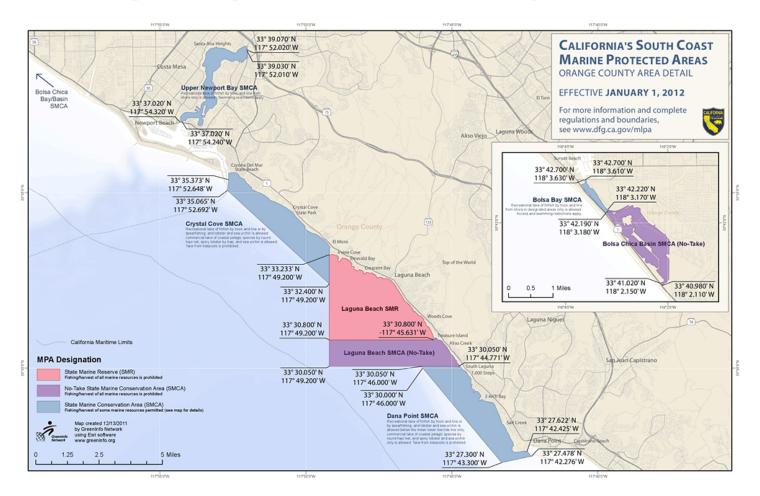


### Orange County MPAs Watch 1<sup>st</sup> Quarterly Report 2018



# <sup>1st</sup> Quarter, 2018 Results by Marine Protected Area

MPA	Total Activities	Total Onshore	Total Offshore	Onshore Consumptive	Onshore Non- consumptive	Offshore Consumptive	Offshore Non- consumptive	Violation	Total Surveys
Upper Newport Bay	84	25	59	8	17	0	59	0	14
Crystal Cove	1170	1023	147	4	1019	8	139	0	9
Laguna Beach	2128	1933	195	0	1933	0	195	0	58
Dana Point	421	333	88	2	331	0	88	0	12
Total	3803	3314	489	14	3300	8	481	0	93

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 (SMR) and Crystal Cove, Dana Point, Laguna Beach, 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. MPA Watch should be viewed as the first part of a three-step process of monitoring, education, and enforcement to evaluate MPA effectiveness in the management of coastal and marine habitats and resources.

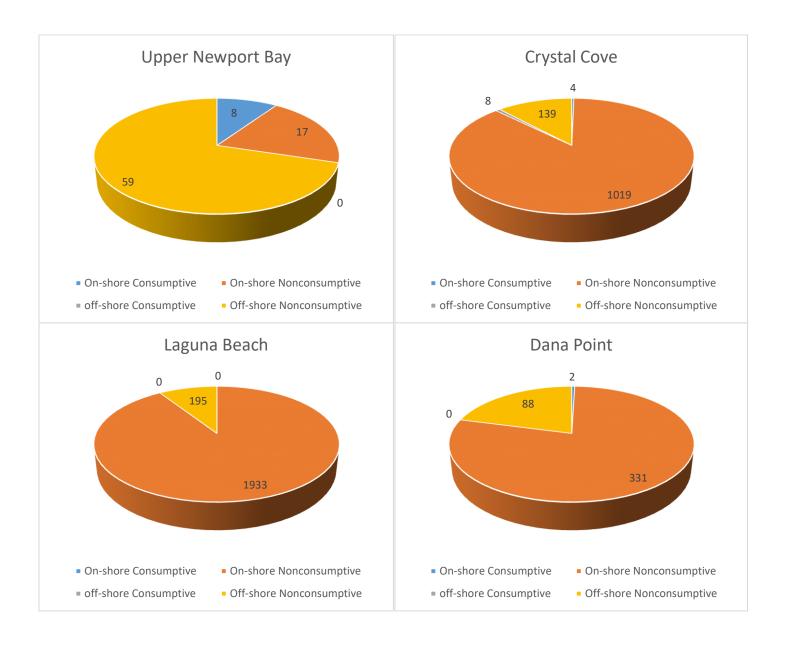
Surveys are conducted at twenty-six locations in five Marine Protected Areas: Crystal Cove SMCA (Big Corona, Little Corona and Reef Point), Upper Newport Bay SMCA (North Star Beach, Castaways and Rocky Point), Laguna Beach SMR (Crescent, Shaws, Fisherman's Cove, Heisler, Main, Bluebird, Woods, Moss Point, Victoria, Montage), Laguna Beach SMCA (Aliso Beach, West Beach, Victoria, Cress, Emerald and Table Rock) and Dana Point SMCA (Totuava, Thousand Steps, Salt Creek, Dana Point and Strands). We do not monitor the Bolsa Bay and Bolsa Basin SMCAs due to a lack of human activity there.

We defined a large number of activities that our volunteers would be most likely to observe during their surveys including: beach recreation, wildlife viewing, snorkeling, and paddle boarding, and, fishing. Each activity falls under one of four broad categories: On-shore, Off-shore, Consumptive, and Non-consumptive.

On-shore vs. Off-shore Distinction: On-shore includes any activities that are within the MPA boundaries of the mean high tide line. This, for the purposes of this project, includes sandy beaches and rock areas up to the nearest bluff or man-made structure. Off-shore includes the area within the offshore MPA boundaries as defined in the Fish and Game code and all activities that occur in this area.

Consumptive vs. Non-consumptive: Consumptive activities include recreational and commercial take of marine species both on and offshore. Non-consumptive activities include kayaking, surfing, scubadiving, wildlife viewing, and beach-visiting.

#### **Number of activities divided by four Orange County MPAs**



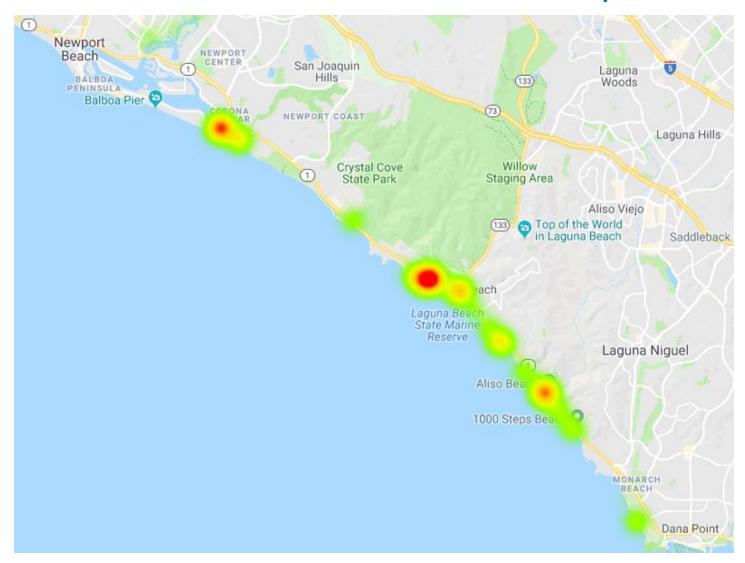
The Crystal Cove and Dana Point SMCAs does not allow take from tide pools.

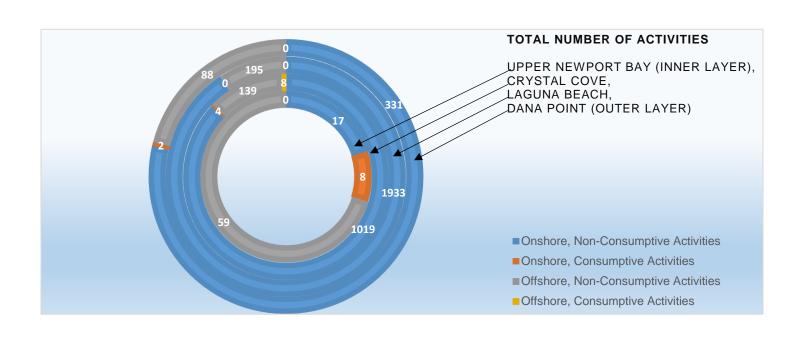
The Upper Newport Bay SMCA allows fishing from shore using hook and line only.

The Laguna Beach SMR and SMCA does not allow take of any marine resources.

During this period (2018-1<sup>st</sup> Quarter) there was no violations in any of the MPAs regions.

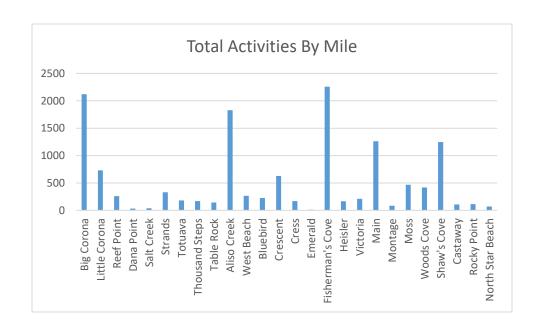
#### 1<sup>st</sup> Quarter 2018 MPAs Total Activities Map



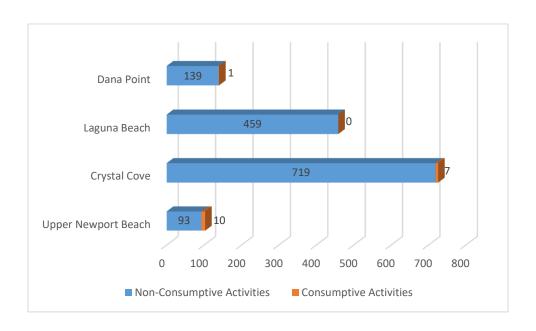


## 1<sup>st</sup> Quarter 2018 Orange County MPAs Activities by Mile

MPA	Surveys	Activities	Non- consumptive	Consumptive	Violations
Big Corona	3	721	774	5	0
Little Corona	4	183	178	5	0
Reef Point	2	266	264	2	0
Dana Point	4	20	20	0	0
Salt Creek	1	40	40	0	0
Strands	4	261	259	2	0
Thousand Steps	2	62	62	0	0
Totuvava	1	38	38	0	
Table Rock	2	16	16	0	0
Aliso Creek	9	457	457	0	
West Beach	3	88	88	0	0
Bluebird	4	95	95		
Crescent	4	201	201	0	0
Fisherman's Cove	7	158	158	0	0
Heisler	2	70	70	0	0
Main	4	442	442	0	0
Montage	1	47	47	0	0
Moss	3	28	28	0	0
Woods Cove	3	46	46	0	0
Shaw's Cove	9	287	287	0	0
Castaway	11	57	49	8	0
Rocky Point	1	15	15	0	0
North Star Beach	2	12	12	0	0



### 1<sup>st</sup> Quarter (2018) Total Number of OC MPAs Activities per Mile



MPA	Total Area	Total Surveys	Total Activities	Consumptive Activities	Non-Consumptive Activities	On-shore Activities	Off-shore Activities
Upper Newport Beach	0.82	14	103	10	93	31	72
Crystal Cove	1.61	9	726	7	719	635	91
Laguna Beach	4.64	58	459	0	459	417	42
Dana Point	3.02	12	139	1	139	110	29

The volunteers observed the behavior of 3803 people in Orange County MPAs between January and March 2018. A majority of observations – 87 percent —were of onshore recreational activities such as swimming, sunbathing, running and wildlife viewing. Offshore activities such as surfing, diving, snorkeling and boating made up 13 percent of those surveyed.