

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 & SMCA), Crystal Cove, Dana Point, and Upper Newport Bay State Marine Conservation Areas (SMCA). 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**

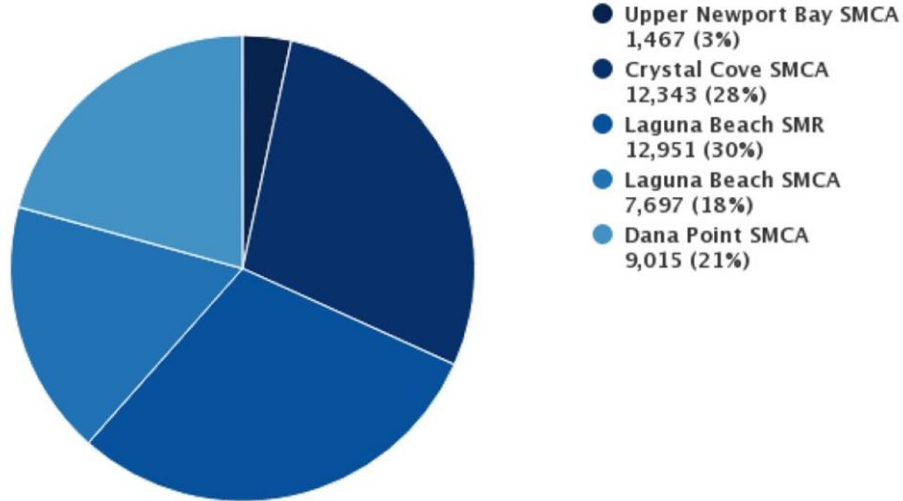
During 2020 651 surveys were completed at 31 MPA survey sites by 29 volunteers. There were 71 potential violations observed out of 43473 total activities documented. Due to the COVID-19 pandemic no surveys were conducted between March 15th and June 1st, 2020.

# Human Use of MPAs January – December 2020

## Overview

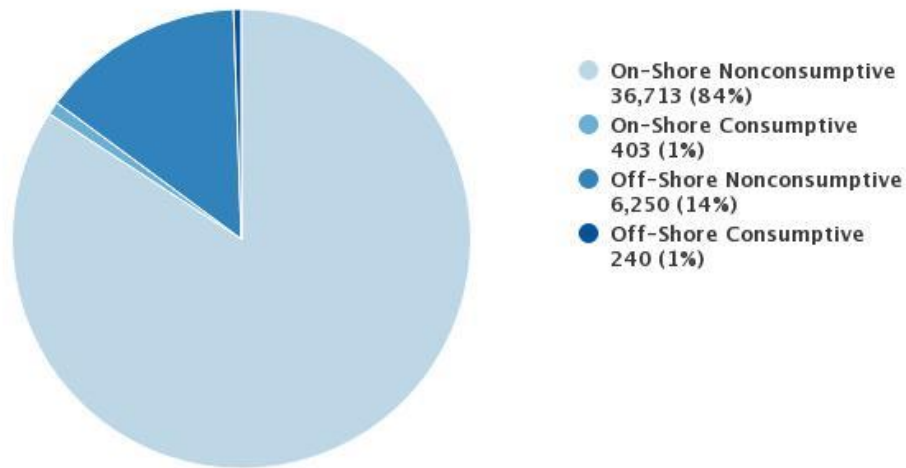
### Top 5 MPAs by All Activity

January 1, 2020 – December 31, 2020  
43,473 total activity events



### All MPAs Combined

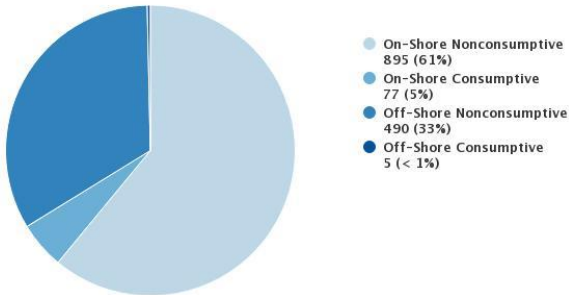
January 1, 2020 – December 31, 2020  
43,606 activity events



# Activity by MPA

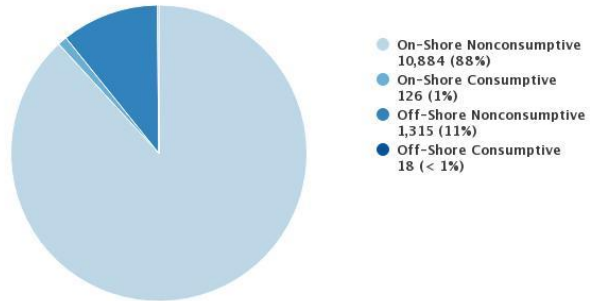
## Upper Newport Bay SMCA

January 1, 2020 - December 31, 2020  
1,467 activity events



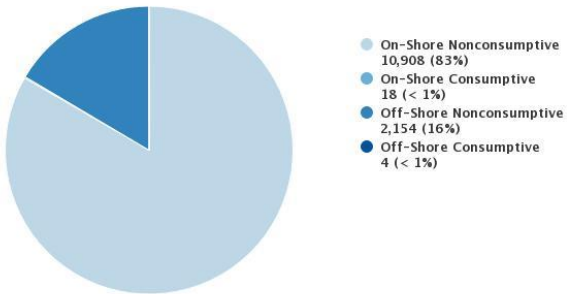
## Crystal Cove SMCA

January 1, 2020 - December 31, 2020  
12,343 activity events



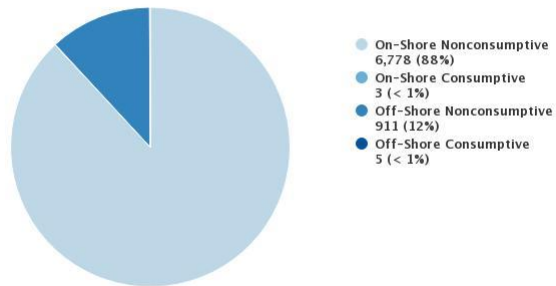
## Laguna Beach SMR

January 1, 2020 - December 31, 2020  
13,084 activity events



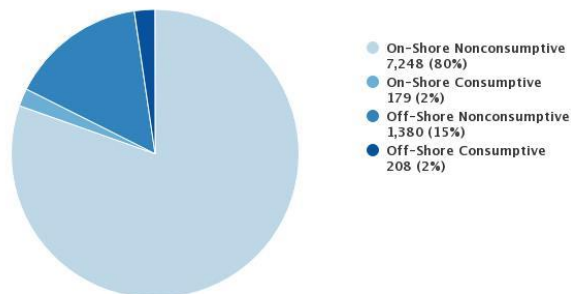
## Laguna Beach SMCA

January 1, 2020 - December 31, 2020  
7,697 activity events



## Dana Point SMCA

January 1, 2020 - December 31, 2020  
9,015 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.

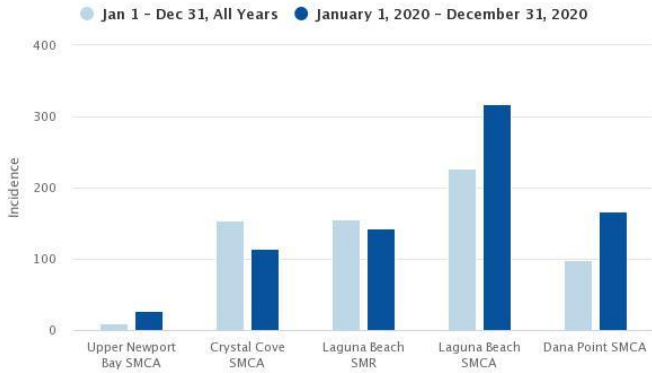
**Off-Shore** - Activities that take place offshore, typically in knee-deep water or deeper. Includes surfing, SCUBA diving, kayaking, boat fishing, etc.

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

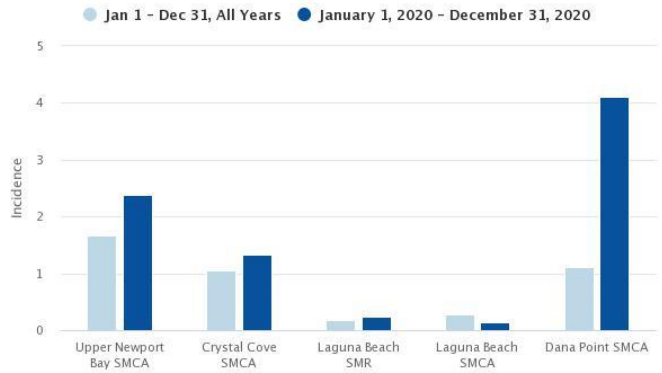
**Non-Consumptive** - An activity in which a natural resource is not collected.

# Activity Incidence by MPA

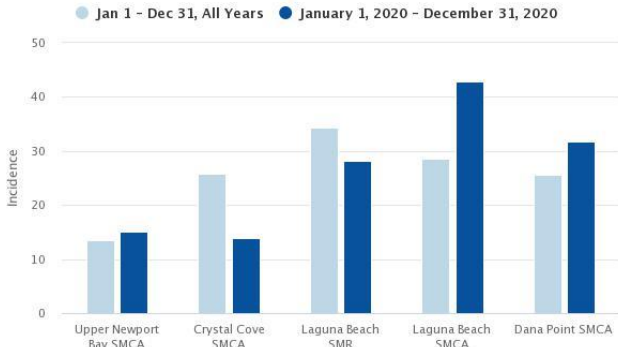
On-Shore, Non-Consumptive



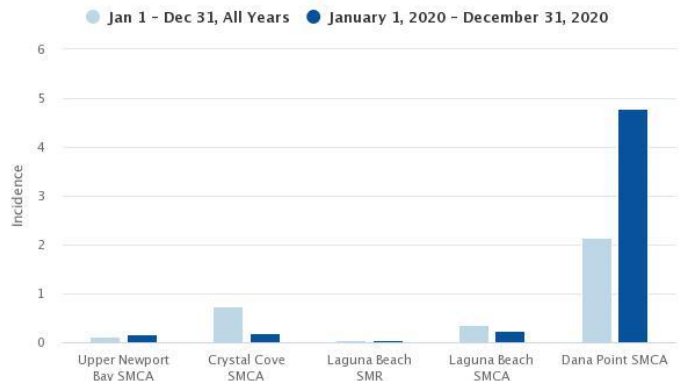
On-Shore, Consumptive



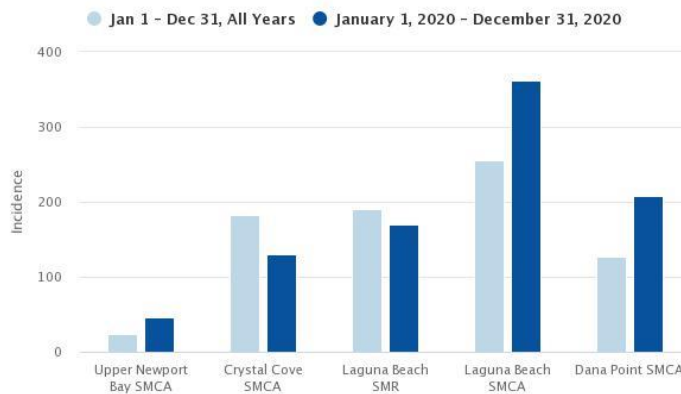
Off-Shore, Non-Consumptive



Off-Shore, Consumptive



All Activity



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.

## Activity Incidence by MPA

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020
Upper Newport Bay SMCA	8.7	27.7	1.7	2.4
Crystal Cove SMCA	154.7	114.8	1.1	1.3
Dana Point SMCA	98.2	166.6	1.1	4.1
Laguna Beach SMCA	226.7	318.2	0.3	0.1
Laguna Beach SMR	155.9	142.2	0.2	0.2
All MPAs Combined	123.2	136.7	0.9	1.5

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020
Dana Point SMCA	25.5	31.7	2.1	4.8
Crystal Cove SMCA	25.8	13.9	0.7	0.2
Laguna Beach SMCA	28.6	42.8	0.3	0.2
Upper Newport Bay SMCA	13.4	15.2	0.1	0.2
Laguna Beach SMR	34.3	28.1	0.0	0.1
All MPAs Combined	26.2	23.3	0.6	0.9

MPA	Total Combined	
	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020
	Upper Newport Bay SMCA	23.9
Crystal Cove SMCA	182.3	130.2
Laguna Beach SMR	190.4	170.6
Laguna Beach SMCA	255.9	361.4
Dana Point SMCA	126.9	207.2
All MPAs Combined	150.9	162.3

### 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.

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.**

## Breakdown by MPA

### Survey Counts

MPA	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020
Upper Newport Bay SMCA	710	84
Crystal Cove SMCA	828	172
Laguna Beach SMR	1,425	256
Laguna Beach SMCA	344	77
Dana Point SMCA	408	63
All MPAs Combined	3,715	652

### Upper Newport Bay State Marine Conservation Area

For the months January through December 2020 there were 84 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed a rate of 14.2 total use count per total miles (103.32) surveyed in the Upper Newport Bay's State Marine Conservation Area (SMCA).

People observed in the MPA were primarily taking part in non-consumptive activities (94.4%). Consumptive activities comprised 5.6% of the total activities in the MPA. Onshore activities accounted for 66% and offshore 34% of total activities.

During this period (January through December 2020) we observed Five (5) potential MPA violations in the Jamboree (3) and Castaway (2) MPA areas.

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 December 2020 there were 172 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed a rate of 17.7 total use count per total miles (696.60) surveyed.



People in the MPA were primarily taking part in both onshore (89%) and offshore (11%) activities.

During this period (January through December 2020) we observed thirty-six (36) potential MPA violations in the Little Corona (29), Los Trancos (5), and Reef Point (2) Crystal Cove MPA Watch area.

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.

### **Laguna Beach State Marine Reserve**

Between the months of January through December of 2020, there were 256 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 15 total use count per total miles (867) surveyed.

People in the MPA were taking part in onshore (83%) and offshore (17%) activities.

During this period (January through December 2020) we observed twenty-two (22) potential MPA violations (Taking from tidepools) in Heisler (12), Shaw's Cove (3), Woods Cove (3), Moss (3), and Crescent (1) MPA Watch areas. According to volunteers, illegal hand collections and fishing activities are commonly observed. Regulations do not allow any taking in the Laguna Beach SMR.

### **Laguna Beach State Marine Conservation Area**

For the months of July through September 2020 there were 77 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 80.61 total use count per total miles (95.48) surveyed.

People observed in the MPA were primarily taking part in non-consumptive activities (99.9%). Consumptive activities only comprised 0.1% of the total activities in the MPA. Onshore activities accounted for 88.0% and offshore 12.0% of total activities.

During this period (July – September 2020) we observed eight (8) potential violations in the Laguna Beach State Marine Conservation Area (Aliso Creek, Montage, Table Rock, and West Beach). No take is allowed from Laguna Beach No-Take SMCA.

## **Dana Point State Marine Conservation Area**

For the months of January through December 2020 there were 63 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 42.46 total use count per total miles (212.31) surveyed.

96% 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 (75.0%). Other common activities are tide pooling (1.0%) and offshore recreation (24.0%).

During this period (Jan- Dec 2020) we observed no potential MPA violations in the Dana Point MPA Watch area. 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 1% (0.16) of all observations recorded.

According to volunteers during this period (January through December 2020), five (5) potential MPA violations in the Jamboree (3) and Castaway (2) MPA areas were observed.

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

However, during this period (Jan- June 2020) we observed thirty-six (36) potential MPA violations in the Little Corona (29), Los Trancos (5), and Reef Point (2) Crystal Cove MPA Watch area.

The recreational take of finfish by hook and line or by spearfishing is allowed; no take is 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- June 2020) we observed twenty-two (22) potential MPA violations (Taking from tidepools) in Heisler (12), Shaw's Cove (3), Woods Cove (3), Moss (3), and



Crescent (1) MPA Watch areas. No take is allowed in the Laguna Beach SMR. According to volunteers there are occasional take violations in the reserve including the collection of biota and illegal fishing offshore.

Volunteers observed eight (8) potential violations in the Laguna Beach State Marine Conservation Area (Aliso Creek, Montage, Table Rock, and West Beach). No take is allowed from the Laguna Beach No-Take SMCA. According to volunteers illegal fishing occurs occasionally on and offshore.

According to volunteers there were no MPA potential violations observed during surveys in the Dana Point Marine Conservation Area. Regulations do not allow any take from tidepools in the Dana Point SMCA.

## **COVID-19**

Due to the COVID-19 pandemic No surveys were conducted between March 15th and June 1st, 2020. This has created a gap in our data collection that will affect comparisons of this time period to previous years.

Additionally, when surveys resumed there was a larger amount of people at the beach than previously observed. We feel this is largely due to people being displaced from their normal activities such as shopping, movies and school and visiting the beach instead.

Beaches closures were in effect during some of the time surveys were suspended.

- Laguna Beach closed March 23rd and reopened on May 5th. City beaches were closed on July 4th and 5th.
- Dana Point: Closed March 23rd. Reopened May 5th.
- Newport Beach: Closed March 18th. Reopened May 6th. City beaches were closed July 3-5th.
- Crystal Cove State Park: Closed March 27. Reopened May 16. State beaches were closed July 4-5th.

## 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](https://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](https://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](https://coastkeeper.org).