

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 Area (SMRs & SMCAs), 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

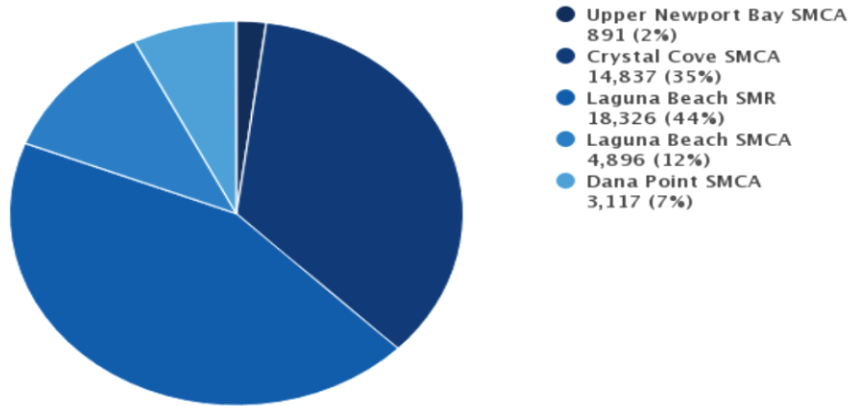
In 2019, 691 surveys were completed covering twenty nine survey sites by thirty volunteers. There were forty three potential violations recorded and 42,067 total activities within the 12.54 miles of MPA area.

Human Use of MPAs January 1, 2019 – December 31, 2019

Overview

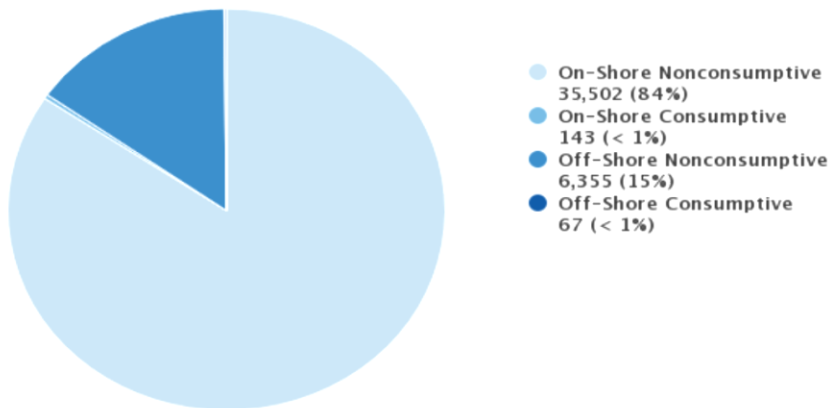
Top 5 MPAs by All Activity

January 1, 2019 – December 31, 2019
42,067 total activity events



All MPAs Combined

January 1, 2019 – December 31, 2019
42,067 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.

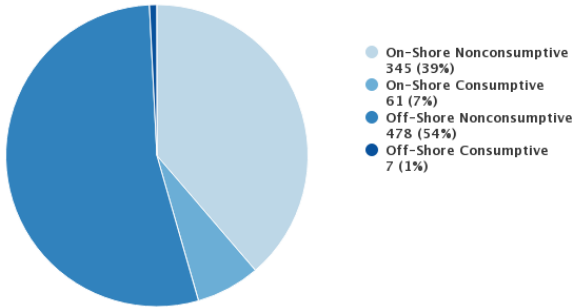
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

Activity by MPA

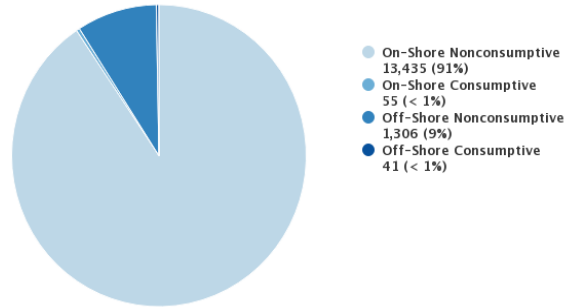
Upper Newport Bay SMCA

January 1, 2019 – December 31, 2019
891 activity events



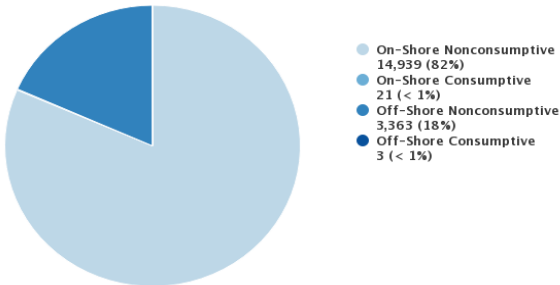
Crystal Cove SMCA

January 1, 2019 – December 31, 2019
14,837 activity events



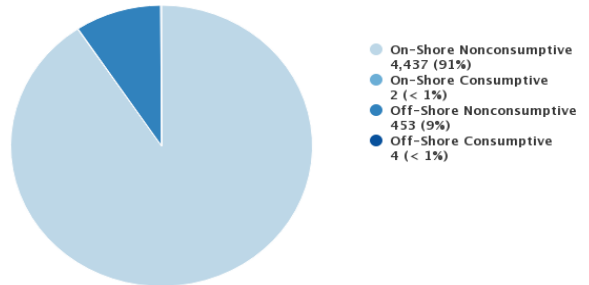
Laguna Beach SMR

January 1, 2019 – December 31, 2019
18,326 activity events



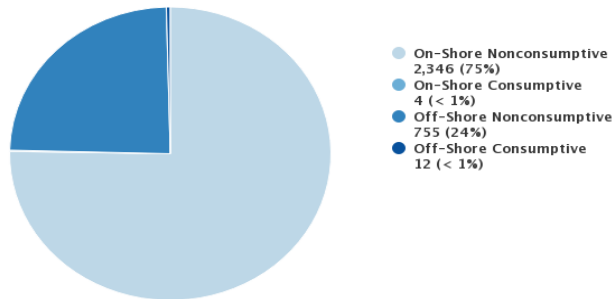
Laguna Beach SMCA

January 1, 2019 – December 31, 2019
4,896 activity events



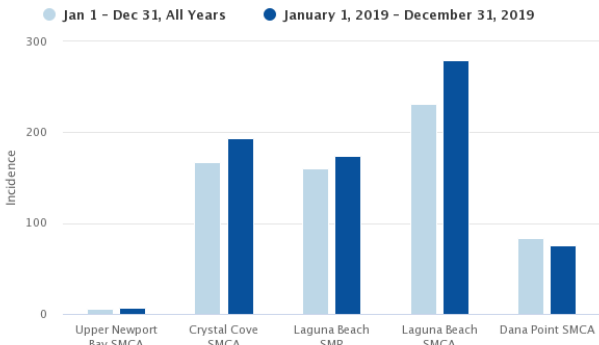
Dana Point SMCA

January 1, 2019 – December 31, 2019
3,117 activity events

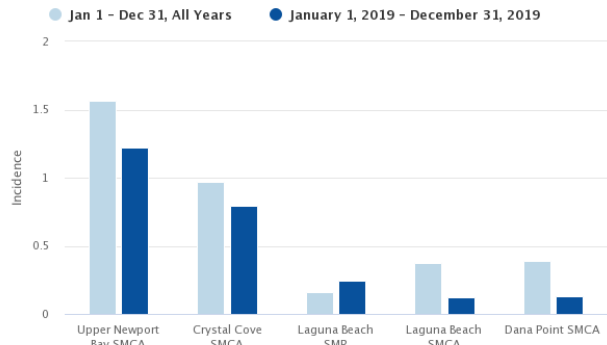


Activity Incidence by MPA

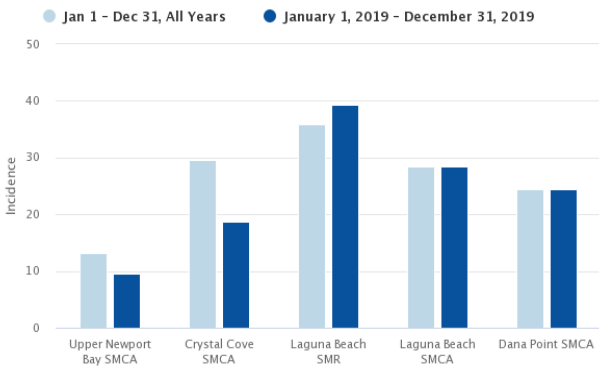
On-Shore, Non-Consumptive



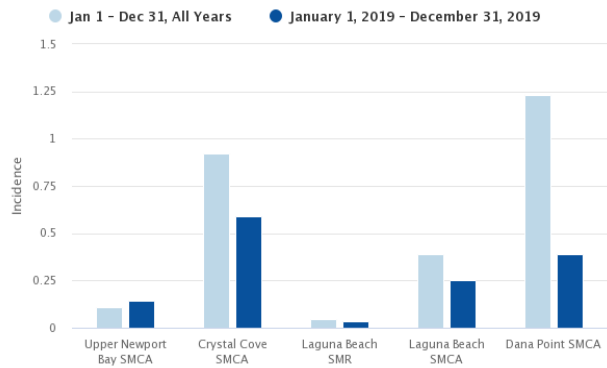
On-Shore, Consumptive



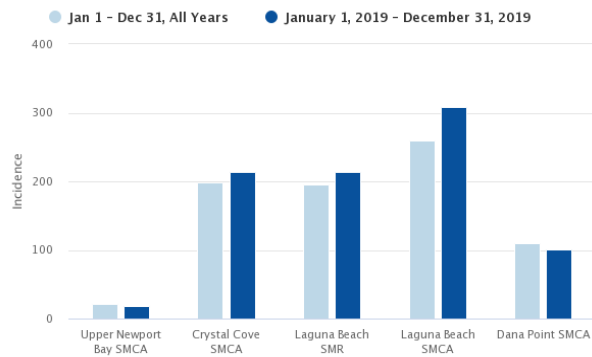
Off-Shore, Non-Consumptive



Off-Shore, Consumptive



All Activity



Activity Incidence by MPA

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	▲ Jan 1 Dec 31 All Years	◆ Jan 1, 2019 through Dec 31, 2019 ◆	▲ Jan 1 Dec 31 All Years	◆ Jan 1, 2019 through Dec 31, 2019 ◆
Upper Newport Bay SMCA	6.2	6.9	1.6	1.2
Crystal Cove SMCA	167.3	193.0	1.0	0.8
Laguna Beach SMR	160.0	174.3	0.2	0.2
Laguna Beach SMCA	231.1	279.1	0.4	0.1
Dana Point SMCA	83.5	75.9	0.4	0.1
All MPAs Combined	121.6	140.9	0.7	0.6

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	▲ Jan 1 Dec 31 All Years	◆ Jan 1, 2019 through Dec 31, 2019 ◆	▲ Jan 1 Dec 31 All Years	◆ Jan 1, 2019 through Dec 31, 2019 ◆
Upper Newport Bay SMCA	13.1	9.6	0.1	0.1
Crystal Cove SMCA	29.6	18.8	0.9	0.6
Laguna Beach SMR	35.8	39.2	0.0	0.0
Laguna Beach SMCA	28.4	28.5	0.4	0.3
Dana Point SMCA	24.4	24.4	1.2	0.4
All MPAs Combined	27.2	25.2	0.5	0.3

MPA	Total Combined	
	▲ Jan 1 Dec 31 All Years	◆ Jan 1, 2019 through Dec 31, 2019 ◆
	Upper Newport Bay SMCA	21.0
Crystal Cove SMCA	198.8	213.2
Laguna Beach SMR	196.1	213.8
Laguna Beach SMCA	260.2	307.9
Dana Point SMCA	109.5	100.9
All MPAs Combined	150.1	167.0

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.

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 2019, Orange County MPA Watch data shows a rate of 5.4 total use count per total miles (164.82) surveyed in the Upper Newport Bay Marine Conservation Area (SMCA).

People observed in the MPA were primarily taking part in non-consumptive activities both onshore (73%) and off-shore (7%), such as: beach and ocean recreations. The remaining 20% of human use was comprised of offshore consumptive activities (Fishing 15%) and animal walking 5%).

The recreational take of finfish by hook and line is allowed from shore only.

Crystal Cove State Marine Conservation Area

For 2019, Orange County MPA Watch data shows a rate of 21.93 total use count per total miles (676.35) surveyed in the Crystal Cove SMCA.

People in the MPA were primarily taking part in both onshore (74.5%) and offshore 21%), non-consumptive activities. These activities accounted for 95.5% of the observations logged in MPA Watch surveys. The remaining 4.5% were tidepooling (4%) and fishing (0.5%) activities.

Our surveys show illegal hand collection from tidepools is commonly observed. Regulations do not allow any taking from tidepools in the Crystal Cove SMCA.

Laguna Beach State Marine Reserve

For 2019, Orange County MPA Watch data shows a rate of 23.22 total use count per total miles (789) surveyed.

People in the MPA were taking part in onshore (84%) and offshore (12.5%) activities. This accounted for 97% of the activities logged in the MPA Watch surveys. The remaining 3.5% were tide pooling (1.5%), animal walking and wildlife watching (2%) activities.

Our surveys show illegal hand collection and fishing activities are commonly observed. Regulations do not allow any take in the Laguna Beach SMR.

Laguna Beach State Marine Conservation Area

Between the months of January and December 2019, Orange County MPA Watch data shows a rate of 46.45 total use count per total miles (105.4) surveyed.

People in the MPA were taking part in onshore (88.5%) and offshore (6%) activities. This accounted for 94.5% of the activities logged in the MPA Watch surveys. The remaining 5.5% were tide pooling (3%), animal walking, and wildlife watching (2%) and fishing (0.5%) activities.

No take allowed in the Laguna Beach SMCA.

Dana Point State Marine Conservation Area

In 2019, Orange County MPA Watch data shows a rate of use of 24.57 total use count per total miles (126.84) surveyed.

People in the MPA were taking part in onshore (83%) and offshore (14%) activities. This accounted for 97% of the activities logged in MPA Watch surveys. The remaining 3% were tidepooling (2.5%) and fishing (0.5%) activities.

Our surveys show illegal hand collection from tidepools are commonly observed. Regulations does 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% of all observations recorded.

According to volunteers there were no MPA potential violations observed during surveys in the Upper Newport Bay Marine Conservation Area. The recreational take of finfish by hook and line is allowed from shore only.

However, during this period (Jan- Dec 2019) we observed eleven (11, 0.02%) potential MPA violations in the Crystal Cove SMCA (Little Corona; Los Trancos; and Reef Point). The recreational take of finfish by hook and line or by spearfishing is allowed; no take allowed from tidepools. According to volunteers, recurring issues with the illegal take and disturbance of tide pool organisms continues to be a problem during low tides.

Also, during this period (Jan- Dec 2019) we observed twenty three (23, 0.03%) potential MPA violations in the Laguna Beach State Marine Reserve Area (Main; Heisler; Victoria; Crescent; and Cress). No take allowed in the Laguna Beach SMR. According to volunteers there are occasional take violation in the reserve including the collection of biota and illegal fishing from the offshore.

Volunteers observed six (6, 0.06%) potential MPA violations in the Laguna Beach State Marine Conservation Area (West Beach; Montage; and Aliso Creek). No take allowed from Laguna Beach No-Take SMCA. According to volunteers there are occasional illegal fishing from the on and offshore.

According to volunteers' submitted data, during this period (Jan- Dec 2019) three (3, 0.02%) potential MPA violations in the Dana Point State Marine Conservation Area (Dana Point) were observed. The recreational take of finfish by hook and line or by spearfishing is allowed; no take allowed from tidepools. Recurring issues with the illegal take and disturbance of tidepools organisms continues to be a problem during low tides.

Next Steps

Orange County Coastkeeper is working to implement boat based MPA Watch surveys into our data reporting to monitor human use within our MPAs. Once we are able to publish that data we will be able to accurately represent offshore usage within our MPAs. In Orange County Coastkeeper is working to increase outreach for MPA Watch and increase the number of volunteers we have collecting human use data within our local MPAs.

MPA Watch intends 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 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.