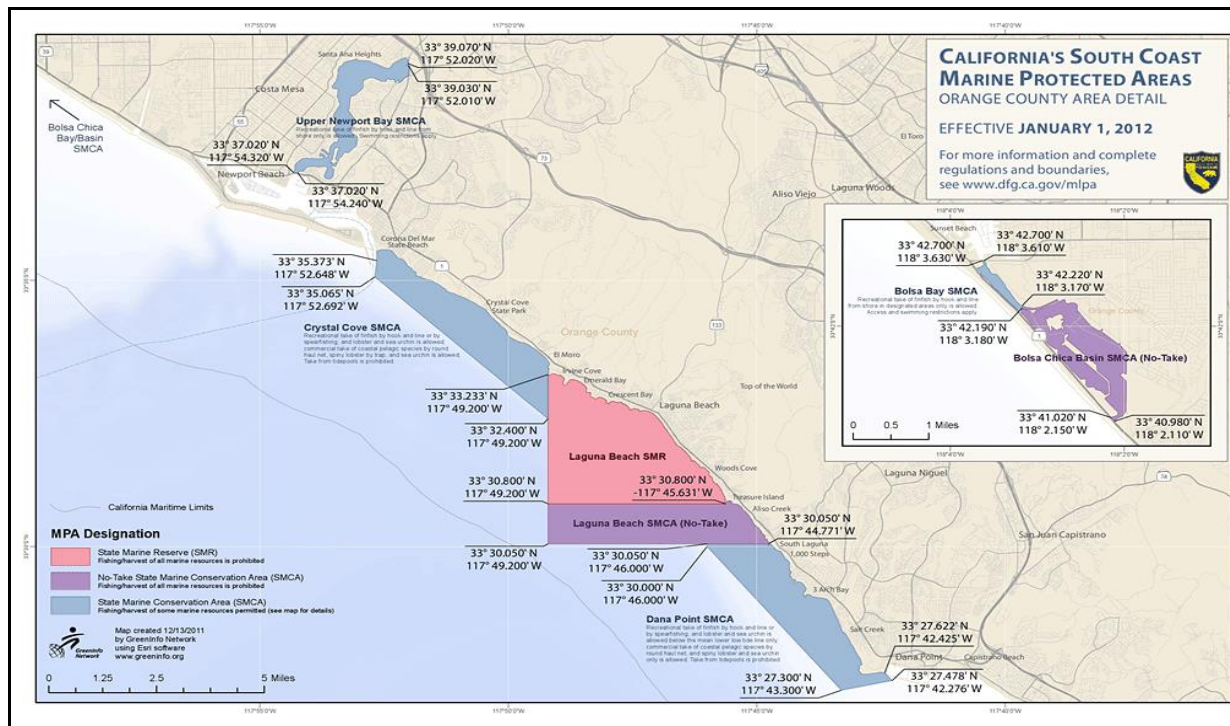




**Marine Protected Area (MPA) Watch
Annual Report
Orange County
January 1, 2022 – December 31, 2022**



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 protect the region’s water resources, so they are swimmable, drinkable and fishable for present and future generations. 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), along with 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

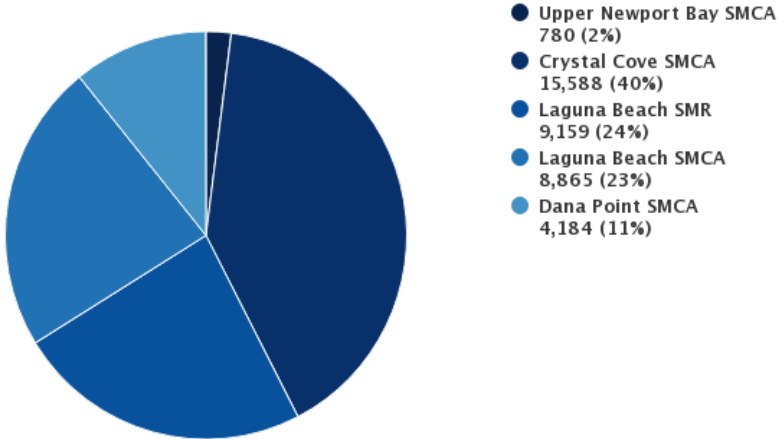
- During this period 838 surveys were completed at thirty MPA survey sites by eighteen volunteers.
- There were forty potential violations observed out of 38,576 total activities documented. Twenty two of these were reported.
- A decrease in the rate of use for the reporting period vs. baseline was observed.

Human Use of MPAs January 1, 2022 – December 31, 2022

Overview

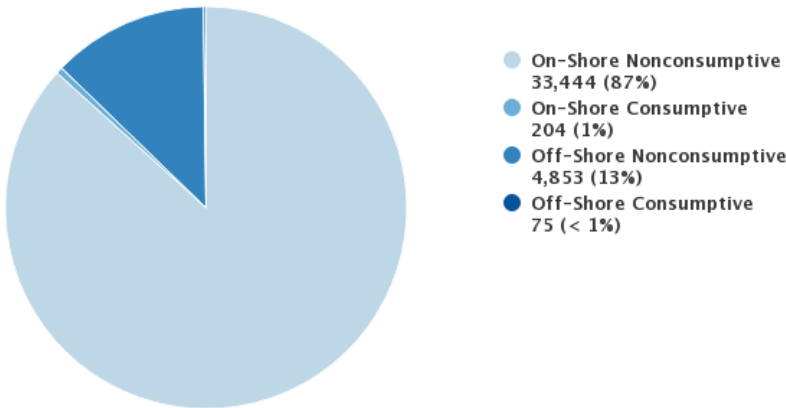
Top 5 MPAs by All Activity

January 1, 2022 – December 31, 2022
38,576 total activity events



All MPAs Combined

January 1, 2022 – December 31, 2022
38,576 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.

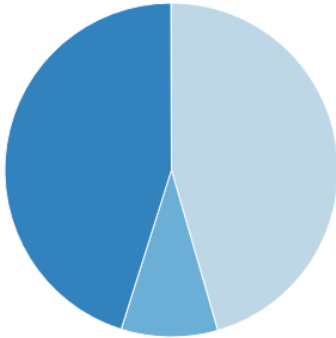
Non-Consumptive - An activity in which a natural resource is not collected.



Activity by MPA

Upper Newport Bay SMCA

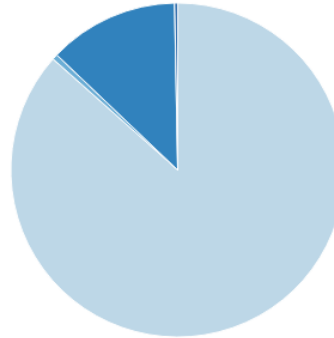
January 1, 2022 – December 31, 2022
780 activity events



- On-Shore Nonconsumptive
355 (46%)
- On-Shore Consumptive
73 (9%)
- Off-Shore Nonconsumptive
352 (45%)
- Off-Shore Consumptive
0 (< 1%)

Crystal Cove SMCA

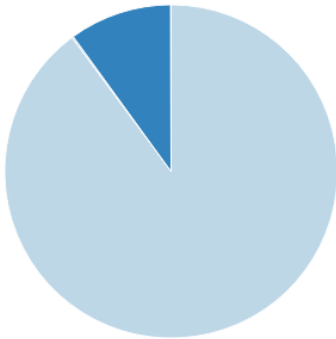
January 1, 2022 – December 31, 2022
15,588 activity events



- On-Shore Nonconsumptive
13,496 (87%)
- On-Shore Consumptive
81 (1%)
- Off-Shore Nonconsumptive
1,965 (13%)
- Off-Shore Consumptive
46 (< 1%)

Laguna Beach SMR

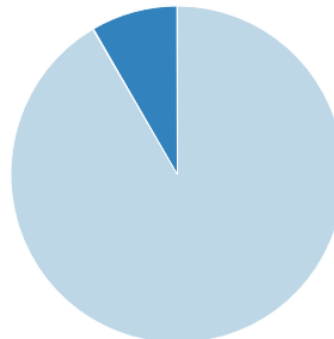
January 1, 2022 – December 31, 2022
9,159 activity events



- On-Shore Nonconsumptive
8,230 (90%)
- On-Shore Consumptive
13 (< 1%)
- Off-Shore Nonconsumptive
916 (10%)
- Off-Shore Consumptive
0 (< 1%)

Laguna Beach SMCA

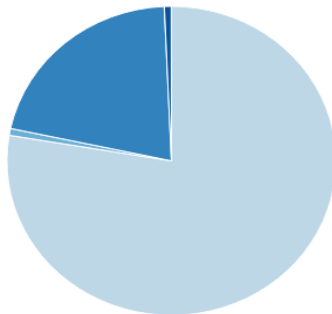
January 1, 2022 – December 31, 2022
8,865 activity events



- On-Shore Nonconsumptive
8,114 (92%)
- On-Shore Consumptive
7 (< 1%)
- Off-Shore Nonconsumptive
744 (8%)
- Off-Shore Consumptive
0 (< 1%)

Dana Point SMCA

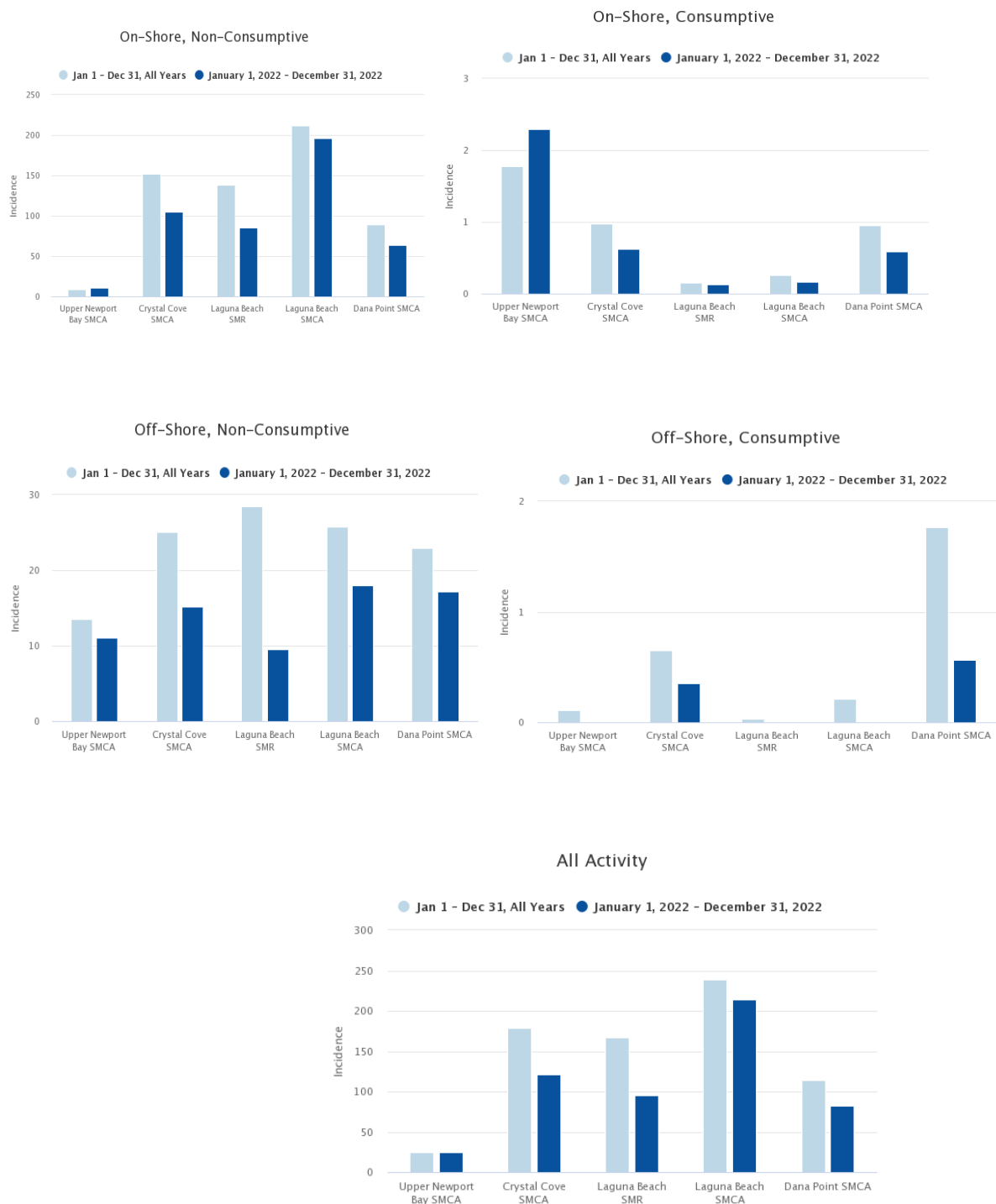
January 1, 2022 – December 31, 2022
4,184 activity events



- On-Shore Nonconsumptive
3,249 (78%)
- On-Shore Consumptive
30 (1%)
- Off-Shore Nonconsumptive
876 (21%)
- Off-Shore Consumptive
29 (1%)



Activity Incidence by MPA



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 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

MPA	On-Shore					
	Non-Consumptive			Consumptive		
	◆ Jan 1 Dec 31 All Years	◆ Jan 1, 2022 through Dec 31, 2022	◆	Jan 1 Dec 31 All Years	Jan 1, 2022 through Dec 31, 2022	▲
Laguna Beach SMR	138.0	85.6		0.2	0.1	
Laguna Beach SMCA	212.2	196.0		0.3	0.2	
Crystal Cove SMCA	151.6	104.5		1.0	0.6	
Dana Point SMCA	88.9	63.7		0.9	0.6	
Upper Newport Bay SMCA	8.9	11.1		1.8	2.3	
All MPAs Combined	120.1	95.7		0.8	0.6	

MPA	Off-Shore					
	Non-Consumptive			Consumptive		
	◆ Jan 1 Dec 31 All Years	◆ Jan 1, 2022 through Dec 31, 2022	◆	Jan 1 Dec 31 All Years	Jan 1, 2022 through Dec 31, 2022	▲
Upper Newport Bay SMCA	13.6	11.0		0.1	0.0	
Laguna Beach SMR	28.5	9.5		0.0	0.0	
Laguna Beach SMCA	25.8	18.0		0.2	0.0	
Crystal Cove SMCA	25.0	15.2		0.7	0.4	
Dana Point SMCA	22.9	17.2		1.8	0.6	
All MPAs Combined	23.9	13.9		0.5	0.2	

MPA	Total	
	Combined	
	▼ Jan 1 Dec 31 All Years	◆ Jan 1, 2022 through Dec 31, 2022
Dana Point SMCA	114.6	82.0
Laguna Beach SMCA	238.4	214.1
Laguna Beach SMR	166.7	95.3
Crystal Cove SMCA	178.3	120.7
Upper Newport Bay SMCA	24.4	24.5
All MPAs Combined	145.4	110.3

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.

Breakdown by MPA

Upper Newport Bay State Marine Conservation Area

For the months January through December 2022 there were 87 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed a rate of 24.5 total use count per total miles surveyed.

People observed in the MPA were primarily taking part in beach recreation activities (36.0%). Offshore activities comprised 4.0% of the total activities in the MPA. paddle boarding, kayaking, and other boating accounted for 31.0% of total activities.

During this period (January through December 2022) we observed one (1) potential MPA violation (Hand Collect Biota; Sandy), in the Castaway MPA survey area. The regulations allow 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 2022 there were 221 surveys submitted to the MPA Watch website. Orange County MPA Watch data showed a rate of 120.7 total use count per total miles surveyed.

People in the MPA were primarily taking part in onshore (87.0%) activities with offshore (13.0%) activities making up the rest. Tidepooling (Not Collecting) accounted for 5.0% of total activities.

During this period (January through December 2022) we observed eighteen (18) potential MPA potential violations at the Little Corona (9), Reef point (7), Los Trancos (1), and Pelican Point (1) MPA Watch survey areas.

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 2022, there were 300 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a 95.3 total use count per total miles surveyed within the MPA Watch area.

People in the MPA were taking part in onshore (90.0%) and offshore (10.0%) activities. Beach recreational activities comprised 71.0% of the total activities in the MPA area.

During this period (January through December 2022) we observed thirteen (13) potential MPA violations all hand collection of biota; rocky. This occurred in the Heisler (11), Woods Cove (1), and Fisherman's Cove (1) MPA Watch survey areas.

According to volunteers, 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

For the months of January through December 2022 there were 161 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 214.1 total use count per total miles surveyed within the MPA Watch area

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 92.0% and offshore 8.0% of total activities.

During this period (January through December 2022) we observed Seven (7) potential violations, all hand take of biota, at the Montage (5), Aliso Creek (1) and Table Rock (1) survey sites within the Laguna Beach State Marine Conservation Area. No take is allowed from Laguna Beach No-Take SMCA.

Dana Point State Marine Conservation Area

For the months of January through December 2022 there were 69 surveys submitted to the MPA Watch website. Orange County MPA Watch data shows a rate of 82.0 total use count per total miles surveyed.

98.5.0% 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 (62.5.0%). Other common activities are boat fishing (0.8%) and offshore activities such as surfing and paddle boarding (7%).

During this period (January through December 2022) we observed one (1) potential MPA violation (Hand Collect Biota; Rocky) in the Dana Point MPA Watch survey 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% (0.10) of all observations recorded.

According to volunteers there were two MPA potential violations observed during surveys in the Upper Newport Bay (Castaway) and Dana Point (Dana Point) Marine Conservation Areas, both hand take of biota. In the 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.

During this period (Jan-Dec 2022) we observed eighteen (18) potential MPA violations in the Crystal Cove SMCA, all for hand collection of biota. This included (9) in the Little Corona, seven (7) in the Reef point, one (1) in the Los Trancos, and one (1) in the Pelican Point MPA Watch survey areas. No take is allowed from tidepools in the Crystal Cove SMCA. 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 2022) we observed thirteen (13) potential MPA violations in the Laguna Beach State Marine Reserve, all take from tidepools. This includes eleven (11) in the Heisler, one (1) in the Woods Cove (1), and one (1) in the Fisherman's Cove MPA Watch survey 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, but strict local MPA enforcement efforts keep take low in this area.

Volunteers observed seven (7) potential violations in the Laguna Beach State Marine Conservation Area, all hand collection of biota; five (5) in the Montage (5), one in the (1) Aliso Creek. and one (1) in the Table Rock MPA Watch survey areas. No take is allowed from the Laguna Beach No-Take SMCA. According to volunteers illegal fishing occurs occasionally on and offshore.

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 goals 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. In 2023 the CDFW will be reviewing the effectiveness of all California MPAs as part of its adaptive management of these areas. MPA Watch data will be used as part of this review, and we will inform and encourage our volunteers and the public to participate in this public process.

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.