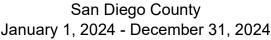
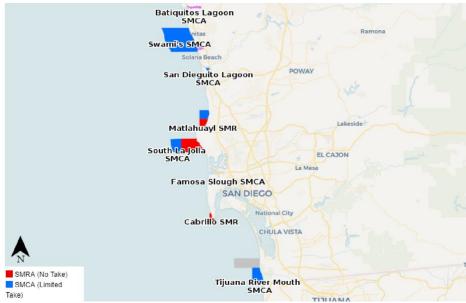


Marine Protected Area (MPA) Watch Regional Report







MPA Watch is a statewide collaborative effort to collect critical human use data to enhance the management and conservation of marine protected areas (MPAs). MPA Watch data informs the management, enforcement, and science of California's MPAs and allows us insight on how human uses are changing as a result of MPA implementation. By involving local communities in this important work, MPA Watch programs inspire and empower stewardship, and educate California communities about ocean ecosystems. MPA Watch trains volunteers to observe and collect unbiased data on coastal and marine resource use. The San Diego Marine Protected Area Watch Program, organized by WILDCOAST, engages community scientists and CA State Parks in five MPAs in San Diego County, including Swami's SMCA, San Diego- Scripps Coastal SMCA, Matlahuayl SMR, South La Jolla SMR, and the Tijuana River Mouth SMCA.

Executive Summary

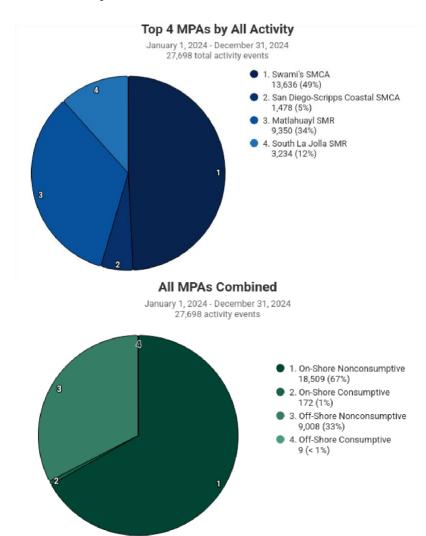
- From January to December of 2024 in San Diego County, 196 land-based surveys were conducted by 18 volunteers with 27,740 activities observed, 61 of which were potential violations. Surveys were conducted in the Swami's SMCA, San Diego Scripps-Coastal SMCA, Matlahuayl SMR, and South La Jolla SMR.
- Non-consumptive activities (onshore and offshore) account for 99.3% (27,557 / 27,740) of observations in the 4 MPAs listed above.
- All 61 potential violations recorded were the hand collection of biota.

mpawatch.org | wildcoast.org | lillie@wildcoast.org



HUMAN USE OF MPAS

January 1, 2024 - December 31, 2024



ACTIVITY CLASSIFICATIONS

On-Shore - Activities that take place on a sandy or rocky beach. Excludes bluffs, trails, sea walls, parking lots, or other man-made structures. Includes recreation, tidepooling, shore-based fishing, etc.

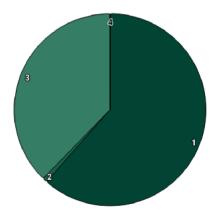
Off-Shore - Activities that take place offshore, typically in knee-deep water or deeper. Includes surfing, SCUBA diving, kayaking, boat fishing, etc.

Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected. **Non-Consumptive** - An activity in which a natural resource is not collected.

MARINE PROTECTED AREA (MPA) WATCH REGIONAL REPORT **ACTIVITY BY MPA**

Swami's SMCA

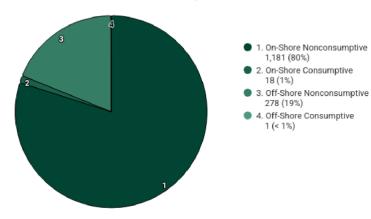
January 1, 2024 - December 31, 2024 13,636 activity events



- 1. On-Shore Nonconsumptive 8,391 (62%)
- 2. On-Shore Consumptive 102 (1%)
- 3. Off-Shore Nonconsumptive 5,140 (38%)
- 4. Off-Shore Consumptive 3 (< 1%)

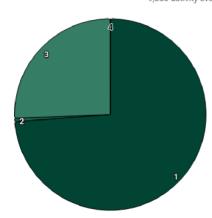
San Diego-Scripps Coastal SMCA

January 1, 2024 - December 31, 2024 1,478 activity events



Matlahuayl SMR

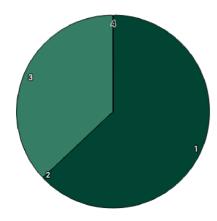
January 1, 2024 - December 31, 2024 9,350 activity events



- 1. On-Shore Nonconsumptive 6,901 (74%)
- 2. On-Shore Consumptive 52 (1%)
- 3. Off-Shore Nonconsumptive 2,394 (26%)
- 4. Off-Shore Consumptive 3 (< 1%)

South La Jolla SMR

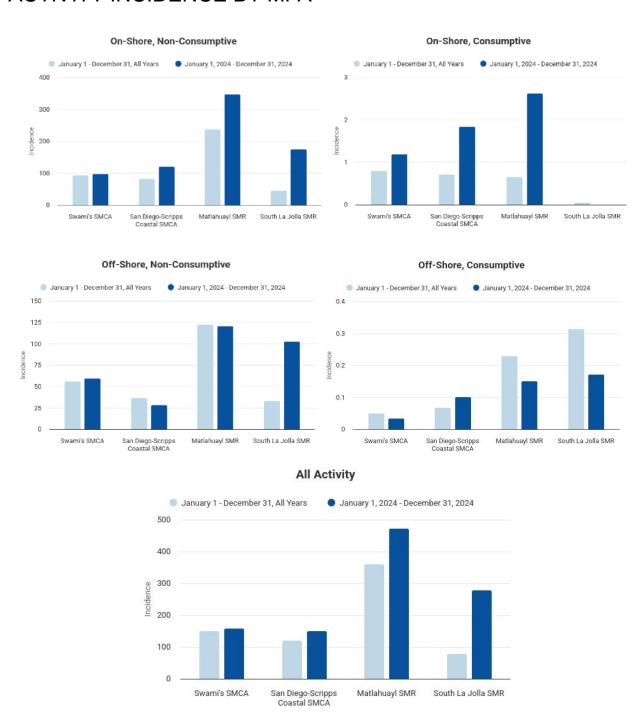
January 1, 2024 - December 31, 2024 3,234 activity events



- 1. On-Shore Nonconsumptive 2,036 (63%)
- 2. On-Shore Consumptive 0 (< 1%)
- 3. Off-Shore Nonconsumptive 1,196 (37%)
- 4. Off-Shore Consumptive 2 (< 1%)



ACTIVITY INCIDENCE BY MPA



The above charts show incidence values for each MPA monitored by MPA Watch in San Diego County.

Incidence is calculated as number of activities recorded divided by total survey-miles.





MARINE PROTECTED AREA (MPA) WATCH REGIONAL REPORT ACTIVITY INCIDENCE BY MPA

	On-Shore				
	Non-Consumptive		Consumptive		
MPA	January 1 December 31 All Years	January 1, 2024 through December 31, 2024	January 1 December 31 All Years	January 1, 2024 through December 31, 2024	
Swami's SMCA	93.0	97.9	0.8	1.2	
San Diego-Scripps Coastal SMCA	83.1	120.5	0.7	1.8	
Matlahuayl SMR	238.1	348.5	0.7	2.6	
South La Jolla SMR	45.5	175.5	0.1	0.0	
All MPAs Combined	81.9	145.9	0.8	1.4	

	Off-Shore				
	Non-Consumptive		Consumptive		
MPA	January 1 December 31 All Years	January 1, 2024 through December 31, 2024	December	January 1, 2024 through December 31, 2024	
Swami's SMCA	56.3	60.0	0.1	0.0	
San Diego-Scripps Coastal SMCA	37.2	28.4	0.1	0.1	
Matlahuayl SMR	122.9	120.9	0.2	0.2	
South La Jolla SMR	33.3	103.1	0.3	0.2	
All MPAs Combined	45.4	71.0	0.2	0.1	



		Total			
	Combined				
MPA	January 1 December 31 All Years	January 1, 2024 through December 31, 2024			
Swami's SMCA	150.2	159.1			
San Diego-Scripps Coastal SMCA	121.1	150.8			
Matlahuayl SMR	361.8	472.2			
South La Jolla SMR	79.2	278.8			
All MPAs Combined	128.3	218.3			

NOTES ON CALCULATING INCIDENCE

The baseline rate for the reporting period was calculated by summing the total use count for each category during the same period from each previous year and dividing this value by the transect miles surveyed at each site. The miles surveyed were calculated by first identifying the length of each transect for all the MPAs in question and multiplying the length of the transect by the number of surveys that had been taken along that transect during the same time period. For MPAs with multiple transects, the total distance traveled for each transect within the MPA were summed together to get the total miles surveyed within that MPA.

BREAKDOWN BY MPA

Note for all MPAs

Provided by Anita Balcar from CA State Parks: January and February 2024 brought storms with high waves. January 10-13, 2024 had extreme tides with high tide reaching over seven feet. February 8-10 high tides over seven feet occurred again.

Swami's State Marine Conservation Area

In the Swami's SMCA, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:

- a. Recreational take by hook-and-line from shore is allowed.
- b. The recreational take by spearfishing of white seabass and pelagic finfish is allowed.
- c. Take pursuant to beach nourishment and other sediment management activities and operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by the Department.



Between the months of January and December 2024

- 134 surveys collected
- 13,636 activity events recorded.
- 1 potential violation recorded (hand collection of biota)
- 159.1 total use count per total miles surveyed in the Swami's SMCA. This is a 5.9% increase compared to the rate calculated from the data collected by MPA Watch volunteers January – December in previous years.

People observed in the MPA were primarily taking part in <u>non-consumptive activities</u> (over 99% of all 13,636 observations): both <u>on-shore</u> (62% of all 13,636 observations) and off-shore (38% of all 13,636 observations) including

• Beach recreation (55%), surfing (32%), offshore recreation (4%), animals on leash (3%), and tidepooling (2%)

The remaining observations recorded were <u>on-shore consumptive activities</u> (less than 1% of all 13,636 observations)

• Hook fishing, sandy, (1%), spear fishing, sandy (<1%), hand collection of biota, sandy (<1%), hook fishing rocky (<1%), and spear fishing offshore (<1%).

Notes from State Parks:

- The transects of Swamis 3b and 4 had an usual disappearance of the sand all together exposing nothing but reef.
- The Cardiff State Beach day use lot was torn up from waves action and cobbles. The leading edge of Cardiff State Beach parking lot adjacent to the sand lost asphalt and the post that the gate should be secured to was gone. The parking lot was undercut very extensively at the South end of the lot and its existing riprap was removed altogether. An extensive amount of cobble stones covered the parking lot all the way to the bathrooms. Sea water also collected in the lot to the bathrooms. The lot had to be closed for a couple of months before emergency repairs could begin in the spring.
- The living dunes stretch of beach on the transect of Swamis 4 was battered by waves removing large amounts of sand, destroying allocated walkways that lead from the street parking on Hwy 101 thru to the beach. Access to the beach was blocked as the sand level dropped too low, it became an easy six foot drop to get to the actual beach. The trailing edges of the wooden fencing had been destroyed as well.
- Waves at South Cardiff State Beach aka Seaside Beach breached the sidewalk all along the beach and water with an extensive amount of cobbles and sand





made its way to the bathrooms at the far backside of the lot. A skip loader had to be used to clear the cobbles and sand from the lot. This procedure had to be repeated several times.

- After the dredging of the lagoon mouth and ¼ mile into the lagoon's waterway the beach was replenished and the San Elijo Lagoon waters were able to flow freely into the ocean by the end of March 2024. The sand was used to re-cover exposed rip rap that lay beneath the living dune on Swamis 4.
- For Swamis 3a, 3b, and 4 transects recreational surfing was commonly observed during surveys. Potential violations of dogs of leash were mostly seen by MPA Watchers on the Swamis 4 transect where they approached violators to leash their dogs and the individuals were compliant.
- The city of Solana Beach used a barge offshore and other equipment to suck up sand from offshore and replenish the beach near Pillbox at Lifeguard Headquarters. The City of Encinitas used the same equipment and procedure to replenish Moonlight Beach with sand from offshore. With that, Swamis 3a and 3b fill in with sand within two weeks covering the reef completely.
- Swamis MPA-Transects 3A, 3B, & 4: During the months of July, August, and September and October we observe the highest numbers of beach visitors and also dog walkers. On the weekends during these months proves to be the highest numbers of people enjoying recreation activities. Board sports numbers are consistent with swell size. October saw higher numbers for surfing. Swamis 4 always has dog walkers with most folks being compliant to the leash law. Swamis 3A gets dogs with some off-leash. We believe it is in part to vehicle access restricted during higher tides and reef exposure in the fall and winter making it harder terrain to traverse.
- There have been a number of day fishing boats so close to the MPA Boundaries. From land it is hard to tell where the ocean boundaries lay but they sure seem closer than the 3 mile mark at sea and placed on or real close to the southern boundary to Swamis MPA.

San Diego-Scripps Coastal State Marine Conservation Area

In the San Diego-Scripps SMCA, It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:

a. The recreational take of coastal pelagic species, except market squid, by hook-and-line is allowed.





- b. Take pursuant to the operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state, and local permits, or as otherwise authorized by the Department.
- c. Licensees of the Regents of the University of California and all officers, employees, and students of such university may take, for scientific purposes, invertebrates, fish, or specimens of marine plant or algae under the conditions prescribed in a scientific collecting permit issued by the Department.

Between the months of January and December 2024

- 23 surveys collected
- 1,478 activity events recorded.
- 8 potential violations recorded (hand collection of biota)
- 150.8 total use count per total miles surveyed in the SD Scripps Coastal SMCA.
 This is a 24.5% increase compared to the rate calculated from the data collected by MPA Watch volunteers January December in previous years.

People observed in the MPA were primarily taking part in <u>non-consumptive activities</u> (99% of all 1,478 observation): both <u>on-shore</u> (80% of all 1,478 observations) and <u>offshore</u> (19% of all 1,478 observations) including

• Beach recreation, sandy, (62%), surfing (23%), offshore recreation (7%), animals on leash, sandy (2%), and tidepooling (2%).

The remaining observations recorded were <u>on-shore and off-shore consumptive</u> <u>activities</u> (1% of all 1,478 observations):

• Hook fishing, sandy (<1%), hand collection of biota, sandy, (<1%- 8 potential violations), and unknown fishing (<1%).

Matlahuayl State Marine Reserve

In the Matlahuayl SMR, It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.

Between the months of January and December 2024

- 19 surveys collected
- 9,350 activity events recorded.
- 52 potential violations recorded (hand collection of biota)
- 472.2 total use count per total miles surveyed in the Matlahuayl SMR. This is a 30.5% increase compared to the rate calculated from the data collected by MPA Watch volunteers January – December in previous years.





People observed in the MPA were primarily taking part in <u>non-consumptive activities</u> (over 99% of all 9,350 observation): both <u>on-shore</u> (74% of all 9,350 observations) and off-shore (26% of all 9,350 observations) including

• Beach recreation, sandy, (73%), surfing (12%), offshore recreation (10%), kayaking (2%), and other board sports (<1%).

The remaining observations recorded were <u>on-shore consumptive activities</u> (<1% of all 9,350 observations):

 Hand collection of biota, sandy, (<1%- 52 potential violations), unknown fishing (<1%).

South La Jolla State Marine Reserve

In the South La Jolla State Marine Reserve (SMR), it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.

Between the months of January and December 2024

- 19 surveys collected
- 3,234 activity events recorded.
- 0 potential violation recorded.
- 278.8 total use count per total miles surveyed in the South La Jolla SMR. This is a 352%% increase compared to the rate calculated from the data collected by MPA Watch volunteers January December in previous years.

People observed in the MPA were primarily taking part in <u>non-consumptive activities</u> (99% of all 3,234 observation): both <u>on-shore</u> (63% of all 3,234 observations) and <u>offshore</u> (37% of all 3,234 observations) including

• Beach recreation, sandy, (62%), surfing (23%), offshore recreation (10%), other board sports (3%), driving (<1%).

The remaining observations recorded were <u>off-shore consumptive activities</u> (<1% of all 3,234 observations):

Unknown fishing (<1% - 2 potential violations)

South La Jolla State Marine Conservation Area

In the South La Jolla State Marine Conservation Area (SMCA), it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:

a. The recreational take of pelagic finfish by hook-and-line only is allowed.





This MPA is off shore of the South La Jolla SMR and therefore not connected to land.

Tijuana River Mouth State Marine Conservation Area

In the Tijuana River Mouth SMCA, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:

a. The recreational take of coastal pelagic species, except market squid, by hand-held dip net only and the commercial take of coastal pelagic species, except market squid, by round haul net only. finfish by hook-and-line only is allowed.

Between the months of January and December 2024, there were no land-based surveys conducted by San Diego MPA Watch in the Tijuana River Mouth SMCA. There have been recurring issues with beach closures at the Tijuana River Mouth SMCA due to poor water quality resulting from sewage contamination.

San Diego County MPAs Boat-based Surveys

January - December 2024

In addition to the shore-based MPA Watch surveys, WILDCOAST staff conducts offshore surveys from the Research Vessel *Under-See* of South La Jolla SMR, Matlahuayl SMR, and Scripps SMCA. Surveys are also conducted between the South La Jolla SMR and Matlahuayl SMCA. As conditions permit, surveys are also conducted at the Swami's SMCA.

During boat MPA Watch surveys WILDCOAST documents all consumptive and nonconsumptive boating activity, as well as all fishing and other consumptive activities observed taking place on or in the water, as well as all onshore fishing and any other consumptive activity occurring in and around the MPA's, including control areas. WILDCOAST staff are present and conduct all surveys.

WILDCOAST completed 31 coastal boat MPA Watch surveys of South La Jolla SMR and SMCA, Matlahuayl SMR, and Scripps SMCA. Based on weather conditions, the majority of surveys started between 10-11am (13), followed by 9-10am (7), and 8-9am (5).

There were 14 potential violations observed during the coastal boat-based surveys conducted during January to December 2024 time period. All 14 potential violations were recreational fishing, both sport recreational fishing vessels and kayaks. WILDCOAST reported all potential violations to CALTIP. The heat maps below show that hotspots for potential illegal fishing are in the South La Jolla SMR (8), followed by the Matlahuayl SMR (5), and the San Diego ScrippsCoastal SMCA (1)

For the coastal boat-based surveys, conducted both in and out of MPAs, recreational activity was most common (208) followed by commercial fishing (44), commercial work boats, commercial non fishing, and commercial net boats (less than 10 each). The most common vessels recorded were sport fishing boats (130), fishing kayaks (50), lobster boats (28), dive boats (22), and CPFVs (14). Research/military/enforcement, power boats, jet skis, light boats, charter boats, and purse seiners were also recorded (less than 10 each). Please note that nonconsumptive kayaks within the Matlahuayl SMR

are constant and not recorded in this survey. The heat maps below show that hotspots for legal fishing are north of the South La Jolla SMR off of Point La Jolla.

It is important to note that San Diego has 3 Marine Monitor (M2) RADARs overlooking the South La Jolla SMR/SMCA, Matlahuayl SMR, Scripps SMCA, and Swami's SMCA. These RADARs show that the South La Jolla SMR is hit the hardest with potential violations, with numbers much greater than what has been recorded during MPA Watch surveys. The data from the RADARs suggest that weekends are the most common time to see potential violations, so WILDCOAST makes an effort to conduct surveys at this time. Please contact lillie@wildcoast.org with questions regarding these RADARs and the compliance issues they have recorded.

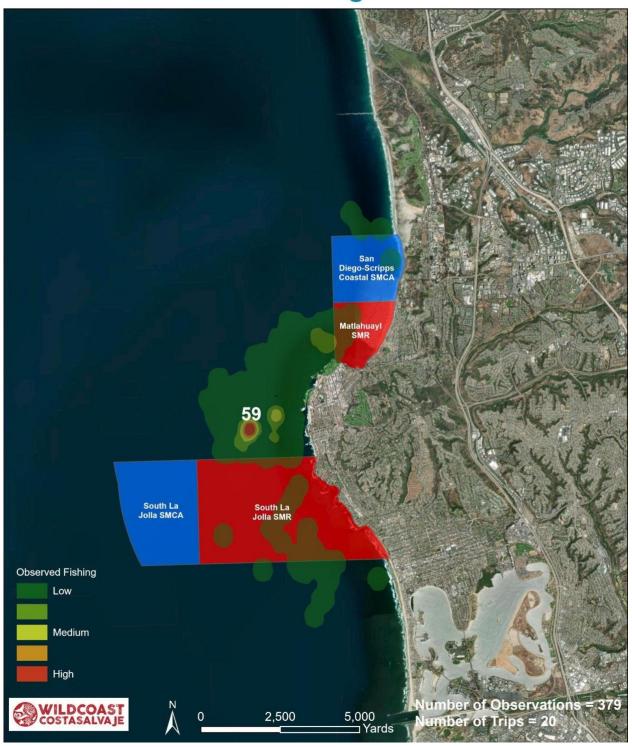


Jan - Jun 2024 All Fishing Activity San Diego





Jul - Dec 2024 All Fishing Activity San Diego





Jan - Jun 2024 Reported Violations San Diego





Jul - Dec 2024 Reported Violations San Diego





POTENTIAL VIOLATIONS

From shore-based surveys, 61 potential violations were observed. All of which were hand collection of biota.

- Swami's: 1 potential violation recorded (hand collection of biota)
- Scripps: 8 potential violations recorded (hand collection of biota)
- Matlahuayl: 52 potential violations recorded (hand collection of biota)
- South La Jolla: 0 potential violation recorded
 - However, as mentioned, the M2 RADAR recorded 67 off-shore potential violations from Jan - Dec: showing the need for more surveys conducted at this site.

NEXT STEPS

In San Diego County, WILDCOAST is working with selected interns to conduct more frequent and accurate surveys. An effort will be made to conduct more surveys in South La Jolla as the M2 RADAR has shown a high number of potential violations so far this year, which is not reflected in on-shore MPA Watch data.

In addition, WILDCOAST conducted intercept surveys for a pilot study in partnership with UC Davis and OC Coastkeeper. The collection of surveys for this pilot project were initially analyzed and key take aways were summarized in a two-pager for other MPA Watch managers and state agency partners, like the Ocean Protection Council. In the initial pilot study, over 200 surveys were conducted and implementation of the surveys for both WILDCOAST and OC Coastkeeper were a success. WILDCOAST is working with partners to explore the expansion of the intercept surveys in a second phase of the pilot project.

WILDCOAST will continue conducting public outreach to spread awareness surrounding tide pools that fall under MPA protections. These efforts are focused primarily on the tide pools located within MPA boundaries located at San Diego-Scripps SMCA and Swami's SMCA.

MPA Watch intends to continue to collaborate with the California Department of Fish and Wildlife (CDFW) to distribute MPA Watch reports to regional managers in order to improve the management and enforcement of MPAs. MPA Watch is also looking to expand its network of partner organizations to enhance the scale and scope of MPA monitoring across California. MPA Watch will be making our human use data available on our website to make it accessible to partners, resource agencies, municipalities, and other interested parties. One of the hopes of MPA Watch is that volunteers and community members help spread knowledge and awareness of MPAs to the communities that surround them, inspiring marine stewardship in our populations.



ADDITIONAL INFORMATION

For additional information on MPA Watch, including survey sites, participating organizations, protocols and datasheets, media kit, and how to get involved, please visit mpawatch.org. Connect with MPA Watch on social media @MPAWatchOrg.

For additional information regarding MPAs and regulations specific to the various classifications of MPAs please visit <u>wildlife.ca.gov/MPAs</u>. If you see an activity that violates MPA regulations, please call CalTip to report the violation at (888) 334-2258.

For more information about the work WILDCOAST does to conserve California's MPAs and other conservation projects please visit wildcoast.org.

PHOTOS



Photos 1 and 2: Erosion and storm damage of Swamis 3b and 4. Showing lack of beach access in January and February. Provided by CA State Parks.



Photos 3 and 4: Erosion and storm damage of Cardiff State Beach with lot closures in January and February. Provided by CA State Parks.





Photo 5: High tide inundation of South Cardiff State beach aka Seaside beach in early 2024. Provided by CA State Parks.