

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 and 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 Area (SMR & SMCA), and the 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). The goal of MPA watch is to provide information to enhance management and performance of Marine Protected Areas.

Executive Summary

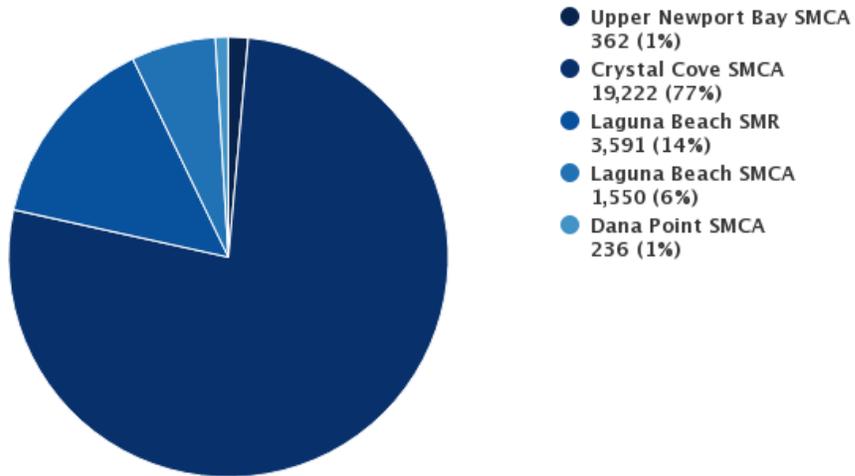
- Due to the COVID-19 pandemic the first half of 2021 had wide swings in our ability to conduct MPA Watch surveys, and the number of volunteers we had available to conduct them. All of our surveys were done in full compliance with local and state pandemic orders. Volunteer efforts were strong and continue to climb.
- During this period 399 surveys were completed at 30 MPA survey sites by 25 volunteers. There were 31 potential violations observed out of 24,961 total activities documented.

Human Use of MPAs January – June 2021

Overview

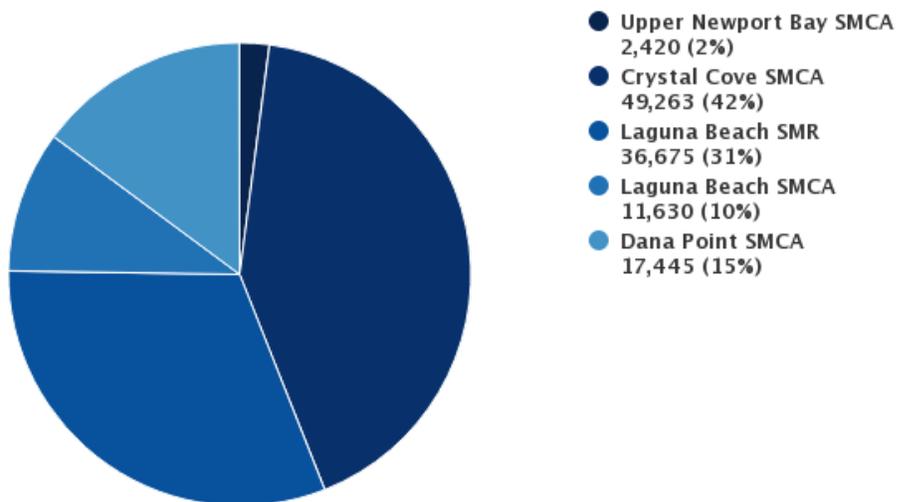
Top 5 MPAs by All Activity

January 1, 2021 – June 30, 2021
24,961 total activity events



Top 5 MPAs by All Activity

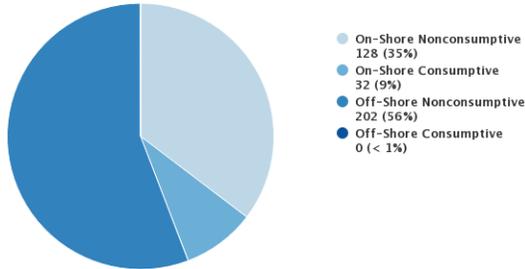
Jan 1 – Jun 30, All Years
117,433 total activity events



Activity by MPA

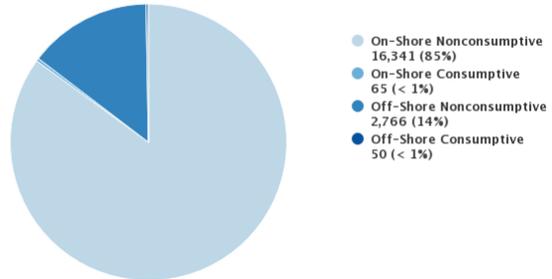
Upper Newport Bay SMCA

January 1, 2021 – June 30, 2021
362 activity events



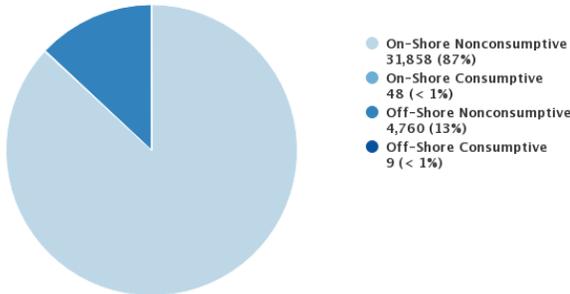
Crystal Cove SMCA

January 1, 2021 – June 30, 2021
19,222 activity events



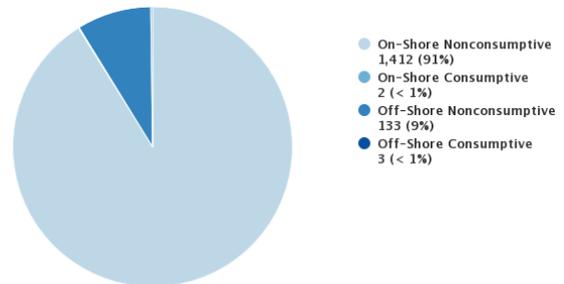
Laguna Beach SMR

Jan 1 – Jun 30, All Years
36,675 activity events



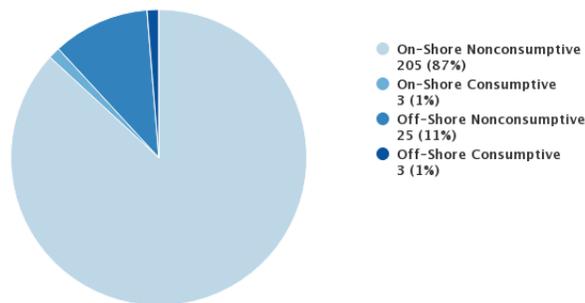
Laguna Beach SMCA

January 1, 2021 – June 30, 2021
1,550 activity events



Dana Point SMCA

January 1, 2021 – June 30, 2021
236 activity events



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.

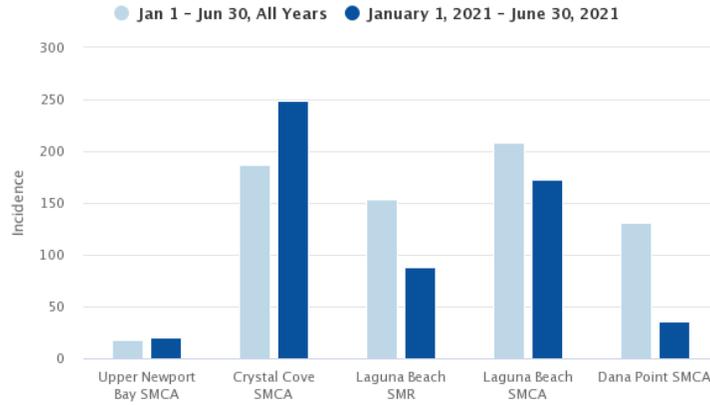
Off-Shore - Activities that take place offshore, typically in knee-deep water or deeper. Includes surfing, SCUBA diving, kayaking, boat fishing, etc.

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

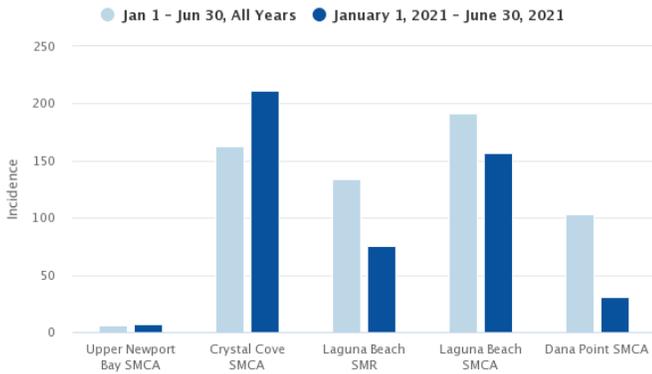
Non-Consumptive - An activity in which a natural resource is not collected.

Activity Incidence by MPA, Comparison Charts

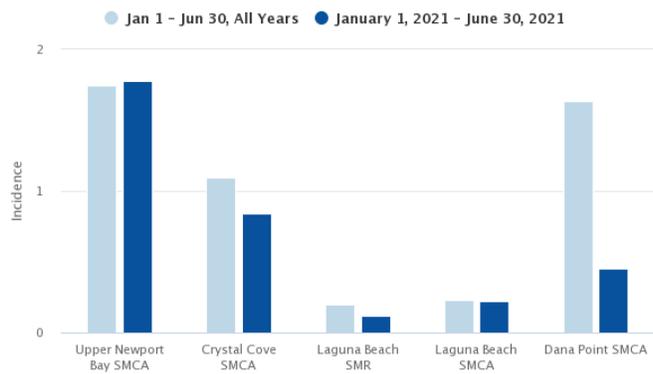
All Activity



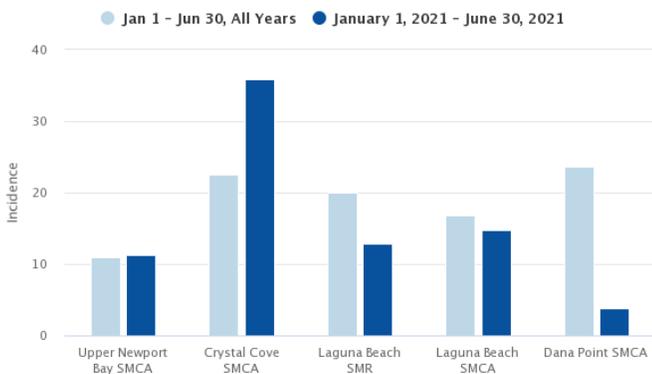
On-Shore, Non-Consumptive



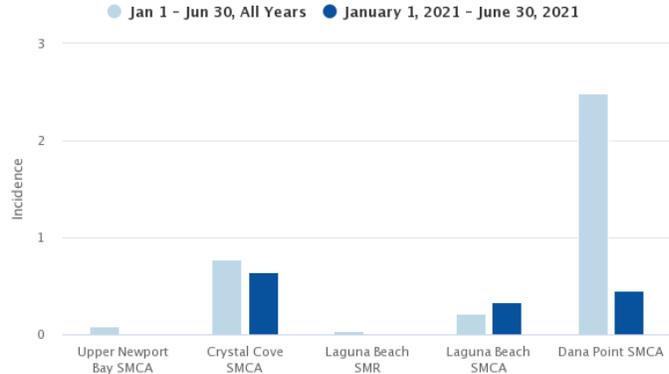
On-Shore, Consumptive



Off-Shore, Non-Consumptive



Off-Shore, Consumptive



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

Survey Count by MPA

MPA	Total	
	Jan 1 Jun 30 All Years	Jan 1, 2021 through Jun 30, 2021
Upper Newport Bay SMCA	18.3	20.1
Crystal Cove SMCA	186.6	249.0
Laguna Beach SMR	154.0	88.2
Laguna Beach SMCA	208.4	172.2
Dana Point SMCA	130.7	35.8
All MPAs Combined	142.5	164.8

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.

Activity Incidence by MPA

MPA	On-Shore								
	Non-Consumptive				Consumptive				
	▲	Jan 1 Jun 30 All Years	◆	Jan 1, 2021 through Jun 30, 2021	◆	Jan 1 Jun 30 All Years	◆	Jan 1, 2021 through Jun 30, 2021	◆
Upper Newport Bay SMCA		5.5		7.1		1.7		1.8	
Crystal Cove SMCA		162.2		211.7		1.1		0.8	
Laguna Beach SMR		133.7		75.2		0.2		0.1	
Laguna Beach SMCA		191.1		156.9		0.2		0.2	
Dana Point SMCA		102.9		31.1		1.6		0.5	
All MPAs Combined		121.1		139.6		1.0		0.7	

MPA	Off-Shore								
	Non-Consumptive				Consumptive				
	▲	Jan 1 Jun 30 All Years	◆	Jan 1, 2021 through Jun 30, 2021	◆	Jan 1 Jun 30 All Years	◆	Jan 1, 2021 through Jun 30, 2021	◆
Upper Newport Bay SMCA		10.9		11.2		0.1		0.0	
Crystal Cove SMCA		22.5		35.8		0.8		0.6	
Laguna Beach SMR		20.0		12.9		0.0		0.0	
Laguna Beach SMCA		16.8		14.8		0.2		0.3	
Dana Point SMCA		23.7		3.8		2.5		0.5	
All MPAs Combined		19.7		24.1		0.7		0.4	

*The above table shows incidence values for each MPA monitored by MPA Watch in Orange County. **Incidence is calculated as number of activities recorded divided by total survey-miles.***

COVID-19

The first half of 2021 continued to be a challenge for Orange County MPA Watch due to the COVID-19 pandemic. During the first quarter of the year the high infection rates of the pandemic had major impacts on the program, specifically reducing our ability to recruit and deploy volunteers. We were able to cover this gap utilizing Coastkeeper staff and limited volunteers. In the second quarter the success of vaccinations significantly reduced the illness rate and we were able to recruit and train more volunteers. As of this report our volunteer base is strong and growing. We did lose several of our partner organizations; the Eco Adventure Center at the Ritz Carlton Dana Point and Ocean Quest in Newport Beach due to pandemic closures. We will continue to look for and recruit new MPA Watch partners with a focus on inland communities. Since the path of the pandemic is still uncertain we will continue to follow state and local health agency guidance and recruit and train volunteers in 2021 utilizing methods to ensure the safety of the volunteers and the public.

Breakdown by MPA

Upper Newport Bay State Marine Conservation Area

For the months of January through June 2021 there were 48 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed a rate of 6.13 total use count per total miles (59.04) surveyed in the Upper Newport Bay's State Marine Conservation Area (SMCA). People observed in the MPA were primarily taking part in Beach Recreation activities (34%). Onshore hook fishing comprised 9% of the total activities in the MPA. Surfing, Paddle Boarding, and kayaking accounted for 18.0% of total activities. During this reporting period we observed no potential MPA violations. The recreational take of finfish by hook and line is allowed from shore only.

Crystal Cove State Marine Conservation Area

For the months of January through June 2021 there were 172 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed a rate of 27.59 total use count per total miles (696.60) surveyed. People in the MPA were primarily taking part in both onshore (85.0%) and offshore (15.0%) activities. Tidepooling accounted for 4.0% of total activities. During this reporting period we observed twenty-one potential MPA potential violations in the Little Corona MPA Watch survey area. According to volunteers, illegal hand collection from tidepools is commonly observed. Regulations do not allow any take from tidepools in the Crystal Cove State Marine Conservation Area.

Laguna Beach State Marine Reserve

Between the months of January through December of 2021, there were 134 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of total use 7.81 count per total miles (459.62) surveyed. People in the MPA were taking part in onshore (85.0%) and offshore (15.0%) activities. Animals on leash or off leash comprised 3.25% of the total activities in the MPA area. During this reporting period we observed five potential MPA violations. They were all had collection of biota, three incidents at the Heisler Park survey area and two incidents at the Crescent

Bay survey areas. According to volunteers, illegal hand collection was the only potential violation observed. Regulations do not allow any take in the Laguna Beach SMR.

Laguna Beach State Marine Conservation Area

For the months of January through June 2021 there were 35 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 35.71 total use count per total miles (43.4) surveyed. People observed in the MPA were primarily taking part in non-consumptive activities (99.7%). Consumptive activities only comprised 0.3% of the total activities in the MPA. Onshore activities accounted for 91.0% and offshore 9.0% of total activities. During this reporting period we observed five potential violations. One hand collection of biota at the Aliso Creek survey area, and one hand collection of biota and three boat fishing incidents at the West Beach survey areas. No take of any kind is allowed from Laguna Beach No-Take SMCA.

Dana Point State Marine Conservation Area

For the months of January through June 2021 there were 10 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 7.81 total use count per total miles (30.2) surveyed. 97.5% of the Dana Point coastal uses surveyed since MPA implementation are non-consumptive. The most popular coastal activities in Dana Point are general beach recreation (84.0%). Other common activities are boat fishing (2.6%) and offshore activities such as surfing and paddle boarding (8.5%). During this reporting period we observed no potential MPA violations in the Dana Point MPA Watch area. Regulations do not allow any taking from tidepools in the Dana Point SMCA.

Potential Violations

Rate of consumptive activities observed remains relatively low in all MPAs surveyed, accounting for less than 1% (0.12) of all observations recorded. According to volunteers there were no MPA potential violations observed during surveys in the Upper Newport Bay and Dana Point Marine Conservation Areas. In Upper Newport Bay, the recreational take of finfish by hook and line is allowed from shore only. Regulations do not allow any taking from tidepools in the Dana Point SMCA.

However, during this reporting period we observed twenty-one potential MPA violations in the Little Corona MPA Watch area. All of them were for take from tidepools. This higher than usual rate of potential violations is likely due to the reduced presence of City of Newport Beach docents due to pandemic restrictions and staff turnover. According to volunteers, recurring issues with the illegal take and disturbance of tide pool organisms continues to be a problem during low tides. The recreational take of finfish by hook and line or by spearfishing is allowed; no take allowed from tidepools.

Also, during this reporting period we observed five potential MPA violations, all hand collection of biota. Three were in the Heisler Park survey area and two were in the Crescent Bay areas. The relatively low rate of potential violations is likely due to the continued strong enforcement by the City of Laguna Beach and docent programs run by the city and Laguna Ocean Foundation. According to volunteers there are occasional take violations in the reserve consisting of hand collection of biota. No take of any kind is allowed in the Laguna Beach SMR.

Volunteers observed five potential violations in the Laguna Beach State Marine Conservation Area. There was one hand collection of biota at Aliso Creek and one hand collection of Biota and three offshore fishing incidents at West Beach. According to volunteers illegal fishing occurs occasionally on and offshore. No take is allowed from the Laguna Beach No-Take SMCA.

Next Steps

MPA Watch collaborates 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 makes 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](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.