



ORANGE COUNTY
COASTKEEPER®

Orange County MPA Watch

Monitoring Human Usage



WHAT IS A MPA?

Marine Protected Areas (MPAs) are discrete geographic marine or estuarine areas designed to protect or conserve marine life and habitat. In 2012, the new statewide network of MPAs, created under the 1999 Marine Life Protection Act (MLPA), was finally complete. The MLPA is different from traditional fisheries regulations in that it seeks to protect entire marine ecosystems rather than individual species. All MPAs have measurable goals and objectives and function as a network. Scientific data on the MPAs is collected to evaluate their performance and facilitate adaptive management. This data is reviewed and adaptive management decisions are made every five years by the California Department of Fish and Wildlife.

WHY DO WE HAVE MPAs?

MPAs preserve California's stunning marine ecosystems so that future generations can observe and enjoy. Direct benefits include:

- Increased spawning stock
- Improved habitats
- Spillover effect enhances catch near protected areas
- Enhanced biodiversity and species protection

WHAT IS THE OC MPA WATCH PROGRAM?

The Orange County Marine Protected Area (OC MPA) Watch Program enlists volunteers, community groups, and local government to monitor human uses in and around the seven Orange County MPAs. The program is organized and run by Orange County Coastkeeper (Coastkeeper).

Orange County Marine Protected Areas:

1. Bolsa Bay State Marine Conservation Area (SMCA)
2. Bolsa Chica Basin SMCA
3. Crystal Cove SMCA
4. Laguna Beach State Marine Reserve (SMR)
5. Laguna Beach SMCA
6. Dana Point SMCA
7. Upper Newport Bay SMCA

Orange County MPA Regulations:

All activities that do not harm marine life including swimming, boating, diving, surfing, tidepooling, walking and other beach recreational activities are allowed with no restrictions. The only activities restricted in MPAs are those that involve harming living marine resources. The regulations for each MPA are as follows:

1. The [Bolsa Bay SMCA](#) allows fishing from shore by hook and line only. Due to additional restrictions from the ecological reserve overlay, fishing is only allowed at one site in the very north end of the SMCA near the Bolsa Chica Interpretative Center. However, due to rapid bluff erosion this fishing area has been closed since the beginning of the year until bluff stabilization work can be completed.
2. The [Bolsa Basin SMCA](#) allows no take of any kind.

3. The [Crystal Cove SMCA](#) allows the *recreational* take of lobster, sea urchin, and finfish by hook-and-line or spearfishing, and the *commercial* take of lobster, urchins, and coastal pelagic species such as sardine, anchovy and squid by round haul net. The take of all living marine resources from tidepools is prohibited. The SMCA is bounded by the southern Newport Harbor jetty in the north to Abalone Point in the south.
4. The [Laguna Beach Marine Reserve](#) does not allow take of any marine resources in the 4.7 mile stretch from Abalone Point in the north to Goff Island in the south.
5. The [Laguna Beach SMCA](#) does not allow take of any marine resources in the 1.2 mile stretch from Geoff Island in the north to Table Rock Point in the south.
6. The [Dana Point SMCA](#) allows the *recreational* take of lobster, sea urchin, and finfish by hook-and-line or spearfishing, and the *commercial* take of lobster, urchins, and coastal pelagic species such as sardine, anchovy, and squid by round haul net. The take of all living marine resources from inside tidepools is prohibited. The SCMA is bounded by Table Rock Point in the north and the bend in the Dana Point Harbor jetty in the south.
7. The [Upper Newport Bay SMCA](#) allows fishing from shore using hook and line only. Due to the ecological reserve overlay, fishing is only allowed at four designated sites: Castaways Beach, North Star Beach, Rocky Point, and the Jamboree Bridge. This SMCA includes all of Newport Bay north of the Pacific Coast Highway bridge.

HOW & WHY MONITOR “HUMAN USAGE” IN A MPA?

To assure the effectiveness of Marine Protected Areas (MPAs) and to determine the impacts on marine resources, we need to identify the types of human activities that occur in or near MPAs. Gathering this data is time consuming, so partnerships with key community groups and engaged citizens are a cost-effective and resource-efficient way to evaluate human uses. Trained volunteers can produce accurate and reliable information that can be used to better understand how individuals use MPAs. **Through monitoring human usage inside OC MPAs, MPA Watch data provides much needed context to assist with the interpretation of biological data.**

Activities Observed:

- *What human uses occur in and around MPAs?*
- *What resources are needed to support the MPAs?*
- *Are regulations being followed?*
- *Have consumptive and non-consumptive uses changed since the MPAs were implemented?*

Partners:

- City of Newport Beach
- City of Laguna Beach
- City of Dana Point
- Crystal Cove State Park
- Laguna Bluebelt Coalition
- Jean-Michel Cousteau's Ambassadors of the Environment Ritz-Carlton
- Bolsa Chica Conservancy
- Members of the public

DATA:

With sound practices, data from effective volunteer monitoring programs can be used **to inform resource managers and provide information to enhance the management and performance of Marine Protected Areas.**

This data, collected by MPA Watch volunteers, is analyzed **to identify human use patterns** in MPAs. Coastkeeper then uses the collected information to prepare four quarterly and one annual report that summarizes the survey data for use by resource managers, partner groups, and the public. **This data will allow resource managers and community groups working with MPAs to make decisions on where to invest their resources to maximize benefits for the MPAs and the community.**

The MPA Watch program has been designed as a standardized survey, not necessarily a scientific study. The MPA Watch Program is one part of the umbrella of the larger Orange County and statewide MPA program. Coastkeeper is also involved in other parts of the MPA process.



Activities Observed:

We defined a large number of activities that our volunteers would be most likely to observe during their surveys, such as beach recreation, wildlife viewing, snorkeling, paddle boarding, and of course, fishing. Each activity falls under one of the four categories:

- *Onshore vs. Offshore distinction:* Onshore includes any activities that are within the MPA boundaries of the mean high tide line, which, for the purposes of this project, includes sandy beaches and rock areas up to the nearest bluff or man-made structure. Offshore includes the area within the offshore MPA boundaries as defined in the Fish and Wildlife 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, scuba diving, wildlife viewing, and beach-visiting.

Survey Results:

The South Coast MPAs, from Point Conception to the Mexican border, were implemented on January 1, 2012. This resulted in a major change in both the size and take regulations for the Orange County MPAs since our last report. **From January 1 – December 31, 2012, we completed 754 surveys and observed**

44,670 activities, consumptive and non-consumptive, onshore and offshore. We found that the frequency of non-consumptive activities greatly outnumbers consumptive activities, with 95% of the **44,670 activities** observed being non-consumptive. Of these activities, beach recreation was the most popular non-consumptive activity. Of the consumptive activities, fishing from private vessels was the most common observance.

Survey Sites and Activities:

1. The **Bolsa Bay SMCA**: There is one survey site at the interpretive center. No fishing was observed in this area during surveys of the site. Walking, running and wildlife viewing were the most common observed activities.
2. The **Bolsa Basin SMCA**: There are two survey sites, one at the walkbridge and one at the tidal inlet. The most common activities here are walking, running, and wildlife viewing. Fishing is popular outside the SMCA at the tidal inlet jetties across Bolsa Chica State Beach.
3. The **Upper Newport Bay SMCA** allows fishing from shore using hook and line only. Due to the ecological reserve overlay, fishing is only allowed at four designated sites: Castaways Beach, North Star Beach, Rocky Point, and the Jamboree Bridge. Each of these is also a survey site. The most popular activities are beach recreation and kayaking.
4. The **Crystal Cove SMCA** consists of two jurisdictions:
 - The **City of Newport Beach** survey sites are Corona Del Mar Beach, Little Corona Del Mar Beach, and Morning Canyon Beach. The most popular activities here are beach recreation, walking, and tidepooling. These are also the most common spots in all of the Orange County MPAs for spearfishing and kayak fishing.
 - The **Crystal Cove State Park** survey sites are Pelican Point, Los Trancos, and Reef Point. The most common activities here are beach recreation, walking, and tidepooling. Recreational shore and spear fishing is common, along with commercial lobster and purse seining fishing.
5. The **Laguna Beach Marine Reserve** does not allow take of any marine resources in the 4.7 mile stretch from Abalone Point in the north to Goff Point in the south. The reserve contains twelve survey sites covering almost every accessible beach. Beach recreation, walking, running, and wildlife viewing (including tidepooling) are the most popular onshore activities with surfing, diving, and boating as the most popular offshore activities.
6. The **Laguna Beach SMCA** does not allow take of any marine resources in the 1.2 mile stretch from Goff Island to Table Rock Point (except for public works maintenance activities). The SMCA contains three survey sites covering almost every accessible beach. Beach recreation, walking, running, and wildlife viewing (including tidepooling) are the most popular onshore activities with surfing, diving, and boating as the most popular offshore activities.
7. The **Dana Point SMCA** allows the *recreational* take of lobster and sea urchin, and of finfish by hook-and-line or spearfishing, and the *commercial* take of lobster, urchins, and coastal pelagic species such as sardine, anchovy, and squid by round haul net. The take of all living marine resources from inside the tidepools in these MPAs is prohibited. The survey sites are Totuava Beach, Thousand Steps Beach, Three Arch Bay, Salt Creek, Dana Strands, and Dana Point. The most popular activities here are beach recreation, walking, and tidepooling. The most common non-consumptive offshore activity is surfing, primarily at Salt Creek Beach. This area was also the most popular MPA for fishing from private boats.

Frequency of MPA Watch Visits per Quarter

No. of Visits per Quarter

MPA	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Bolsa Chica	18	12	35	18	83
Upper Newport	33	22	27	12	94
Crystal Cove	44	31	35	43	153
Laguna	57	85	79	77	298
Dana Point	36	41	25	24	126
TOTAL	188	191	201	174	754

*The frequency of MPA Watch Visits in the Orange County Marine Protected Areas
January 1, 2012 through December 31, 2012*

Observed Activities during MPA Watch Visits

MPA	Onshore, Non-Consumptive Activities	Onshore, Consumptive Activities	Offshore, Non-consumptive Activities	Offshore, Consumptive Activities	TOTALS
Bolsa Chica	1554	72	11	0	1637
Upper Newport Bay	545	83	613	19	1260
Crystal Cove	10100	306	2534	666	13606
Laguna	15309	112	3290	47	18758
Dana Point	6344	118	2266	681	9409
TOTALS	33852	691	8714	1413	44670

*The frequency of consumptive versus non-consumptive activities in the Orange County Marine Protected Areas
January 1, 2012 through December 31, 2012*

Orange County Survey Sites

