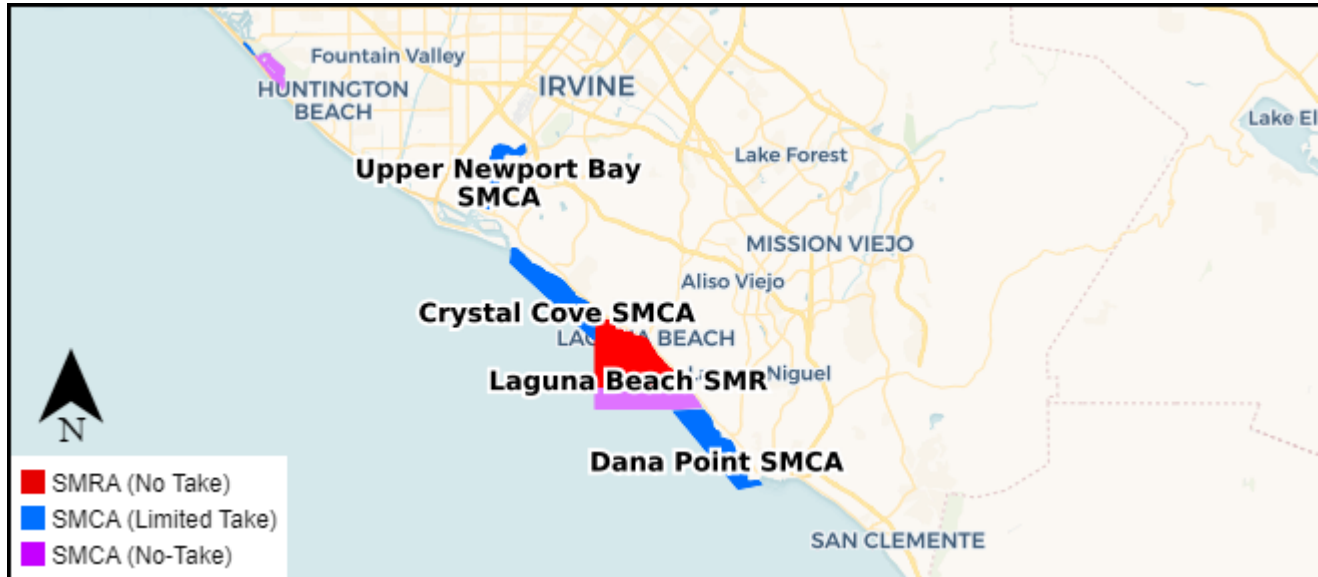


Marine Protected Area (MPA) Watch Regional Report
Orange County
January 1, 2024 – December 31, 2024



Orange County Coastkeeper (Coastkeeper) is a nonprofit clean water organization that serves as a proactive steward of our fresh- and saltwater ecosystems. We work collaboratively with diverse groups in the public and private sectors to achieve healthy, accessible, and sustainable water resources for the region. We implement innovative, effective programs in education, advocacy, restoration, research, enforcement, and conservation.

The Orange County Marine Protected Area (OCMPA) Watch Program enlists volunteers, community groups, and local government to monitor human activity in the Laguna Beach State Marine Reserve and Conservation Areas (SMRs & SMCAs), Crystal Cove, Dana Point, and Upper Newport Bay State Marine Conservation Areas (SMCAs). MPA Watch is a statewide program with the Orange County component run by Orange County Coastkeeper (OCCK). This report also includes MPA Watch data collected by California State Parks at Crystal Cove State Park. The goal of MPA Watch is to provide information to enhance the management and performance of Marine Protected Areas.

Executive Summary

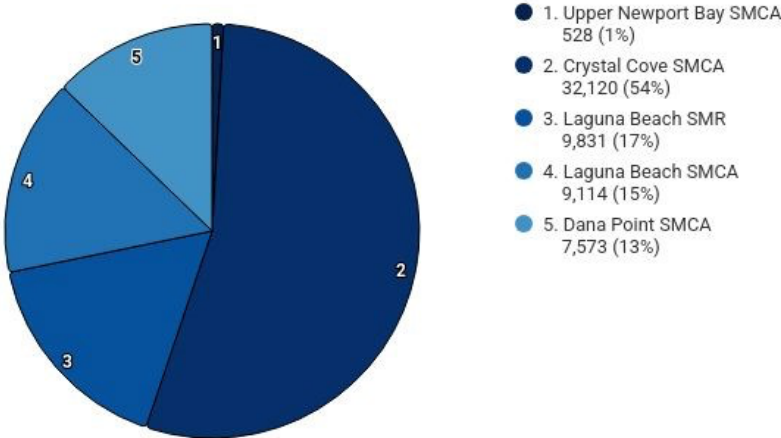
- During this period, 679 surveys were completed at 29 MPA survey sites by 35 volunteers.
- There were thirty-seven potential violations observed out of 59,166 total activities documented. Five of those potential violations were reported to enforcement agencies, although twenty-seven were reported by State Park officials, who are enforcement officers.
- This reporting period saw an overall increase in the rates of both non-consumptive and consumptive uses vs. the long-term baseline, largely due to non-consumptive use increases in the Laguna Beach SMR and consumptive use increases in the Crystal Cove SMCA.
- The rate of consumptive activities observed remains relatively low in all MPAs surveyed, accounting for slightly more than 1% (0.011) of all observations recorded.

Human Use of MPAs January 1, 2024 – December 31, 2024

Overview

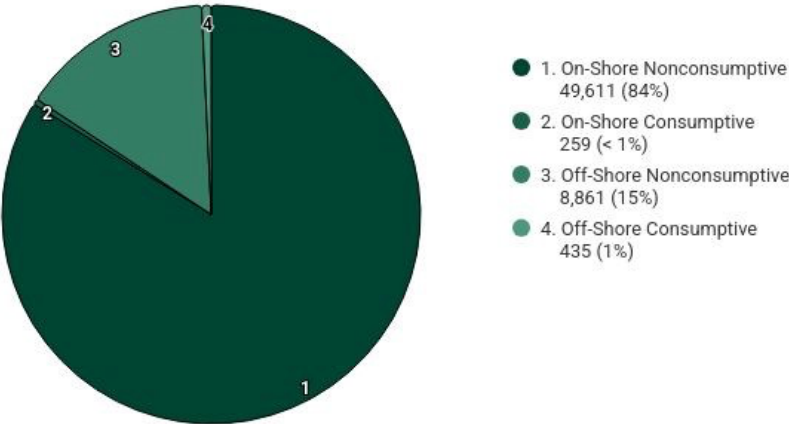
Top 5 MPAs by All Activity

January 1, 2024 - December 31, 2024
59,166 total activity events



All MPAs Combined

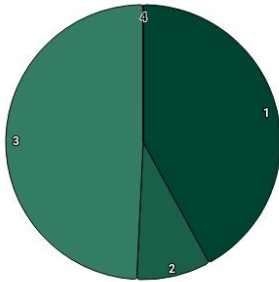
January 1, 2024 - December 31, 2024
59,166 activity events



Activity by MPA

Upper Newport Bay SMCA

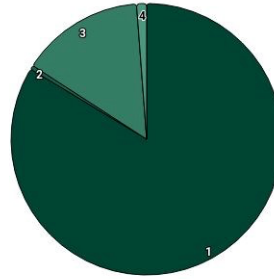
January 1, 2024 - December 31, 2024
528 activity events



- 1. On-Shore Nonconsumptive
222 (42%)
- 2. On-Shore Consumptive
46 (9%)
- 3. Off-Shore Nonconsumptive
260 (49%)
- 4. Off-Shore Consumptive
0 (< 1%)

Crystal Cove SMCA

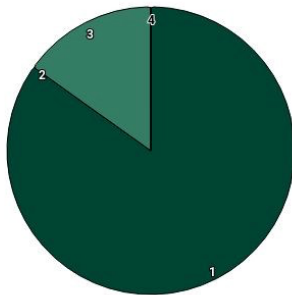
January 1, 2024 - December 31, 2024
32,120 activity events



- 1. On-Shore Nonconsumptive
26,867 (84%)
- 2. On-Shore Consumptive
156 (< 1%)
- 3. Off-Shore Nonconsumptive
4,710 (15%)
- 4. Off-Shore Consumptive
387 (1%)

Laguna Beach SMR

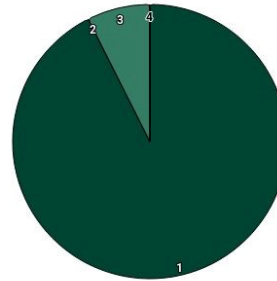
January 1, 2024 - December 31, 2024
9,831 activity events



- 1. On-Shore Nonconsumptive
8,342 (85%)
- 2. On-Shore Consumptive
0 (< 1%)
- 3. Off-Shore Nonconsumptive
1,489 (15%)
- 4. Off-Shore Consumptive
0 (< 1%)

Laguna Beach SMCA

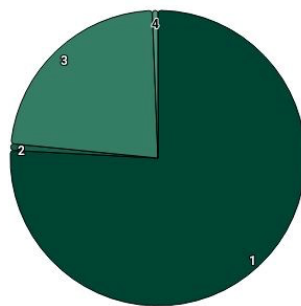
January 1, 2024 - December 31, 2024
9,114 activity events



- 1. On-Shore Nonconsumptive
8,436 (93%)
- 2. On-Shore Consumptive
3 (< 1%)
- 3. Off-Shore Nonconsumptive
673 (7%)
- 4. Off-Shore Consumptive
2 (< 1%)

Point SMCA

January 1, 2024 - December 31, 2024
7,573 activity events



- 1. On-Shore Nonconsumptive
5,744 (76%)
- 2. On-Shore Consumptive
54 (1%)
- 3. Off-Shore Nonconsumptive
1,729 (23%)
- 4. Off-Shore Consumptive
46 (1%)

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.

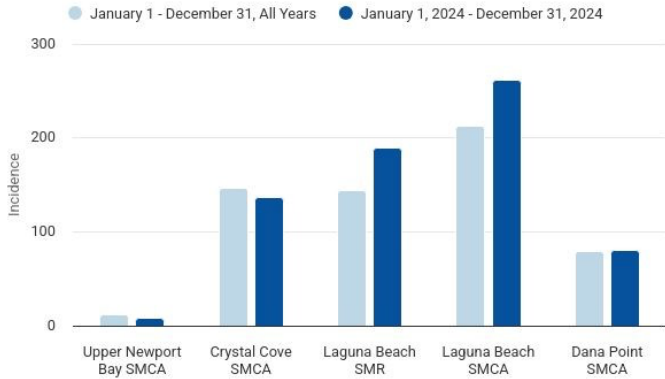
Non-Consumptive - An activity in which a natural resource is not collected.

Activity Incidence by MPA

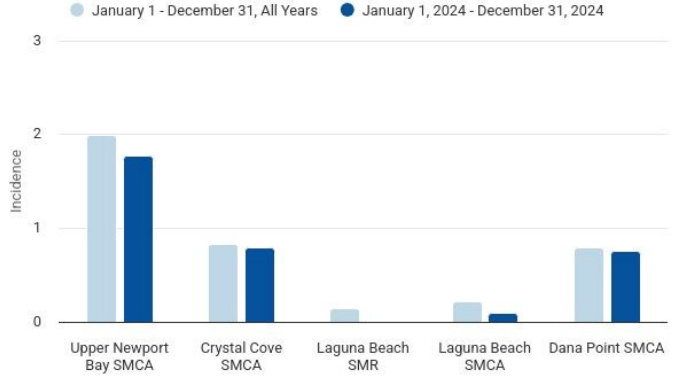
The charts below show incidence values for each MPA monitored by MPA Watch in Orange County. Incidence is calculated as the number of activities recorded divided by total survey-miles.

On-Shore

On-Shore, Non-Consumptive

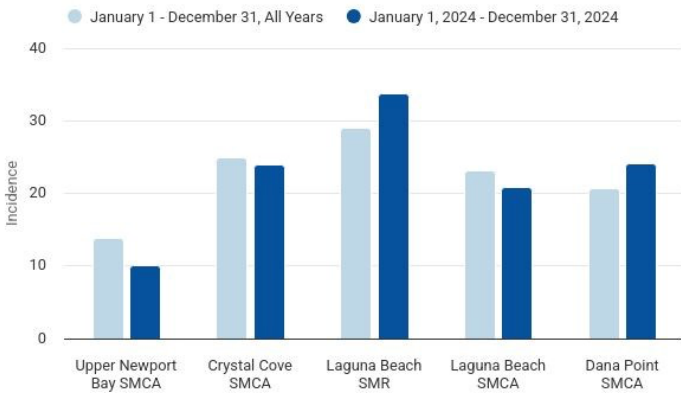


On-Shore, Consumptive

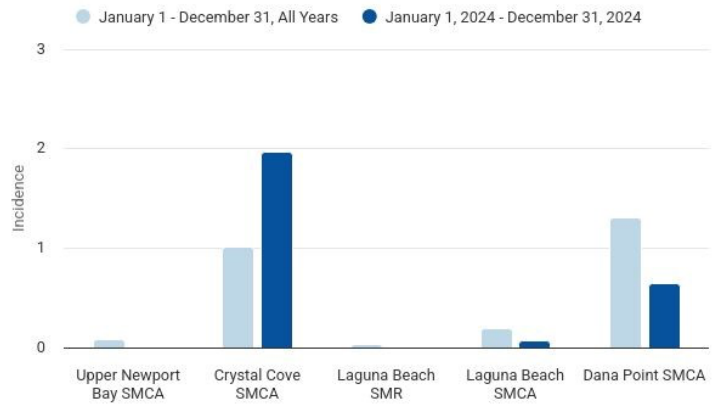


Off-Shore

Off-Shore, Non-Consumptive



Off-Shore, Consumptive



Activity Incidence by MPA

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	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
Upper Newport Bay SMCA	12.1	8.5	2.0	1.8
Crystal Cove SMCA	146.6	136.3	0.8	0.8
Laguna Beach SMR	144.5	188.7	0.1	0.0
Laguna Beach SMCA	212.7	261.2	0.2	0.1
Dana Point SMCA	78.9	80.0	0.8	0.8
All MPAs Combined	121.1	133.6	0.8	0.7

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	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
Upper Newport Bay SMCA	13.8	10.0	0.1	0.0
Crystal Cove SMCA	24.8	23.9	1.0	2.0
Laguna Beach SMR	29.0	33.7	0.0	0.0
Laguna Beach SMCA	23.2	20.8	0.2	0.1
Dana Point SMCA	20.6	24.1	1.3	0.6
All MPAs Combined	23.4	23.9	0.6	1.2

MPA	Total Combined	
	January 1 December 31 All Years	January 1, 2024 through December 31, 2024
Upper Newport Bay SMCA	28.0	20.3
Crystal Cove SMCA	173.2	163.0
Laguna Beach SMR	173.6	222.4
Laguna Beach SMCA	236.3	282.2
Dana Point SMCA	101.5	105.5
All MPAs Combined	145.8	159.3

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 MPA's 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 MPA's 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.

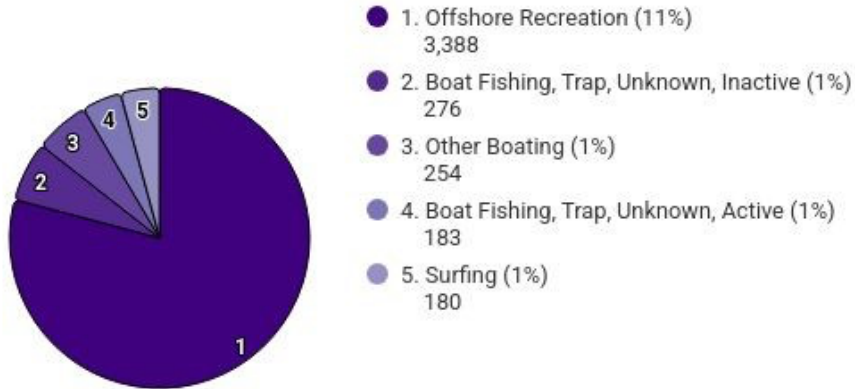
California State Parks Data

Crystal Cove State Park-Los Trancos Transect

Offshore Activities

Crystal Cove SMCA

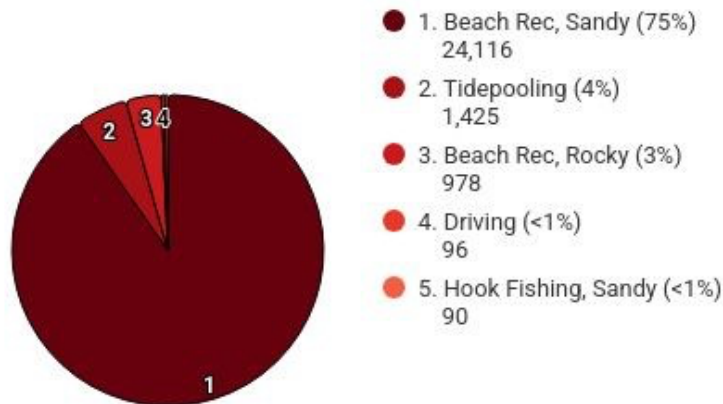
January 1, 2024 - December 31, 2024
Top offshore activity, 4,281 (13%) of all 32,120 observations



Onshore Activities

Crystal Cove SMCA

January 1, 2024 - December 31, 2024
Top onshore activity, 26,705 (83%) of all 32,120 observations



Activities Rate

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	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
Crystal Cove SMCA	19.5	19.0	2.0	3.8
All MPAs Combined	19.5	19.0	2.0	3.8

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	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
Crystal Cove SMCA	118.5	109.3	0.7	1.2
All MPAs Combined	118.5	109.3	0.7	1.2

MPA	Total Combined	
	January 1 December 31 All Years	January 1, 2024 through December 31, 2024
	Crystal Cove SMCA	140.7
All MPAs Combined	140.7	133.2

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 MPA's 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 MPA's 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

Upper Newport Bay State Marine Conservation Area

For the year 2024 there were 73 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed an activity incidence rate of 20.3.

People observed in the MPA were primarily taking part in sandy beach recreational activities (37%), kayaking (18%), using paddle-operated boats (8%), and hook and line fishing (9%). Offshore activities comprised 49.2% of the total activities in the MPA. Boating accounted for 41% of total activities.

During this reporting period we did not observe any potential MPA violations in the Upper Newport Bay SMCA. The recreational take of finfish by hook and line is allowed from shore only.

Crystal Cove State Marine Conservation Area

For the year 2024, there were 264 surveys submitted to Orange County MPA Watch. This data showed an activity incidence rate of 163.

People in the MPA were primarily taking part in beach recreational activities (78.0%) and tidepooling (4%). Offshore recreation activities accounted for 15.8% of total activities.

During this reporting period we observed 29 potential MPA violations: all but one occurred within the Crystal Cove State Park. The one violation occurred at Little Corona Beach and involved a visitor collecting shells.

Crystal Cove State Park – State Parks Summary

For the year 2024, the Crystal Cove State Marine Conservation Area (SMCA) recorded a total of 11,598 observations, providing valuable insight into the recreational use and potential violations within this protected area. The data revealed trends related to both non-consumptive and consumptive activities, as well as seasonal patterns, and highlighted areas of concern for potential violations and enforcement needs.

Non-Consumptive Activities

Nonconsumptive activities dominated the recorded observations, with 96% of the total activity. Among these, beach recreation on sandy shores stood out as the most popular, accounting for 72% of all recorded observations (8,400). This suggests that Crystal Cove's beaches continue to attract a large number of passive beachgoers who enjoy the natural environment.

Other notable non-consumptive activities included offshore recreation (8%) and tidepooling (7%). Offshore recreation activities, such as kayaking and paddleboarding, reflect the area's diverse recreational draw, offering opportunities for water-based activities. Tidepooling, on the other hand, serves as an educational and exploratory experience, allowing visitors to observe marine life in shallow pools along the shoreline. The 7% of observations related to tidepooling demonstrate the continued interest in these natural features, though they also raise concerns regarding the potential for the collection of marine organisms.

Consumptive Activities

Consumptive activities, while representing only 4% of the recorded observations, still raised concerns about the potential impact on the protected marine environment. Boat fishing, particularly trap fishing, and hook fishing along the sandy shore, accounted for a combined 61% of consumptive activity. Boat fishing was the most prominent consumptive activity, with 182 offshore observations, while hook fishing along the shore comprised 1% of the total observations, totaling 78 instances. Despite the relatively low number of consumptive activities, the persistence of these practices highlights the ongoing pressure on marine resources and the need for continued monitoring and enforcement.

Seasonal Trends

The seasonal trends observed during the year mirrored common patterns seen in coastal recreational areas. Activities like beach recreation and tidepooling peaked during weekends and holiday periods, when visitation was higher due to warmer weather. This seasonal influx of visitors is typical, where people are more likely to engage in recreational activities during the summer months or on pleasant weekends. In contrast, offshore recreational activities such as kayaking and paddleboarding were more frequent on calm weather

days, a trend consistent with the seasonal conditions that favor water-based sports. These observations highlight the seasonal variations in recreational use.

Potential Violations and Enforcement

While recreational activities at Crystal Cove are largely in line with regulations, potential violations do occur. Tidepooling, for example, contributes significantly to nonconsumptive activities, but some visitors may be tempted to remove marine organisms from these fragile environments, which is prohibited. The 420 recorded tidepooling observations raise concerns that some individuals may unknowingly or deliberately violate the prohibition on taking living marine resources from tidepools. This highlights the need for clear signage and increased public education to remind visitors of the importance of respecting these protected zones.

In terms of fishing activity, recreational divers and anglers are permitted to take certain species, such as spiny lobster, sea urchins, and finfish, but only under the specific guidelines set by CDFW. Violations could occur if individuals fish in prohibited zones near protected offshore areas or take species that are not allowed under these regulations. While no direct enforcement actions were observed during surveys, these concerns suggest the need for more active monitoring, clearer signage, and public outreach to ensure compliance with the regulations.

In summary, Crystal Cove SMCA is managed to allow for sustainable recreational use, but violations related to tidepool collection and fishing in restricted areas continue to be a concern. Through enhanced enforcement and education efforts, the integrity of this marine conservation area can be maintained for both current and future generations.

Next Steps for Crystal Cove State Park

Findings from the 2024 surveys will be shared with environmental scientists and park rangers to inform management strategies and improve enforcement practices. Additionally, Crystal Cove plans on installing improved signage in violation hotspots, especially near rocky shore areas, to better educate the public about MPA regulations. As part of its ongoing educational initiatives, four tidepool educators have been onboarded and will set up an education table in the Education Commons every weekend, helping to raise awareness and ensure visitors understand the importance of preserving marine life and adhering to the area's conservation rules.

Laguna Beach State Marine Reserve

For the year 2024, there were 136 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows an activity incidence rate of 222.4.

People in the MPA were taking part in beach recreational activities (81.0%), swimming, wading and body surfing (10%), board sports (2%), and tidepooling (2%). Offshore activities comprised 15% of the total activities in the MPA.

During this reporting period we did not observe any potential MPA violations.

Regulations do not allow take of any kind in the Laguna Beach SMR.

Laguna Beach State Marine Conservation Area

For the year 2024, there were 112 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows an activity incidence of 282.2 within the MPA Watch area.

People observed in the MPA were primarily taking part in beach recreational activities (90%), swimming, wading and body surfing (6%), accompanying animals on-leash (1%), and tidepooling (1%). Offshore activities only comprised 7% of the total activities in the MPA.

During this reporting period, surveyors observed 5 potential MPA violations in the Laguna Beach State Marine Conservation Area.

Taking of onshore or offshore resources is not allowed within the Laguna Beach No-Take SMCA.

Dana Point State Marine Conservation Area

For the year 2024, there were 94 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows an activity incidence rate of 105.5.

Of the 7,573 activities observed in the Dana Point SMCA, 74% of coastal uses surveyed were sandy and rocky beach recreation. In addition to that, the most popular coastal activities in Dana Point were surfing and other board sports (13%), and swimming, wading and body surfing (8%). During this period, volunteers reported 3 potential MPA violations in the Dana Point SMCA.

Regulations do not allow any taking from tidepools in the Dana Point SMCA.

Count of Potential Violations by MPA

MPA	January 1 December 31 All Years	January 1, 2024 through December 31, 2024
Upper Newport Bay SMCA	53	0
Crystal Cove SMCA	330	29
Laguna Beach SMR	118	0
Laguna Beach SMCA	99	5
Dana Point SMCA	38	3
All MPAs Combined	638	37

Potential Violations

Upper Newport Bay State Marine Conservation Area

According to volunteers there were no MPA potential violations observed during surveys in the Upper Newport Bay SMCA during this reporting period. In this SMCA, the recreational take of finfish by hook and line is allowed from shore only in designated areas.

Crystal Cove State Marine Conservation Area

During this reporting period we observed 29 potential MPA violations: all but one occurred within the Crystal Cove State Park. The one violation occurred at Little Corona Beach and involved a visitor collecting shells. The recreational take of finfish by hook and line or by spearfishing is allowed in this SMCA; no take is allowed from tidepools. According to volunteers, recurring issues with the illegal take and disturbance of tide pool organisms continue to be a problem during low tides. Anecdotally, staff see a lot more violations that take place while not on a survey. During the summer, staff make multiple contacts with people to help educate them on the tidepool rules.

Laguna Beach State Marine Reserve

Volunteers observed no potential violations in the Laguna Beach State Marine Reserve. No take is allowed from the Laguna Beach SMR.

Laguna Beach State Marine Conservation Area

During this reporting period we observed five potential MPA violations in the Laguna Beach No Take SMCA. One was hand collection of biota from tidepools, two were hook and line fishing from the shore, another was trap fishing just inside the MPA, and one was consumptive diving. None of these potential violations were reported.

Taking of onshore or offshore resources is not allowed within the Laguna Beach No-Take SMCA.

Dana Point State Marine Conservation Area

During this period, volunteers reported 3 potential MPA violations in the Dana Point SMCA. All 3 incidents happened on the same day and involved hand collection of biota from the tidepools.

Regulations do not allow any taking from tidepools in the Dana Point SMCA.

Next Steps

Beginning in June, OC Coastkeeper piloted an Intercept Survey developed by MPA Watch Intercept Survey Working Group (a subcommittee of the MPA Watch managers) and the UC Davis Center for Community and Citizen Science. This survey is designed to enhance and deepen our understanding of how MPAs are being used. The Intercept Survey is designed to go beyond the Core Protocol to identify generally who the users of the sites are, what is their purpose for visiting the sites, the frequency of these visits at each site and their knowledge/awareness of MPA rules and regulations. The pilot project is now being considered for rollout to other MPA Watch programs throughout the state. OC Coastkeeper will continue with the protocol as determined by the Working Group.

MPA Watch will continue to collaborate with the California Department of Fish and Wildlife (CDFW) along with local agencies, NGOs and the public to improve the management and enforcement of MPAs statewide. From January through December 2024, Orange County Coastkeeper trained 48 new MPA Watch volunteers. Orange County MPA Watch partners with local organizations including the Ocean Institute to enhance the scale and scope of our MPA monitoring. MPA Watch makes our human use data available on our website so it is accessible to partners, resource agencies, municipalities, and other interested parties. One of the goals of MPA Watch is that our volunteers 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](https://twitter.com/MPAWatchOrg).

For additional information regarding MPAs and regulations specific to the various classifications of MPAs please visit wildlife.ca.gov/MPAs. 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 OC Coastkeeper does to conserve California's MPAs and other conservation projects, please visit coastkeeper.org.