Heal the Bay

2023-2024 Beach Report Card

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

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

The Beach Report Card program is funded by grants from:

SIMA SURF INDUSTRY MANUFACTURERS ASSOCIATION

SONY PICTURES

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.

2023-2024 CONTENTS

Manhattan Beach Pier / Los Angeles County

EXECUTIVE SUMMARY

Moonlight State Beach / San Diego County

Heal the Bay is proud to release the 34th annual Beach Report Card. This report examines amounts of fecal pollution measured at ocean beaches along the West Coast. The main goal of the Beach Report Card is to keep people safe when they go to the beach. We accomplish this by turning water quality data into easy-to-understand A to F letter grades. 2023 Summer Dry Grades were great across the State with 89% of California beaches receiving A and B grades, which is slightly below the average. Winter Dry Grades were well below average with only 66% of the beaches receiving A and B grades. Wet Weather Grades for the past year were above average with 80% of the beaches receiving A and B grades

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This year, coastal counties in California received 31% more rainfall than the 10-year average, which is a significant amount, though not as extreme as last year's record-breaking levels. The state experienced five major storm events, known as atmospheric rivers, from October 2023 to March 2024. This count is close to the annual average of six but far fewer than the 19 experienced in the previous year. Particularly notable was an intense atmospheric river in Southern California that struck on February 4, 2024. The downtown area of Los Angeles received 7.03 inches of rain over two days, making it the third highest two-day rainfall total recorded since the city's official weather records started in 1877. This extreme weather caused widespread flooding, mudslides, and power outages, creating hazardous conditions for millions. The storms overwhelmed urban infrastructure, leading to significant environmental and safety challenges.

The heavy rains washed pollutants, including bacteria, into the ocean, which typically leads to a decline in Wet Weather Grades. While water quality did clearly decline with wet weather, this year the grades were not as poor as expected because the storm severity made it difficult to collect water quality samples during or immediately after the rainfall. Fewer samples taken during wet weather, and specifically during the largest storms, likely led to Wet Weather Grades that were above average. However, Winter Dry Grades suffered significantly from lingering impacts of rain, which flushed pollutants through storm drains and caused numerous sewage spills, introducing a high volume of contaminants into the ocean. This led to a prolonged presence of pollutants, resulting in notably poorer water quality throughout the winter. Despite these conditions, 12 beaches qualified for the Honor Roll this year, an improvement from just 2 the previous year, though still far below the usual 30 to 50 beaches. Moreover, an alarming

38 million gallons of sewage spilled into the ocean and coastal waterways, exacerbated by the increased rainfall that overwhelmed sewage systems.

Sewage spills, combined with extreme weather, underscore the urgent need for climate preparedness and investments in sewage infrastructure upgrades and enhancements in public notification protocols. Local officials are strongly urged to prioritize these investments to ensure the safety and well-being of all beachgoers and to protect the environmental health of California's coastal ecosystems.

This year's Beach Bummers, by county, are:

- **San Diego County: Battling Persistent Cross-Border Pollution**

  San Diego County faces a unique environmental crisis, marked by its proximity to the Tijuana River which consistently brings pollution from across the border. Tijuana River Mouth, now the top Beach Bummer, highlights the extreme challenges from tens of millions of gallons of untreated sewage that spill into the ocean annually. Nearby, Tijuana Slough, just north of the river, shares these burdens, exacerbated by poorly treated discharges from the Punta Bandera plant. Both areas are part of ongoing United States Environmental Protection Agency (USEPA)-funded projects aimed at reducing pollution. New to the list are Imperial Beach at Seacoast Drive and Border Field State Park, which also suffer from these issues. Despite their open waters, these beaches are unable to dilute the influx of pollutants, stressing the critical need for enhanced water treatment and international cooperation.

- **Baja California, Mexico: Severe Sewage Contamination Issues**

  Baja California's beaches in the Tijuana area, notably Playa Blanca and El Faro, continue to endure significant environmental degradation due to inadequate sewage systems in Tijuana. Playa Blanca, holding its Beach Bummer position at number two, and El Faro at number 10, both receive sewage-contaminated runoff that severely affects their water quality and usability. The ongoing issue reflects a broader environmental crisis that requires substantial infrastructure improvements and effective sewage treatment solutions to mitigate the impact on these coastal areas.

- **Los Angeles County: Urban Runoff and Enclosed Beach Challenges**

  In Los Angeles County, Santa Monica Pier, which ranks third on the Beach Bummer list, faces ongoing challenges to improve water quality despite recent upgrades, including stormwater capture systems. Additionally, efforts like bird deterrent netting have proven ineffective or have not been adequately maintained. The persistent water quality issues are compounded by polluted runoff and continuous urban activities in the vicinity that exacerbate pollution at the pier. Marina del Rey Mother's Beach, an enclosed beach with limited circulation, is synonymous with poor water quality. Despite various cleanup and intervention projects, its geographical setting makes natural cleansing difficult, highlighting the ongoing battle against pollution in enclosed coastal areas.

- **San Mateo County: Enclosed Beaches and Stagnant Waters**

  San Mateo County is home to recurring Beach Bummers like Linda Mar Beach and Lakeshore Park due to its enclosed water bodies and insufficient circulation. Linda Mar Beach, impacted by pollution from San Pedro Creek, faces continuous environmental challenges that prevent it from shaking its Beach Bummer status. Lakeshore Park, set within stagnant bay channels, illustrates the difficulty in managing pollution in static water environments. The county's struggle is highlighted by the repeated inclusion of its beaches on the Beach Bummer list, underscoring the need for targeted pollution management strategies.

No Oregon beaches were monitored during the winter months. Six counties received Summer Dry Grades and Wet Weather grades. 100% of Oregon beaches had excellent Summer Dry Grades of A or B. And 79% of the beaches received A and B grades for Wet Weather, which is higher than the state's historical average of 67%.

Washington Summer Dry Grades were also superb, with 97% of the beaches receiving A and B grades, which is above the average of 92%. Wet Weather Grades were equally outstanding and above average with 93% of beaches receiving A and B grades. Unfortunately, most Washington beaches were not monitored during the winter months so we could not calculate Winter Dry Grades. For the five beaches monitored in winter, they all received A or B for Winter Dry Grades.

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, in addition to sewage infrastructure upgrades, is our best bet for keeping our waters clean and safe. Green stormwater 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 through the Safe, Clean Water Program, which aims to increase local water supply, improve water quality, and protect public health by focusing efforts on multi-benefit projects, with a commitment to invest equitably in communities that have been identified as disadvantaged or severely disadvantaged with regards to access to green space and other socioeconomic factors. The Program has invested a total of $1.4 billion in 126 stormwater infrastructure projects to date.

Alarmingly, we have observed an increase in the number of attempts to loosen or rollback fecal pollution regulations in California. When waterways become polluted with contaminants such as bacteria and viruses (as measured through fecal indicator bacteria or FIB), the USEPA holds the surrounding municipalities responsible for that pollution and requires them to keep pollution out of those waterways or face penalties. Unfortunately, many local governments and other pollution dischargers across California attempt to change the standards they are held to so they can achieve compliance more readily instead of addressing water quality issues directly. Heal the Bay is adamantly against efforts to circumvent California's water quality objectives, and we urge the State Water Resources Control Board (SWRCB) to firmly reassert that local governments and other pollution dischargers are responsible for keeping all fecal matter, that human activity either causes or contributes to, out of the ocean and surrounding waterways.

As evidenced by the presence of numerous San Diego County and Tijuana beaches on the Bummer List, the transboundary pollution issues in the Tijuana River watershed continue to be a major concern. This area is significantly impacted by water pollution, which not only affects local ecosystems but also compromises public health across border communities. Heal the Bay is actively engaged in cross-border efforts to address these challenges and is committed to supporting comprehensive solutions that will lead to substantial improvements in water quality in the region. We urge local and international stakeholders to collaborate more closely to tackle the pollution problems in the Tijuana watershed effectively.

In the face of ongoing challenges, Heal the Bay is encouraged by the adoption of innovative rapid testing methods such as digital droplet polymerase chain reaction PCR (ddPCR) technologies. These advancements offer the potential for more timely and accurate detection of fecal pollution in our waterways. As we work to integrate ddPCR results into our Beach Report Card grading system, we remain cautiously optimistic about their comparability to traditional culturing methods, which have long served as the benchmark for regulatory compliance and public health protection.

INTRODUCTION

Life in coastal areas of the West Coast is intrinsically connected to the beach. These spaces are not only vital for relaxation and recreation but also serve as communal hubs where people can enjoy natural beauty and connect with one another. While we are fortunate to have many days of pristine and inviting beaches, there are times when the water quality along the coast can pose health risks. Common pollutants including chemicals, trash, and fecal matter frequently contaminate our coastal waters, posing threats to both human health and marine ecosystems.

The Beach Report Card Initiative by Heal the Bay

Over 30 years ago, Heal the Bay introduced the Beach Report Card as a pivotal public health tool designed to safeguard beachgoers. This comprehensive tool evaluates water quality by analyzing bacteria pollution at over approximately 700 beaches stretching from Tijuana up through Washington. The Beach Report Card is accessible to the public through both a website and a mobile app, entirely free of charge, underscoring our commitment to public health and environmental stewardship.

Beyond its role as an information resource, the Beach Report Card has been instrumental in advocacy efforts led by Heal the Bay. These efforts aim to enhance water quality and have motivated municipalities and agencies to implement measures that have led to numerous environmental success stories across the coast.

Understanding the Beach Report Card Grades

The grades issued in the Beach Report Card are based on the levels of fecal indicator bacteria (FIB) found in ocean waters. These bacteria themselves are not harmful, but their presence indicates contamination by fecal matter that may contain dangerous pathogens. Fecal pollution is of particular concern because even a single exposure can result in illness. In contrast, other pollutants like heavy metals may only cause health issues after prolonged exposure, which is less likely for the average beachgoer. However, frequent beach users such as surfers may face higher risks due to more regular contact with these pollutants.

Recommendations for Beachgoers

We encourage all beach users to consult the Beach Report Card to assess potential health risks before entering the water. Avoiding water at beaches with poor grades reduces the risk of exposure not only to harmful bacteria but also to other pollutants, which often enter the ocean through common pathways such as storm drains, rivers, and streams. We advise people to steer clear of ocean water near storm drains and river outlets, and to avoid all ocean contact for at least three days following significant rainfall. While Heal the Bay does not advocate for restricting beach or water access unless there are exceptional circumstances, we believe in empowering people with the necessary water quality information to make informed decisions about when and where to swim.

BEACH REPORT CARD BASICS

The Beach Report Card utilizes a straightforward A-to-F grading system to communicate water quality to the public. While A or B grades indicate good water quality for recreational uses, C to F grades mean increased health risks. This annual report compiles comprehensive grades for West Coast beaches and includes details on significant water quality events from the past year, such as sewage spills and major storms.

Grades are derived from routine water quality sampling conducted by various authorities including county health agencies, state agencies, tribal agencies, and sanitation departments. Water samples are tested for three key FIB: total coliform, fecal coliform (*E. coli*), and *Enterococcus* species. High concentrations of these bacteria indicate the presence of pathogens that could be harmful to beachgoers.

This report assigns three separate grades for each beach:

Summer Dry Grade (April 2023 through October 2023)

This is the prime recreation season in California when beaches are most active. County governments are required to sample during this period according to the California Beach Bathing Water Quality Standards, as defined in Assembly Bill 411 (AB 411, Wayne 1997).[1] Samples taken during wet weather are not used for these grades.

Winter Dry Grade (November 2023 through March 2024)

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 2023 through March 2024)

When rain falls over impermeable surfaces such as concrete, it becomes runoff, flushing contaminants, including bacteria, from our streets out into the ocean through storm drains, rivers, and streams. This polluted 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 within 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.[2,3,4] 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).[5]

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. 1999. 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/2017/02/2013healthebayproject-1.pdf

HONOR ROLL

To earn a spot on the Honor Roll, a beach must be monitored weekly throughout the year and receive an A+ grade in all conditions — Summer Dry, Winter Dry, and Wet Weather.

This year, only twelve of the over 500 monitored beaches in California achieved this distinction. While this is an improvement from two beaches last year, it is significantly lower than the typical 30–50 beaches that make the list. The reduced number of Honor Roll beaches this year is largely due to the unprecedented rainfall during the 2023–2024 winter, which substantially decreased overall water quality.

The record rainfall particularly affected the Honor Roll in two significant ways: firstly, fewer beaches managed to secure weekly Winter Grades due to reduced sampling activities; secondly, the increased precipitation worsened water quality by washing more pollutants into the ocean. This was especially evident in February when Southern California experienced record-high storms, severely impacting water quality and disqualifying many regular Honor Roll contenders from the region.

Achieving zero bacterial exceedances all year under all conditions is a formidable challenge, made even more difficult by heavy rainfall. Additionally, the inability to grade one-third of San Diego County's beaches owing to a new testing methodology (ddPCR) that the Beach Report Card grading is not yet compatible with — which often represents a substantial portion of the Honor Roll — further shortened the list since 2022 when the new methodology was adopted.

Historically, the Honor Roll has been dominated by Southern California beaches, partly because many Northern and Central California counties do not monitor water quality year-round. However, this year's severe winter weather affected water quality across all regions.

Notably, the Point Loma Lighthouse in San Diego maintained its position on the Honor Roll for three consecutive years. Other beaches on the Honor Roll include Moonlight Beach in San Diego and Ventura's County Line Beach, with the remaining beaches all located in Orange County. Despite the challenges this year, these beaches have demonstrated exemplary water quality resilience.

HONOR ROLL 2023-2024

BEACH NAME	COUNTY
Dana Point Harbor Fuel Dock	Orange
Huntington Harbor, Seagate Lagoon	Orange
Huntington Harbor, Trinidad Lane Beach	Orange
Newport Bay, Promontory Point	Orange
Dana Point, South Capistrano Bay Community Beach	Orange
Riviera Beach	Orange
Emerald Bay Beach	Orange
Marine Science Institute Beach (SERRA)	Orange
Salt Creek Beach	Orange
Point Loma, Lighthouse	San Diego
Encinitas, Moonlight Beach, Cottonwood Creek	San Diego
County Line Beach	Ventura

BEACH BUMMERS

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

1. Tijuana River Mouth
(San Diego County)

Previously ranked sixth, Tijuana River Mouth surged to the top this year due to persistent sewage issues. The Tijuana River annually discharges tens of millions of gallons of untreated sewage into the ocean, originating from inadequate sewage infrastructure in Tijuana. Enhancements are underway, including the USEPA-funded upgrades to the Punta Bandera treatment plant and Tijuana's infrastructure, which aim to ameliorate these conditions.

2. Playa Blanca
(Baja California, Mexico)

After being the top Beach Bummer for two consecutive years, Playa Blanca falls to second place this year. It continues to suffer from sewage-contaminated runoff from the Tijuana region, where sewage infrastructure is notably insufficient. Additionally, the nearby Punta Bandera treatment plant discharges millions of gallons of only partially treated wastewater into the ocean, affecting Playa Blanca and surrounding beaches. Research suggests that while ocean currents often carry this contamination north, other sources of pollution may also impact this beach.

3. Santa Monica Pier
(Los Angeles County)

Falling from last year's top spot to third, Santa Monica Pier remains a concern. Despite improvements like a stormwater capture system installed in 2018 and renewed efforts to manage pollution from bird feces, water quality issues persist. The pier's consistent appearance on the Beach Bummer list indicates ongoing challenges in controlling sources of pollution.

4. Tijuana Slough
(San Diego County)

Situated north of the Tijuana River Mouth, Tijuana Slough suffers from severe sewage pollution due to compromised infrastructure in Tijuana. Millions of gallons of sewage are released into the Tijuana River annually, impacting the Slough and adjacent coastal areas. Recent findings also highlight the negative effects of partially-treated sewage from the Punta Bandera treatment plant, which flows north and deteriorates water quality at beaches across the border region.

5. Linda Mar Beach
(San Mateo County)

Making a return to the Beach Bummer list, Linda Mar Beach has been impacted by pollution primarily through San Pedro Creek, which channels urban runoff directly to this Pacific Ocean beach. The beach's recurring presence on the list underscores ongoing issues with managing local runoff.

6. Lakeshore Park
(San Mateo County)

Repeatedly featured as a Beach Bummer in previous reports, Lakeshore Park faces pollution problems due to its location within a network of stagnant water channels in San Francisco Bay. These channels, receiving continuous urban runoff from surrounding areas, provide limited water circulation, which hampers the natural cleaning processes.

7. Imperial Beach at Seacoast Drive

(San Diego County)

Newly listed as a Beach Bummer, Imperial Beach at Seacoast Drive's inclusion is notable since open ocean beaches usually avoid such classification due to better tidal flushing. However, the significant sewage pollution from the Tijuana River this year was enough to overwhelm natural dispersal mechanisms, highlighting severe water quality issues.

8. Border Field State Park

(San Diego County)

Located close to the Tijuana River Mouth, Border Field State Park faces similar challenges as Imperial Beach, with heavy sewage pollution persistently affecting water quality. The beach's proximity to the pollution source exacerbates the situation, despite the advantageous open ocean setting.

9. Marina Del Rey Mother's Beach at Lifeguard Tower

(Los Angeles County)

Mother's Beach remains a Beach Bummer, primarily due to its enclosed geography within Marina Del Rey, which limits wave action and water circulation. This setup traps pollutants close to the shore, and despite several local water quality improvement efforts, the beach continues to struggle with high levels of bacterial pollution.

10. El Faro

(Baja California, Mexico)

Matching the predicaments of Playa Blanca, El Faro endures continuous exposure to sewage-contaminated runoff from Tijuana. The lack of sufficient sewage treatment in the area is stark, with all monitored beaches in Tijuana scoring straight Fs across all conditions, underscoring the critical water quality crisis.

BEACH BUMMERS 2023-2024

RANK	LOCATION	SUMMER DRY GRADE	COUNTY/AREA	BEACH TYPE
1	Tijuana Slough, Tijuana River mouth	F	San Diego	Storm Drain Impacted
2	Playa Blanca	F	Tijuana	
3	Santa Monica Pier	F	Los Angeles	Storm Drain Impacted
4	Tijuana Slough, north of Tijuana River	F	San Diego	Storm Drain Impacted
5	Linda Mar Beach, at San Pedro Creek	F	San Mateo	Storm Drain Impacted
6	Lakeshore Park, behind Rec Center	F	San Mateo	Enclosed
7	Imperial Beach, at Seacoast Dr.	F	San Diego	Open
8	Border Field State Park, at Monument Rd.	F	San Diego	Open
9	Marina del Rey Mothers' Beach, between Lifeguard Tower and Boat dock	F	Los Angeles	Enclosed
10	El Faro	F	Tijuana	

1 **Tijuana River Mouth:** Severely affected by untreated sewage from Tijuana, with ongoing infrastructure upgrades in progress.

2 **Playa Blanca:** Impacted by sewage-contaminated runoff and partially treated wastewater from Punta Bandera treatment plant.

3 **Santa Monica Pier:** Continues to struggle with urban runoff and pollution despite recent improvements.

4 **Tijuana Slough:** Suffers from significant sewage pollution from Tijuana and north-flowing contaminants from Punta Bandera treatment plant.

5 **Linda Mar Beach:** Recurrently listed due to pollution from urban runoff via San Pedro Creek.

6 **Lakeshore Park:** Troubled by pollution in stagnant bay channels from local urban runoff.

7 **Imperial Beach at Seacoast Drive:** Notable for severe sewage pollution from the Tijuana River, affecting water quality despite its open ocean setting.

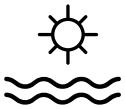
8 **Border Field State Park:** Affected by heavy sewage pollution close to the Tijuana River Mouth, challenging its coastal environment.

9 **Marina Del Rey Mother's Beach at Lifeguard Tower:** Enclosed location limits water circulation, leading to persistent bacterial pollution.

10 **El Faro:** Continuously exposed to sewage-contaminated runoff from Tijuana, resulting in severe water quality issues.

IMPACT OF BEACH TYPE

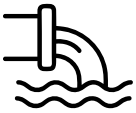
Different beach types inherently face varying levels of water quality challenges due to their geographical and environmental characteristics. We have categorized California's beaches into three groups for analysis: 1) open beaches, 2) storm drain, stream, and river beaches, and 3) enclosed beaches. This year, our analysis has been particularly focused on understanding how enclosed and storm drain-impacted beaches have disproportionately suffered due to significant sewage spills exacerbated by intense storm events.



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. This year, 82 open beaches received grades.

- Summer Dry Grades: Despite a slight decrease, 94% of open beaches received A and B grades.
- Winter Dry Grades: Maintained strong performance with 86% receiving A and B grades.
- Wet Weather Grades: Went way above average with 91% receiving A and B grades (could be attributed to decreased sampling activity due to severe winter storms).
- This year, two open beaches in San Diego have landed on the Beach Bummer list, indicating unusually severe pollution levels



Storm Drain, Stream, and River Beaches

Beaches near storm drains, streams, or rivers are particularly vulnerable to urban runoff, which often carries a higher load of pollutants, especially after rainfall. We recommend swimming at least 100 yards away from storm drains, streams, and rivers at the beach and avoiding 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: Showed commendable performance with 89% receiving A and B grades.
- Winter Dry Grades: Deterioration observed with only 66% securing A and B grades due to increased runoff pollution.
- Wet Weather Grades: Improvement observed to 79%.
- Four of this year's Beach Bummers were impacted by runoff from a nearby storm drain, river, or stream.

Mother's Beach / Los Angeles County

Enclosed Beaches

Enclosed beaches, such as those found in bays or marinas, are blocked from open waters by land masses or jetties, leading to poor water circulation and generally worse water quality. Their calm waters make them inviting for families with small children, often earning them the moniker "Mother's Beach." This year, the grading for 79 enclosed beaches reflects their increased vulnerability to pollution, particularly during rain events. We calculated grades for 79 enclosed beaches this year.

- Summer Dry Grades: 86% of enclosed beaches received A and B grades.
- Winter Dry Grades: Declined to 51%, significantly impacted by lingering runoff effects after rain during dry weather and the limited capacity of these waters to disperse pollutants effectively.
- Wet Weather Grades: 72% received A and B grades, showing the effect of limited circulation.
- Two of this year's Beach Bummers were enclosed beaches.

GRADES BY TIME PERIOD & BEACH TYPE

OPEN

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	72	88%	42	74%	72	83%
B	5	6%	7	12%	7	8%
C	0	0%	1	2%	0	0%
D	0	0%	2	4%	2	2%
F	5	6%	5	9%	6	7%
A+B	77	94%	49	86%	79	91%
C,D,F	5	6%	8	14%	8	9%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	80	92%	53	87%	53	63%
B	4	5%	3	6%	10	12%
C	2	2%	2	3%	7	9%
D	0	0%	1	2%	4	5%
F	0	0%	2	3%	11	13%
A+B	84	97%	56	92%	63	74%
C,D,F	2	3%	5	8%	22	26%

STORM DRAIN

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	172	77%	51	43%	159	65%
B	25	11%	27	23%	36	15%
C	9	4%	26	22%	19	8%
D	8	4%	4	3%	16	7%
F	8	4%	11	9%	16	7%
A+B	197	89%	78	66%	195	79%
C,D,F	25	11%	41	34%	51	21%

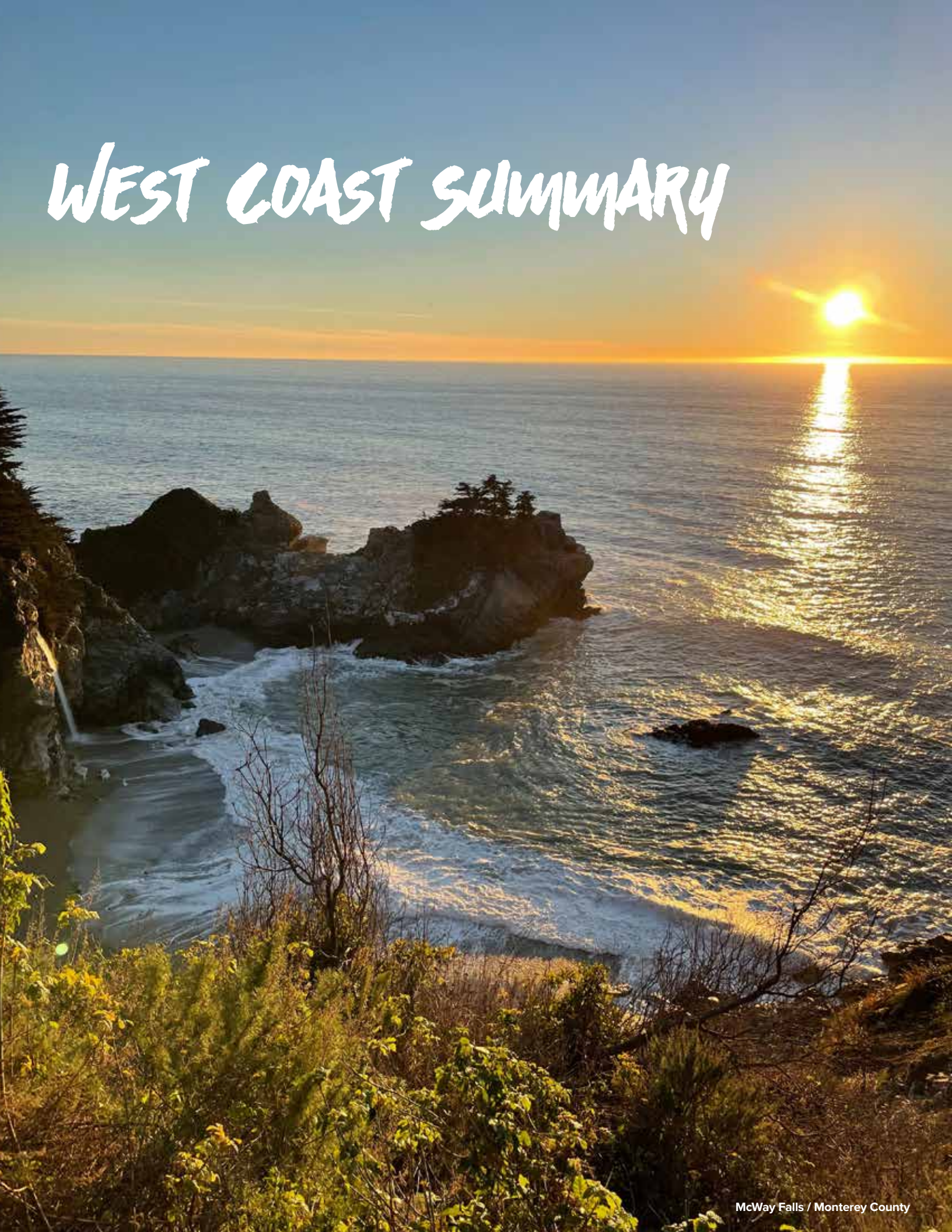
5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	192	85%	133	81%	107	49%
B	18	8%	14	9%	24	11%
C	8	4%	7	4%	15	7%
D	3	1%	5	3%	14	6%
F	5	2%	6	3%	61	27%
A+B	210	93%	147	89%	131	59%
C,D,F	16	7%	17	11%	90	41%

ENCLOSED

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	54	68%	28	47%	52	60%
B	14	18%	2	3%	10	12%
C	1	1%	9	15%	10	12%
D	4	5%	1	2%	6	7%
F	6	8%	19	32%	8	9%
A+B	68	86%	30	51%	62	72%
C,D,F	11	14%	29	49%	24	28%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	75	80%	42	67%	32	35%
B	10	10%	9	15%	7	8%
C	3	3%	4	7%	7	8%
D	2	2%	2	3%	6	6%
F	4	4%	5	8%	38	43%
A+B	85	90%	52	82%	39	43%
C,D,F	9	10%	11	18%	51	57%

West Coast Summary



McWay Falls / Monterey County

CALIFORNIA OVERVIEW

Newport Beach / Orange County

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

Summer Dry Grades were good across the State with 89% of California beaches receiving A and B grades, though slightly low compared to the historical average of 94%. Winter Dry Grades saw a more significant decrease, with only 66% of beaches achieving A and B grades, underperforming against an 89% average, likely reflecting the impact of sporadic yet intense winter storms. In contrast, Wet Weather Grades actually improved, with 80% receiving A and B grades, compared to the 59% average, possibly due to decreased or delayed sampling activities as a safety response to the heavy storms, leading to the absence of data on the initial flush and highest levels of bacteria.

This year, coastal California received 31% more rainfall than the 10-year average. Although not as extreme as the previous year, intense storms caused significant sewage spills and overflows, exacerbating beach water pollution. As climate change continues to alter global patterns, we can anticipate significant yearly fluctuations in precipitation and water quality across coastal California. In this reporting year, over 38 million gallons of sewage entered California's waterways, marking a continued trend of infrastructure challenges under wet conditions. We urge local governments to prioritize infrastructure resilience to better manage wastewater and protect water quality.

The increase in sewage spills not only poses risks to aquatic life, introducing contaminants like pharmaceuticals and pathogens, but also impacts public health, leading to beach closures and economic losses for coastal businesses. Addressing these infrastructure issues is critical to safeguarding the environment and public health.

CALIFORNIA

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	330	78%	146	51%	326	67%
B	46	11%	43	15%	62	13%
C	13	3%	39	14%	35	7%
D	12	3%	10	3%	26	5%
F	22	5%	50	17%	37	8%
A+B	376	89%	189	66%	388	80%
C,D,F	47	11%	99	34%	98	20%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	398	86%	267	80%	220	49%
B	35	8%	30	9%	47	10%
C	13	3%	14	4%	33	7%
D	6	1%	8	2%	28	6%
F	10	2%	15	4%	122	27%
A+B	433	94%	297	89%	267	59%
C,D,F	29	6%	36	11%	183	41%

Crab Cove / Alameda County / photo: Sabrina Sexton

Northern California Overview

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

- Summer Dry Grades in this region were very good with 90% of beaches receiving A and B grades, which is on par with average.
- Winter Dry Grades were below average with only 50% of the beaches tested receiving A and B grades.
- Wet Weather Grades in the northern part of the state were surprisingly excellent with 100% of beaches receiving A's and B's.

Northern California experienced above-average rainfall last year, though the increase was not as pronounced as in Central and Southern California. Typically, higher rainfall leads to lower Wet Weather Grades and Winter Grades due to the influx of pollutants, including bacteria, being washed into the ocean.

NORTHERN CALIFORNIA

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	36	88%	0	0%	38	100%
B	1	2%	3	50%	0	0%
C	2	5%	0	0%	0	0%
D	2	5%	1	17%	0	0%
F	0	0%	2	33%	0	0%
A+B	37	90%	3	50%	38	100%
C,D,F	4	10%	3	50%	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	39	89%	1	100%	23	68%
B	2	4%	0	0%	4	11%
C	1	3%	0	0%	2	6%
D	1	2%	0	0%	1	4%
F	1	2%	0	0%	4	11%
A+B	40	94%	1	100%	27	80%
C,D,F	3	6%	0	0%	7	20%

Central California Overview

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

- Summer Dry Grades were good with 84% of beaches receiving A and B grades, which is close to the average.
- Winter Dry Grades were notably poor this year, with only 45% of beaches receiving A and B grades, falling below the usual average.
- Wet Weather Grades were low with 79% of the region's beaches receiving A and B grades. That is above the 57% average.

Central California Counties saw 34% more rainfall than average, which likely accounts for the below average Winter Dry Grades this past year.

Southern California Overview

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

- 90% of the region's Summer Dry Grades were A and B grades, which is slightly below the average.
- Winter Dry Grades were far below average, with 70% of SoCal beaches receiving A and B grades.
- Wet Weather Grades were above average with 78% of the beaches in Southern California receiving A and B grades when it rained.

Southern California saw a significant increase in precipitation, with rainfall totals 75% above average. The intense rain events, particularly during the winter, washed more bacteria into the ocean, resulting in lower Winter Dry Grades and fewer Southern California beaches achieving Honor Roll status. Also, the intense rain events likely made collecting wet samples right after the rain extremely difficult. As a result, this year's wet grades may not accurately reflect the true situation, as the initial flush of pollutants following the rain was often not measured.

CENTRAL CALIFORNIA

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	51	76%	15	31%	60	63%
B	5	7%	7	2%	16	17%
C	2	3%	9	18%	6	6%
D	4	6%	4	1%	8	8%
F	5	7%	14	29%	6	6%
A+B	56	84%	22	45%	76	79%
C,D,F	11	16%	27	55%	20	21%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	62	77%	45	72%	41	45%
B	11	13%	7	12%	11	12%
C	2	2%	3	5%	8	9%
D	2	2%	2	3%	6	6%
F	5	6%	4	7%	25	28%
A+B	72	90%	52	84%	52	57%
C,D,F	8	10%	10	16%	39	43%

SOUTHERN CALIFORNIA

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	243	77%	131	55%	228	66%
B	40	13%	36	15%	43	12%
C	9	3%	30	13%	29	8%
D	6	2%	6	3%	17	5%
F	17	5%	36	15%	29	8%
A+B	283	90%	167	70%	271	78%
C,D,F	32	10%	72	30%	75	22%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	298	88%	222	82%	156	48%
B	22	7%	22	8%	32	10%
C	10	3%	11	4%	23	7%
D	4	1%	6	2%	21	6%
F	4	1%	10	4%	93	29%
A+B	320	95%	244	90%	188	58%
C,D,F	18	5%	27	10%	136	42%

Kiddie Beach / Ventura County
photo: Genelle Guzman

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. There is only one beach that was monitored and, this year, there were no grades issued for this site due to insufficient sampling. Del Norte County received 75 inches of rain this past year, which is more than any other county in California and 16% greater than the historical average of 54 inches. There were a total of 5 sewage spills in Del Norte County but no spills impacted recreational beaches or other waters during this past year.

DEL NORTE COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	0	NO DATA	0	NO DATA	0	NO DATA
B	0	NO DATA	0	NO DATA	0	NO DATA
C	0	NO DATA	0	NO DATA	0	NO DATA
D	0	NO DATA	0	NO DATA	0	NO DATA
F	0	NO DATA	0	NO DATA	0	NO DATA
A+B	0	NO DATA	0	NO DATA	0	NO DATA
C,D,F	0	NO DATA	0	NO DATA	0	NO DATA

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	1	100%	0	35%
B	0	0%	0	0%	0	22%
C	0	0%	0	0%	0	22%
D	0	0%	0	0%	0	22%
F	0	0%	0	0%	0	0%
A+B	1	100%	1	100%	1	57%
C,D,F	0	0%	0	0%	1	43%

Humboldt County

Summer Dry Grades were very poor this year, with only 20% of beaches receiving A and B grades, which is below average. It's important to note that these results might be biased due to the limited number of sampling sites. In contrast, Wet Weather Grades were better than average, with 80% of beaches receiving A and B grades.

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

Humboldt County received 60 inches of cumulative rainfall, which is 58% higher 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 increased rainfall had on water quality.

There were 17 sewage spills totaling 805,123 gallons in Humboldt County that reached lakes, rivers, or streams. Many of them were due to sewage overflows as a result of stormwater exceeding the capacity of their facilities after the heavy rain events.

Mendocino County

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

Mendocino County is one of two coastal counties this year that actually experienced lower than average rainfall. The County received 21 inches of rain, which is 38% lower than the average of 35 inches.

Mendocino County again experienced a minimal sewage year. Four spills totaling 206 gallons reached a body of water, but none were close to ocean beaches.

HUMBOLDT COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	20%	0	NO DATA	2	40%
B	0	0%	0	NO DATA	2	40%
C	2	40%	0	NO DATA	0	0%
D	2	40%	0	NO DATA	1	20%
F	0	0%	0	NO DATA	0	0%
A+B	1	20%	0	NO DATA	4	80%
C,D,F	4	80%	0	NO DATA	1	20%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	36%	0	NO DATA	1	25%
B	1	12%	0	NO DATA	2	40%
C	1	20%	0	NO DATA	0	5%
D	1	16%	0	NO DATA	1	15%
F	1	16%	0	NO DATA	1	15%
A+B	2	48%	0	NO DATA	3	65%
C,D,F	3	52%	0	NO DATA	1	35%

MENDOCINO COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	5	100%	0	NO DATA	5	100%
B	0	0%	0	NO DATA	0	0%
C	0	0%	0	NO DATA	0	0%
D	0	0%	0	NO DATA	0	0%
F	0	0%	0	NO DATA	0	0%
A+B	5	100%	0	NO DATA	5	100%
C,D,F	0	0%	0	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	5	93%	0	NO DATA	4	86%
B	0	7%	0	NO DATA	0	5%
C	0	0%	0	NO DATA	0	5%
D	0	0%	0	NO DATA	0	5%
F	0	0%	0	NO DATA	0	0%
A+B	5	100%	0	NO DATA	4	91%
C,D,F	0	0%	0	NO DATA	0	9%

Sonoma County

Sonoma County beaches got straight A's for Summer Dry Grades, and 86% of beaches got either an A or a B for Wet Weather, which is typical for this stretch of coastline. Sonoma County does not monitor its beaches in winter months so no Winter Dry Grades were generated and no beaches from this county were eligible for the Honor Roll.

Sonoma County is one of two coastal counties that received lower than average precipitation. In total, 13 inches of rain fell across Sonoma County, which is 50% lower than the historical average of 26 inches. This is now the fourth straight year of below average rainfall for Sonoma County.

11 spills with 62,937 gallons of sewage spilled throughout Sonoma County this past year. In March, a power outage due to a storm caused a major spill of partially treated sewage.

SONOMA COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	100%	0	NO DATA	6	86%
B	0	0%	0	NO DATA	0	0%
C	0	0%	0	NO DATA	0	0%
D	0	0%	0	NO DATA	0	0%
F	0	0%	0	NO DATA	1	14%
A+B	7	100%	0	NO DATA	6	86%
C,D,F	0	0%	0	NO DATA	1	14%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	97%	0	NO DATA	4	96%
B	0	0%	0	NO DATA	0	4%
C	0	3%	0	NO DATA	0	0%
D	0	0%	0	NO DATA	0	0%
F	0	0%	0	NO DATA	0	0%
A+B	7	97%	0	NO DATA	5	100%
C,D,F	0	3%	0	NO DATA	0	0%

Marin County

Summer Dry Grades were top of the class with 96% beaches receiving A's and 4% receiving B's. Wet Weather Grades were also above average with 96% receiving either an A or a B. Marin County does not monitor its beaches in winter months so no Winter Dry Grades were calculated and no beaches from this County were eligible for the Honor Roll.

Marin County received 29 inches of rain, which is 40% above the historical average of 21 inches. However, most of the rain fell during the winter months when the beaches are not monitored, so we do not know if there was an impact on water quality.

Close to 15,000 gallons of sewage flowed into Marin County waterways this past year.

MARIN COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	23	96%	0	NO DATA	25	93%
B	1	4%	0	NO DATA	1	4%
C	0	0%	0	NO DATA	0	0%
D	0	0%	0	NO DATA	0	0%
F	0	0%	0	NO DATA	1	4%
A+B	24	100%	0	NO DATA	26	96%
C,D,F	0	0%	0	NO DATA	1	4%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	24	97%	0	NO DATA	14	68%
B	1	3%	0	NO DATA	2	8%
C	0	0%	0	NO DATA	2	8%
D	0	0%	0	NO DATA	0	1%
F	0	0%	0	NO DATA	3	15%
A+B	25	100%	0	NO DATA	15	76%
C,D,F	0	0%	0	NO DATA	5	24%

San Francisco County

94% of San Francisco's Summer Dry Grades were either A's or B's this year, which is similar to average.

Wet Weather Grades were above average with 83% of beaches receiving A and B grades.

However, Winter Dry Grades were disappointing as only 47% of beaches received either an A or a B, likely due to sewer overflows after major winter storms.

San Francisco County received 29 inches of rain, which is a 40% increase from the historical average of 21 inches.

San Francisco has a combined sewer system, meaning rain runoff flows into the sewer system and gets treated instead of flowing into the ocean. Therefore, increased rainfall did not impact Wet Weather Grades as much this past year.

Approximately 4.6 million gallons of sewage were spilled in San Francisco County, with two major incidents in February and March each exceeding one million gallons. Although most of the spill volume was recovered, these significant spill events, involving untreated or partially treated stormwater and wastewater, are cause for serious concern.

SAN FRANCISCO COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	14	88%	6	32%	13	72%
B	1	6%	3	16%	2	11%
C	1	6%	3	16%	1	6%
D	0	0%	2	11%	0	0%
F	0	0%	5	26%	2	11%
A+B	15	94%	9	47%	15	83%
C,D,F	1	6%	10	53%	3	17%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	14	86%	12	79%	5	27%
B	2	11%	2	11%	4	22%
C	0	1%	0	3%	2	10%
D	0	0%	0	3%	1	6%
F	0	1%	1	4%	6	36%
A+B	15	97%	13	90%	9	49%
C,D,F	0	3%	1	10%	9	51%

Crane Cove/San Francisco / Credit: Corey Chrisman


Keller Beach, Richmond / Contra Costa County

East Bay: Alameda County and Contra Costa County

The East Bay had outstanding water quality over the last year with 100% of the beaches earning either an A or a B for Summer Dry Grades again for a second year. For Wet Weather Grades, 88% of the beaches received A and B grades, which is substantially higher than average. East Bay beaches are monitored in winter months, but no Winter Dry Grades were calculated this year because most winter data was categorized as wet weather.

Alameda County and Contra Costa County received 29 inches of rain, which is a 40% increase from the historical average of 21 inches. More rainfall usually results in worse water quality because more pollutants are washed into the ocean, but the East Bay has bucked that trend this year.

Last year, East Bay experienced significant sewage spills, totaling over 1 million gallons. Notably, a single event in El Sobrante saw over 500,000 gallons of sewage spill from a maintenance hole. These large volumes of spilled sewage are deeply concerning.

EAST BAY COUNTIES

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	88%	0	NO DATA	6	75%
B	1	13%	0	NO DATA	1	13%
C	0	0%	0	NO DATA	1	13%
D	0	0%	0	NO DATA	0	0%
F	0	0%	0	NO DATA	0	0%
A+B	8	100%	0	NO DATA	7	88%
C,D,F	0	0%	0	NO DATA	1	13%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	77%	2	70%	3	41%
B	1	15%	1	20%	1	18%
C	0	3%	0	10%	1	12%
D	0	5%	0	0%	0	6%
F	0	0%	0	0%	2	24%
A+B	7	92%	2	90%	4	59%
C,D,F	1	8%	0	10%	3	41%

San Mateo County

Summer Dry Grades were mediocre with only 61% of beaches earning A and B grades. This is slightly below the average for this county, which has struggled with water quality in recent years.

Wet Weather Grades were bottom of the class as only 56% of beaches earned A and B grades. This is an improvement compared to last year's 31%, but still below average.

Winter Dry Grades performed better, with 50% of beaches receiving A and B grades, which is above the average of 37% for this county.

San Mateo County is home to two of this year's Beach Bummers: Lake Shore Park and Linda Mar Beach. Lake Shore is one of the beaches that are categorized as enclosed, which means they do not receive sufficient water circulation. Linda Mar Beach is impacted by pollution from San Pedro Creek. This marks the sixth consecutive report where San Mateo County has multiple Beach Bummers.

San Mateo County experienced a 40% increase in rainfall last year, receiving 29 inches compared to the historical average of 21 inches. Given the enclosed nature of many of its beach locations, it's not surprising that the Wet Weather Grades consistently fell short.

Last year, approximately 162,000 gallons of sewage were spilled into the ocean, lakes, rivers, and streams of San Mateo County, representing a relatively small volume compared to previous years.

SAN MATEO COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	13	57%	9	35%	11	41%
B	1	4%	4	15%	4	15%
C	1	4%	2	8%	2	7%
D	3	13%	2	8%	6	22%
F	5	22%	9	35%	4	15%
A+B	14	61%	13	50%	15	56%
C,D,F	9	39%	13	50%	12	44%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	8	46%	10	45%	7	28%
B	4	22%	4	16%	2	9%
C	1	6%	3	12%	3	11%
D	1	6%	2	8%	3	10%
F	4	21%	5	20%	10	41%
A+B	12	68%	14	61%	9	37%
C,D,F	6	32%	9	39%	16	63%

Tunitas Beach / San Mateo County / photo: David Baron

Santa Cruz County

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

Wet Weather Grades were above the average with 81% of the beaches receiving A or B grades.

Winter Dry Grades were disappointing as none of the beaches received an A or B grade; this is far lower than the average of 88%. All beaches ended up with C grades for winter.

Santa Cruz County received 32 inches of rain, which is 19% above the historical average of 27 inches.

No major sewage spills happened in Santa Cruz County last year. 13 minor spills sent a total of 4,390 gallons of sewage into waterways.

SANTA CRUZ COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	11	79%	0	0%	7	44%
B	2	14%	0	0%	6	38%
C	0	0%	4	100%	1	6%
D	1	7%	0	0%	2	13%
F	0	0%	0	0%	0	0%
A+B	13	93%	0	0%	13	81%
C,D,F	1	7%	4	100%	3	19%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	9	69%	6	71%	4	27%
B	3	20%	1	17%	2	15%
C	1	5%	1	7%	2	13%
D	0	2%	0	2%	1	9%
F	1	5%	0	2%	5	36%
A+B	12	89%	7	88%	6	41%
C,D,F	1	11%	1	12%	9	59%

Monterey County

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

Wet Weather Grades were very good and above average with 100% of the County's beaches receiving A and B grades.

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

Monterey County received 20 inches of rain, which is 11% higher than the historical average of 18 inches. We do not know the full impact this increase in precipitation had on water quality because Monterey County does not monitor its beaches in the winter, when most rainfall occurs.

Overall, 36 spills sent 2,986 gallons of sewage into waterways across the county in this reporting year.

MONTEREY COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	100%	0	NO DATA	7	88%
B	0	0%	0	NO DATA	1	13%
C	0	0%	0	NO DATA	0	0%
D	0	0%	0	NO DATA	0	0%
F	0	0%	0	NO DATA	0	0%
A+B	6	100%	0	NO DATA	8	100%
C,D,F	0	0%	0	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	91%	3	92%	5	86%
B	1	9%	0	8%	0	0%
C	0	0%	0	0%	0	0%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	1	14%
A+B	7	100%	3	100%	5	86%
C,D,F	0	0%	0	0%	1	14%

San Luis Obispo County

In typical fashion, San Luis Obispo County's annual Summer Dry Grades were usually very good, with most beaches receiving either A's or B's. However, this year we saw a reduction in sampling events in San Luis Obispo, resulting in no beaches having enough samples to qualify for grades.

Wet Weather Grades were on par with the average, with 95% of the beaches receiving A and B grades.

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

San Luis Obispo County received 20 inches of rain, which is 63% higher than the average of 12 inches.

San Luis Obispo County had a relatively sewage-free year, with 7 spills sending a total of 75 gallons of sewage into its waterways in 2023–2024.

SAN LUIS OBISPO COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	0	NO DATA	0	NO DATA	16	84%
B	0	NO DATA	0	NO DATA	2	11%
C	0	NO DATA	0	NO DATA	1	5%
D	0	NO DATA	0	NO DATA	0	0%
F	0	NO DATA	0	NO DATA	0	0%
A+B	0	NO DATA	0	NO DATA	18	95%
C,D,F	0	NO DATA	0	NO DATA	1	5%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	19	98%	15	96%	16	85%
B	0	2%	1	4%	1	7%
C	0	0%	0	0%	0	2%
D	0	0%	0	0%	0	2%
F	0	0%	0	0%	1	3%
A+B	19	100%	15	100%	18	93%
C,D,F	0	0%	0	0%	1	7%

Santa Barbara County

Summer Dry Grades were good this past year with 100% of beaches receiving either A or B gradings; Wet Weather Grades were not as good with 75% earning A and B grades, which is still higher than the average of 54% for Santa Barbara County; Winter Dry Grades were disappointing and below average with only 63% of the beaches earning A and B grades.

Santa Barbara County received 19 inches of rainfall this past year, which was 64% higher than the average of 12 inches. However, there was not a noticeable dip in wet weather water quality as a result.

17 sewage spills totaling 1,030,945 gallons flowed into the ocean, rivers, lakes, and streams throughout the county. Over one million gallons of untreated sewage were spilled from a main pipe maintained by the Goleta West Sanitary District on February 16 and 17, contaminating the Goleta Slough and adjacent beaches. This incident, the largest reported in Santa Barbara County in the past decade, resulted in the closure of a 2.5-mile stretch of beach near Goleta Beach Park.

SANTA BARBARA COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	10	67%	2	25%	7	44%
B	5	33%	3	38%	5	31%
C	0	0%	2	25%	3	19%
D	0	0%	1	13%	0	0%
F	0	0%	0	0%	1	6%
A+B	15	100%	5	63%	12	75%
C,D,F	0	0%	3	38%	4	25%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	14	88%	13	86%	7	43%
B	1	6%	2	14%	2	11%
C	1	5%	0	0%	2	10%
D	0	1%	0	0%	2	10%
F	0	0%	0	0%	4	26%
A+B	15	94%	15	100%	9	54%
C,D,F	1	6%	0	0%	7	46%

Ventura County

True to form, 97% of Ventura County's beaches received A and B Summer Dry Grades.

Wet Weather Grades went above the average this past year with 85% earning A's and B's.

Winter Dry grades were good, as usual, in Ventura County. 92% of the beaches received A's or B's, consistent with the historical average.

Ventura County received 21 inches of rain, which is 87% higher than the historical average of 11 inches. This increase likely had negative impacts on this year's Wet Weather Grades.

In total, 14,520 gallons of sewage were spilled into Ventura County waterways. Following a significant spill in February that leaked into a storm drain, beach closures were issued for areas one mile north and one mile south of the Ventura River outfall.

Los Angeles County

Los Angeles County had great Summer Dry Grades with 81% of its beaches earning A and B grades, but lower than the historical average; Wet Weather Grades were relatively good, with 66% of beaches achieving A's and B's, significantly better than the usual average of 39%; however, Winter Dry Grades significantly declined, with only 37% of beaches receiving A and B grades, greatly impacted by this winter's severe rainstorms.

Persistent Beach Bummers included Marina del Rey Mother's Beach and Santa Monica Pier, both maintaining their unfortunate record of poor water quality.

Los Angeles County experienced an exceptional increase in rainfall, receiving 21 inches — 93% above the historical average of 11 inches. This dramatic uptick in precipitation, coupled with ongoing sewage spill issues following major storms, contributed to notably poor Winter Dry Grades and Wet Weather Grades.

The county also saw 185 sewage spills totaling approximately 9 million gallons, a stark increase from the 330,396 gallons reported the previous year. In February, about 8 million gallons of raw waste entered the Dominguez Channel, subsequently affecting Cabrillo Beach and necessitating beach closures.

VENTURA COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	27	90%	7	54%	31	78%
B	2	7%	5	38%	3	8%
C	0	0%	1	8%	3	8%
D	0	0%	0	0%	3	8%
F	1	3%	0	0%	0	0%
A+B	29	97%	12	92%	34	85%
C,D,F	1	3%	1	8%	6	15%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	36	98%	11	91%	19	66%
B	0	1%	0	2%	1	4%
C	0	1%	0	2%	2	7%
D	0	0%	0	3%	2	5%
F	0	0%	0	2%	5	18%
A+B	37	99%	11	93%	20	70%
C,D,F	0	1%	1	7%	9	30%

LOS ANGELES COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	52	62%	10	18%	45	49%
B	16	19%	11	19%	15	16%
C	5	6%	18	32%	10	11%
D	5	6%	2	4%	9	10%
F	6	7%	16	28%	12	13%
A+B	68	81%	21	37%	60	66%
C,D,F	16	19%	36	63%	31	34%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	75	83%	59	73%	26	28%
B	8	9%	8	10%	11	11%
C	4	4%	6	8%	8	8%
D	2	2%	2	3%	8	8%
F	2	2%	5	6%	42	44%
A+B	83	92%	67	83%	37	39%
C,D,F	7	8%	13	17%	58	61%

Orange County

Summer Dry Grades were close to the average, with 95% of the beaches receiving A and B grades.

Wet Weather Grades exceeded the average, with 89% of the beaches achieving A and B grades.

Winter Dry Grades were good, though slightly lower than average, with 91% of the beaches scoring A and B grades.

Orange County experienced a significant increase in rainfall, receiving 19 inches, which is 94% higher than the historical average of 10 inches. Despite this substantial increase, there was no noticeable negative impact on the Wet Weather and Winter Dry Grades. Orange County also dominated the Honor Roll with 9 beaches making the list.

In the 2023–2024 period, a total of 210,667 gallons of sewage spilled into the waterways of Orange County.

ORANGE COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	111	83%	82	77%	102	75%
B	16	12%	15	14%	19	14%
C	4	3%	7	7%	11	8%
D	1	1%	2	2%	3	2%
F	1	1%	1	1%	1	1%
A+B	127	95%	97	91%	121	89%
C,D,F	6	5%	10	9%	15	11%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	115	92%	94	88%	56	49%
B	6	5%	7	7%	12	11%
C	2	1%	2	2%	9	8%
D	1	0%	1	1%	7	6%
F	1	1%	2	2%	31	27%
A+B	121	97%	102	95%	68	60%
C,D,F	4	3%	5	5%	46	40%

Newport Harbor / Orange County

San Diego County

In May 2022, San Diego County implemented a new bacteria testing method using ddPCR technology at approximately one-third of its beaches. This advanced method detects bacterial genetic material in water, providing faster and more precise results than traditional culturing methods. Although Heal the Bay supports the adoption of ddPCR for its rapidity and precision, our current Beach Report Card grading system is designed for data from cultured bacteria, posing compatibility issues.

To maintain insights into water quality at these beaches, we analyzed the frequency with which the ddPCR-monitored beaches in San Diego County exceeded California's state-approved standards, using a recommended conversion factor. Our analysis revealed that these beaches exceeded standards in 50%–76% of samples taken, a significant increase from the 5%–10% exceedance rates observed with older culturing methods. This discrepancy does not necessarily indicate higher pollution levels but rather reflects the heightened sensitivity of ddPCR testing.

SAN DIEGO COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	43	86%	30	59%	43	72%
B	1	2%	2	4%	1	2%
C	0	0%	2	4%	2	3%
D	0	0%	1	2%	1	2%
F	6	12%	16	31%	13	22%
A+B	44	88%	32	63%	44	73%
C,D,F	6	12%	19	37%	16	27%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	57	84%	43	81%	47	69%
B	7	10%	4	8%	6	9%
C	3	4%	2	3%	3	4%
D	1	1%	2	4%	3	4%
F	1	1%	2	4%	9	14%
A+B	64	93%	48	89%	53	78%
C,D,F	5	7%	6	11%	15	22%

Heal the Bay is actively exploring ways to integrate ddPCR data into our Beach Report Card framework. Meanwhile, we recommend that San Diego County continue to use traditional culturing methods alongside ddPCR to ensure consistent water quality assessments until these methodological discrepancies can be fully addressed.

We were still able to grade most of San Diego County's beaches. And among those beaches, Summer Dry Grades were good, though slightly lower than average, with 88% of the beaches receiving A and B grades.

Wet Weather Grades were not as good and slightly below average with only 73% of the beaches receiving A and B grades.

Winter Dry Grades were below average with 63% of beaches receiving A and B grades.

This year, the Tijuana River Mouth, Tijuana Slough, Border Field State Park, and Imperial Beach at Seacoast Drive all landed on the Beach Bummer list, making San Diego the county with the highest number of bummers. This issue is exacerbated by the millions of gallons of untreated sewage that regularly flow into the ocean via the Tijuana River. San Diego County was also home to two Honor Roll beaches: Point Loma Lighthouse and Moonlight Beach.

San Diego County received 12 inches of rain last year, which is 31% higher than the historical average of 10 inches. This increase in rainfall, especially the major rain storms, account for the below average Wet Weather Grades.

The historic rain event this winter delivered an unprecedented 3 inches of rain in just three hours. The intense rainfall led to severe flooding and significant inflows to the wastewater conveyance system, overwhelming it and resulting in overflows. In total, over 20 million gallons of sewage were spilled in San Diego this past year, accounting for more than half of the total spill volume across California.

OREGON COUNTY SUMMARIES


Seaside Beach / Clatsop County

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

Oregon's Department of Environmental Quality monitors water quality at ocean beaches from Memorial Day through Labor Day, testing for the FIB *Enterococcus*. This contrasts with California, where water quality monitoring is required from April 1 to October 31 and includes tests for three indicator bacteria. Funding for Oregon's beach monitoring is provided entirely by the USEPA under the Beaches Environmental Assessment and Coastal Health (BEACH) Act.

For many years, a large part of Oregon's beaches have gone ungraded by us due to insufficient sampling frequency. Our criteria for assigning a beach grade requires that beaches be sampled at least 75% of the weeks during the summer season, which spans from Memorial Day to Labor Day. Unfortunately, this standard often isn't met, preventing us from issuing grades for most beaches. Additionally, no Oregon beaches are monitored during winter, so we cannot provide Winter Dry Grades.

This year, only six counties in Oregon received Summer Dry Grades and Wet Weather grades. Despite the limited data, 100% of the monitored Oregon beaches received excellent Summer Dry Grades of A or B, and 79% achieved A and B grades in Wet Weather, surpassing the state's historical average of 67%.

It is disappointing that under-sampling has limited our ability to issue more comprehensive grades. We continue to encourage Oregon to increase funding for ocean water quality monitoring. Expanding this program is crucial to protect public health and ensure that residents and visitors can safely enjoy Oregon's beautiful beaches.

OREGON

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	58	71%	NO DATA	NO DATA	58	74%
B	24	29%	NO DATA	NO DATA	4	5%
C	0	0%	NO DATA	NO DATA	6	8%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	10	13%
A+B	82	100%	NO DATA	NO DATA	62	79%
C,D,F	0	0%	NO DATA	NO DATA	16	21%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	100%	NO DATA	NO DATA	18	62%
B	0	0%	NO DATA	NO DATA	1	5%
C	0	0%	NO DATA	NO DATA	3	9%
D	0	0%	NO DATA	NO DATA	2	8%
F	0	0%	NO DATA	NO DATA	5	16%
A+B	6	100%	NO DATA	NO DATA	20	67%
C,D,F	0	0%	NO DATA	NO DATA	10	33%

CLATSOP COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	7	64%	NO DATA	NO DATA	7	64%
B	4	36%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	4	36%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	11	100%	NO DATA	NO DATA	7	64%
C,D,F	0	0%	NO DATA	NO DATA	4	36%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	3	100%	NO DATA	NO DATA	4	62%
B	0	0%	NO DATA	NO DATA	0	3%
C	0	0%	NO DATA	NO DATA	0	7%
D	0	0%	NO DATA	NO DATA	0	7%
F	0	0%	NO DATA	NO DATA	1	21%
A+B	3	100%	NO DATA	NO DATA	4	66%
C,D,F	0	0%	NO DATA	NO DATA	2	34%

COOS COUNTY

2023–2024	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	NO DATA	NO DATA	NO DATA	NO DATA	3	65%
B	NO DATA	NO DATA	NO DATA	NO DATA	1	15%
C	NO DATA	NO DATA	NO DATA	NO DATA	0	10%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	0	10%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	3	80%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	20%

LINCOLN COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	9	47%	NO DATA	NO DATA	15	79%
B	10	53%	NO DATA	NO DATA	4	21%
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	19	100%	NO DATA	NO DATA	19	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	100%	NO DATA	NO DATA	6	67%
B	0	0%	NO DATA	NO DATA	0	4%
C	0	0%	NO DATA	NO DATA	1	10%
D	0	0%	NO DATA	NO DATA	1	10%
F	0	0%	NO DATA	NO DATA	1	8%
A+B	2	100%	NO DATA	NO DATA	7	71%
C,D,F	0	0%	NO DATA	NO DATA	3	29%

TILLAMOOK COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	NO DATA	NO DATA	4	70%
B	0	0%	NO DATA	NO DATA	0	3%
C	0	0%	NO DATA	NO DATA	0	7%
D	0	0%	NO DATA	NO DATA	1	13%
F	0	0%	NO DATA	NO DATA	0	7%
A+B	1	100%	NO DATA	NO DATA	4	73%
C,D,F	0	0%	NO DATA	NO DATA	2	27%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	NO DATA	NO DATA	4	70%
B	0	0%	NO DATA	NO DATA	0	3%
C	0	0%	NO DATA	NO DATA	0	7%
D	0	0%	NO DATA	NO DATA	1	13%
F	0	0%	NO DATA	NO DATA	0	7%
A+B	1	100%	NO DATA	NO DATA	4	73%
C,D,F	0	0%	NO DATA	NO DATA	2	27%

CURRY COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	13	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	13	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	0	14%
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	86%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	0	14%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	86%

LANE COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
B	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
C	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
D	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
F	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
A+B	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	NO DATA	NO DATA	NO DATA	NO DATA	1	55%
B	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
C	NO DATA	NO DATA	NO DATA	NO DATA	0	18%
D	NO DATA	NO DATA	NO DATA	NO DATA	0	0%
F	NO DATA	NO DATA	NO DATA	NO DATA	1	27%
A+B	NO DATA	NO DATA	NO DATA	NO DATA	1	55%
C,D,F	NO DATA	NO DATA	NO DATA	NO DATA	1	45%

Heceta Head Lighthouse / Lane County / photo: Rick Obst

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

Washington's Department of Ecology monitors water quality at ocean beaches from Memorial Day through Labor Day, testing for *Enterococcus*. This differs from California, where testing from April 1 to October 31 includes three indicator bacteria. Approximately 80% of Washington's funding for ocean beach monitoring is sourced from the BEACH Act, with the remaining 20% provided by the USEPA's National Estuary Program's Pathogen Prevention, Reduction, and Control Grant. The Makah Tribe in Clallam County also conducts their own beach monitoring through separate BEACH Program Tribal funding, uniquely monitoring their beaches on a weekly basis throughout the year. We commend the Makah Tribe for their comprehensive monitoring approach and urge the Washington Department of Ecology to adopt similar practices across the state to ensure consistent water quality assessments.

Washington's Summer Dry Grades were impressive, with 97% of the beaches scoring A and B grades, surpassing the state average of 92%. Wet Weather Grades were also excellent, with 93% of beaches achieving A and B grades, indicating superior water quality even during adverse conditions.

Unfortunately, due to the lack of winter monitoring by the state, we were unable to issue Winter Dry Grades for most Washington beaches. The exception is the beaches monitored by the Makah Tribe, where all five monitored beaches received A or B grades during the winter months. This highlights the benefits of year-round monitoring and underscores the need for expanded efforts to provide comprehensive data across all seasons.

WASHINGTON

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	56	92%	4	80%	51	88%
B	3	5%	1	20%	3	5%
C	1	2%	0	0%	3	5%
D	1	2%	0	0%	1	2%
F	0	0%	0	0%	0	0%
A+B	59	97%	5	100%	54	93%
C,D,F	2	3%	0	0%	4	7%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	127	89%	NO DATA	NO DATA	129	92%
B	4	3%	NO DATA	NO DATA	4	3%
C	4	3%	NO DATA	NO DATA	4	3%
D	3	2%	NO DATA	NO DATA	2	1%
F	4	3%	NO DATA	NO DATA	2	2%
A+B	131	92%	NO DATA	NO DATA	133	94%
C,D,F	11	8%	NO DATA	NO DATA	8	6%

CLALLAM COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	8	100%	4	80%	8	100%
B	0	0%	1	20%	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	8	100%	5	100%	8	100%
C,D,F	0	0%	0	0%	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	10	96%	4	100%	13	96%
B	0	4%	0	0%	1	4%
C	0	0%	0	0%	0	0%
D	0	0%	0	0%	0	0%
F	0	0%	0	0%	0	0%
A+B	10	100%	4	100%	13	100%
C,D,F	0	0%	0	0%	0	0%

KITSAP COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	67%	NO DATA	NO DATA	7	78%
B	2	22%	NO DATA	NO DATA	1	11%
C	1	11%	NO DATA	NO DATA	1	11%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	8	89%	NO DATA	NO DATA	8	89%
C,D,F	1	11%	NO DATA	NO DATA	1	11%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	30	92%	NO DATA	NO DATA	29	89%
B	1	3%	NO DATA	NO DATA	1	4%
C	0	1%	NO DATA	NO DATA	1	3%
D	1	4%	NO DATA	NO DATA	1	3%
F	0	0%	NO DATA	NO DATA	0	1%
A+B	31	95%	NO DATA	NO DATA	30	93%
C,D,F	2	5%	NO DATA	NO DATA	2	7%

SKAGIT COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	1	100%	NO DATA	NO DATA	1	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	1	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	75%
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	0%
F	0	0%	NO DATA	NO DATA	1	19%
A+B	2	92%	NO DATA	NO DATA	3	81%
C,D,F	0	8%	NO DATA	NO DATA	1	19%

SNOHOMISH COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	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	6	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	13	93%	NO DATA	NO DATA	18	95%
B	0	1%	NO DATA	NO DATA	1	3%
C	0	3%	NO DATA	NO DATA	0	1%
D	0	1%	NO DATA	NO DATA	0	1%
F	0	1%	NO DATA	NO DATA	0	0%
A+B	13	94%	NO DATA	NO DATA	18	97%
C,D,F	1	6%	NO DATA	NO DATA	1	3%

WHATCOM COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	3	75%	NO DATA	NO DATA	3	75%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	1	25%
D	1	25%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	3	75%	NO DATA	NO DATA	3	75%
C,D,F	1	25%	NO DATA	NO DATA	1	25%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	43%	NO DATA	NO DATA	7	76%
B	1	14%	NO DATA	NO DATA	0	2%
C	0	10%	NO DATA	NO DATA	1	9%
D	0	5%	NO DATA	NO DATA	0	2%
F	1	29%	NO DATA	NO DATA	1	11%
A+B	2	57%	NO DATA	NO DATA	7	78%
C,D,F	2	43%	NO DATA	NO DATA	2	22%

ISLAND COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	4	100%	NO DATA	NO DATA	3	75%
B	0	0%	NO DATA	NO DATA	1	25%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	4	100%	NO DATA	NO DATA	4	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	5	68%	NO DATA	NO DATA	9	94%
B	1	13%	NO DATA	NO DATA	0	3%
C	1	8%	NO DATA	NO DATA	0	0%
D	0	3%	NO DATA	NO DATA	0	0%
F	1	8%	NO DATA	NO DATA	0	3%
A+B	6	82%	NO DATA	NO DATA	9	97%
C,D,F	1	18%	NO DATA	NO DATA	0	3%

KING COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	10	100%	NO DATA	NO DATA	8	89%
B	0	0%	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	0	0%
A+B	10	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	17	91%	NO DATA	NO DATA	28	93%
B	0	1%	NO DATA	NO DATA	1	3%
C	0	2%	NO DATA	NO DATA	1	3%
D	0	2%	NO DATA	NO DATA	1	2%
F	1	3%	NO DATA	NO DATA	0	0%
A+B	17	92%	NO DATA	NO DATA	29	96%
C,D,F	1	8%	NO DATA	NO DATA	1	4%

JEFFERSON COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	4	100%	NO DATA	NO DATA	4	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	4	100%	NO DATA	NO DATA	4	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	77%	NO DATA	NO DATA	8	94%
B	0	5%	NO DATA	NO DATA	0	0%
C	0	5%	NO DATA	NO DATA	1	6%
D	1	8%	NO DATA	NO DATA	0	0%
F	0	5%	NO DATA	NO DATA	0	0%
A+B	6	82%	NO DATA	NO DATA	8	94%
C,D,F	1	18%	NO DATA	NO DATA	1	6%

MASON COUNTY

2023–2024	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%

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

GRAY'S HARBOR COUNTY

2023–2024	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	8	93%	NO DATA	NO DATA	9	100%
B	0	2%	NO DATA	NO DATA	0	0%
C	0	4%	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	96%	NO DATA	NO DATA	9	100%
C,D,F	0	4%	NO DATA	NO DATA	0	0%

THURSTON COUNTY

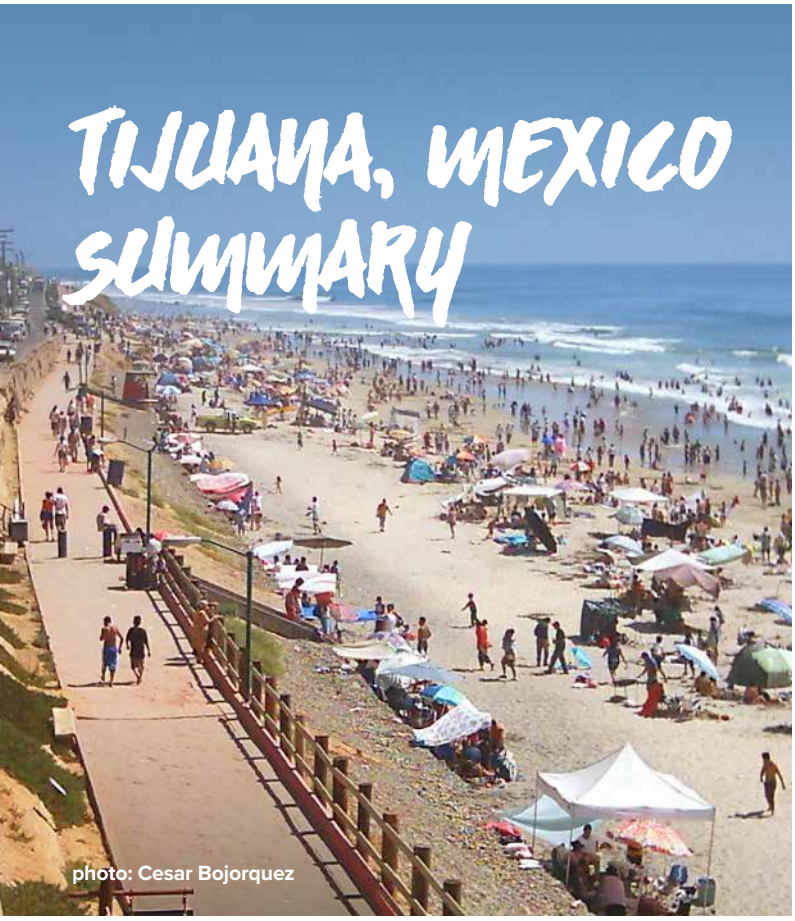
2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	100%	NO DATA	NO DATA	2	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	2	100%	NO DATA	NO DATA	2	100%
C,D,F	0	0%	NO DATA	NO DATA	0	0%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	2	80%	NO DATA	NO DATA	4	100%
B	0	0%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	0	0%
D	0	0%	NO DATA	NO DATA	0	0%
F	1	20%	NO DATA	NO DATA	0	0%
A+B	2	80%	NO DATA	NO DATA	4	100%
C,D,F	1	20%	NO DATA	NO DATA	0	0%

PIERCE COUNTY

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	6	86%	NO DATA	NO DATA	5	71%
B	1	14%	NO DATA	NO DATA	0	0%
C	0	0%	NO DATA	NO DATA	1	14%
D	0	0%	NO DATA	NO DATA	1	14%
F	0	0%	NO DATA	NO DATA	0	0%
A+B	7	100%	NO DATA	NO DATA	5	71%
C,D,F	0	0%	NO DATA	NO DATA	2	29%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	23	97%	NO DATA	NO DATA	17	89%
B	0	1%	NO DATA	NO DATA	1	3%
C	0	1%	NO DATA	NO DATA	1	4%
D	0	1%	NO DATA	NO DATA	0	2%
F	0	0%	NO DATA	NO DATA	0	1%
A+B	23	98%	NO DATA	NO DATA	17	93%
C,D,F	0	2%	NO DATA	NO DATA	1	7%



TIJUANA, MEXICO

2023–2024	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	0	0%	0	0%	0	0%
B	0	0%	0	0%	0	0%
C	0	0%	0	0%	0	0%
D	0	0%	0	0%	1	33%
F	3	100%	3	100%	2	67%
A+B	0	0%	0	0%	0	0%
C,D,F	3	100%	3	100%	3	100%

5 YEAR AVERAGE	Summer Dry		Winter Dry		Wet Weather	
GRADE	#	%	#	%	#	%
A	0	0%	0	0%	0	0%
B	0	0%	0	0%	0	0%
C	1	33%	0	0%	0	0%
D	1	33%	1	33%	0	0%
F	1	33%	1	67%	2	100%
A+B	0	0%	0	0%	0	0%
C,D,F	3	100%	2	100%	2	100%

The Tijuana area, home to over 2 million people, boasts beaches crucial for recreation and tourism. We analyzed weekly monitoring data collected by the County of San Diego for three beaches: Playa El Faro, Playa El Vigia, and Playa Blanca. During the dry summer months, all three beaches consistently received F grades. Apart from Playa El Vigia, which earned a D during wet weather, these beaches also recorded straight F's in all other conditions.

These consistently poor grades pose a significant health risk to beachgoers and present challenges for the local tourism economy. This section of the coastline suffers from chronic sewage pollution throughout the year, exacerbated by inadequate sewage infrastructure. A primary source of this pollution is the Punta Bandera treatment plant south of the city, which intermittently discharges untreated or partially treated sewage into the ocean.[6] Prevailing ocean currents carry sewage pollution north to the Tijuana beaches as well as Imperial Beach. The USEPA is actively pursuing improvements to the sewage infrastructure on both sides of the border, which are expected to enhance water quality in the area.[7] However, given the extensive and complex issues within the Tijuana River Watershed, these efforts should be viewed as initial steps toward a more comprehensive solution.

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

7 https://www.epa.gov/sustainable-water-infrastructure/usmca-tijuana-river-watershed#solutions

BEACH NEWS

Mission Bay Park / San Diego County

SPECIAL SECTION

Addressing Sewage Pollution in the Tijuana River Watershed

Overview of Pollution Challenges

The Tijuana River Watershed, which spans the U.S.-Mexico border, has become a critical focal point for environmental and public health concerns due to recurring sewage pollution. Over the last three decades, rapid population growth, industrialization, and urban sprawl in Tijuana, Mexico, have severely taxed the aging sewage infrastructure. This strain has led to frequent untreated sewage overflows, which travel north into California, significantly degrading water quality in the Tijuana River Estuary and adjacent coastal areas. This pollution not only impacts the ecological health of these environments, but also poses serious public health risks to communities on both sides of the border.

Impact on Local Water Quality and Beach Report Card Grades

The persistent sewage issues directly influence the water quality of beaches in Southern San Diego County and the Tijuana region, contributing to the region's prominence on Heal the Bay's 2023 Beach Bummer List. In particular, the proximity of these beaches to the Tijuana River's outflow means they are often first to experience the deleterious effects of these pollution events, resulting in beach closures and health advisories due to elevated bacterial levels. This year, the inclusion of these beaches on the Bummer List highlights a concerning trend of deteriorating conditions, which, while present, has not been as pronounced in previous years. Increased awareness and action are critical at this juncture to reverse the decline and safeguard these vital recreational and ecological assets.

Binational Efforts and Infrastructure Development

Addressing these complex transboundary pollution challenges requires coordinated binational solutions. The International Boundary and Water Commission, along with local and federal agencies from the U.S. and Mexico, has been instrumental in developing infrastructure and operational strategies to mitigate these issues. Recent efforts have focused on enhancing existing facilities and constructing new infrastructure to manage and treat the sewage effectively.

For example, significant repairs to a major pipeline in Tijuana are expected to drastically reduce sewage flows into the Tijuana River by up to 100% of daily flows, directly impacting the volume of pollutants entering U.S. waters. These repairs are part of broader efforts that include the upgrade and expansion of the South Bay International Wastewater Treatment Plant (ITP) in San Diego, which treats a portion of Tijuana's sewage and runoff. The planned expansion from 25 million gallons per day (mgd) to 50 mgd will significantly enhance the plant's capacity to manage and treat sewage, especially during storm events. Additionally, Mexico recently broke ground on a replacement for the deteriorating San Antonio de los Buenos wastewater treatment plant in Punta Bandera, which is expected to dramatically reduce sewage discharge affecting San Diego and Tijuana shorelines. The new $33-million facility will feature advanced oxidation ditch technology and aims to be operational by the end of September 2024, marking a significant step towards resolving cross-border pollution issues.

Ongoing Challenges and Future Plans

Despite these planned advancements, challenges remain, particularly with frequent sanitary sewer overflows during rain events and the need for urgent rehabilitation of infrastructure that has been long neglected. The San Diego Water Board, CA Coastal Commission, elected officials, non-profits, and other interested parties continue to press for timely completion of these projects to ensure compliance with the Clean Water Act and to safeguard public health.

The future of the Tijuana River Watershed's environmental health hinges on the successful implementation of these infrastructure projects and the continued cooperation between the U.S. and Mexico. Ensuring these efforts are adequately funded and prioritized remains a critical concern for all parties involved.

Recommendations for Further Action

Heal the Bay recommends continued vigilance and advocacy to ensure these projects not only proceed on schedule but also include necessary improvements to handle future challenges. Public education and community engagement are crucial in fostering a broader understanding of the issues and in mobilizing support for sustained environmental protection efforts. Additionally, ongoing monitoring and adaptive management strategies will be vital in responding effectively to the dynamic nature of transboundary pollution and in safeguarding the coastal waters that are integral to the region's ecological and economic well-being.

Through the Beach Report Card, Heal the Bay will continue to highlight these issues, providing critical information to the public and policymakers to drive and inform actions that improve water quality and protect public health along California's southern coast.

MORE NEWS

Efforts to Weaken Water Quality Objectives

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

Unfortunately, we have seen a number of attempts to loosen or rollback fecal pollution regulations in California. When waterways become polluted with contaminants such as FIB, the USEPA holds responsible those who discharge pollution, which can include local municipalities, wastewater treatment plants, and other pollution producing facilities. These dischargers are legally responsible for reducing the amount of contamination in their discharge so that the local waterways once again meet their water quality standards. Under the Clean Water Act of 1972, some polluted water bodies have limits on the amount of pollution that can be discharged into them. These limits are called Total Maximum Daily Loads (TMDLs), and they are defined as the maximum amount of pollution that a waterbody can handle before people get sick, aquatic life is harmed, or other beneficial uses are impacted. A local government is usually given at least 10 years, though often as much as 20 to 30 years, to achieve compliance with a TMDL. However, some responsible parties have attempted to weaken these limits, or extend the deadlines to meet them, which would make compliance with the Clean Water Act easier. In 2021, the SWRCB approved extensions of up to 6.5 years for nine TMDL deadlines in the Los Angeles Region, including four

related to bacteria pollution, allowing for the continued discharge of pollutants to drain through our communities and out to the Pacific Ocean.[8] Since then, we have seen additional deadline extension requests submitted. In addition, dischargers are increasingly focused on fecal pollution originating solely from humans, which inappropriately disregards fecal pollution from indirect human activities such as pets, livestock, and certain flocks of birds, which contribute fecal contamination to our watersheds as a result of human activity. Human fecal waste does pose the largest health risk to humans, but research has shown that fecal matter from other animals is also hazardous to human health.[9]

Heal the Bay is watching these attempts to alter TMDLs very closely, and advocating that any changes that are made must be based on the best available science, and must still be fully protective of public and environmental health. We urge the SWRCB to firmly reassert that local governments and other pollution dischargers are responsible for keeping all fecal matter originating from human activities out of the ocean and waterways. Some recent efforts to weaken water quality restrictions include:

- In September 2022, The SWRCB hosted the California Bacteria Summit, which was co-hosted by the California Stormwater Quality Association (CASQA).[10] CASQA is effectively a lobbying alliance that represents the interests of the municipalities responsible for keeping pollution out of the water. The event was comprehensive, but a significant amount of time was spent discussing strategies that would allow municipalities and pollution dischargers to get off the hook for fecal pollution. Heal the Bay and other groups boycotted the Bacteria Summit because the organizers failed to include many crucial stakeholders in their discussion such as Indigenous and environmental justice organizations. The SWRCB did acknowledge this shortcoming and began a process of planning a second summit that included Indigenous, environmental justice, and nonprofit organizations. However, the 2024 Bacteria Summit, initially scheduled for August 27–28, has been canceled. The SWRCB and the Planning Committee, appreciating the community's interest and efforts, decided to shift focus from a large-scale summit to smaller, more impactful discussions. The intention is to foster focused dialogues in smaller settings, continuing these critical conversations across various platforms. A new working group, including representatives from California Native American Tribes, non-governmental organizations, the regulated stormwater and wastewater communities, and the SWRCB, will meet quarterly to exchange updates, perspectives, and new information on managing FIB and ensuring safe water contact.
- San Diego County has numerous TMDLs in place for its beaches, and recently requested a number of changes to the requirements including deadline extensions and a focus on human sources. We commend staff at the San Diego Regional Water Quality Control Board for removing the alternative compliance pathway focused on human sources. Unfortunately, in March of 2024, the local government agencies responsible for these TMDLs did receive an extension for the compliance deadline at 20 beaches. San Diego County municipalities have actually made a lot of progress towards reaching the TMDLs set for their beaches so we are disappointed that they took this approach, and that the Regional Water Board is allowing exceedances to occur up to 90% of the time for the next several years.

Incorporating ddPCR Technology in San Diego

Since May 2022, San Diego has implemented ddPCR technology to test bacterial levels in water. Amid efforts to protect public health and the environment from fecal pollution, Heal the Bay supports the integration of innovative technologies like ddPCR. This method enhances the accuracy of detecting bacterial contamination and significantly reduces the time from sample to result, allowing for more timely public notifications.

8 https://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/docs/R21-001_RB_RSL.PDF.pdf

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

10 https://www.waterboards.ca.gov/bacterialobjectives/#bsummit

However, as we work to incorporate ddPCR results into the Beach Report Card grading system, we have observed some inconsistencies compared to traditional culturing methods. Currently, ddPCR in San Diego focuses solely on *Enterococcus*, without testing for total and fecal coliforms, which limits the comprehensiveness of our water quality assessments. Despite these challenges, Heal the Bay is committed to refining these methods to ensure they align with our rigorous standards for accuracy and reliability in water quality testing.

This technological transition is crucial as we continue to address the significant water quality issues faced in the region, especially those stemming from persistent pollution in the Tijuana watershed. The situation underscores the critical need for improved infrastructure and international cooperation to mitigate pollution impacts. By advancing our monitoring techniques, we aim to enhance public health protections and support the restoration of our coastal ecosystems.

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, in addition to sewage infrastructure upgrades, is our best bet for keeping our waters clean and safe. Green infrastructure spaced throughout our communities will provide clean water, green space for communities to enjoy, habitat for wildlife, and so much more. The Los Angeles County Safe, Clean Water Program (SCWP), approved by local voters in 2018, offers a model program for improving coastal and inland water quality using a multi-benefit approach.[11] This funding program aims to increase local water supplies, improve water quality, and protect public health by focusing efforts on multi-benefit projects, particularly in communities that have been identified as disadvantaged and severely disadvantaged with regards to access to green space and other socioeconomic factors. This year, the SCWP underwent its first official assessment through the Biennial Review process, offering an opportunity to assess progress, reflect on the achievement of goals, and make recommendations to improve the Program. Heal the Bay celebrates the successes of the SCWP in its first four years, including the approval of funding for 126 regional infrastructure projects, representing over $1.4 billion in stormwater investments. We also recognize that more must be done through proactive visioning to maximize the potential benefits of the SCWP based on data and community needs assessments. There is also a need to improve access to participation in the program, and to examine ways to accelerate hardscape removal, green schools, and generally increase implementation of vegetated nature-based solutions throughout the Program. This year, as a result of funding constraints, the County is accepting applications, as usual, for Scientific Studies and the Technical Resources Program, but not for the Infrastructure Program. Some upcoming engagement opportunities for Program improvement during this funding pause include watershed planning efforts, and the launch of a new education grants program within the SCWP.

NowCast Update

For the tenth summer, Heal the Bay is providing daily water quality predictions for California beaches at the Beach Report Card with NowCast website and application. NowCast predicts concentrations of bacteria in the water on a daily basis, thus providing additional information to the public and filling in the time gaps of traditional bacteria sampling. To make daily predictions, we use computer models to examine correlations between environmental conditions (such as temperature and tide) and historical bacteria concentrations. Our NowCast models then predict, with a high accuracy, how much bacteria is present in the water given the current local conditions; and predictions are verified with sampling data. This year, we do not have as many beaches in NowCast as we have had in previous years. This is due to the decline in accuracy with our current linear models, which struggle to keep up with the increasing weather anomalies, changing environmental conditions, and unusual bacterial data patterns we've seen in recent years. Consequently, we were not able to

11 https://safecleanwaterla.org/

provide NowCast predictions for this past winter. Heal the Bay is in the process of reconstructing our environmental and bacteria database and we plan to develop new and improved prediction models this year. We hope to secure the necessary funding to enhance our model's accuracy and provide more precise predictions for more beaches in the future. Visit beachreportcard.org[12] to find daily summer predictions for 14 beaches in California.

The Beach Report Card and Access to Recreation

Recreation, whether at a park or a beach, plays a crucial role in enhancing quality of life and public health. While our Beach Report Card and River Report Card programs serve as essential tools to ensure safety for water recreators, we recognize that they have been limited in reach. Initially, our report cards benefitted those who have access to recreational areas and are comfortable engaging in water activities. However, working-class communities, particularly those composed predominantly of Black, Indigenous, Latinx, Asian, and other people of color, face numerous barriers to accessing recreational spaces. These obstacles range from work commitments and geographic constraints to unfamiliarity with various recreational activities. We affirm that access to recreational opportunities is a fundamental right for everyone, irrespective of their identity, and are committed to diminishing these barriers.

Addressing recreation justice has become a pivotal aspect of our mission. Heal the Bay is actively broadening the scope of our Beach and River Report Cards by collaborating with organizations dedicated to dismantling the barriers to water recreation faced by communities of color.

In recent developments, we are excited about the launch of our Marine Debris Summer Youth Internship and Volunteer Program, which is dedicated to expanding access to the Santa Monica Bay through community science initiatives utilizing a National Oceanic and Atmospheric Administration protocol. Club Heal the Bay members from inland schools, such as John Marshall High School in Los Feliz, now frequently participate in environmental DNA (eDNA) sampling events. These events support research into the effectiveness of Marine Protected Areas (MPAs) by comparing marine biodiversity and abundance within and outside of MPAs. Students engage as community scientists, employing eDNA monitoring as a dynamic method to analyze environmental samples and enhance our understanding of local biodiversity.

Moreover, our Speakers Bureau program has made significant strides in educating the community through compelling presentations that leverage the Beach Report Card to advocate for coastal access and address ocean pollution. In 2024 alone, we've conducted 122 presentations at schools and organizations, particularly focusing on inland communities.

For the last decade, Heal the Bay began teaming up with organizations such as The Black Surfers Collective[13] Surf Bus Foundation,[14] Santa Monica Conservancy,[15] and Swim Up Hill[16] to celebrate Nick Gabaldón — a trailblazing surfer of African American and Mexican American descent, and the first documented surfer of color in Santa Monica Bay. Nick Gabaldón Day introduces people young and old from inland communities to the magic of the coast through free surf and ocean safety lessons, beach ecology exploration, and a history lesson about a man who followed his passion, and a community who challenged anti-Black discrimination to enjoy the beach. Heal the Bay will continue to celebrate Nick Gabaldón Day and enhance access to beach recreation, and we remain committed to further expanding these initiatives to foster greater inclusivity and engagement with our natural water environments.

12 https://beachreportcard.org/

13 http://www.blacksurferscollective.org/

14 https://www.surfbusfoundation.org/

15 https://www.smconservancy.org/

16 https://www.swimuphill.org/

APPENDICES 2023-2024

Emerald Bay, Catalina Island / Los Angeles County

Last 10 Years Beach Bummers: 2013–2023

2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Poche Beach, at creek outlet ORANGE COUNTY
Marina Lagoon, Aquatic Park & Lakeshore Park SAN MATEO COUNTY	Marina del Rey, Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	San Clemente Pier ORANGE COUNTY	Lakeshore Park, behind Rec Center SAN MATEO COUNTY
Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	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
Cabrillo Beach Harborside I LOS ANGELES COUNTY	Aquatic Park SAN MATEO COUNTY	Monarch Beach, at Salt Creek ORANGE COUNTY	Newport Bay Abalone Avenue Beach ORANGE COUNTY	Clam Beach, at Strawberry Creek HUMBOLDT COUNTY
Stillwater Cove MONTEREY COUNTY	Mission Bay, Visitor's Center at Clairemont Dr. SAN DIEGO 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
Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	La Jolla Cove SAN DIEGO COUNTY	Luffenholtz Beach, near Luffenholtz Creek HUMBOLDT COUNTY
Santa Monica Pier LOS ANGELES COUNTY	Candlestick Point, Sunnydale Cove SAN FRANCISCO COUNTY	Redondo Municipal Pier, 100 yards south LOS ANGELES COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Santa Monica Pier LOS ANGELES COUNTY
Pillar Point Harbor, at Westpoint Ave. LOS ANGELES COUNTY	Stillwater Cove, at Beach and Tennis Club MONTEREY COUNTY	Candlestick Point Sunnydale Cove SAN FRANCISCO COUNTY	Capitola Beach, west of jetty SANTA CRUZ COUNTY	Cowell Beach, west of the wharf SANTA CRUZ COUNTY
Capitola Beach, west of jetty I SANTA CRUZ COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY	Pillar Point Harbor, end of Westpoint Ave. SAN MATEO COUNTY	Luffenholtz Beach, near Luffenholtz Creek HUMBOLDT COUNTY	Cabrillo Beach Harborside LOS ANGELES COUNTY
Windsurfer Circle SAN FRANCISCO COUNTY	Huntington State Beach, projection of Brookhurst Street ORANGE COUNTY	Pismo Beach Pier, 40 feet south of the pier SAN LUIS OBISPO COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Surfer's Beach, southend of riprap SAN MATEO COUNTY

(CONTINUED)

2018–2019	2019–2020	2020–2021	2021–2022	2022–2023
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	Playa Blanca TIJUANA	Playa Blanca TIJUANA
Clam Beach, at Strawberry Creek HUMBOLDT COUNTY	Poche Beach, at Creek Outlet ORANGE COUNTY	Erckenbrack Park, Foster City SAN MATEO COUNTY	Erckenbrack Park, Foster City SAN MATEO COUNTY	Santa Monica Pier LOS ANGELES 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	Marlin Park, Foster City SAN MATEO COUNTY	Linda Mar Beach, at San Pedro Creek SAN MATEO COUNTY
Long Beach City Beach, projection of Coronado Ave. LOS ANGELESCOUNTY	Erckenbrack Park, Foster City SAN MATEO COUNTY	Gull Park, Foster City SAN MATEO COUNTY	Santa Monica Pier LOS ANGELES COUNTY	Marlin Park, Foster City 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	Marina del Rey Mother's Beach, at Lifeguard Tower LOS ANGELES COUNTY	Erckenbrack Park, Foster City SAN MATEO 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	Moonstone County Park (Little River State Beach) HUMBOLDT COUNTY	Tijuana Slough, Tijuana River mouth 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	Newport Bay, Vaughns Launch ORANGE COUNTY	Pillar Point Harbor, Capistrano Ave Beach SAN MATEO COUNTY
Cabrillo Beach Harborside LOS ANGELES COUNTY	Mission Bay, Vacation Isle North Cove SAN DIEGO COUNTY	Marlin Park, Foster City SAN MATEO COUNTY	Lakeshore Park, behind Rec Center SAN MATEO COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY
Keller Beach South Beach CONTRA COSTA COUNTY	San Clemente Pier ORANGE COUNTY	Candlestick Point, Windsurfer Circle SAN FRANCISCO COUNTY	Marina del Rey Mother's Beach, between Lifeguard Tower and Boat dock LOS ANGELES COUNTY	Poche Creek Outlet ORANGE COUNTY
Aquatic Park SAN MATEO COUNTY	Pillar Point Harbor, at Westpoint Ave. SAN MATEO COUNTY	East Beach, at Mission Creek SANTA BARBARA COUNTY	Tijuana Slough, north of Tijuana River SAN DIEGO COUNTY	Gull Park, Foster City SAN MATEO COUNTY

CALIFORNIA GRADES BY COUNTY

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
ALAMEDA COUNTY				
	Crown Beach, at Bath House	A+		A+
	Crown Beach, at Windsurfer Corner	A		A+
	Crown Beach, at Sunset Rd.	A		A+
	Crown Beach, at 2001 Shoreline Dr.	A		A
	Crown Beach, at Bird Sanctuary	A		B
	Crown Beach, Crab Cove	B		C
CONTRA COSTA COUNTY				
	Keller Beach, North Beach	A		A
	Keller Beach, South Beach	A		A
HUMBOLDT COUNTY				
	Trinidad State Beach, at Mill Creek	C		D
	Luffenholtz Beach, at Luffenholtz Creek	D		B
	Moonstone County Park (Little River State Beach)	C		A
	Clam Beach County Park, at Strawberry Creek	D		B
	Mad River Mouth (north)	A+		A+
LOS ANGELES COUNTY				
	Long Beach City Beach, at 55th Place	B	C	B
	Long Beach City Beach, at 72nd Place	B	C	A
	Alamitos Bay, at shore float	B	F	C
	Long Beach Mothers' Beach, north end	A	F	C
	Colorado Lagoon, south	B	F	C
	Colorado Lagoon, north	C	F	B
	Alamitos Bay, at 56th Place on bayside	A	C	C
	Long Beach City Beach, at 5th Place	B	C	C
	Long Beach City Beach, at 10th Place	B	C	F
	Long Beach City Beach, at Molino Av.	A	C	F
	Long Beach City Beach, at Granada Av.	B	C	C
	Alamitos Bay, at 2nd St. Bridge and Bayshore	A	F	D
	Long Beach City Beach, at Coronado Ave.	B	C	D
	Belmont Pier, west side	B	C	D
	Long Beach City Beach, at Prospect Ave.	C	C	C
	Cabrillo Beach, harborside at boat launch	B	C	D
	Cabrillo Beach, harborside at restrooms	F	F	F
	Big Rock Beach at 19948 PCH stairs			A+
	Malibu Pier, 50 yards east of pier	A		A
	Malibu Point	A		A+
	Santa Monica Beach, at Strand St.	A		A
	Venice City Beach, at Brooks Ave. drain	A+		A
	Venice Beach, 50 yards south of Fishing Pier	A+		B
	Venice Beach, at Topsail St.	A		B
	Marina del Rey Mothers' Beach, at playground	D	F	F
	Marina del Rey Mothers' Beach, between Lifeguard Tower and Boat dock	F	F	F
	Dockweiler State Beach, at World Way	A		A
	Hyperion Treatment Plant, at One Mile Outfall	A+		A
	Dockweiler State Beach, at Grand Ave.	A+		A
	Hermosa City Beach, at 26th Street	A		A+
	Redondo State Beach, at Topaz Street	A+		A+

(CONTINUED)

	Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
Avalon Beach, 100 feet east of the Green Pleasure Pier	A+		A+
Avalon Beach, 50 feet east of the Green Pleasure Pier	A+		A+
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	B	D
Herondo Street (Redondo Breakwater)	A	B	B
Avalon Beach, underneath Pier			A+
Avalon Beach, 50 yards north of Pier			A+
Rancho Palos Verdes, Long Point	A	A	B
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	B	A+
Palos Verdes Estates, at Palos Verdes Cove	B	A	A
Palos Verdes Estates, at Malaga Cove rocks	B	D	A
Surfrider Beach, at lagoon breach	F	F	F
Ballona Creek Entrance			A+
Dockweiler State Beach, at Culver Blvd.	A	C	A+
Imperial Highway Storm Drain, 50 Yards North			A+
Manhattan State Beach, at 40th Street	A	B	A
Hermosa Beach Pier, 50 yards south of pier	A	B	B
Palos Verdes Estates, at Malaga Cove trail outlet	A+	B	A
Topanga Beach, at creek mouth	F	D	F
Marina del Rey Mothers' Beach, at lifeguard tower	D	F	F
Leo Carrillo Beach, at Arroyo Sequit Creek	A		A
Dan Blocker County Beach, at Solstice Canyon	C	B	B
Puerco State Beach, at creek mouth	A		A+
Marie Canyon storm drain, at Puerco Beach	F	F	F
Carbon Beach, at Sweetwater Canyon	D	C	D
Las Flores State Beach, at Las Flores Creek	B	C	C
Las Tunas County Beach, at Pena Creek	A	A	C
Tuna Canyon			A+
Encinal Canyon at El Matador State Beach			A+
Broad Beach, at Trancas Creek	A+		A+
Zuma Beach, at Zuma Creek	B		A+
Walnut Creek Outlet, at Wildlife Road	A	C	B
Paradise Cove Pier, at Ramirez Canyon Creek	D		A
Escondido State Beach, at Escondido Creek	C	F	D
Latigo Canyon Creek mouth	A		B
Castle Rock Beach, at storm drain	A	C	A
Dockweiler State Beach, at North Weschester storm drain	B	A	A
Dockweiler State Beach, at Imperial Highway storm drain	A	A	A
Will Rogers State Beach, at Pulga Canyon storm drain	A	B	B
Will Rogers State Beach, Bel Air Bay Club	A	A	A+
Will Rogers State Beach, at Temescal Canyon	A		A+
Will Rogers State Beach, at Santa Monica Canyon	D	F	F
Santa Monica Beach, at Montana Ave.	A+		A+

(CONTINUED)

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
	Santa Monica Beach, at Wilshire Blvd.	A+		A
	Santa Monica Pier	F	F	F
	Santa Monica Beach, at Pico-Kenter storm drain	C	F	F
	Ocean Park Beach, at Ashland Ave. storm drain	A	B	C
	Venice Beach, at Rose Ave.	A	C	B
	Venice Beach, at Windward Ave.	B	B	D
	Nicholas Beach, at San Nicholas Canyon Creek	A+		A+
	Manhattan Beach Pier	A	C	D
	Redondo Beach Pier, 100 yards south of pier	A	F	B
	Redondo State Beach, at Sapphire Street	A	A	B
	Torrance Beach, at Avenue I storm drain	A	B	B
	Dockweiler State Beach, at Ballona Creek mouth	A+		A
MARIN COUNTY				
	Dillon Beach	A		A
	Millerton Point	A		A
	Drakes Beach			A+
	Drakes Estero			A+
	Bolinas Beach, at Wharf Rd.	A		A+
	Stinson Beach, North	A+		A
	Stinson Beach, Central	A+		A+
	Stinson Beach, South	A+		A+
	Lawson's Landing	A		A+
	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+		A+
	Baker Beach, Horseshoe Cove NW	A		A+
	Baker Beach, Horseshoe Cove NE	A		A+
	Schoonmaker Beach	A		A+
	Miller Park	A		A
	Paradise Cove	A+		A+
	China Camp	A		A+
	McNears Beach	B		B
	Heart's Desire	A+		A+
	Shell Beach	A+		A+
	Chicken Ranch Beach at Channel.			F
	Chicken Ranch Beach, at Creek mouth	A		A
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+

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
MONTEREY COUNTY				
	Monterey State Beach			A+
	Monterey Municipal Beach at the Commercial Wharf			A
	San Carlos Beach, at San Carlos Beach Park	A		A+
	Lover's Point Park, at 16th Street	A		A+
	Asilomar State Beach, at Arena Av.	A+		B
	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
	Dana Point Harbor Baby Beach, West End	B	C	C
	Dana Point Harbor Baby Beach, Buoy Line	B	C	B
	Dana Point Harbor Baby Beach, Swim Area	B	B	C
	Dana Point Harbor Baby Beach, East End	B		B
	Dana Point Harbor, Pilgrim Dock	A	A	C
	Dana Point Harbor Youth Dock	A	A+	A
	Huntington Harbor, 11th Street Beach	B	A	B
	Huntington Harbour, Anaheim Bay-Gas Dock	A	A+	A+
	Huntington Harbor, Humboldt Beach	A	A+	A+
	Huntington Harbor, Seagate Lagoon	A+	A+	A+
	Huntington Harbour, Admiralty Drive Beach	A	A+	A
	Huntington Harbor, Trinidad Lane Beach	A+	A+	A+
	Huntington Harbour, Channel Beach	C		A+
	Huntington Harbor, Mothers Beach-Orange County	A	B	A
	Huntington Harbor, Coral Cay Beach	A	A+	A+
	Newport Bay, Park Avenue Beach	B	A+	A
	Newport Bay, Onyx Avenue Beach	A		A
	Newport Bay, Ruby Avenue Beach	A	A+	A+
	Newport Bay, Bayshore Beach	A	A+	B
	Newport Bay, Via Genoa Beach	A	A	A
	Newport Bay, 43rd Street Beach	A	A	B
	Newport Bay, 38th Street Beach	A	A+	A
	Newport Bay, 33rd Street Beach	A	A+	B
	Newport Bay, Rhine Channel Beach	B	A	B
	Newport Bay, 19th Street Beach	A	A	A+
	Newport Bay, 15th Street Beach	A	A	A+
	Newport Bay, 10th Street Beach	A	A	A+
	Newport Bay, Alvarado/ Bay Isle Beach	A	A+	A+
	Newport Bay, Sapphire Avenue Beach	A	A	A+
	Newport Bay, Abalone Avenue Beach	B	C	B
	Newport Bay, N Street Beach	A	A+	A
	Newport Bay, Newport Dunes-East	A	A	A+
	Newport Bay, Newport Dunes-Middle	A	A	A+
	Newport Bay, Newport Dunes-North	B	C	C
	Newport Bay, Newport Dunes-West	A+	A	A+
	Newport Bay, North Star Beach	A	A+	A+

(CONTINUED)

	Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
Newport Bay, Promontory Point	A+	A+	A+
Newport Bay, De Anza Beach	A	A+	A+
Newport Bay, Garnet Avenue Beach	A	A	A+
Newport Bay, Lido Yacht Club Beach	A+	A+	A
Newport Bay, Harbor Patrol Beach at Bayside Drive	B		B
Newport Bay, Grand Canal	A	A	A+
Newport Bay, Newport Blvd Bridge	A	A	A
Newport Slough at Lancaster/62nd Street Beach	C	B	C
Newport Slough, Grand Street Beach	A	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)	B		A+
Huntington Harbour, Clubhouse Marina	A	A+	B
Huntington Harbour, Sunset Aquatic Park Beach	A		A
Huntington Harbor, Davenport Beach	A		A+
Huntington Harbour, Anderson Street Marina	A		C
Dana Point, at Camino Estrella	A+		A+
Dana Point, South Capistrano Bay Community Beach	A+	A+	A+
Poche Beach	A		A
Diver's Cove	A	A	A+
Pico drain at North Beach	A		A+
Mariposa Beach	A+		A+
Linda Lane Beach	A	A+	A
San Clemente Pier	A+		A+
Riviera Beach	A+	A+	A+
Between Pearl & Agate Street			A+
Cleo Street	A+	B	A+
Aliso Creek Ocean Interface	A	B	D
West Street	A+	A	A
San Juan Creek	D	F	F
Doheny Beach	A	B	A+
Capistano Bay Community Beach			A+
Poche Creek Outlet	F	B	D
Little Corona Beach	C	B	B
Monarch Beach at north	C	C	B
Doheny State Beach, North Beach	B	D	B
Doheny State Beach, End of the Park	A	B	A+
San Clemente Trafalgar Canyon	A+		A+
Pelican Point Beach	A+	A	C
Muddy Creek Beach	A	A	C
El Moro Beach	A	A	A+
Emerald Bay Beach	A+	A+	A+
Laguna Main Beach	A		B
Laguna Hotel	A+	A	A
Projection of Bluebird Canyon	B		A
Victoria Beach	A+	A	A+
Doheny State Beach, at San Juan Creek	B	D	C
Doheny State Beach, at Last Campground	A	C	A

(CONTINUED)

CALIFORNIA GRADES BY COUNTY

	Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
Laguna Beach, at Goff Island Beach	A+	A	A+
Corona Del Mar (CSDOC)	A+	A	B
2000 feet south of SERRA Outfall	A	B	A+
Crystal Cove (CSDOC)	A+	A	A
Marine Science Institute Beach (SERRA)	A+	A+	A+
Dana Point, Capistrano County Beach	A+		A+
Doheny State Beach, Pedestrian Bridge	A		A+
Doheny State Beach, Mid Beach north of San Juan Creek	B	C	D
Dana Strands Beach (AWMA)	A		A+
Huntington State Beach, at Brookhurst Street	A	A	A
Huntington State Beach, at Magnolia Street	A	A	A
Huntington State Beach, at Newland St. (SCE Plant)	A	A	A
Huntington City Beach, at Beach Blvd.	A	B	A+
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	B
Newport Beach, at Orange Street	A+	A	C
Newport Beach, at 52nd/53rd Street	A+	A	B
Newport Beach, at 38th Street	A+	A	B
Balboa Beach, at 15th/16th Street	A	A	A
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	B		A+
Seal Beach, at 8th Street	A	B	A
Seal Beach, at 14th Street	A+	A	A
Seal Beach Pier, 100 yards south of pier	A	A	A
San Clemente, North beach at Avenida Pico	A+		A+
San Clemente at El Portal drain	A+		A+
San Clemente, South Linda Lane storm drain	A+		A+
San Clemente Pier, Lifeguard Building north	A		A+
San Clemente, at Avenida Calafia	A+		A+
San Clemente at Avenida Las Palmeras			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+	B	A
Aliso Creek, 1000 south of creek mouth	A	B	C
Aliso Creek, at mouth	A	B	A+
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+

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
SAN DIEGO COUNTY				
	Coronado, at North Beach near Ocean Blvd.			A+
	San Diego Bay, Tidelands Park at Mullinix Dr.		C	F
	San Diego Bay, Glorietta Bay Park at boat launch		F	
	San Diego Bay, Silver Strand		A+	
	San Diego Bay, Bayside Park at projection of J Street		F	
	San Diego Bay, Spanish Landing Park beach		F	
	San Diego Bay, Shelter Island (Shoreline Beach Park)	A+		A
	Pacific Beach, at Grand Ave.	A+		A+
	Pacific Beach at Missouri St.			A+
	La Jolla, at Palomar Av.	A+		A+
	Windansea Beach, at Playa Del Norte	A+		A+
	La Jolla, at Vista De La Playa	A		A+
	La Jolla Ravina, south of Nicholson Pt.	A+		A+
	La Jolla, South Casa Beach	A+		A+
	La Jolla, Children's Pool			A+
	La Jolla, projection of Vallecitos	A+		A
	La Jolla Shores Beach, Del Oro	A		A+
	La Jolla Shores, El Paseo Grande (near Scripps)	A+		A+
	Del Mar, San Dieguito River Beach	A+		A+
	Encinitas, San Elijo State Park, Pipes surf break	A	A	A+
	Encinitas, Swami's Beach (Seacliff Park)			A+
	Encinitas, Moonlight Beach, Cottonwood Creek	A+	A+	A+
	Cesar Chavez Park		F	F
	Harbor Island South		F	
	Seaport Village		F	F
	Ruocco Park		F	F
	San Diego Bay, Outfall at B St Pier, Upstream		F	
	San Diego Bay, Outfall at B St Pier, Downstream		A+	F
	Highland Ave Bridge		F	
	Living Coast Discovery Center		F	
	Sweetwater Channel Mouth		F	
	Pacific Beach at Diamond		A+	
	Pacific Beach at Law Street		A+	
	Pacific Beach at Hornblend		A+	
	Pacific Beach at Loring		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, San Diego River outlet (Dog Beach)	A		C
	Pacific Beach, Crystal Pier at Garnet		A+	
	Pacific Beach, Tourmaline Surf Park at Tourmaline St.	A		A+
	La Jolla, Windansea Beach at Bonair St.	A+		A+
	La Jolla Shores, at Ave De La Playa	A		A+
	Torrey Pines, Los Penasquitos Lagoon outlet	A+		A+
	Border Field State Park, north side of Border Fence	F	F	F

(CONTINUED)

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
	Border Field State Park, at Monument Rd.	F	F	F
	Tijuana Slough NWRS, Tijuana River mouth	F	F	F
	Tijuana Slough NWRS, 3/4 miles north of Tijuana River	F	F	F
	Imperial Beach, at Seacoast Dr.	F	F	F
	Imperial Beach, at Carnation Ave.	F	D	F
	Coronado, Silver Strand	A	C	A
	Coronado, at Ave del Sol	A	A	A+
	Oceanside, St. Malo Beach downcoast from St. Malo Road	A	A	A+
	Oceanside, at Cassidy Street	A	A	D
	Oceanside, Buccaneer Beach (at Loma Alta Crk.)			F
	Oceanside, 500 feet North of Loma Alta Creek	A	A	F
	Oceanside, at Forster Street	A	A	A
	Oceanside, at Tyson Street	A	A	A+
	Oceanside, San Luis Rey River outlet	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+	B	B
	Ocean Beach, Stub Jetty	A	B	C
	Mission Beach, Belmont Park	A+	A	A+
	Solana Beach, Fletcher Cove (proj. Lomas Santa Fe Dr.)	A		A+
	Solana Beach, Tide Beach Park (proj. Solana Vista Dr.)	A	A+	A+
	Cardiff State Beach, Seaside State Park	A	A	A+
	Cardiff State Beach, Las Olas (100 yds. south of Charthouse)	A	A	A+
	Cardiff State Beach Charthouse parking (slight S. of Kilkeny)	A	A	A+
	Encinitas, San Elijo State Park (proj. Liverpool Dr.)	B	A+	A+
SAN MATEO COUNTY				
	Pillar Point #9 Harbor Beach	F	F	C
	Surfer's Beach, south end of riprap	A+	B	B
	Gull Park Foster City	D	F	D
	Roosevelt Beach, south end of parking lot	A	B	C
	Dunes Beach	A	B	B
	Venice Beach at Frenchman's Creek		B	A+
	Francis Beach at the foot of the steps	A+	A	A+
	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+	A	A+
	Gazos Beach at Gazos Creek	A	A	A
	Oyster Point		D	B
	Coyote Point	A+	A	B
	Aquatic Park	F	F	D
	Lakeshore Park, behind Rec Center	F	F	F
	Kiteboard Beach		C	A
	Foster City, Erckenbrack Park	D	F	F
	Foster City, Marlin Park	F	F	D

(CONTINUED)

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
	Rockaway Beach, at Calera Creek	A+	A	A+
	Linda Mar Beach, at Crespi Dr.		D	D
	Linda Mar Beach, at San Pedro Creek	F	F	F
	Fitzgerald Marine Reserve, at San Vicente Creek	C		F
	Pillar Point #8 Mavericks Beach Westpoint Ave.	A	C	A+
	Pillar Point Harbor, end of Westpoint Ave.	B	F	D
	Pillar Point Harbor, Capistrano Ave Beach	D	F	D
SANTA BARBARA COUNTY				
	Guadalupe Dunes			A+
	Hope Ranch Beach	A	B	B
	Arroyo Burro Beach	B	C	C
	Leadbetter Beach	A		A
	East Beach, at Mission Creek	B	C	F
	East Beach, at Sycamore Creek	A	A	A
	Butterfly Beach	A		A+
	Hammond's Beach	A	B	B
	Summerland Beach	A	B	A
	Carpinteria State Beach	B	A	B
	Jalama Beach	A		A
	Gaviota State Beach	B		B
	Refugio State Beach	B		C
	El Capitan State Beach	A+		A+
	Sands, at Coal Oil Point	A+		B
	Goleta Beach	A+	D	C
SANTA CRUZ COUNTY				
	Cowell Beach, west of the wharf	A	C	D
	Santa Cruz Main Beach, at the Boardwalk	B		B
	Santa Cruz Main Beach, at the San Lorenzo River	D		B
	Seabright Beach	A	C	B
	Twin Lakes Beach	A		A+
	Capitola Beach, west of jetty	B		B
	Capitola Beach, east of jetty	A		A
	New Brighton Beach	A		A+
	Seacliff State Beach	A		A+
	Rio Del Mar Beach	A		A
	Hidden Beach			A+
	Natural Bridges State Beach	A	C	B
	Mitchell's Cove Beach	A	C	D
	Lighthouse Beach (Steamer Lane)			A+
	Cowell Beach, at the Stairs	A		B
	Cowell Beach Lifeguard Tower 1	A		C

CALIFORNIA GRADES BY COUNTY

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
SAN FRANCISCO COUNTY				
	Ocean Beach, at Pacheco St.		F	A+
	Ocean Beach at Vicente St.		F	A
	Hyde Street Pier	A	A	A+
	Aquatic Park Beach, 211 Station	A+	A	A+
	China Beach, at Sea Cliff Ave.	A+	A	A+
	Ocean Beach, at Balboa Ave.	A+	B	B
	Ocean Beach, at Lincoln Way	A+	B	A
	Ocean Beach, at Sloat Blvd.	A	A	A+
	Fort Funston, opposite Lake Merced overflow structure		D	
	Candlestick Point, Jackrabbit Beach	A	C	A
	Candlestick Point, Windsurfer Circle	A	C	A
	Candlestick Point, Sunnydale Cove	A	F	B
	Islais Landing at Islais Creek	B	F	F
	Mission Creek Park, at Mission Creek	A	F	F
	Crissy Field Beach East, 202.4 Station	A	C	A
	Crissy Field Beach West, 202.5 station	A+	B	A
	Baker Beach East, Ocean #15 East	A	A	A+
	Baker Beach, Lobos Creek	C	D	C
	Baker Beach West, Ocean #16	A+	A	A
SAN LUIS OBISPO COUNTY				
	Avila Beach 350 yards west of pier, at Creek			A
	Avila Beach, at San Luis Street			A
	Studio Drive parking lot near Old Creek			A+
	Cayucos State Beach, downcoast of the pier			A+
	Cayucos Beach, North of pier at storm drain			A+
	Hearst Memorial State Beach, 100 yards west of the pier at creek outfall			A
	Olde Port Beach (Harford Beach), North			A+
	Pismo Beach, at Ocean View			B
	Pismo Beach, 40 feet south of the pier			A+
	Pismo Beach, at Wadsworth Street			A+
	San Simeon State Beach, at Pico Ave.			A+
	Sewers at Silver Shoals Dr.			A
	Morro Bay City Beach, 75 feet north of main parking lot			A
	Morro Bay City Beach, at Morro Creek			A+
	Morro Bay City Beach, at Atascadero			A+
	Morro Strand State Beach, at Beachcomber Drive			B
	Pismo State Beach, 571 yards south of Pier Ave.			C
	Pismo State Beach, at Pier Ave.			A
	Pismo State Beach, 330 yards north of Pier Ave.			A+
SONOMA COUNTY				
	Gualala Regional Park Beach	A+		A+
	Black Point Beach	A+		A+
	Stillwater Cove Regional Park Beach	A+		A+
	Goat Rock State Park Beach	A+		A+
	Salmon Creek State Park Beach	A+		A+
	Campbell Cove State Park Beach	A		F
	Doran Regional Park Beach	A		A+

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

OREGON GRADES BY COUNTY

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
CLATSOP COUNTY				
	Cannon Beach at Ecola Creek mouth	A		A+
	Cannon Beach near Ecola Court storm outfall	A		A+
	Ecola Court pipe at Gower Street discharge to Cannon Beach	A		A+
	Ecola Creek at the mouth of Logan Creek	A		A+
	Seaside Beach at 12th Avenue	A+		A+
	Seaside Beach at Broadway turn around	A+		A+
	Seaside Beach at U Avenue	A+		A+
	Tolavana State Park Beach at mouth of Chisana Creek	B		C
	Tolovana SP Beach 50m south of Chisana Creek	B		C
	Tolovana SP Beach in Chisana Creek at the pipe outflow	B		C
	Tolovana State Park beach 50m north of Chisana Creek	B		C
COOS COUNTY				
	Bastendorff Beach 250m S of Minor Cr	A		A
	Bastendorff Beach 400m south of jetty	A		A
	Bastendorff Beach at Miner Creek	A		A
	Bastendorff Beach north cove at the jetty	A		A
	Big Creek at Sunset Bay SP footbridge	A		A
	Miner Creek 200m upstream from Bastendorff Beach	A		A
	Sunset Bay State Park Beach at north beach access	A		A
	Sunset Bay State Park Beach at restroom	A		A
	Sunset Bay State Park Beach at the mouth of Big Creek	A		A
CURRY COUNTY				
	Harris Beach State Park at mouth of Eiler Creek	A		A
	Harris Beach State Park south cove southwest of parking area	A		A
	Harris Beach State Park west of access ramp and restrooms	A		A
	Harris Creek 100 m upstream from the mouth	A		A
	Harris Creek north cove at mouth of Harris Creek	A		A
	Hubbard Beach 50m N of Hubbard Cr	A		A
	Hubbard Cr Beach 50m S of Hubbard Cr	A		A
	Hubbard Cr between Hwy 101 and Beach	A		A
	Hubbard Creek Beach at mouth of Hubbard Creek	A		A
	Macklyn Creek 50m upstream from mouth	A		A+
	Mill Beach at Macklyn Cr	A		A+
	Mill Beach Macklyn Cove south side of Table Rock	A		A+
	Mill Beach north Macklyn Cove at Zwagg Island	A		A+
LANE COUNTY				
	Heceta Beach at the mouth of the north runoff at Driftwood Shores Resort	A		
	Heceta Beach at the mouth of the south runoff at Driftwood Shores Resort	A		
	Heceta Beach at the south end pipe runoff	A		
	Heceta Beach middle site at Driftwood Resort	A		

OREGON GRADES BY COUNTY

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
LINCOLN COUNTY				
	Agate Beach at mouth of Big Creek	B		A+
	Beverly Beach 100 m north of ramp at beach access	B		B
	Beverly Beach 100 m south of ramp at Beach Access	B		B
	Beverly Beach at the mouth of Spencer Creek	B		B
	Big Creek at Agate Beach Wayside at footbridge	B		A+
	D River at Hwy. 101 Bridge	A		A+
	D River Beach 200 meters south of restroom	A		A+
	D River Beach at mouth of D River at north corner of parking area	A		A+
	D River Beach west of public restroom	A		A+
	Hill Creek at Seal Rock Beach at outflow W of HWY 101	A		A
	Little Creek at Seal Rock Beach at outflow W of HWY 101	A		A
	Nye Beach 100m north Nye Cr. Outflow W of NW 6th street	B		A
	Nye Beach at rocky outcrop west of Olive Street	B		A
	Nye Beach turnaround at discharge pipe (fresh water)	B		A
	Nye Beach turnaround at mouth of Nye Creek	B		A
	Seal Rock Beach at the mouth of Hill Creek	A		A
	Seal Rock Beach at the mouth of Little Creek	A		A
	Seal Rock Beach at the north access State Wayside trail	A		A
	Spencer Creek at Beverly Beach at Hwy 101 bridge	B		B
TILLAMOOK COUNTY				
	Hawk Creek at the Salem Avenue bridge	A		A
	Kiwanda Beach at Dory Launch	A+		A+
	Kiwanda Beach at mid mound	A+		A+
	Kiwanda Beach at S site	A+		A+
	Manzanita Beach at Neahkahnie-Manzanita State Recreation Site (marine)	B		F
	Manzanita Beach west of Treasure Cove Lane (marine)	B		F
	Neskowin Beach at Neskowin Creek north side of Proposal Rock	A		A
	Neskowin Beach at Neskowin Creek south side of Proposal Rock	A		A
	Neskowin Creek 50 m upstream of the confluence with Hawk Creek	A		A
	Oceanside Beach State Wayside at headland	A		A+
	Oceanside Beach State Wayside at parking access	A		A+
	Oceanside Beach State Wayside at seep (250 meters south)	A		A+
	Rock Creek at Rockaway Beach at South 1st Avenue parking area	B		F
	Rockaway Beach at mouth of Rock Creek at South 1st Avenue	B		F
	Rockaway Beach at the mouth of Saltair Creek	B		F
	Saltair Creek at Rockaway Beach at south 6th Avenue	B		F
	Short Sand Beach Oswald State Park 1st creek north of Short Sand Creek	A		A
	Short Sand Beach Oswald State Park at 2nd creek north of Short Sand Creek	A		A
	Short Sand Beach Oswald State Park at mouth of Short Sand Creek	A		A
	Short Sand Creek Oswald State Park at dowstream footbridge	A		A
	Stormwater Runoff at Neahkahnie-Manzanita State Recreation Site (freshwater)	B		F
	Stormwater Runoff at Treasure Cove Lane at Manzanita (freshwater)	B		F
	Twin Rocks Beach at the mouth of Watseco Creek	B		F
	Twin Rocks Beach at the mouth of Watseco Creek	A		C
	Watseco Creek 100 m upstream from the mouth	B		F
	Watseco Creek 100 m upstream from the mouth	A		C

WASHINGTON GRADES BY COUNTY

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
CLALLAM COUNTY				
	Cline Spit County Park	A		A
	Dakwas Park Beach, Neah Bay	A	B	A
	Front Street Beach, East	A+	A	A
	Hobuck Beach	A+	A+	A+
	Hollywood Beach	A		A+
	Salt Creek Recreation Area	A		A+
	Sooes Beach	A	A+	A+
	Third Beach, Neah Bay	A+	A+	A+
GRAYS HARBOR COUNTY				
	Westhaven State Park, Half Moon Bay	A+		A+
	Westhaven State Park, South Jetty	A+		A+
	Westport - The Groynes	A+		A+
ISLAND COUNTY				
	Dave Mackie Memorial County Park	A+		A+
	Freeland County Park/ Holmes Harbor	A		B
	Libbey Beach County Park	A+		A+
	Windjammer Lagoon	A+		A+
JEFFERSON COUNTY				
	Chetzemoka Park	A+		A+
	Fort Worden State Park	A		A+
	Mystery Bay State Park	A		A+
	Point Whitney Tidelands	A		A+
KING COUNTY				
	Alki Beach Park	A		A+
	Carkeek Park	A		A+
	Dash Point State Park	A		A+
	Golden Gardens	A		A
	Lincoln Park	A		A+
	Redondo County Park	A		A+
	Richey Viewpoint	A		A
	Richmond Beach Saltwater Park	A+		
	Saltwater State Park	A		A+
	Seahurst Park	A		B
KITSAP COUNTY				
	Arness County Park	A+		A+
	Fay Bainbridge Park	B		C
	Illahee State Park	A		A+
	Indianola Dock	B		A
	Joel Pritchard Park	A		A
	Lions Field	A		B
	Point No Point Lighthouse Park			
	Pomeroy Park - Manchester Beach	C		A+
	Scenic Beach State Park	A+		A+
	Silverdale Waterfront Park	A		A+

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
MASON COUNTY				
	Belfair State Park	A		A
	Potlatch State Park	A+		A+
	Twanoh State Park	A+		
PIERCE COUNTY				
	Browns Point Lighthouse Park			
	Dash Point County Park	A		A+
	Jack Hyde Park	A		C
	Owen Beach/Point Defiance Park	A		A+
	Purdy Sandspit County Park	A		A+
	Saltars Point Beach			
	Sunnyside Beach Park	A		A
	Titlow Park	B		D
	Waterfront Dock / Ruston Way	A		A+
SKAGIT COUNTY				
	Bayview State Park	A		A+
SNOHOMISH COUNTY				
	Brackett's Landing & Edmonds Underwater Park	A+		A+
	Edmonds Marina Beach Park	A		A+
	Howarth Park	A+		
	Jetty Island			A+
	Kayak Point County Park	A+		
	Mukilteo Lighthouse Park	A		A+
	Picnic Point County Park	A		A+
THURSTON COUNTY				
	Burfoot County Park	A+		A+
	Squaxin Park	A		A+
WHATCOM COUNTY				
	Birch Bay Beach & Tidelands Access	A		A+
	Larrabee State Park, Wildcat Cove	A		A
	Little Squalicum Park	D		C
	Port of Bellingham Marine Park	A+		A+

		Summer Dry Grade	Winter Dry Grade	Wet Weather Grade
TIJUANA				
	Playas Blanca	F	F	F
	El Vigia	F	F	D
	El Faro	F	F	F

About Heal the Bay's Annual Beach Report Card

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

What is the Beach Report Card?

The Beach Report Card (BRC) 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.

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 rain storm 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 the complete methodology, see Appendix D.

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

How current are the weekly grades?

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

What type of pollution is measured?

Pollution is measured by sampling types of fecal indicator bacteria (FIB) including total coliform, fecal coliform, and *Enterococcus* species. 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 FIB 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. Indicator bacteria are tested for because they are easier and less expensive to test for than specific pathogenic microorganisms. 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, trash, and more. 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; never swim in any coastal waters during a rainstorm; and 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 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. For more on storm drain impacted beaches, see “Analysis of Beach Types”.

Are beaches monitored year-round?

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

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

Why not test for viruses?

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

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

Beach Report Card Grading and Methodology

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

METHODOLOGY: CALIFORNIA

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

Past amendments to the grading methodology have included:

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

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

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

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

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

Total Points Available

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

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

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

Total Points Lost

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

Geometric Mean

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

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

Single Sample Standard

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

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

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

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

Determining a Grade

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

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

METHODOLOGY: OREGON AND WASHINGTON

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

Total Points Available

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

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

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

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

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

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

Total Points Lost

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

Geometric Mean

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

Single Sample Standard

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

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

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

Determining a Grade

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

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

TABLE 5-1: GRADING SYSTEM

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

TABLE 5-2: TOTAL POINTS AVAILABLE BY COMPONENT

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

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

Indicator Exceeded	Calif. Beach Bathing Water Standard	% of Total Available Points Lost** Due to Exceedance	Total Avail. Points
Enterococcus	35	80%	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	**10,000**–14,900	> 14,900	N/A
Fecal Coliform	268–399	**400**–596	> 596	N/A
Enterococcus	70–103	**104**–155	> 155	N/A
Total: Fecal Ratio (when total ≥ 1,000)	10.1–13	7.1–**10**	2.1–7	< 2.1

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

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

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

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

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

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

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

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

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San Luis Obispo County Environmental Health Services
Santa Barbara County Environmental Health Services
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County of Orange Environmental Health
Orange County Sanitation District
San Diego County Department of Environmental Health
San Elijo Joint Powers Authority
City of San Diego
City of Oceanside
Encina Wastewater Authority
Port of San Diego
State Water Resources Control Board

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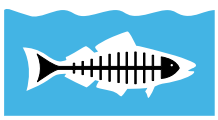

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