sewage spills.

### SANTA BARBARA COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	15	94%	16	100%	15	94%
B	0	0%	0	0%	0	0%
C	1	6%	0	0%	0	0%
D	0	0%	0	0%	1	6%
F	0	0%	0	0%	0	0%
A+B	15	94%	16	100%	15	94%
C,D,F	1	6%	0	0%	1	6%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	GRADE	#	%	#	%	#
A	14	84%	13	83%	4	26%
B	2	9%	1	9%	2	10%
C	1	5%	0	3%	2	10%
D	0	2%	0	0%	2	15%
F	0	0%	1	5%	6	39%
A+B	15	94%	14	92%	6	36%
C,D,F	1	6%	1	8%	10	64%

## Ventura County

Even though Summer Dry Grades were superlative with 97% of the beaches receiving A and B grades, they were still slightly below the five year average of 99%. We are heartened that Ventura County sets such a high bar for summer water quality.

Wet Weather Grades were great and above average this year with 87% of the beaches receiving A and B grades.

Ventura County did not monitor its beaches often enough in winter months to receive Winter Dry Grades, and consequently, no beaches from this County were eligible for the Honor Roll. This is unusual for Ventura County and we urge them to return to their typical winter monitoring schedule.

Ventura County received 11 inches of rain, which is a little above the historical average of 10 inches.

Ventura County had four sewage spills reach bodies of water, totalling 60,822 gallons. No beaches were reportedly impacted.

## Los Angeles County

Los Angeles County had excellent Summer Dry Grades with 90% of the County's beaches receiving A and B grades.

Wet Weather Grades were flunking with only 46% of the beaches receiving A and B grades, which is just above average for the County.

Winter Dry Grades were good yet slightly below average with 83% of the beaches receiving A and B grades.




Six Los Angeles County beaches made it on the esteemed Honor Roll list. Most of them are in the Malibu and Rancho Palos Verdes areas.




Three L.A. County beaches made it on our Beach Bummers list. Two locations at Marina Del Rey Mother's Beach were Beach Bummers this year. Santa Monica Pier earned fourth place on the Bummers List.

L.A. County received 9 inches of rain, which is about the same as the historical average.




Eighty-nine sewage spills sent an alarming volume of 20,322,566 gallons into bodies of water. The major spills at Hyperion and Carson, combined, sent 20 million gallons into the ocean and led to multiple beach closures. Five spills occurred upstream from L.A. River Recreation Zones during the open recreation season but no closures were issued.




### VENTURA COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	34	97%	NO DATA	NO DATA	26	87%
B	0	0%	NO DATA	NO DATA	0	0%
C	1	3%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	1	3%
F	0	0%	NO DATA	NO DATA	3	10%
A+B	34	97%	NO DATA	NO DATA	26	87%
C,D,F	1	3%	NO DATA	NO DATA	4	13%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	39	99%	15	92%	23	73%
B	0	0%	1	4%	2	8%
C	0	1%	0	2%	3	8%
D	0	0%	0	2%	0	1%
F	0	0%	0	0%	3	9%
A+B	39	99%	16	95%	26	81%
C,D,F	0	1%	1	5%	6	19%

### LOS ANGELES COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	79	85%	65	81%	27	28%
B	5	5%	1	1%	17	18%
C	3	3%	7	9%	13	14%
D	3	3%	0	0%	3	3%
F	3	3%	7	9%	36	38%
A+B	84	90%	66	83%	44	46%
C,D,F	9	10%	14	18%	52	54%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	79	86%	66	74%	32	33%
B	7	7%	11	12%	10	10%
C	3	3%	6	7%	6	7%
D	2	2%	2	2%	8	8%
F	1	1%	4	4%	41	42%
A+B	85	94%	77	86%	42	43%
C,D,F	6	6%	12	14%	55	57%

## Orange County

Summer Dry Grades were excellent and just above the five-year average with 99% of the beaches receiving A and B grades.

Wet Weather Grades were also better than average with 66% of the beaches receiving A and B grades.

Winter Dry Grades were stellar with 95% of the beaches receiving A and B grades.

A total of 19 beaches made it on the Honor Roll, which is more than any other county. However, Orange County had one beach that ended up on the Beach Bummer list: Newport Bay, Vaughn’s Launch. This location is impacted by a nearby creek outlet. Natural populations of birds are suspected to be a source of high bacteria concentrations, but more investigation is necessary.

Orange County received 7 inches of rain, which is lower than the historical average of 9 inches. The decrease in rainfall did not appear to impact Wet Weather Grades.

There were 13 sewage spills reported across the County that sent 6,719 gallons of sewage into bodies of water. A 250-gallon spill closed Huntington Harbor Beaches temporarily.

### ORANGE COUNTY

2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	121	96%	101	86%	73	53%
B	4	3%	10	9%	17	12%
C	0	0%	4	3%	19	14%
D	0	0%	1	1%	9	7%
F	1	1%	1	1%	19	14%
A+B	125	99%	111	95%	90	66%
C,D,F	1	1%	6	5%	47	34%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	111	92%	104	88%	47	42%
B	5	4%	7	6%	11	10%
C	2	2%	3	3%	7	6%
D	1	1%	1	1%	9	9%
F	1	1%	3	3%	37	33%
A+B	117	97%	111	94%	57	52%
C,D,F	4	3%	7	6%	53	48%



San Clemente Pier / Orange County



## San Diego County

Summer Dry Grades were good and slightly higher than the five-year average with 96% of the beaches receiving A and B grades.

Wet Weather Grades were good and above average with 85% of the beaches receiving A and B grades.

Winter Dry Grades were outstanding with 90% of beaches receiving A and B grades, which is about the same as average.

A total of 15 beaches made it on the Honor Roll, which is the second most after Orange County.

The Tijuana Slough North of Tijuana River Mouth ended up on the Beach Bummer list. Millions of gallons of untreated sewage regularly flow into the ocean via the Tijuana River. Most of the sewage enters the river in the City of Tijuana where there are many sewage infrastructure problems.

San Diego County received 8 inches of rain last year, which is slightly lower than the historical average of 9 inches. This decrease in rainfall may account for the above average Wet Weather Grades, however the difference in rainfall compared to last year was small.

There were 26 sewage spills into water bodies amounting to 78,684 gallons. Two events totaling 1,600 gallons spilled into Mission Bay and resulted in health advisories for the area.



Torrey Pines State Beach / San Diego County

### SAN DIEGO COUNTY

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
A	75	89%	39	81%	63	72%
B	6	7%	4	8%	11	13%
C	1	1%	0	0%	2	2%
D	1	1%	3	6%	6	7%
F	1	1%	2	4%	5	6%
A+B	81	96%	43	90%	74	85%
C,D,F	3	4%	5	10%	13	15%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
A	63	88%	43	82%	40	66%
B	5	7%	4	8%	6	9%
C	3	4%	2	3%	3	5%
D	1	1%	1	2%	3	5%
F	1	1%	2	5%	9	15%
A+B	68	94%	47	90%	45	75%
C,D,F	4	6%	5	10%	15	25%



# OREGON COUNTY SUMMARIES

Cannon 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. EPA's 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 57% of the beaches received A and B grades, which is lower than the state's historical average of 79%. We are disheartened by the lack of monitoring taking place in Oregon, and we urge state officials to devote more resources to this public health issue.




OREGON

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	NO DATA	NO DATA	NO DATA	NO DATA	12	52%
B	NO DATA	NO DATA	NO DATA	NO DATA	1	4%
C	NO DATA	NO DATA	NO DATA	NO DATA	3	13%
D	NO DATA	NO DATA	NO DATA	NO DATA	1	4%
F	NO DATA	NO DATA	NO DATA	NO DATA	6	26%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	13	57%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	10	43%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	5	92%	NO DATA	NO DATA	9	70%
B	0	0%	NO DATA	NO DATA	1	9%
C	0	0%	NO DATA	NO DATA	1	4%
D	0	4%	NO DATA	NO DATA	1	4%
F	0	4%	NO DATA	NO DATA	2	12%
A+B	5	92%	NO DATA	NO DATA	11	79%
C,D,F	0	8%	NO DATA	NO DATA	3	21%




CLATSOP COUNTY

2021-2022	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	1	20%
F	NO DATA	NO DATA	NO DATA	NO DATA	4	80%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	5	100%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	2	100%	NO DATA	NO DATA	2	79%
B	0	0%	NO DATA	NO DATA	0	7%
C	0	0%	NO DATA	NO DATA	0	7%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	7%
A+B	2	100%	NO DATA	NO DATA	2	86%
C,D,F	0	0%	NO DATA	NO DATA	0	14%




COOS COUNTY

2021-2022	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	1	25%
C	NO DATA	NO DATA	NO DATA	NO DATA	1	25%
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	3	75%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	25%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	1	100%	NO DATA	NO DATA	1	40%
B	0	0%	NO DATA	NO DATA	1	30%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	10%
F	0	0%	NO DATA	NO DATA	0	20%
A+B	1	100%	NO DATA	NO DATA	1	70%
C,D,F	0	0%	NO DATA	NO DATA	1	30%

LINCOLN COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	NO DATA	NO DATA	NO DATA	NO DATA	6	75%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	1	13%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	1	13%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	6	75%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	2	25%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	2	82%	NO DATA	NO DATA	4	76%
B	0	0%	NO DATA	NO DATA	0	8%
C	0	0%	NO DATA	NO DATA	0	8%
D	0	9%	NO DATA	NO DATA	0	8%
F	0	9%	NO DATA	NO DATA	0	0%
A+B	2	82%	NO DATA	NO DATA	4	84%
C,D,F	0	18%	NO DATA	NO DATA	1	16%



Seaside / Clatsop County

**TILLAMOOK COUNTY**

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	NO DATA	NO DATA	NO DATA	NO DATA	3	75%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	1	25%
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	3	75%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	25%

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

**CURRY COUNTY**

2021-2022	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	1	100%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	100%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	NO DATA	NO DATA	NO DATA	NO DATA	0	33%
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	0	67%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	0	33%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	0	67%

**LANE COUNTY**

2021-2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	NO DATA	NO DATA	NO DATA	NO DATA	1	100%
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	0	0%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	1	100%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
GRADE						
A	NO DATA	NO DATA	NO DATA	NO DATA	1	56%
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	44%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	1	56%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	44%



# WASHINGTON COUNTY SUMMARIES

First Beach / Olympic National Park




*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 mediocre with 79% of the beaches receiving A and B grades, which is far below the average of 96%. Wet Weather Grades were exceptional and equal to the historical average with 94% receiving A and B grades. Unfortunately, no




Washington beaches were monitored during the winter months so we could not calculate Winter Dry Grades. We urge the State of Washington and the Makah Tribe to ensure beaches are adequately monitored during winter months.




WASHINGTON

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	103	74%	NO DATA	NO DATA	144	88%
B	7	5%	NO DATA	NO DATA	10	6%
C	12	9%	NO DATA	NO DATA	2	1%
D	10	7%	NO DATA	NO DATA	4	2%
F	8	6%	NO DATA	NO DATA	3	2%
A+B	110	79%	NO DATA	NO DATA	154	94%
C,D,F	30	21%	NO DATA	NO DATA	9	6%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	148	93%	NO DATA	NO DATA	121	91%
B	4	3%	NO DATA	NO DATA	4	3%
C	2	2%	NO DATA	NO DATA	4	3%
D	2	1%	NO DATA	NO DATA	1	1%
F	3	2%	NO DATA	NO DATA	3	2%
A+B	152	96%	NO DATA	NO DATA	125	94%
C,D,F	7	4%	NO DATA	NO DATA	8	6%




CLALLAM COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	6	75%	NO DATA	NO DATA	9	100%
B	2	25%	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	13	94%	9	100%	15	92%
B	0	3%	0	0%	1	7%
C	0	3%	0	0%	0	1%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	0	0%
A+B	13	97%	9	100%	17	99%
C,D,F	0	3%	0	0%	0	1%




KITSAP COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	24	73%	NO DATA	NO DATA	27	82%
B	1	3%	NO DATA	NO DATA	3	9%
C	2	6%	NO DATA	NO DATA	0	0%
D	6	18%	NO DATA	NO DATA	3	9%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	25	76%	NO DATA	NO DATA	30	91%
C,D,F	8	24%	NO DATA	NO DATA	3	9%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	33	97%	NO DATA	NO DATA	32	93%
B	1	3%	NO DATA	NO DATA	1	2%
C	0	0%	NO DATA	NO DATA	1	3%
D	0	0%	NO DATA	NO DATA	0	1%
F	0	0%	NO DATA	NO DATA	0	1%
A+B	34	100%	NO DATA	NO DATA	32	96%
C,D,F	0	0%	NO DATA	NO DATA	2	4%




SKAGIT COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	3	100%	NO DATA	NO DATA	3	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	3	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	69%
B	0	0%	NO DATA	NO DATA	0	6%
C	0	8%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	6%
F	0	0%	NO DATA	NO DATA	1	19%
A+B	2	92%	NO DATA	NO DATA	2	75%
C,D,F	0	8%	NO DATA	NO DATA	1	25%




**SNOHOMISH COUNTY**

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	11	73%	NO DATA	NO DATA	18	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	2	13%	NO DATA	NO DATA	0	0%
D	1	7%	NO DATA	NO DATA	0	0%
F	1	7%	NO DATA	NO DATA	0	0%
A+B	11	73%	NO DATA	NO DATA	18	100%
C,D,F	4	27%	NO DATA	NO DATA	0	0%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	15	99%	NO DATA	NO DATA	13	83%
B	0	0%	NO DATA	NO DATA	1	7%
C	0	1%	NO DATA	NO DATA	1	5%
D	0	0%	NO DATA	NO DATA	1	3%
F	0	0%	NO DATA	NO DATA	0	2%
A+B	15	99%	NO DATA	NO DATA	14	90%
C,D,F	0	1%	NO DATA	NO DATA	2	10%




**WHATCOM COUNTY**

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	2	33%	NO DATA	NO DATA	8	80%
B	0	0%	NO DATA	NO DATA	1	10%
C	2	33%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	2	33%	NO DATA	NO DATA	1	10%
A+B	2	33%	NO DATA	NO DATA	9	90%
C,D,F	4	67%	NO DATA	NO DATA	1	10%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	3	58%	NO DATA	NO DATA	6	80%
B	1	13%	NO DATA	NO DATA	0	0%
C	0	4%	NO DATA	NO DATA	0	6%
D	0	8%	NO DATA	NO DATA	0	3%
F	1	17%	NO DATA	NO DATA	1	11%
A+B	3	71%	NO DATA	NO DATA	6	80%
C,D,F	1	29%	NO DATA	NO DATA	1	20%




**ISLAND COUNTY**

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	8	89%	NO DATA	NO DATA	7	78%
B	1	11%	NO DATA	NO DATA	1	11%
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	11%
A+B	9	100%	NO DATA	NO DATA	8	89%
C,D,F	0	0%	NO DATA	NO DATA	1	11%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	5	64%	NO DATA	NO DATA	8	91%
B	1	10%	NO DATA	NO DATA	0	0%
C	1	10%	NO DATA	NO DATA	0	3%
D	0	3%	NO DATA	NO DATA	0	0%
F	1	13%	NO DATA	NO DATA	1	6%
A+B	6	74%	NO DATA	NO DATA	8	91%
C,D,F	2	26%	NO DATA	NO DATA	1	9%

**KING COUNTY**

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	11	73%	NO DATA	NO DATA	27	90%
B	1	7%	NO DATA	NO DATA	3	10%
C	1	7%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	2	13%	NO DATA	NO DATA	0	0%
A+B	12	80%	NO DATA	NO DATA	30	100%
C,D,F	3	20%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	24	93%	NO DATA	NO DATA	26	91%
B	1	3%	NO DATA	NO DATA	1	3%
C	0	1%	NO DATA	NO DATA	1	4%
D	0	2%	NO DATA	NO DATA	1	2%
F	0	2%	NO DATA	NO DATA	0	0%
A+B	25	96%	NO DATA	NO DATA	27	94%
C,D,F	1	4%	NO DATA	NO DATA	2	6%



Ruby Beach / Jefferson County




**JEFFERSON COUNTY**




2021–2022	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
<b>A</b>	4	44%	NO DATA	NO DATA	8	89%
<b>B</b>	1	11%	NO DATA	NO DATA	0	0%
<b>C</b>	1	11%	NO DATA	NO DATA	1	11%
<b>D</b>	3	33%	NO DATA	NO DATA	0	0%
<b>F</b>	0	0%	NO DATA	NO DATA	0	0%
<b>A+B</b>	5	56%	NO DATA	NO DATA	8	89%
<b>C,D,F</b>	4	44%	NO DATA	NO DATA	1	11%

5 YEAR AVERAGE	Summer Dry ☀️		Winter Dry ❄️		Wet Weather ☁️	
	#	%	#	%	#	%
<b>A</b>	5	85%	NO DATA	NO DATA	5	95%
<b>B</b>	0	4%	NO DATA	NO DATA	0	0%
<b>C</b>	0	4%	NO DATA	NO DATA	0	5%
<b>D</b>	0	0%	NO DATA	NO DATA	0	0%
<b>F</b>	0	7%	NO DATA	NO DATA	0	0%
<b>A+B</b>	5	89%	NO DATA	NO DATA	5	95%
<b>C,D,F</b>	1	11%	NO DATA	NO DATA	0	5%









MASON COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	5	56%	NO DATA	NO DATA	9	100%
B	1	11%	NO DATA	NO DATA	0	0%
C	3	33%	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	6	67%	NO DATA	NO DATA	9	100%
C,D,F	3	33%	NO DATA	NO DATA	0	0%




5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	9	98%	NO DATA	NO DATA	6	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	2%	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	98%	NO DATA	NO DATA	6	100%
C,D,F	0	2%	NO DATA	NO DATA	0	0%




GRAY'S HARBOR COUNTY

2021-2022	Summer Dry 		Winter Dry 		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 		Winter Dry 		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

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	0	0%	NO DATA	NO DATA	3	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	3	100%	NO DATA	NO DATA	0	0%
A+B	0	0%	NO DATA	NO DATA	3	100%
C,D,F	3	100%	NO DATA	NO DATA	0	0%

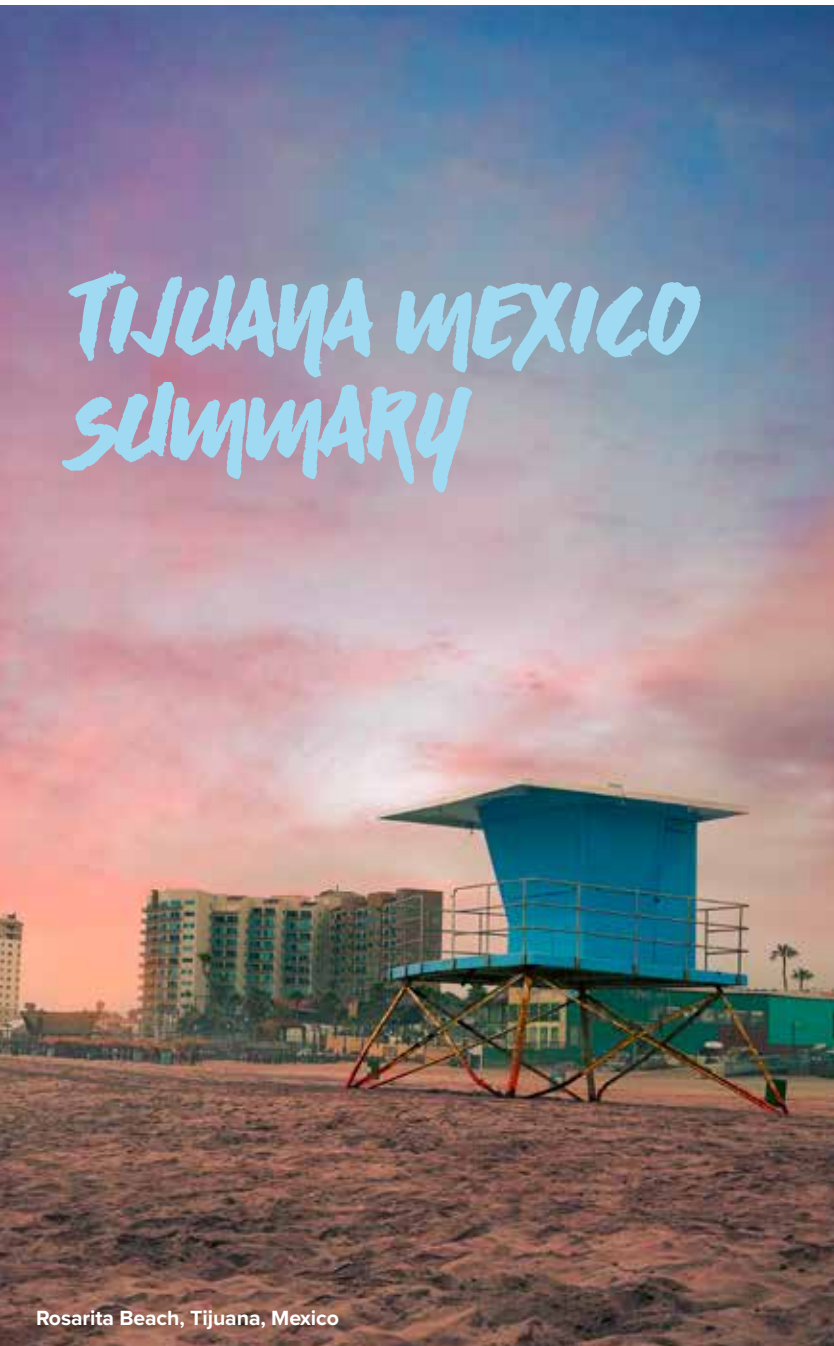
5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	3	100%	NO DATA	NO DATA	2	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	3	100%	NO DATA	NO DATA	2	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

PIERCE COUNTY

2021-2022	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	20	95%	NO DATA	NO DATA	16	76%
B	0	0%	NO DATA	NO DATA	2	10%
C	1	5%	NO DATA	NO DATA	1	5%
D	0	0%	NO DATA	NO DATA	1	5%
F	0	0%	NO DATA	NO DATA	1	5%
A+B	20	95%	NO DATA	NO DATA	18	86%
C,D,F	1	5%	NO DATA	NO DATA	3	14%

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
GRADE						
A	26	99%	NO DATA	NO DATA	15	94%
B	0	0%	NO DATA	NO DATA	0	1%
C	0	0%	NO DATA	NO DATA	1	5%
D	0	1%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	26	99%	NO DATA	NO DATA	15	95%
C,D,F	0	1%	NO DATA	NO DATA	1	5%

# TIJUANA MEXICO SUMMARY






Rosarita Beach, Tijuana, Mexico

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. Unfortunately, we found concerning levels of pollution at all three beaches. El Faro and El Vigia both received a D for Summer Dry Grades, while Playa Blanca received a F and ended up on our Beach Bummer list. All three beaches received F's for Wet Weather and Winter Dry Grades.

These poor marks are not good for local beachgoers or the tourism economy. This stretch of coastline is heavily impacted by sewage pollution year-round, even during dry weather. The main source 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.<sup>13</sup> Prevailing currents carry sewage pollution north to the Tijuana beaches as well as Imperial Beach. Deteriorating infrastructure is another issue in the area. In early 2022, a sewer main carrying sewage to the International Wastewater Treatment Plant was ruptured and allowed millions of gallons of raw sewage to flow into the Tijuana River over the course of four months.<sup>14</sup> Improvement projects are funded and underway,<sup>15</sup> but the scale of the problem is immense and will take time to correct. There is an urgent need for Mexico and the United States to swiftly work together to address sewage pollution in Tijuana.

## TIJUANA, MEXICO

2021–2022 GRADE	Summer Dry 		Winter Dry 		Wet Weather 	
	#	%	#	%	#	%
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

<sup>13</sup> <https://wildcoast.org/wp-content/uploads/2019/08/Issue-Briefing-Tijuana-River-Pollution.pdf>

<sup>14</sup> [https://www.waterboards.ca.gov/sandiego/water\\_issues/programs/tijuana\\_river\\_valley\\_strategy/spill\\_report.html](https://www.waterboards.ca.gov/sandiego/water_issues/programs/tijuana_river_valley_strategy/spill_report.html)

<sup>15</sup> <https://www.epa.gov/sustainable-water-infrastructure/tijuana-river-watershed-technical-evaluation-infrastructure>

# BEACH NEWS





LA-River-Sepulveda-Basin / Los Angeles County

## Big Spills

This past year highlighted many of the threats to our beaches and by extension, our quality of life. Over the last year, West Coast waters suffered from several catastrophic pollution discharges that endangered public health and our coastal ecosystems. This ‘summer of spills’ included a 13 million gallon sewage spill<sup>16</sup> from Los Angeles’ Hyperion Water Reclamation Plant; a seven million gallon sewage spill<sup>17</sup> into the Dominguez Channel, which flows into the ocean near Long Beach, California; and close to one billion gallons of sewage-contaminated water flowed into the Pacific Ocean due to a structure failure at the International Wastewater Treatment Plant north of Tijuana, Mexico.

In addition to sewage spills, 2021 also saw two other spills into

waterways that impacted public health. In October, 25,000 gallons of oil leaked from a pipeline off the coast of Huntington Beach, California.<sup>18</sup> Only a small portion of the oil was recovered so most of it is still in the ocean or in the intertidal zone. Later that month, after a fire, runoff that was contaminated with chemicals from an industrial facility entered the Dominguez Channel in Carson, California (unrelated to the sewage spill) and impacted the surrounding communities with nuisance fumes.<sup>19</sup> Each of these incidents posed a health risk to the surrounding communities, and all resulted in closed beaches, with the exception of the chemical spill. Decision makers must step up and significantly invest in infrastructure in addition to holding polluters accountable.

## 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.<sup>20</sup> This 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

<sup>16</sup> <https://healthebay.org/july-2021-sewage-spill-in-santa-monica-bay-and-beach-closures/>

<sup>17</sup> <https://www.lacsd.org/about-us/carson-sewage-spill>

<sup>18</sup> <https://wildlife.ca.gov/OSPR/NRDA/Pipeline-P00547>

<sup>19</sup> <https://www.aqmd.gov/home/news-events/community-investigations/dominguez-channel>

<sup>20</sup> <https://safecleanwaterla.org/>

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 drought conditions in California continue to worsen.

## Assembly Bill (AB) 1066

Unlike ocean beaches, there is no statewide oversight, standardization, or funding for FIB monitoring, nor are there mandated public water quality notifications for freshwater swimming and recreation areas. In October 2021, California Governor, Gavin Newsom, signed AB 1066 into law. The bill, authored by Assemblymember Bloom and sponsored by Heal the Bay, tasks the California Water Quality Monitoring Council with defining and identifying high-priority freshwater recreation sites across the state as well as making recommendations for an appropriate monitoring program for these sites. AB 1066 is a critical first step in establishing a monitoring and public notification mandate, similar to the mandate of AB 411 for ocean beaches, to achieve public health protections

for freshwater. Heal the Bay will support implementation of AB 1066, and advocate for further legislation requiring monitoring and public advisories for freshwater recreation areas.

## Wildfires, Water Quality, and Climate Change

Heal the Bay partnered with scientists from UCLA and the Jet Propulsion Laboratory (JPL) Remote Sensing Lab on a study investigating the impacts of the 2018 Woolsey Fire on beach water quality.<sup>21</sup> The results showed that beaches experienced elevated levels of bacteria and sediment in the water for several months after the fire was extinguished. The fire left the coastal watershed of Malibu devoid of vegetation, allowing large amounts of soil and bacteria to wash into the ocean. The resulting increase in ocean turbidity likely caused bacteria to persist in the water longer because the bacteria were not getting sterilized by the sun's rays. This research is important in that it is among the first studies to shed light on the potential for wildfires to create unsafe conditions for recreation in the ocean. We plan to pursue this research further especially as climate change

continues to increase the intensity, frequency, and size of wildfires.

## Funding Shoreline Monitoring Programs

The U.S. EPA's Beaches Environmental Assessment and Coastal Health Act<sup>22</sup> (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<sup>23</sup>.

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

<sup>21</sup> <https://www.nature.com/articles/s41598-022-05945-x>

<sup>22</sup> <https://www.epa.gov/beach-tech/about-beach-act>

<sup>23</sup> <https://coast.noaa.gov/data/digitalcoast/pdf/econ-report.pdf>

Foundation is leading the effort to increase federal spending for water quality monitoring.<sup>24</sup>

States will also likely need 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), 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.

## NowCast Update

For the eighth 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 are present in the water given the current local conditions and are verified with sampling data. Visit [beachreportcard.org](https://beachreportcard.org) to find daily summer predictions for 25 beaches in California. The Beach Report Card with NowCast app is available for free on [iOS](#) and [Android](#) devices.

## The Beach Report Card and Access to Water Recreation

Water recreation, whether it be at a park or a beach, is vital to good quality of life and public health. The Beach Report Card and River Report Card programs are essential tools for keeping water users safe, but 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 safe, healthy, and clean water recreation areas. Communities who are primarily Black, Indigenous, Latino, Asian,

and people of color experience many barriers to accessing water recreation spaces and outdoor activities. These barriers include socioeconomic inequities; a disproportionate burden of pollution; the lack of inclusiveness in water recreation opportunities; and the threat of racism in outdoor spaces, among many other systemic issues. We believe it is an inherent right for everyone to have access to water recreation, and therefore, we need to reduce and remove barriers to these opportunities and spaces. The Beach Report Card and River Report Card have not addressed this issue before. We acknowledge this as a major shortcoming in our efforts to promote good water quality and protect public health at our beaches and rivers. Heal the Bay is committed to expanding the user base of our Beach Report Card and River Report Card. We have started by working with local community-based organizations that are taking down barriers to water recreation for communities of color. Through this work, we will amplify what "safe, healthy, and clean access to water recreation" means in the communities where it is needed the most.

<sup>24</sup> <https://www.surfrider.org/pages/support-clean-water-programs-in-epas-fy2023-budget>



Point Dume / Los Angeles County

# APPENDICES

## 2021-2022

### SECTION V: APPENDICES

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## Last 10 Years Beach Bummers: 2011–2021

2011–2012	2012–2013	2013–2014	2014–2015
Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Avalon Catalina Island LOS ANGELES COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY
Avalon Catalina Island LOS ANGELES 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
Cabrillo Beach Harborside LOS ANGELES 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
Topanga State Beach LOS ANGELES COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY	Cabrillo Beach Harborside   LOS ANGELES COUNTY	Aquatic Park SAN MATEO COUNTY
Poche Beach ORANGE COUNTY	Malibu Pier LOS ANGELES COUNTY	Stillwater Cove MONTEREY COUNTY	Mission Bay, Visitor's Center at Clairemont Dr. SAN DIEGO COUNTY
Doheny State Beach, at San Juan Creek ORANGE COUNTY	Marina Lagoon, Aquatic Park & Lakeshore Park SAN MATEO COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Santa Monica Pier LOS ANGELES COUNTY
Arroyo Burro SANTA BARBARA COUNTY	Doheny State Beach, at San Juan Creek ORANGE COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Candlestick Point, Sunnysdale Cove SAN FRANCISCO COUNTY
Baker Beach, at Lobos Creek SAN FRANCISCO 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
Colorado Lagoon LOS ANGELES COUNTY	Windsurfer Circle SAN FRANCISCO COUNTY	Capitola Beach, west of jetty   SANTA CRUZ COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY
Capitola Beach, west of jetty SANTA CRUZ COUNTY	Tijuana River Mouth SAN DIEGO COUNTY	Windsurfer Circle SAN FRANCISCO COUNTY	Huntington State Beach, projection of Brookhurst Street ORANGE COUNTY

2015–2016	2016–2017	2017–2018
Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Poche Beach, at creek outlet ORANGE COUNTY
Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	San Clemente Pier ORANGE COUNTY	Lakeshore Park, behind Rec Center SAN MATEO COUNTY
San Diego Bay Shelter Island, Shoreline Beach Park SAN DIEGO COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Linda Mar Beach, at San Pedro Creek SAN MATEO COUNTY
Monarch Beach, at Salt Creek ORANGE COUNTY	Newport Bay Abalone Avenue Beach ORANGE COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY
Santa Monica Pier LOS ANGELES COUNTY	Lakeshore Park, behind Rec Center SAN MATEO COUNTY	Roosevelt Beach, south end of parking lot SAN MATEO COUNTY
Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	La Jolla Cove SAN DIEGO COUNTY	Luffenholz Beach, near Luffenholz Creek HUMBOLDT COUNTY
Redondo Municipal Pier, 100 yards south LOS ANGELES COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Santa Monica Pier LOS ANGELES COUNTY
Candlestick Point Sunnysdale Cove SAN FRANCISCO COUNTY	Capitola Beach, west of jetty SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY
Pillar Point Harbor, end of Westpoint Ave. SAN MATEO COUNTY	Luffenholz Beach, near Luffenholz Creek HUMBOLDT COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY
Pismo Beach Pier, 40 feet south of the pier SAN LUIS OBISPO COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Surfer's Beach, south end of riprap SAN MATEO COUNTY





2018–2019	2019–2020	2020–2021
San Clemente Pier ORANGE COUNTY	Fitzgerald Marine Reserve, at San Vicente Creek Outlet SAN MATEO COUNTY	Tijuana Slough NWRS, Tijuana River mouth SAN DIEGO COUNTY
Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Poche Beach, at Creek Outlet ORANGE COUNTY	Foster City, Erckenbrack Park SAN MATEO COUNTY
Linda Mar Beach, at San Pedro Creek SAN MATEO COUNTY	Pillar Point Harbor, at Capistrano Ave. SAN MATEO COUNTY	Capitola Beach, west of jetty. SANTA CRUZ COUNTY
Long Beach City Beach, projection of Coronado Ave. LOS ANGELES COUNTY	Foster City, Erckenbrack Park SAN MATEO COUNTY	Foster City, Gull Park SAN MATEO COUNTY
Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Topanga Beach, at Creek Outlet LOS ANGELES COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY
Monarch Beach, at Salt Creek ORANGE COUNTY	Pillar Point Harbor Beach SAN MATEO COUNTY	Tijuana Slough NWRS, 3/4 miles north of Tijuana River SAN DIEGO COUNTY
Marina del Rey, Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Linda Mar, at San Pedro Creek Outlet SAN MATEO COUNTY	Clam Beach County Park, at Strawberry Creek HUMBOLDT COUNTY
Cabrillo Beach Harborside LOS ANGELES COUNTY	Mission Bay, Vacation Isle North Cove SAN DIEGO COUNTY	Foster City, Marlin Park SAN MATEO COUNTY
Keller Beach South Beach CONTRA COSTA COUNTY	San Clemente Pier ORANGE COUNTY	Candlestick Point, Windsurfer Circle SAN FRANCISCO COUNTY
Aquatic Park SAN MATEO COUNTY	Pillar Point Harbor, at Westpoint Ave. SAN MATEO COUNTY	East Beach, at Mission Creek SANTA BARBARA COUNTY

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

Dockweiler State Beach, at Grand Ave.	A+	A	F
Hermosa City Beach, at 26th Street	A+	A+	A
Redondo State Beach, at Topaz Street	A	A	C
Avalon Beach - 100 feet east of the Green Pleasure Pier			A
Avalon Beach, 50 feet east of the Green Pleasure Pier	A+		F
Avalon Beach, 50 feet west of the Green Pleasure Pier	A		A+
Avalon Beach, 100 feet west of the Green Pleasure Pier	A		A+
Avalon Beach, east of the Casino Arch at the steps	A		A+
Manhattan Beach, at 28th Street	A	A	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+	A+
Royal Palms State Beach	A+	A+	A+
Cabrillo Beach, ocean side	A+	A	A
Palos Verdes Estates, at Palos Verdes Cove	A	A+	B
Palos Verdes Estates, at Malaga Cove rocks	A	A+	B
Basin D, near first slip outside swim area (from surface)	A	A	C
Basin D, near first slip outside swim area (at depth)	A	A	B
Basin E, in front of tide gate from Oxford Basin	D	A	F
Basin E, center of basin (from surface)	C	A+	F
Basin E, center of basin (at depth)	A	A	C
Basin E, in front of Boone-Olive Pump Outlet	C	B	F
Back of main channel (from surface)	A	A+	F
Back of main channel (at depth)	A	A+	C
Basin F, center of basin (from surface)	A	A+	D
Basin F, center of basin (at depth)	A+	A+	B
Surfrider Beach, at lagoon breach	A	C	F
Dockweiler State Beach, at Culver Blvd.	A	A	F
Manhattan State Beach, at 40th Street	A	A+	A+
Hermosa Beach Pier, 50 yards south of pier	A	A	A+
Palos Verdes Estates, at Malaga Cove trail outlet	A+	A+	A+
Topanga Beach, at creek mouth	A	F	F
Marina del Rey Mother's Beach, at lifeguard tower	F	F	F
Leo Carrillo Beach, at Arroyo Sequit Creek	A+	C	A+
Dan Blocker County Beach, at Solstice Canyon	A+	C	D
Puerco State Beach, at creek mouth	A+	A	B
Marie Canyon storm drain, at Puerco Beach	A	A	B
Carbon Beach, at Sweetwater Canyon	A+	A	C
Las Flores State Beach, at Las Flores Creek	A+	A+	B
Las Tunas County Beach, at Pena Creek	A+	A+	A+
Tuna Canyon			A+
Broad Beach, at Trancas Creek	A+	A+	C
Zuma Beach, at Zuma Creek	A+	A	B
Walnut Creek Outlet, at Wildlife Road	A+	A	F
Paradise Cove Pier, at Ramirez Canyon Creek	A	A	B
Escondido State Beach, at Escondido Creek	A+	A	C
Latigo Canyon Creek mouth	A	A	B

Castle Rock Beach, at storm drain	C	A	F
Dockweiler State Beach, at North Weschester storm drain	A	A	F
Dockweiler State Beach, at Imperial Highway storm drain	A	A	F
Will Rogers State Beach, at Pulga Canyon storm drain	A	A	C
Will Rogers State Beach, Bel Air Bay Club	B	A	B
Will Rogers State Beach, at Temescal Canyon	A	A+	B
Will Rogers State Beach, at Santa Monica Canyon	A	A	F
Santa Monica Beach, at Montana Ave.	A+	A+	B
Santa Monica Beach, at Wilshire Blvd.	A	B	C
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
Venice Beach, at Windward Ave.	A	A	F
Nicholas Beach, at San Nicholas Canyon Creek	A+	A+	A+
Manhattan Beach Pier	A	A+	B
Redondo Beach Pier, 100 yards south of pier	A	C	A+
Redondo State Beach, at Sapphire Street	A	A	A+
Torrance Beach, at Avenue I storm drain	A+	A	A+
Dockweiler State Beach, at Ballona Creek mouth	A	A	F
<b>MARIN COUNTY</b>			
Dillon Beach	A+		A
Millerton Point	A+		F
Drake's Beach	A		B
Drakes Estero	B		F
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		F
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 SW	A+		B
Baker Beach, Horseshoe Cove NW	A+		C
Baker Beach, Horseshoe Cove NE	A+		C
Schoonmaker Beach	A+		B
Miller Park	A+		F
Paradise Cove	A+		B
China Camp	A		C
McNears Beach	A		B
Heart's Desire	A+		F
Shell Beach	A+		F
Chicken Ranch Beach at Channel.			F
Chicken Ranch Beach, at Creek mouth	A		F

MENDOCINO COUNTY				
	Pudding Creek Outlet	A		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	B		A+
	Asilomar State Beach, at Arena Ave.	A		A+
	Spanish Bay (Moss Beach), at 17 mile drive	A+		A+
	Stillwater Cove, at Beach and Tennis Club	A		A+
	Carmel City Beach, at Ocean Ave.	A		A+
ORANGE COUNTY				
	Dana Point Harbor Fuel Dock	A+	A	A+
	Dana Point Harbor Pier	A	A	A+
	Dana Point Harbor Baby Beach, West End	A	C	A+
	Dana Point Harbor Baby Beach, Buoy Line	A	B	A+
	Dana Point Harbor Baby Beach, Swim Area	A	C	A+
	Dana Point Harbor Baby Beach, East End	A	A	A+
	Dana Point Harbor, Pilgrim Dock	A	A	A+
	Dana Point Harbor Youth Dock	A+	A+	A+
	Huntington Harbor, 11th Street Beach	A+		F
	Huntington Harbour, Anaheim Bay-Gas Dock	A		F
	Huntington Harbor, Humboldt Beach	A		F
	Huntington Harbor, Seagate Lagoon	A+	A	A+
	Huntington Harbour, Admiralty Drive Beach	A+	A	F
	Huntington Harbor, Trinidad Lane Beach	A+		F
	Huntington Harbour, Channel Beach	A	A	F
	Huntington Harbor, Mothers Beach-Orange County	A	A	F
	Huntington Harbor, Coral Cay Beach	A+	A	F
	Newport Bay, Park Avenue Beach	A	A	B
	Newport Bay, Onyx Avenue Beach	A	C	C
	Newport Bay, Ruby Avenue Beach	A	A	C
	Newport Bay, Bayshore Beach	A	A	D
	Newport Bay, Via Genoa Beach	A		B
	Newport Bay, 43rd Street Beach	A+	A	C
	Newport Bay, 38th Street Beach	A	A+	C
	Newport Bay, 33rd Street Beach	A+	A	C
	Newport Bay, Rhine Channel Beach	A+	A	D
	Newport Bay, 19th Street Beach	A+	A	C
	Newport Bay, 15th Street Beach	A	A	B
	Newport Bay, 10th Street Beach	A	A	C
	Newport Bay, Alvarado/ Bay Isle Beach	A	A	C
	Newport Bay, Sapphire Avenue Beach	A	A	C
	Newport Bay, Abalone Avenue Beach	A	A	B
	Newport Bay, N Street Beach	A	A	B
	Newport Bay, Newport Dunes-East	A	B	D
	Newport Bay, Newport Dunes-Middle	A	A	D

Newport Bay, Newport Dunes-North	A	C	D
Newport Bay, Newport Dunes-West	A+	A	D
Newport Bay, Vaughns Launch	F	F	F
Newport Bay, North Star Beach	A	B	D
Newport Bay, Promontory Point	A	A+	B
Newport Bay, De Anza Beach	A	A	C
Newport Bay, Garnet Avenue Beach	A	B	C
Newport Bay, Lido Yacht Club Beach	A	A	B
Newport Bay, Harbor Patrol Beach at Bayside Drive	A+	A	B
Newport Bay, Grand Canal	A	A	C
Newport Bay, Newport Blvd Bridge	A	A	C
Newport Slough at Lancaster/62nd Street Beach	A+	A	B
Newport Slough, Grand Street Beach	A+		B
Dana Point Harbor, Harbor Patrol Dock	A	A+	A+
Dana Point Harbor Guest Dock	A+	A+	A+
Dana Point Harbor, M Dock (East Basin)	A	A	A+
Huntington Harbour, Clubhouse Marina	A	A	F
Huntington Harbour, Sunset Aquatic Park Beach	A+	A	F
Huntington Harbor, Davenport Beach	A+		F
Huntington Harbour, Anderson Street Marina	A		F
Dana Point, at Camino Estrella	A+		A+
Dana Point, South Capistrano Bay Community Beach	A		A+
Poche Beach	A+	A+	A+
Diver's Cove		A	A+
Pico drain at North Beach	A		A+
Mariposa Beach			A+
Linda Lane Beach	A+	A	A+
San Clemente Pier	A		A+
Riviera Beach	A		A+
Between Pearl & Agate Streets			A+
Cleo Street		A	A+
Aliso Creek Ocean Interface		A	F
West Street		A+	A
San Juan Creek	B	B	D
Doheny Beach	A+	A+	A+
Poche Creek Outlet	B	D	A+
Little Corona Beach	B	B	B
Morch Beach, at Salt Creek		A	A+
Doheny State Beach, North Beach	A	A	B
Doheny State Beach, End of the Park	A+	A+	A+
San Clemente Trafalgar Canyon	A+		A+
Pelican Point Beach	A	A+	A+
Muddy Creek Beach	A+	A+	B
El Moro Beach		A	A+
Emerald Bay Beach		A+	A+
Laguna Main Beach	A	A	A+
Lagu Hotel		A	A+
Projection of Bluebird Canyon		B	A+
Victoria Beach	A	A+	A+

Doheny State Beach, at San Juan Creek	A+	A+	C
Doheny State Beach, at Last Campground	A+	A+	A+
Laguna Beach, at Goff Island Beach	A	A	A
Corona Del Mar (CSDOC)	A+	A+	A+
2000 feet south of SERRA Outfall	A+	A	A+
Crystal Cove (CSDOC)	A+	A+	A+
Marine Science Institute Beach (SERRA)	A+	A+	A+
Dana Point, Capistrano County Beach	A+	A+	A+
Doheny State Beach, Pedestrian Bridge	A+	A+	A+
Doheny State Beach, Mid Beach north of San Juan Creek	A+	A	A+
Dana Strands Beach (AWMA)	A+	A+	A+
Santa Ana River mouth	A	A	F
Huntington State Beach, at Brookhurst Street	A	A	D
Huntington State Beach, at Magnolia Street	B	B	B
Huntington State Beach, at Newland St. (SCE Plant)	A	A	B
Huntington City Beach, at Beach Blvd.	A	A	C
Huntington City Beach, at Huntington St.	A	A	A
Huntington City Beach, at 17th Street	A+	A+	A+
Huntington City Beach, at Bluffs	A+	A	A
Bolsa Chica Reserve, at south end of beach	A+	A+	A
Bolsa Chica Reserve, at Flood Gates	A+	A+	A+
Crescent Bay Beach	A+	A	A+
Santa Ana River Mouth	A	A	C
Newport Beach, at Orange Street	A+	A+	C
Newport Beach, at 52nd/53rd Street	A+	A+	C
Newport Beach, at 38th Street	A+	A	B
Balboa Beach, at 15th/16th Street	A+	A	B
Balboa Beach Pier	A+	A+	A
Balboa Beach, The Wedge	A	A+	A
Crystal Cove	A+	A	A+
Surfside Beach, at Sea Way	A+	A+	A+
Seal Beach, at 1st Street	A		F
Seal Beach, at 8th Street	A	B	F
Seal Beach, at 14th Street	A	A	F
Seal Beach Pier, 100 yards south of pier	A	A	F
San Clemente, North beach at Avenida Pico	A+	A	A+
San Clemente, at El Portal storm drain	A+		A+
San Clemente, South Linda Lane storm drain	A+		A+
San Clemente Pier, Lifeguard Building north	A+	B	A+
San Clemente, at Avenida Calafia	A+	A+	A+
San Clemente, at Avenida Las Palmeras	A+		A+
Salt Creek Beach	A+	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+	A
Camel Point	A+	A+	A
Aliso Creek, 1000 south of creek mouth	A	A+	A
Aliso Creek, at mouth	A	A+	C

## SAN DIEGO COUNTY

North Aliso County Beach	A+	A+	A
Treasure Island Beach	A+	A+	A+
Monarch Beach, 150 feet north of Salt Creek mouth	A	A	A+
Sunset Beach, at Broadway	A	A+	A+
<b>SAN DIEGO COUNTY</b>			
Imperial Beach, at Cortez Ave.	B	B	C
Imperial Beach Pier	A	A	C
Coronado, projection of Loma Ave.			F
Coronado, at North Beach near Ocean Blvd.	A+	A	B
San Diego Bay, Tidelands Park at Mullinix Dr.	B		D
San Diego Bay, Glorietta Bay Park at boat launch	A		A+
San Diego Bay, Silver Strand	A+		A+
San Diego Bay, Bayside Park at J Street	A		A+
San Diego Bay, Shelter Island (Shoreline Beach Park)	A	D	F
Pacific Beach, at Grand Ave.	A+		A+
La Jolla, at Palomar Ave.	A		A+
Windansea Beach, at Playa Del Norte	A+	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
La Jolla, Children's Pool site 2			F
La Jolla, at Vallecitos	A		A+
La Jolla Shores Beach, Del Oro	A+		A+
La Jolla Shores, El Paseo Grande (near Scripps)	A+		A+
Del Mar, at 15th Street	A+	A+	A+
Del Mar, San Dieguito River Beach	A+	A	B
Encinitas, San Elijo State Park, at Pipes surf break	A		A+
Encinitas, Swami's Beach, Seacliff Park	A+		A+
Encinitas, Moonlight Beach, Cottonwood Creek	C	A	A+
Carlsbad, at Batiquitos Lagoon outlet	A		A+
Carlsbad, at Tamarack Ave.	A+	A+	A+
Carlsbad, at Carlsbad Village Drive	A+		A+
Carlsbad, at Poinsettia Lane	A+	A+	A+
Carlsbad, at Ponto Drive	A	A+	A+
Carlsbad, at Encina Creek	A+	A+	A+
Carlsbad, at Palomar Airport Rd.	A+	A+	A+
Carlsbad, at Cerezo Drive	A+	A+	A+
Ocean Beach, at San Diego River	A	A	B
Pacific Beach, Tourmaline Surf Park at Tourmaline St.	A+	A	A
La Jolla, Windansea Beach at Bonair St.	A+		A+
La Jolla, La Jolla Cove	A	D	A
La Jolla Shores, at Ave De La Playa	A	A+	A+
La Jolla, Windansea Beach at Boir St.		A+	
Torrey Pines, Los Penasquitos Lagoon outlet	A	A+	A+
Border Field State Park, north side of Border Fence	B	D	F
Border Field State Park, at Monument Rd.	B	F	D
Tijuana Slough NWRs, Tijuana River mouth	D	F	D
Tijuana Slough NWRs, 3/4 miles north of Tijuana River	F	B	D
Imperial Beach, at Seacoast Dr.	B	B	D



Imperial Beach, at Carnation Ave.	A	A	B
Silver Strand State Beach at Guard Shack	A	A	B
Silver Strand State Beach at Lifeguard Tower			D
Coronado, Silver Strand	A	A+	B
Coronado City beach at Avenida Lunar	A	A	A
Coronado, at Ave del Sol	A	A	B
Mission Bay, Tecolote Shores (swim area)	A		A+
Mission Bay, Comfort Station north of Leisure Lagoon	A	A+	A+
Mission Bay, Campland west of Rose Creek	B	A	A+
Mission Bay, Fiesta Island north west shore	A		A+
Mission Bay, Crown Point Shores	A+		A+
Mission Bay, Fanuel Park at Fanuel St.	A		A+
Mission Bay, San Juan Cove west of boat launch	A		A+
Mission Bay, Bahia Point-northside at Gleason Rd.	A		A+
Mission Bay, Bonita Cove north cove	A		A+
Mission Bay, Vacation Isle Ski Beach	A		A+
Mission Bay, Vacation Isle North Cove Beach	A		A+
Mission Bay, Ventura Cove	A+		A+
Oceanside, St. Malo Beach downcoast from St. Malo Road	A+	A+	B
Oceanside, at Cassidy Street	A+	A	A+
Oceanside, Buccaneer Beach at Loma Alta Creek	A		F
Oceanside, 500 feet North of Loma Alta Creek	A	A+	B
Oceanside, at Forster Street	A+	A+	A+
Oceanside, at Tyson Street	A	A	A+
Oceanside, at Surfrider Way	A+		A+
Oceanside, at San Luis Rey River outlet	A	B	B
Oceanside, Harbor Beach at Harbor Drive	A+	A+	A+
Point Loma, Lighthouse	A+	A+	A+
Point Loma, Point Loma Treatment Plant	A+	A+	A+
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	A
Ocean Beach, Stub Jetty	A	A+	B
Mission Beach, Belmont Park	A+	A+	A+
Solana Beach, Fletcher Cove at Lomas Santa Fe Dr.	A+		A
Solana Beach, Tide Beach Park at Solana Vista Dr.	A		A+
Cardiff State Beach, Seaside State Park	A+		A+
Cardiff State Beach, Las Olas (100 yds. south of Charthouse )	A		A+
Cardiff State Beach, at Charthouse parking	A		A
Cardiff State Beach, San Elijo Lagoon outlet	A+		A+
Encinitas, San Elijo State Park at Liverpool Dr.	A		A+
La Jolla Shores Beach, 1000 ft south of Scripps Pier	A+	A+	A+
La Jolla Shores Beach, 250 feet sout of Scripps Pier	A+	A+	A+
La Jolla Shores Beach, 500 feet north of Scripps Pier	A+	A+	A+
<b>SAN MATEO COUNTY</b>			
Pillar Point #9 Harbor Beach	A	C	F
Surfer's Beach, south end of riprap	A	A+	B
Gull Park Foster City	D	A	C
Roosevelt Beach, south end of parking lot	C	A	C

Dunes Beach	A	B	C
Venice Beach at Frenchman's Creek	B	F	F
Francis Beach at the foot of the steps	B	A	C
San Gregorio State Beach at San Gregorio Creek	A+	A	A+
Pomponio State Beach at Pomponio Creek	A	A+	A+
Pescadero State Beach at Pescadero Creek	A	A+	A+
Bean Hollow State Beach	A+	A+	A
Sharp Park Beach, projection of Birch Ln.			A+
Gazos Beach at Gazos Creek	B	A	A
Coyote Point			A+
Aquatic Park	B	B	F
Lakeshore Park, behind Rec Center	F	B	F
Kiteboard Beach		A	D
Foster City, Erckenbrack Park	F	D	B
Foster City, Marlin Park	F	B	D
Rockaway Beach, at Calera Creek	A	A+	A
Linda Mar Beach, at San Pedro Creek	D	F	F
Fitzgerald Marine Reserve, at San Vicente Creek	A	A	A+
Pillar Point #8 Mavericks Beach Westpoint Ave.	A	B	D
Pillar Point Harbor, end of Westpoint Ave.	C	B	C
Pillar Point Harbor, Capistrano Ave Beach	A	F	F
<b>SANTA BARBARA COUNTY</b>			
Guadalupe Dunes	A+	A+	A+
Hope Ranch Beach	A	A+	A
Arroyo Burro Beach	A+	A	A+
Leadbetter Beach	A	A	A+
East Beach, at Mission Creek	A+	A	D
East Beach, at Sycamore Creek	A+	A+	A+
Butterfly Beach	A	A+	A
Hammond's Beach	A+	A	A+
Summerland Beach	A+	A	A+
Carpinteria State Beach	A+	A+	A
Jalama Beach	A+	A+	A
Gaviota State Beach	A+	A+	A
Refugio State Beach	A+	A	A
El Capitan State Beach	A+	A+	A+
Sands, at Coal Oil Point	A+	A+	A+
Goleta Beach	C	A	A
<b>SANTA CRUZ COUNTY</b>			
Cowell Beach, west of the wharf	C	B	F
Santa Cruz Main Beach, at the Boardwalk	A	A	D
Santa Cruz Main Beach, at the San Lorenzo River	A		F
Seabright Beach	A		C
Twin Lakes Beach	A		A
Capitola Beach, west of jetty	B		F
Capitola Beach, east of jetty	A		F
New Brighton Beach			A+
Seacliff State Beach	A		C
Natural Bridges State Beach	A		B

	Mitchell's Cove Beach	A		F
	Cowell Beach, at the Stairs	A		C
	Cowell Beach, at Lifeguard Tower 1			F
	Rio Del Mar Beach	A		D
<b>SAN FRANCISCO COUNTY</b>				
	Ocean Beach, at Pacheco St.			F
	Ocean Beach, at Vincente St.			F
	Hyde Street Pier	A		B
	Aquatic Park Beach, 211 Station	A		C
	China Beach, at Sea Cliff Ave.	A+		B
	Ocean Beach, at Balboa Ave.	A+		F
	Ocean Beach, at Lincoln Way	A	A+	F
	Ocean Beach, at Sloat Blvd.	A		F
	Candlestick Point, Jackrabbit Beach	A	D	F
	Candlestick Point, Windsurfer Circle	B	F	F
	Candlestick Point, Sunnysdale Cove	A	D	F
	Islais Landing at Islais Creek	A	B	F
	Mission Creek Park, at Mission Creek	A+	A+	F
	Crissy Field Beach East, 202.4 Station	A	F	F
	Crissy Field Beach West, 202.5 station	A	A+	F
	Baker Beach East, Ocean #15 East	A+	A+	B
	Baker Beach, Lobos Creek	A	A+	F
	Baker Beach West, Ocean #16	A+		C
<b>SAN LUIS OBISPO COUNTY</b>				
	Avila Beach 350 yards west of pier, at Creek	A	A	A+
	Avila Beach, at San Luis Street	A	A	A+
	Studio Drive parking lot near Old Creek	A	A+	A+
	Cayucos State Beach, downcoast of the pier	A+	A+	A+
	Cayucos Beach, North of pier at storm drain	A+	A	A+
	Hearst Memorial State Beach, 100 yards west of the pier at creek outfall	A+	A	A+
	Olde Port Beach (Harford Beach), North	A+	B	A+
	Pismo Beach, at Ocean View	A+	A+	A+
	Pismo Beach, 40 feet south of the pier	A+	A	A+
	Pismo Beach, at Wadsworth Street	A+	A+	A+
	San Simeon State Beach, at Pico Ave.	A+	A+	A+
	Sewers at Silver Shoals Dr.	A	A	A+
	Morro Bay City Beach, 75 feet north of main parking lot	A+	A	A+
	Morro Bay City Beach, at Morro Creek	A	A+	A+
	Morro Bay City Beach, at Atascadero	A	A+	A+
	Morro Strand State Beach, at Beachcomber Drive	A+	A+	A+
	Pismo State Beach, 571 yards south of Pier Ave.	A+	A+	A+
	Pismo State Beach, at Pier Ave.	A+	A	A+
	Pismo State Beach, 330 yards north of Pier Ave.	A+	A+	A+
<b>SONOMA COUNTY</b>				
	Gualala Regional Park Beach	A+		
	Black Point Beach	A+		
	Stillwater Cove Regional Park Beach	A+		
	Goat Rock State Park Beach	A		A+
	Salmon Creek State Park Beach	A+		

	Campbell Cove State Park Beach	C		A+
	Doran Regional Park Beach	A		
<b>TIJUANA</b>				
	Playas Blanca	F	F	F
	El Vigia	D	F	F
	El Faro	D	F	F
<b>VENTURA COUNTY</b>				
	Rincon Beach, 25 yards south of the creek mouth	A+		A+
	Solimar Beach, south at end of gate access road	A+		A
	Rincon Beach, at the end of the footpath	A		A+
	Emma Wood State Beach, 50 yards South of first drain	A+		A
	Surfer's Point at Seaside	A		F
	Promenade Park, at Figueroa St.	A+		A+
	Promenade Park, at Redwood Apts.	A		A+
	Promenade Park, south of drain at California St.	A+		A+
	San Bueventura Beach, south of drain at Kalorama St.			A+
	San Buenaventura Beach, south of drain at San Jon Rd.	A+		A+
	San Buenaventura Beach, south of drain at Dover Ln.	A		A+
	San Buenaventura Beach, south of drain at Weymouth Ln.	A+		A+
	Marina Park, north end of playground	A+		A+
	Peninsula Beach, North of South Jetty	A+		A+
	La Conchita Beach, at Ocean View Rd.			A+
	Surfer's Knoll, at parking lot	A+		A+
	Oxnard Beach, at Outrigger Way	A		
	Oxnard Beach Park, at Falkirk Ave.	A+		
	Oxnard Beach Park, at Starfish Dr.	A+		
	Hollywood Beach, at La Crescenta St.	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.	C		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+		D
	Ormond Beach, at J Street	A		A+
	Ormond Beach, 50 yards north of Oxnard Industrial drain	A+		A+
	Point Mugu Beach, at parking lot	A+		
	Thornhill Broome Beach, at parking lot	A+		
	Sycamore Cove Beach, 50 yards south of the creek mouth	A+		
	County Line Beach	A+		A+
	Hobson County Park, at stairs	A+		A+
	Staircase Beach, bottom of staircase	A		
	Faria County Park, at stairs	A+		A
	Mandos Cove storm drain			A+

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
<b>CLATSOP COUNTY</b>				
	Cannon Beach at Ecola Creek mouth (2nd Avenue)			D
	Tolovana State Park Beach 50m north of Chisana Creek			F
	Tolovana State Park Beach			F
	Cannon Beach projection of Gower Ave. storm outflow			F
	Tolovana State Park Beach 50m south of Chisana Creek			F
<b>COOS COUNTY</b>				
	Sunset Bay State Park Beach at North Beach Access			A+
	Sunset Bay State Park Beach at Restroom			A+
	Sunset Bay State Park Beach South Cove			B
	Bastendorff Beach at Minor Creek Mouth			C
<b>CURRY COUNTY</b>				
	Hubbard Creek Beach 50m north of Hubbard Creek			F
<b>LANE COUNTY</b>				
	Heceta Beach at south runoff			A+
<b>LINCOLN COUNTY</b>				
	Seal Rock State Wayside Beach at mouth of Hill Creek			A+
	D River Beach at North corner of parking lot			A+
	Nye Beach Turnaround west of discharge pipe (marine water)			A+
	Seal Rock State Wayside Beach at north access			A+
	Nye Beach 100m north Nye Creek outflow west of NW 6th street			A+
	Nye Beach at war memorial west of Olive Street			A+
	Agate Beach at mouth of Big Creek			C
	D River Beach West of Restroom			F
<b>TILLAMOOK COUNTY</b>				
	Rockaway Beach at South 1st Avenue Creek			A+
	Short Sand Beach at Short Sand creek (Oswald State Park)			A+
	Twin Rocks Beach			A+
	Rockaway Beach at creek (South 6th Avenue)			C

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
<b>CLALLAM COUNTY</b>				
	Hollywood Beach - mid	A		A+
	Cline Spit County Park - mid	A		A+
	Cline Spit County Park - north	A		A+
	Hollywood Beach - west	A+		A+
	Salt Creek Recreation Area - south	A+		A+
	Cline Spit County Park - south	A+		A+
	Hollywood Beach - east	B		A+
	Salt Creek Recreation Area - north	B		A+
	Salt Creek Recreation Area - mid			A+
<b>GRAYS HARBOR COUNTY</b>				
	Westhaven State Park Half Moon Bay - north	A+		A+
	Westhaven State Park Half Moon Bay - south	A+		A+
	Westport - The Groynes - mid	A+		A+
	Westport - The Groynes - west	A+		A+
	Westhaven State Park Half Moon Bay - mid	A+		A+
	Westhaven State Park South Jetty - mid	A+		A+
	Westhaven State Park South Jetty - north	A+		A+
	Westhaven State Park South Jetty - south	A+		A+
	Westport - The Groynes - east	A+		A+
<b>ISLAND COUNTY</b>				
	Freeland County Park Holmes Harbor - west	A		A+
	Freeland County Park Holmes Harbor - east	A		F
	Dave Mackie Park Beach south	A+		A+
	Dave Mackie Park Beach in tidal lagoon	A+		A+
	Oak Harbor Lagoon - north west	A+		A+
	Oak Harbor Lagoon - south east	A+		A+
	Oak Harbor Lagoon - mid	A+		A+
	Dave Mackie Park Beach north	A+		B
	Freeland County Park Holmes Harbor - mid	B		A+
<b>JEFFERSON COUNTY</b>				
	Irondale Beach Park - mid	A		A+
	Fort Worden State Park - north	A+		A+
	Fort Worden State Park - mid	A+		A+
	Fort Worden State Park - south	A+		A+
	Irondale Beach Park - north	B		A+
	Irondale Beach Park - south	C		C
	Point Whitney Tidelands - west	D		A+
	Point Whitney Tidelands - mid	D		A+
	Point Whitney Tidelands - east	D		A+
<b>KING COUNTY</b>				
	Saltwater State Park - north	A		A+
	Redondo County Park - south	A		A+
	Redondo County Park - mid	A		A+
	Carkeek Park - north	A		A+
	Richey Viewpoint - south	A		A+
	Saltwater State Park - mid	A		B

## WASHINGTON GRADES BY COUNTY

Dash Point State Park - west	A+		A+
Dash Point State Park - mid	A+		A+
Dash Point State Park - east	A+		A+
Richey Viewpoint - mid	A+		A+
Richey Viewpoint - north	A+		A+
Redondo County Park - north	B		A+
Saltwater State Park - south	C		B
Carkeek Park - south	F		A+
Carkeek Park - mid	F		A+
Richmond Beach Saltwater Park - mid			A+
Richmond Beach Saltwater Park - north			A+
Richmond Beach Saltwater Park - south			A+
Golden Gardens - north			A+
Golden Gardens - mid			A+
Golden Gardens - south			A+
Seahurst (Ed Munro) Park - mid			A+
Seahurst (Ed Munro) Park - north			A+
Alki Beach Park - north			A+
Alki Beach Park - mid			A+
Alki Beach Park - south			A+
Lincoln Park - north			A+
Lincoln Park - mid			A+
Lincoln Park - south			A+
Seahurst (Ed Munro) Park - south			B
<b>KITSAP COUNTY</b>			
Indianola Dock - east	A		A+
Indianola Dock - mid	A		A+
Indianola Dock - west	A		A+
Scenic Beach State Park mid	A		A+
Scenic Beach State Park east	A		A+
Pomeroy Park - Manchester Beach - north	A		A+
Pomeroy Park - Manchester Beach - mid	A		A+
Joel Pritchard Park - east	A		A+
Pomeroy Park - Manchester Beach - south	A		A+
Joel Pritchard Park - west	A		D
Silverdale County Park - east	A		D
Silverdale County Park - mid	A+		A
Arness County Park - north	A+		A+
Point No Point Lighthouse Park south	A+		A+
Point No Point Lighthouse Park mid	A+		A+
Point No Point Lighthouse Park north	A+		A+
Arness County Park - south	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+
Joel Pritchard Park - mid	A+		A+
Arness County Park - mid	A+		B

	Silverdale County Park - west	A+	D
	Illahee State Park - south	B	A+
	Kitsap Memorial State Park north	C	A+
	Kitsap Memorial State Park mid	C	A+
	Illahee State Park - north	D	A+
	Kitsap Memorial State Park south	D	A+
	Lions Park - mid	D	A+
	Lions Park - south	D	A+
	Illahee State Park - mid	D	B
	Lions Park - north	D	B
<b>MASON COUNTY</b>			
	Potlatch State Park - mid	A	A+
	Potlatch State Park - north	A	A+
	BELFAIR STATE PARK	A	A+
	BELFAIR STATE PARK	A	A+
	BELFAIR STATE PARK	A	A+
	Potlatch State Park - south	B	A+
	Twanoh State Park - point	C	A+
	Twanoh State Park - west of dock	C	A+
	Twanoh State Park - west of point	C	A+
<b>PIERCE COUNTY</b>			
	Dash Point County Park - east	A	A+
	Purdy Sandspit County Park - west	A	A+
	Jack Hyde Park - west	A	A+
	Waterfront Dock/ Ruston Way - north	A	A+
	Titlow Park - south	A	B
	Titlow Park - mid	A	F
	Titlow Park - north	A+	A+
	Dash Point County Park - west of pier	A+	A+
	Sunnyside Beach Park - south	A+	A+
	Jack Hyde Park - mid	A+	A+
	Browns Point Lighthouse Park east	A+	A+
	Purdy Sandspit County Park - mid	A+	A+
	Purdy Sandspit County Park - east	A+	A+
	Ruston Way north - projection of Warner St	A+	A+
	Waterfront Dock/ Ruston Way - south	A+	A+
	Sunnyside Beach Park - north	A+	A+
	Sunnyside Beach Park - mid	A+	A+
	Jack Hyde Park - east	A+	B
	Browns Point Lighthouse Park	A+	C
	Browns Point Lighthouse Park south	A+	D
	Dash Point County Park - east of pier	C	A+
<b>SKAGIT COUNTY</b>			
	Bayview State Park - mid	A	A+
	Bayview State Park - north	A	A+
	Bayview State Park - south	A	A+



SNOHOMISH COUNTY				
	Picnic Point County Park - north	A		A+
	Picnic Point County Park - south	A		A+
	Picnic Point County Park - mid	A		A+
	Edmonds Underwater Park - mid	A		A+
	Marina Beach Edmonds (No Dogs) - north	A		A+
	Marina Beach Edmonds (No Dogs) - mid	A		A+
	Edmonds Underwater Park - south	A		A+
	Kayak Point County Park - mid	A		A+
	Marina Beach Edmonds (No Dogs) - south	A+		A+
	Kayak Point County Park - north	A+		A+
	Edmonds Underwater Park - north	A+		A+
	Mukilteo Lighthouse Park south	C		A+
	Kayak Point County Park - south	C		A+
	Mukilteo Lighthouse Park north	D		A+
	Mukilteo Lighthouse Park mid	F		A+
	Howarth Park - south			A+
	Howarth Park - mid			A+
	Howarth Park - north			A+
THURSTON COUNTY				
	Burfoot County Park - north	F		A+
	Burfoot County Park - mid	F		A+
	Burfoot County Park - south	F		A+
WHATCOM COUNTY				
	Larrabee State Park Wildcat Cove - mid	A		A+
	Larrabee State Park Wildcat Cove - south	A+		A+
	Larrabee State Park Wildcat Cove - west	C		A+
	Little Squalicum Park at creek outlet	C		F
	Little Squalicum Park far west of pier	F		A+
	Little Squalicum Park east	F		B
	Bellingham Marine Park outer			A+
	Birch Bay County Park - north			A+
	Birch Bay County Park - mid			A+
	Birch Bay County Park - south			A+

## About Heal the Bay's Annual Beach Report Card

Heal the Bay is a nonprofit environmental organization, dedicated to making the 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)

A

Winter Dry  
(Nov–Mar)

A

Wet Weather  
Year-Round

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 ( $\geq 0.1$ " ) accumulated over a period of 72 hours. Oregon and Washington criteria for a rain event is  $\geq 0.2$ " 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](http://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 ( $\geq 0.2$  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
<i>Enterococcus</i>	35	80%	50
Fecal Coliform	200	40%	
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	<b>10,000</b> –14,900	> 14,900	N/A
Fecal Coliform	268–399	<b>400</b> –596	> 596	N/A
<i>Enterococcus</i>	70–103	<b>104</b> –155	> 155	N/A
Total: Fecal Ratio (when total $\geq 1,000$ )	10.1–13	7.1– <b>10</b>	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	50
Fecal Coliform	10%	30%	40%	N/A	
<i>Enterococcus</i>	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
<i>Enterococcus</i>	70–103	<b>104</b> –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
<i>Enterococcus</i>	25%	75%	100%	50

## Acknowledgements & Credits

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Makah Tribe	Monterey County Health Department	South Orange County Wastewater Authority
Washington Department of Ecology	San Luis Obispo County Environmental Health Services	County of Orange Environmental Health
Oregon Department of Environmental Quality	Santa Barbara County Environmental Health Services	Orange County Sanitation District
Humboldt County Department of Health & Human Services	Ventura County Environmental Health Division	San Diego County Department of Environmental Health
Mendocino County Environmental Health Department	City of Los Angeles Environmental Monitoring Division	San Elijo Joint Powers Authority
Sonoma County Environmental Health & Safety	Los Angeles County Sanitation Districts	City of San Diego
Marin County Environmental Health Services	County of Los Angeles Department of Public Health	City of Oceanside
San Francisco Public Utilities Commission	County of Los Angeles Department of Public Works	Encina Wastewater Authority
East Bay Regional Park District	City of Redondo Beach	Port of San Diego
San Mateo County Health	City of Long Beach Department of Health and Human Services	State Water Resources Control Board
Santa Cruz County Environmental Health		

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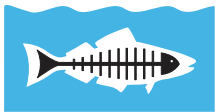
## 2021–22 Beach Report Card

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