

Monitoring Human Activities Along the California Coast



About This Snapshot Report

This report highlights some of the core components of the California MPA Watch program, including key findings and information regarding regional programs.



Volunteers complete an MPA Watch survey in the always popular Matlahuayl State Marine Reserve, which is one of 16 Southern California MPAs monitored by MPA Watch. Photo: Krissel Rivas/WILDCOAST

Creating Human Use Profiles of California's Coastal Areas

MPA Watch is a statewide citizen science initiative designed to monitor human usage of coastal natural resources. By training and supporting volunteers as citizen scientists, MPA Watch facilitates the collection of relevant, scientifically rigorous and broadly accessible data.

The data collected informs the science, management and enforcement of California's marine protected areas (MPAs) and coastal regions, documenting how coastal usage is changing as a result of MPA implementation. By involving local communities in this important work, MPA Watch programs inspire and empower stewardship while educating community members about California's ocean ecosystems.

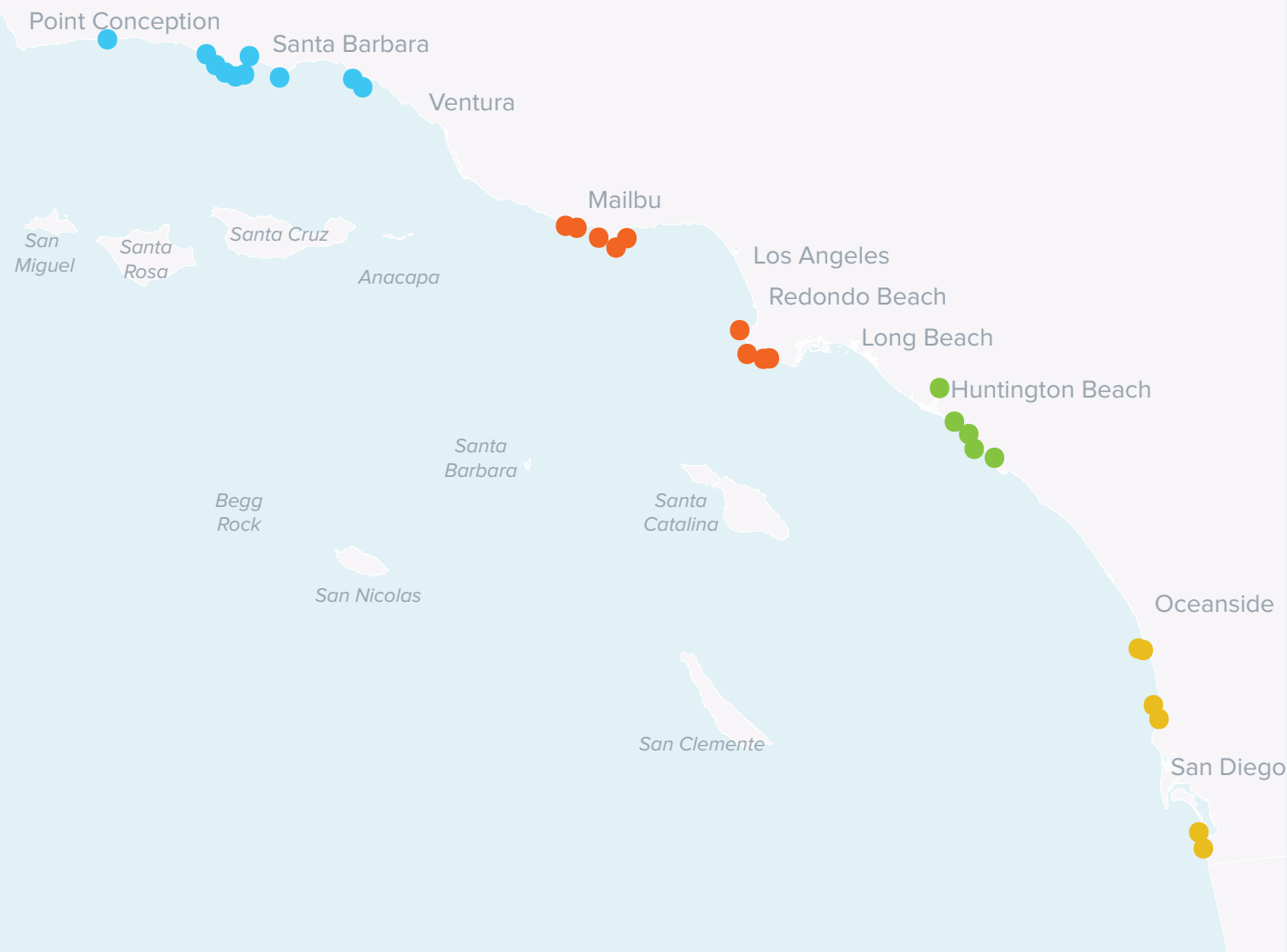
Formed into a cohesive statewide network in 2014 with the support of the Resources Legacy Fund, the California MPA Watch program has collected nearly 14,000 surveys as of

August 2016, and has engaged approximately 1,100 citizen scientist volunteers. All volunteers utilize standardized data collection and reporting methods, and submit data for inclusion in a quality controlled centralized information management system.

MPA Watch's core goals are:

- To document human uses in MPAs and track trends over time
- To provide contextual information on human use for interpretation of biological monitoring data
- To inform MPA enforcement and engagement decisions regarding human activity inside MPAs
- To train MPA Watch volunteers as stewards and effective public educators regarding MPAs

Active MPA Watch Survey Locations

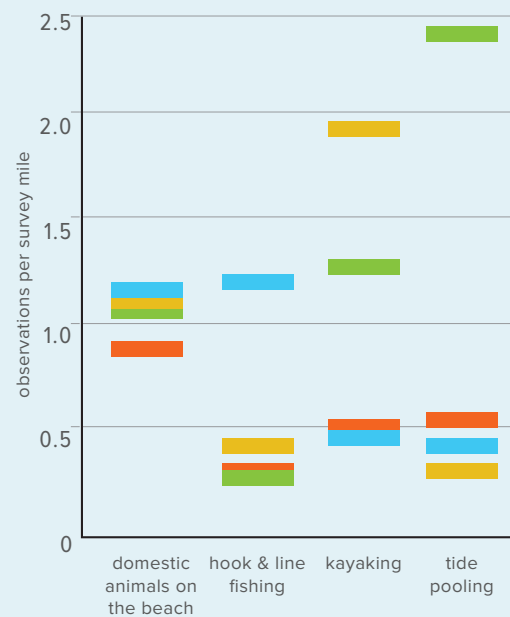
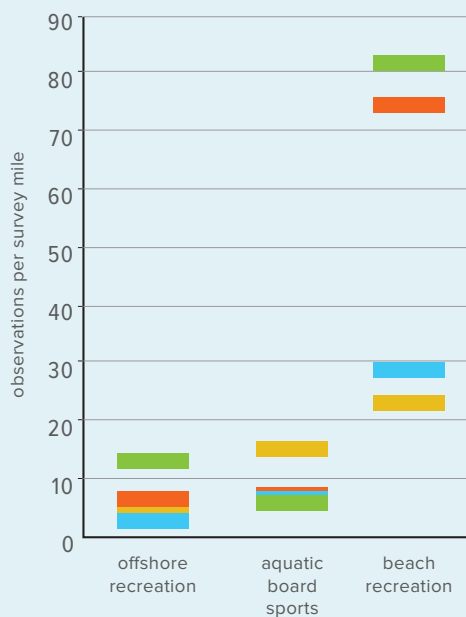


MPA Watch by the Numbers

Between March 2011 and August 2016, over 1,000 Southern California MPA Watch volunteers participated in the program. Volunteers walked a total of 8,561 survey miles over 77 survey transects during 8,677 land-based surveys! Over 300 boat-based surveys have also been submitted.

Measuring All Coastal Uses

MPA Watch data include consumptive and non-consumptive activities. Data categories include general recreation on the beach, surfing, kayaking, fishing from shore or boat, SCUBA diving, and more. For more details on the types of data MPA Watch collects, visit www.MPAWatch.org.



■ Santa Barbara County ■ San Diego County ■ Orange County ■ Los Angeles County

Observations by MPA Watch volunteers from 2011 to 2016. Totals are reported as countywide averages over a survey mile. For example, during a one mile walk in Orange County, volunteers saw an average of one domestic animal (e.g., a dog).



Santa Barbara Channelkeeper MPA Watch volunteer conducts a survey in Campus Point MPA. Photo: Emily Chase

Santa Barbara

By Land and Sea

The Santa Barbara MPA Watch program surveys the three coastal MPAs in southern Santa Barbara County through shoreline surveys conducted by volunteers, as well as offshore surveys conducted by **Santa Barbara Channelkeeper** staff from the Research Vessel Channelkeeper. In addition to engaging Santa Barbara's beach-loving communities, the program also takes advantage of the Campus Point MPA's proximity to the University of California, Santa Barbara by connecting with the student population to recruit volunteers and to build awareness and stewardship for local MPAs. In 2013, Channelkeeper expanded the program to monitor additional MPAs north of Santa Barbara which have limited coastal access, including the Naples MPA, from their boat. In the Santa Barbara area, beach recreation, including running, walking and sunbathing, and board sports are the most common uses of the MPAs surveyed.

Los Angeles

By Land

Since 2011, Los Angeles County's land-based MPA Watch program has trained more than 550 volunteers to monitor the human uses of Los Angeles County's four MPAs. Operated by **Heal the Bay**, LA's MPA Watch program's extensive volunteer database stems from partnerships that have been developed over the years with various schools, community organizations, tribal groups and other NGOs. By involving local groups and communities in this important work, LA's program seeks to inspire and empower ocean stewardship and educate individuals about California's ocean ecosystems. Whether it's a mother-daughter group from the South Bay or a classroom of high school students from Central LA, Heal the Bay's MPA Watch volunteers are leading the way in becoming environmental stewards for the region's fragile coastal ecosystems.

By Sea

Operated by **Los Angeles Waterkeeper**, LA's boat-based MPA Watch surveys provide written, photo and GPS documentation of all boating and fishing activity in and around LA County MPAs. This survey experience, which is open to up to five community scientist volunteers at a time, often includes witnessing incredible wildlife such as porpoises, whales, pinnipeds and sea birds. In addition, surveyors also observe sea life interactions with oil tankers, cargo barges, trash flows, oil spills, sewage spills and illegal fishing. These interactions serve as experiential reminders of how human behavior dramatically impacts LA's coastal areas, highlighting the importance of monitoring human activities. As well as offshore data collection, LA Waterkeeper staff also conducts MPA boundary and regulation outreach and education to fishers and boaters while on the water. To minimize any data bias, this good neighbor gesture is offered after all survey data are collected.

From 2012-2016 LA Waterkeeper's boat-based survey program conducted 323 on-water surveys. Staff and volunteers have documented over 200 potential MPA violations, including 107 recreational boat fishing violations, 1 instance of an active commercial fishing violation, and over 100 instances of illegal onshore fishing.



Heal the Bay hosts an MPA Watch training at the Wishtoyo Chumash Village as part of the Wishtoyo Chumash Foundation's "Chumash Eyes on the Water" tribal MPA program. Photo: Mati Waiya



Break time for staff and a diverse group of LA Waterkeeper volunteers from Mt. St. Mary's University, Yale University, Peru and South Central Los Angeles. Photo: Brent Alex



Peter Pham

Orange County

Started by [Orange County Coastkeeper](#) in 2011, Orange County MPA Watch was the third MPA Watch program established in California. Orange County has seven MPAs—one Marine Reserve and six State Marine Conservation Areas—combining to cover twelve miles of coastline and two estuaries. MPA Watch surveys are conducted at 32 sites in five of the seven MPAs, with volunteers conducting over 400 surveys a year.

With a population of almost four million people and visitors from all over the world, Orange County's MPAs are often crowded with people looking for a place to relax, work out or interact with nature through observation or fishing. This high demand makes data collection that much more important. Data collected from MPA Watch surveys have been communicated to local coastal management agencies who have produced tangible changes. This has resulted in a more informed public, better signs to inform visitors in protected areas, and increased local agency enforcement of regulations in marine protected areas.



Drew McGill



Drew McGill



Will Sooter

San Diego

San Diego County's MPA Watch program operates land-based surveys in four marine protected areas, including the Tijuana River Mouth, California's southernmost MPA. San Diego's MPA Watch program is managed by [WILDCOAST](#), which uses local connections to develop volunteer partnerships that actively engage the local community. This type of partnership is exemplified by the recruitment of "Junior" MPA Watch volunteers, including high school students and youth group participants, all 15 years old or younger. These junior volunteers often work together in teams and are always supervised by an adult to ensure that the data are properly collected.

In San Diego County beach recreation is by far the most popular activity, followed by offshore recreation, surfing and other board sports. WILDCOAST is currently in the process of developing a boat-based program to complement San Diego's land-based surveys.



Krisel Rivas/WILDCOAST

