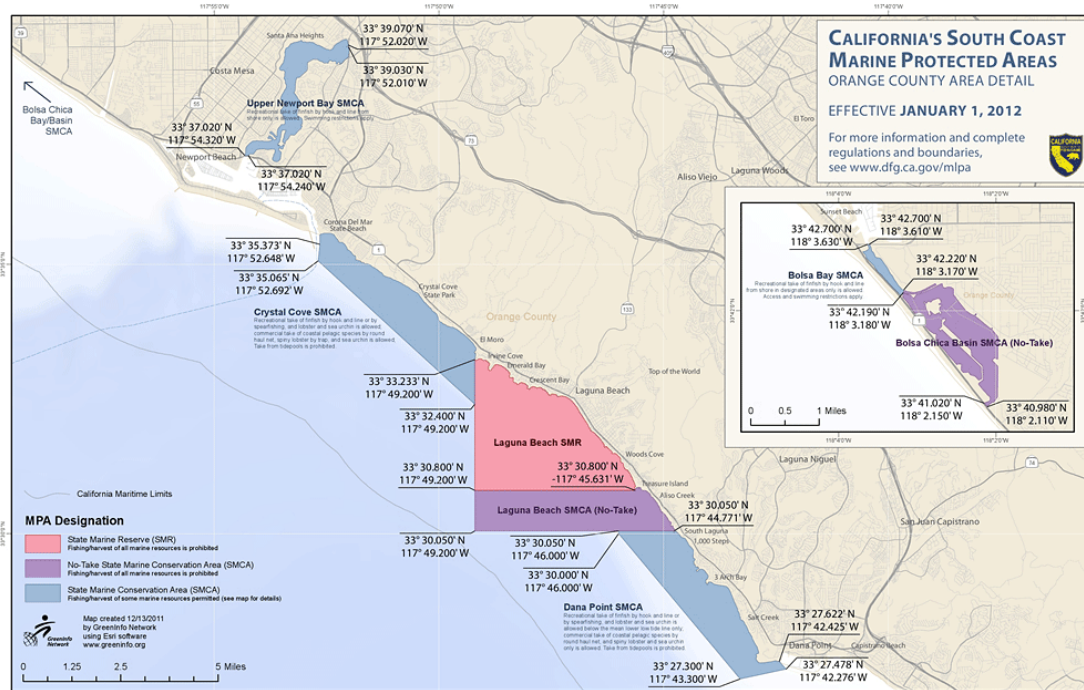


**Marine Protected Area (MPA) Watch
Annual Report
Orange County
January 1, 2023 – December 31, 2023**



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

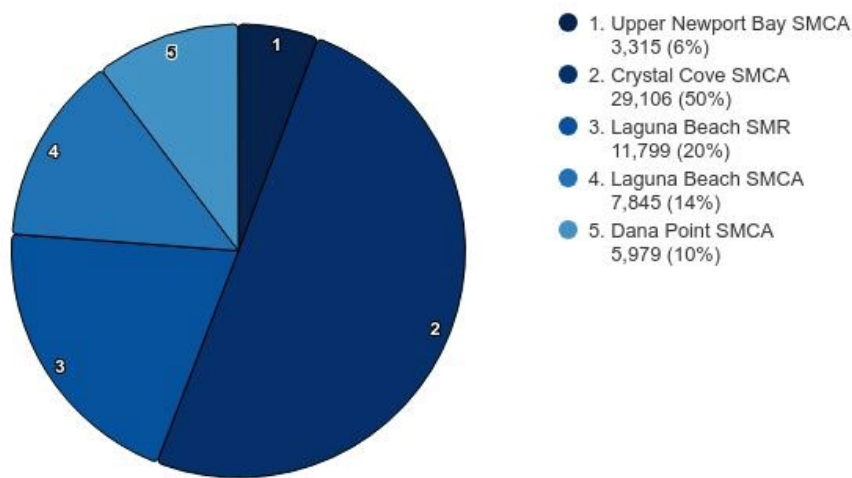
- During this period, 768 surveys were completed at 29 MPA survey sites by 41 volunteers.
- There were 63 potential violations observed out of 58,044 total activities documented. Twenty-three of those potential violations were reported to enforcement agencies.
- This report period saw an increase in the rate of use vs. the long-term baseline.

Human Use of MPAs January 1, 2023 – December 31, 2023

Overview

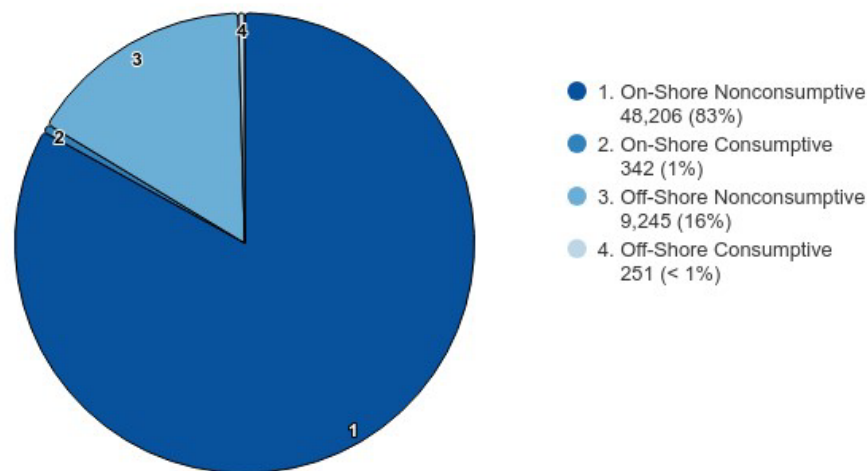
Top 5 MPAs by All Activity

January 1, 2023 - December 31, 2023
58,044 total activity events



All MPAs Combined

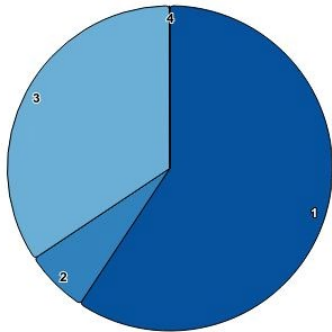
January 1, 2023 - December 31, 2023
58,044 activity events



Activity by MPA

Upper Newport Bay SMCA

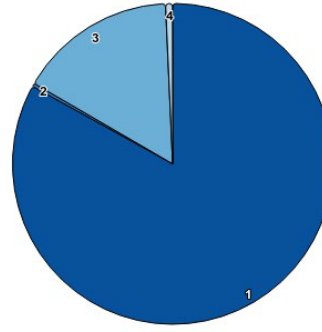
January 1, 2023 - December 31, 2023
3,315 activity events



- 1. On-Shore Nonconsumptive
1,966 (59%)
- 2. On-Shore Consumptive
210 (6%)
- 3. Off-Shore Nonconsumptive
1,138 (34%)
- 4. Off-Shore Consumptive
1 (< 1%)

Crystal Cove SMCA

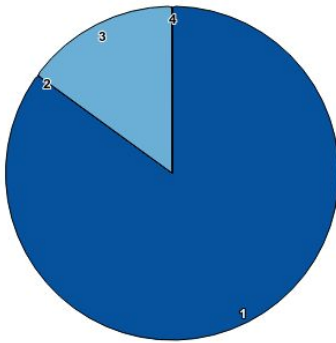
January 1, 2023 - December 31, 2023
29,106 activity events



- 1. On-Shore Nonconsumptive
24,169 (83%)
- 2. On-Shore Consumptive
93 (< 1%)
- 3. Off-Shore Nonconsumptive
4,639 (16%)
- 4. Off-Shore Consumptive
205 (1%)

Laguna Beach SMR

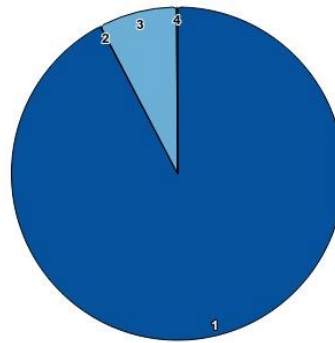
January 1, 2023 - December 31, 2023
11,799 activity events



- 1. On-Shore Nonconsumptive
10,029 (85%)
- 2. On-Shore Consumptive
1 (< 1%)
- 3. Off-Shore Nonconsumptive
1,768 (15%)
- 4. Off-Shore Consumptive
1 (< 1%)

Laguna Beach SMCA

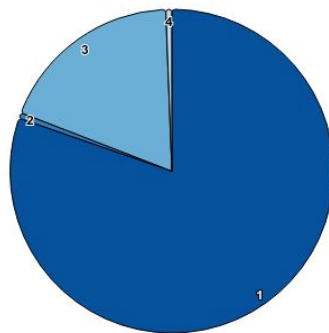
January 1, 2023 - December 31, 2023
7,845 activity events



- 1. On-Shore Nonconsumptive
7,240 (92%)
- 2. On-Shore Consumptive
4 (< 1%)
- 3. Off-Shore Nonconsumptive
593 (8%)
- 4. Off-Shore Consumptive
8 (< 1%)

Dana Point SMCA

January 1, 2023 - December 31, 2023
5,979 activity events



- 1. On-Shore Nonconsumptive
4,802 (80%)
- 2. On-Shore Consumptive
34 (1%)
- 3. Off-Shore Nonconsumptive
1,107 (19%)
- 4. Off-Shore Consumptive
36 (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.

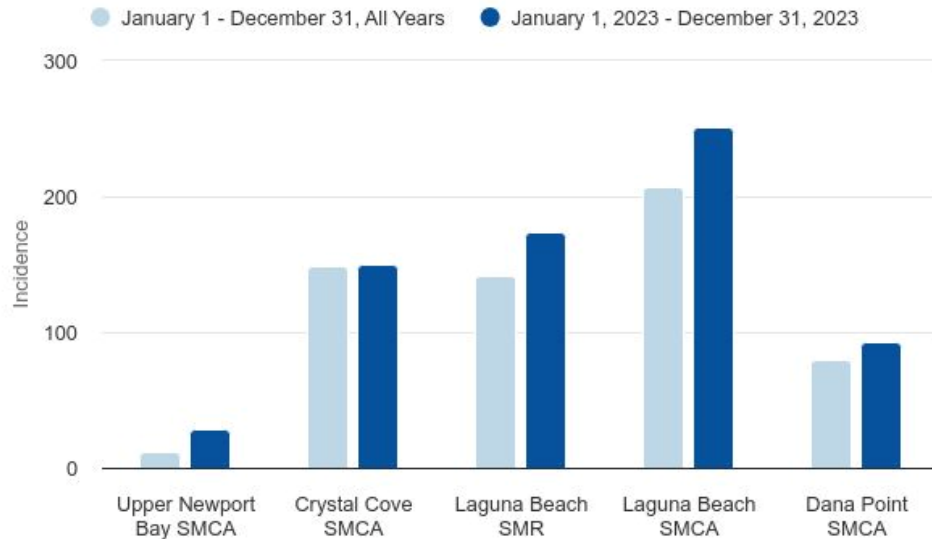
Consumptive - An activity in which a natural resource (i.e., fish, kelp, shells) is being collected.

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

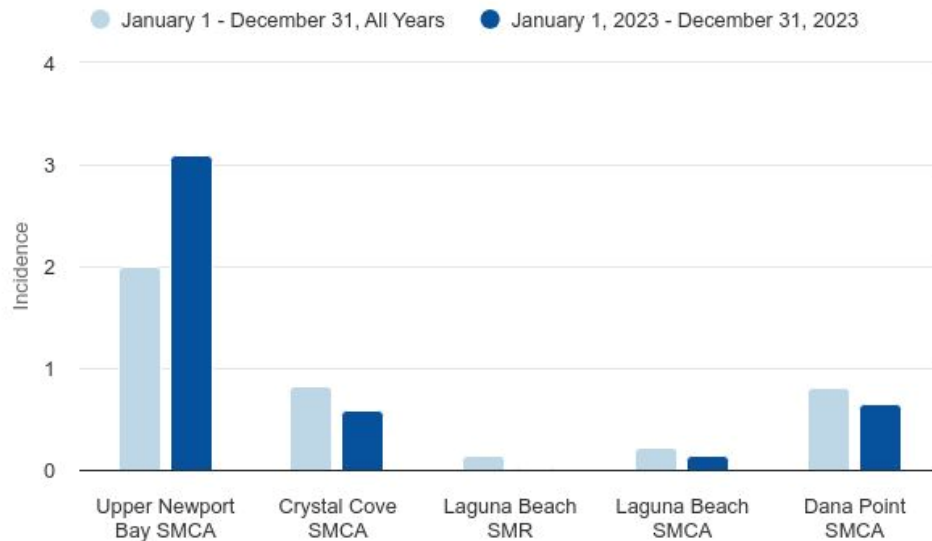
Activity Incidence by MPA

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.

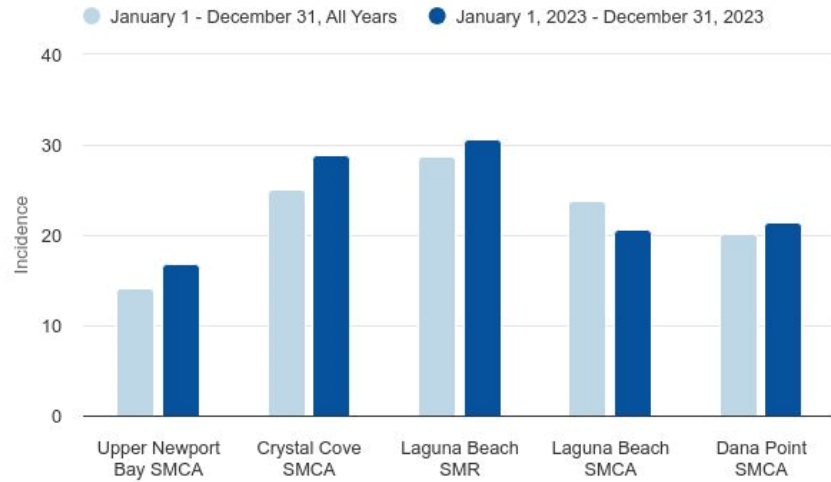
On-Shore, Non-Consumptive



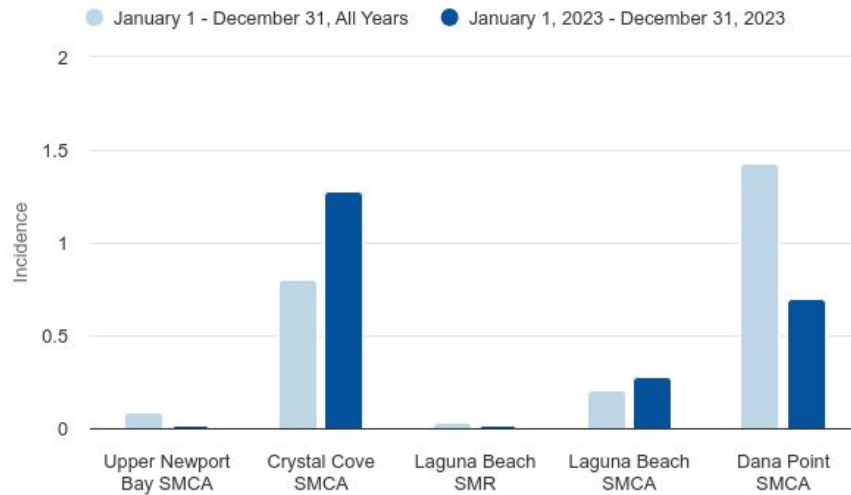
On-Shore, Consumptive



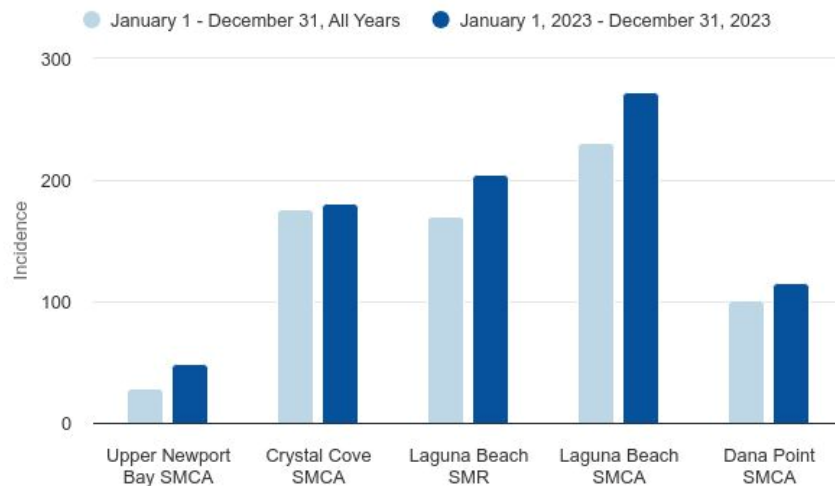
Off-Shore, Non-Consumptive



Off-Shore, Consumptive



All Activity



Activity Incidence by MPA

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Upper Newport Bay SMCA	12.4	29.0	2.0	3.1
Crystal Cove SMCA	149.2	150.6	0.8	0.6
Laguna Beach SMR	141.1	173.8	0.1	0.0
Laguna Beach SMCA	207.1	251.4	0.2	0.1
Dana Point SMCA	79.2	92.9	0.8	0.7
All MPAs Combined	119.5	131.6	0.8	0.9

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Upper Newport Bay SMCA	14.1	16.8	0.1	0.0
Crystal Cove SMCA	25.1	28.9	0.8	1.3
Laguna Beach SMR	28.7	30.6	0.0	0.0
Laguna Beach SMCA	23.8	20.6	0.2	0.3
Dana Point SMCA	20.1	21.4	1.4	0.7
All MPAs Combined	23.4	25.2	0.5	0.7

MPA	Total Combined	
	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Upper Newport Bay SMCA	28.6	49.0
Crystal Cove SMCA	175.9	181.3
Laguna Beach SMR	170.0	204.5
Laguna Beach SMCA	231.4	272.4
Dana Point SMCA	101.5	115.6
All MPAs Combined	144.2	158.4

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

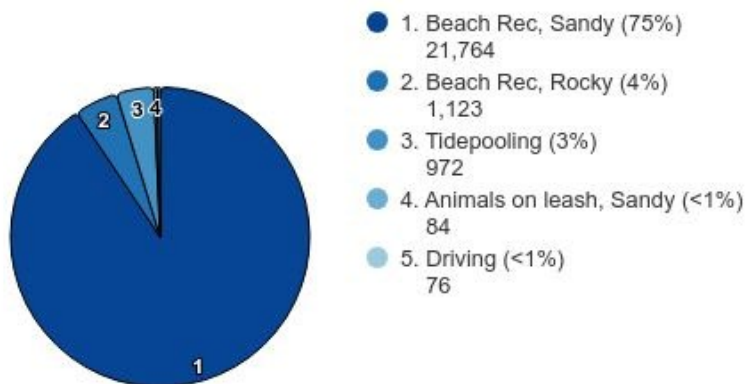
Crystal Cove State Park-Los Trancos Transect

Onshore Activities

Crystal Cove SMCA

January 1, 2023 - December 31, 2023

Top onshore activity, 24,019 (83%) of all 29,106 observations

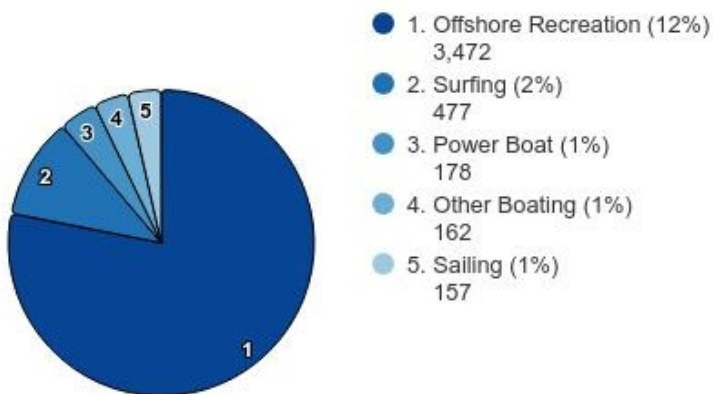


Offshore Activities

Crystal Cove SMCA

January 1, 2023 - December 31, 2023

Top offshore activity, 4,446 (15%) of all 29,106 observations



Activities Rate

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Crystal Cove SMCA	123.1	111.1	0.4	0.6
All MPAs Combined	123.1	111.1	0.4	0.6

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Crystal Cove SMCA	19.8	20.6	1.2	1.5
All MPAs Combined	19.8	20.6	1.2	1.5

MPA	Total	
	Combined	
	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Crystal Cove SMCA	144.5	133.8

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 2023 there were 172 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed total use rate per mile of 49.

People observed in the MPA were primarily taking part in beach and offshore recreational activities (63%), paddleboarding (8%) and kayaking (6%). Offshore activities accounted for 29% of all activities.

During this reporting period only one potential MPA violation was observed in the Upper Newport Bay SMCA. A person was observed fishing from a paddleboard but the incident was not reported to the authorities. The recreational take of finfish by hook and line is allowed from shore only.

Crystal Cove State Marine Conservation Area

For the year 2023, there were 243 surveys submitted to Orange County MPA Watch. This data showed a total use rate per mile of 181.3.

People in the MPA were primarily taking part in beach and offshore recreational activities (93%) and tidepooling (3%), in addition to surfing (2%). Offshore activities made up 15% of total activities.

During this reporting period we observed 45 potential MPA violations, all of which involved hand collection of biota or geological resources, or animals on the beach. Thirteen of these potential violations were reported via phone to CalTIP, but the rest were not reported, as the State Park personnel handled them directly.

According to volunteers, illegal hand collection from tidepools is commonly observed. Regulations do not allow any taking from tidepools in the Crystal Cove State Marine Conservation Area.

Crystal Cove State Park

For the months of January through June 2023, there were 29 Los Trancos surveys submitted by California State Parks MPA Watch. The Los Trancos MPA Watch transect, and the greater shoreline of Crystal Cove State Park sees a very high volume of onshore non-consumptive recreational activity all year long. However, these numbers typically increase during holidays like Spring Break and the onset of summer. Onshore non-consumptive activity remains our highest number when entering data for MPA Watch surveys and with an increase of onshore non-consumptive activity we do see an increase in potential MPA violations in the intertidal zone. These potential violations are not enforced, but rather State Parks staff and volunteers use education to alter visitor behavior, and all visitors have consequently complied with MPA tidepool rules. We haven't yet had any resistance from visitors necessitating enforcement staff. The potential violation we see almost on a daily basis is hand collection of biota. This is the number one issue we face throughout the year. Visitors want to collect, take home shells as souvenirs, and they want to put animals in beach buckets for play. The other potential violation we see very often is dogs on the beach. Once we let dog owners know that dogs are not allowed on the beach they usually say that their dog is a service dog. Looking at the reports comparing last year with this year I see a rise in off-shore consumptive activity. The MPA allow for recreational and some commercial fishing.

From July to December, a total of 28 surveys were taken at Crystal Cove State Park. During these months, we had a total of 15 potential violations that took place. The majority of the activity was considered non-consumptive (on-shore) beach recreation on the sandy shoreline. This was no surprise since most visitors at Crystal Cove are beachgoers who are there for beach recreation, which can be lounging on the beach, walking, and general exploring. The second most common activity is tidepooling. This data is no surprise since most beachgoers visit Crystal Cove mainly for sandy recreation and tidepool exploration after the summer or high-traffic seasons.

While reviewing the data, it also showed that there were 15 violations (potential). The top two violations were unknown fishing and hook fishing (sandy beach). This data finding was surprising due to most of our interactions having to deal with educating the public that you are not allowed to collect biota. Visitors must pass Harry the Hermit crab signs that inform visitors of rules and regulations. However, while educating the public

and kindly reminding them of the signage they passed, they will state that they did not see the signage or properly read it. Another increasing theme is hook fishing and the number of fishing boats in the area. I have witnessed increased line fishing from the shore from July to now. Another observation was the increased number of fishing boats. While there is always an increase in boats during the months of October to mid-March due to Lobster, this observation began early this year, starting around April.

We plan to share our MPA watch data with environmental scientists and rangers to improve Crystal Cove State Park. Another group I would like to communicate this data with is our MPA collaborative network. Sharing the data will allow us to improve how our rules and regulations are conveyed to the public. We can enhance the park by training more volunteers for MPA watch surveys, updating language on signs, and providing more obvious QR codes so visitors can scan and gain more information on the MPA. Visitors can also ask for informative brochures or physical materials due to our service issues at the park. Currently, we do not pass out physical brochures and are making our way to more digital information; however, this only works for a select group of visitors.

Laguna Beach State Marine Reserve

For the year 2023, there were 179 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a total use rate per mile of 204.5.

People in the MPA were taking part in beach and offshore recreational activities (87%), tidepooling (2%), and accompanying animals on-leash (1%). Offshore activities comprised 14% of the total activities in the MPA.

During this reporting period we observed two potential MPA violations. One was hand collection of biota at Bluebird and the other was fishing from a boat off of Cress. Neither incident was reported.

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

Laguna Beach State Marine Conservation Area

For the year 2023, there were 101 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a total use rate per mile of 272.4.

People observed in the MPA were primarily taking part in beach and offshore recreational activities (93%), tidepooling (1%), and accompanying animals on-leash (1%). Offshore activities accounted for 7% of the total activities in the MPA.

During this reporting period twelve potential MPA violations were observed in the Laguna Beach State Marine Conservation Area. Eight of them were lobster fishing, and the other four were hand collection of biota. Seven of the potential violations were reported through the CalTIP App.

Taking of beach resources is not allowed from the Laguna Beach No-Take SMCA. Fishing is only allowed in the area south of the line extending from Table Rock beach.

Dana Point State Marine Conservation Area

For the year 2023, there were 73 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a total use rate per mile of 115.6.

Eighty-six percent of the Dana Point coastal uses surveyed were onshore and offshore beach recreational activities. Other popular coastal activities in Dana Point are tidepooling (2%), hook and line fishing from the rocks (1%), and surfing and other board sports (7%). Offshore activities comprised 18% of all activities in the MPA.

During this reporting period 3 potential MPA violations were observed in the Dana Point SMCA, all of which were hand collection of biota. Two were reported by calling CalTIP and one was reported by text.

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

Potential Violations

The rate of consumptive activities observed remains relatively low in all MPAs surveyed, accounting for less than 2% of all observations recorded.

According to volunteers there was one MPA potential violation 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.

During this period we observed 45 potential MPA violations in the Crystal Cove SMCA: Thirteen at Little Corona Del Mar Beach and 32 within the Crystal Cove State Park. 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.

During this reporting period we observed two potential MPA violations in the Laguna Beach State Marine Reserve, at the Bluebird and Cress Street Survey areas. No take is allowed in the Laguna Beach SMR. According to volunteers there are occasional take violations in the reserve, but many more violations are animal disturbance or obscene trampling, which are not reported through MPA Watch.

Volunteers observed twelve potential violations in the Laguna Beach State Marine Conservation Area. No take is allowed from the Laguna Beach No-Take SMCA. Most of these violations involved lobster fishing and may be due to confusion surrounding the exact boundaries of the No-Take SMCA.

Next Steps

MPA Watch collaborates 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. Orange County MPA Watch partners with local organizations including the Ocean Institute and Monarch Beach Club 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.