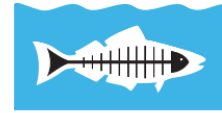
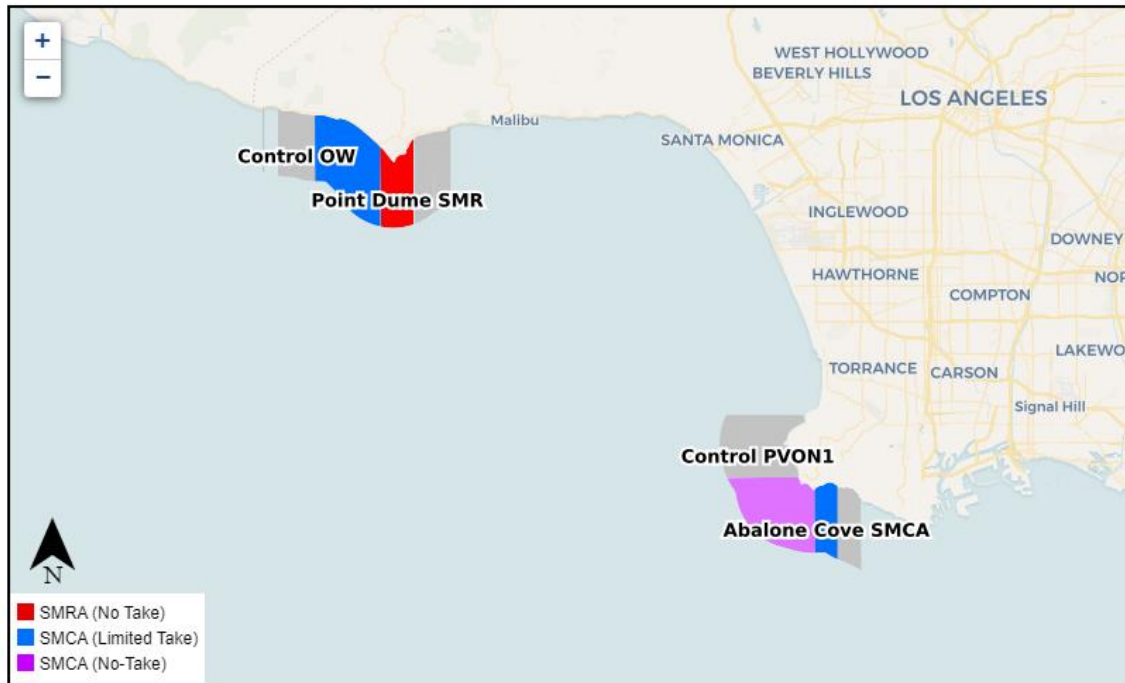




**Marine Protected Area (MPA) Watch  
Regional Report  
LA County Shore-Based  
January 1, 2020 – December 31, 2020**



Heal the Bay



California's network of Marine Protected Areas (MPAs) was established by the Marine Life Protection Act (MLPA) of 1999 to safeguard our marine resources and ecosystems. To ensure success and to inform adaptive management, long-term monitoring of these protected areas must be conducted. Developed in 2011, MPA Watch was designed as a community science program to collect data on human use of MPAs. In Los Angeles County, the non-profit organization Heal the Bay manages MPA Watch shore-based data collection. Our volunteers monitor four MPAs: Abalone Cove State Marine Conservation Area, Point Vicente No-Take State Marine Conservation Area, Point Dume State Marine Conservation Area, and Point Dume State Marine Reserve.

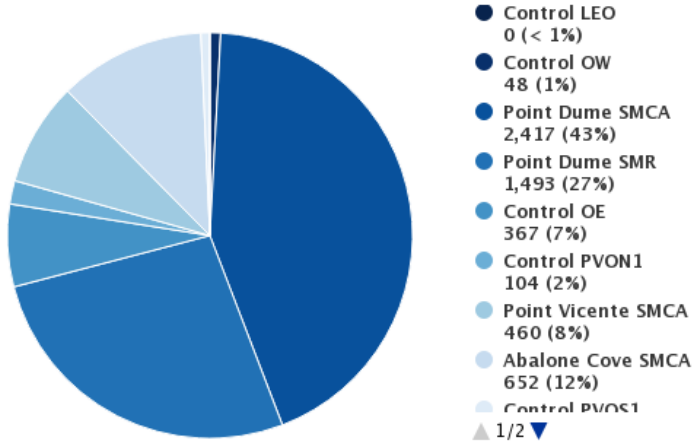
### **Executive Summary**

- In 2020, 43 MPA Watch volunteers conducted a total of 249 surveys across 126 total survey miles and recorded a total of 5,580 activities
- The rate of activities in LA County MPAs decreased in the reporting period as compared to the baseline average of the previous eight years.
- Consumptive activity made up 2% of the total activity observed in 2020, however it made up 9% of total activity in the Point Vicente no-take SMCA.
- The COVID-19 pandemic caused a decrease in surveys conducted by MPA Watch volunteers and is possibly correlated to major poaching concerns in the Abalone Cove SMCA and Point Vicente SMCA.

## Human Use of MPAs January - December 2020

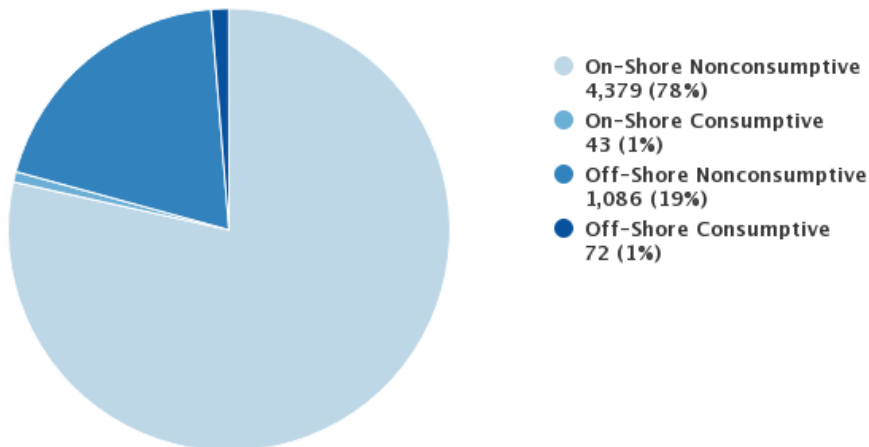
### Top 10 MPAs by All Activity

January 1, 2020 – December 31, 2020  
5,580 total activity events



### All MPAs Combined

January 1, 2020 – December 31, 2020  
5,580 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.

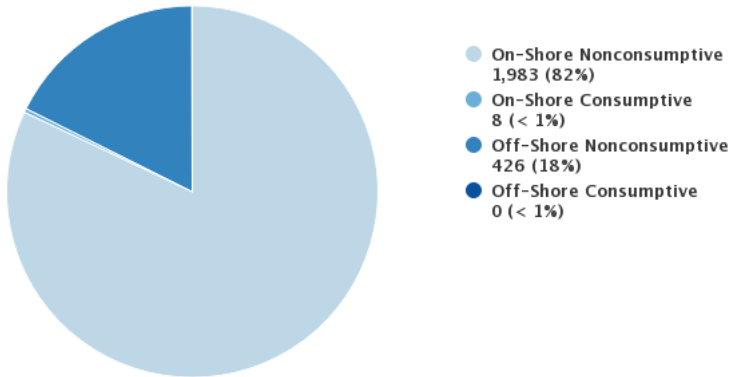
**Consumptive** - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

## Activity by MPA

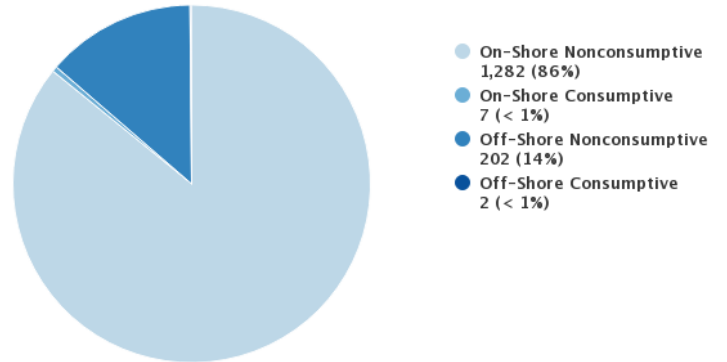
### Point Dume SMCA

January 1, 2020 – December 31, 2020  
2,417 activity events



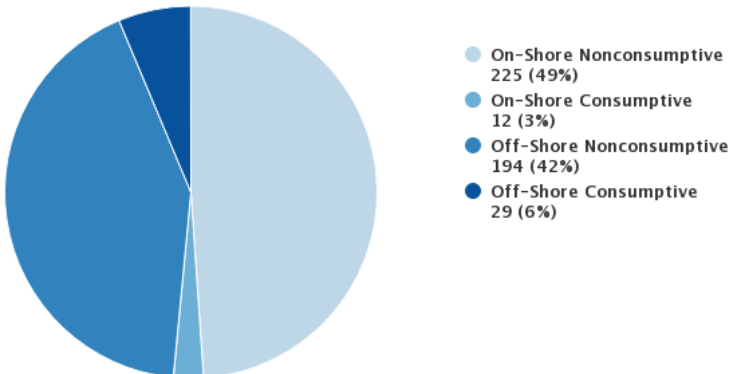
### Point Dume SMR

January 1, 2020 – December 31, 2020  
1,493 activity events



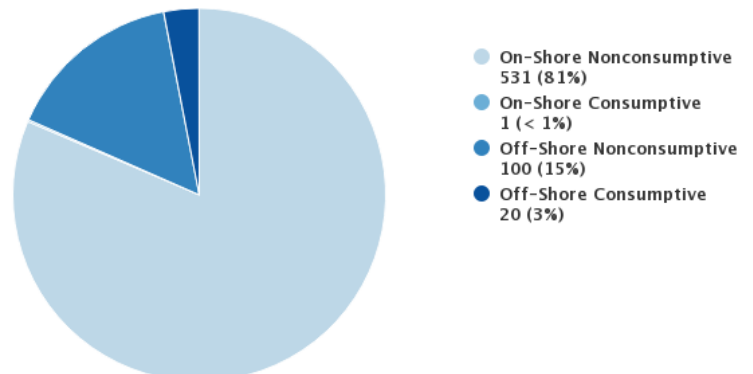
### Point Vicente SMCA

January 1, 2020 – December 31, 2020  
460 activity events



### Abalone Cove SMCA

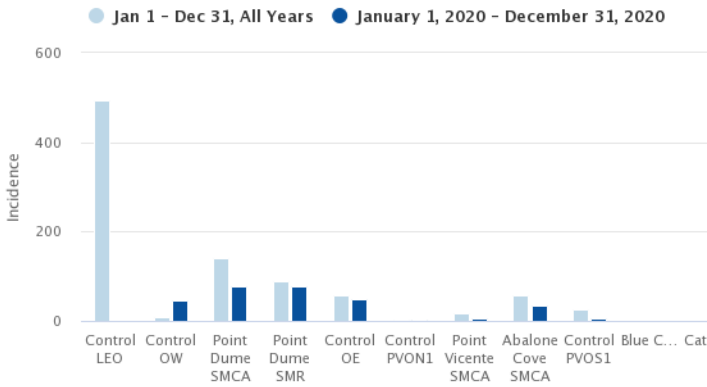
January 1, 2020 – December 31, 2020  
652 activity events



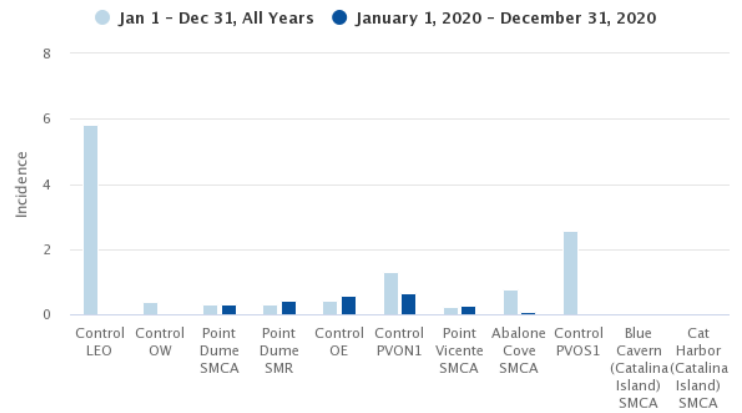
*The above pie charts on pages 1 & 2 show raw number of activities observed by the MPA Watch Program in Los Angeles County and do not correct for number of surveys performed.*

## Activity Incidence by MPA

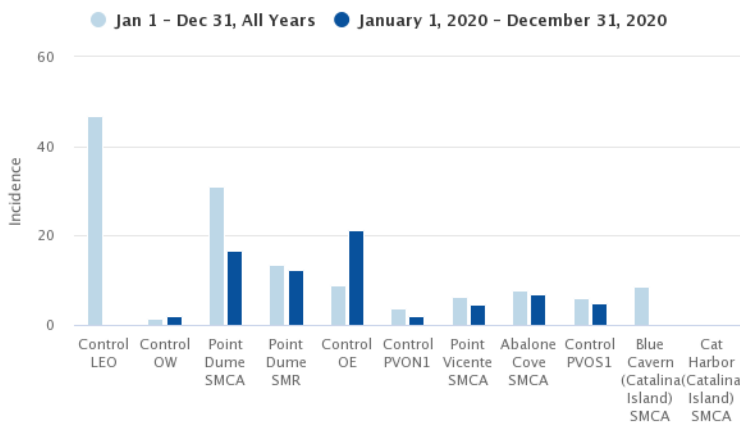
On-Shore, Non-Consumptive



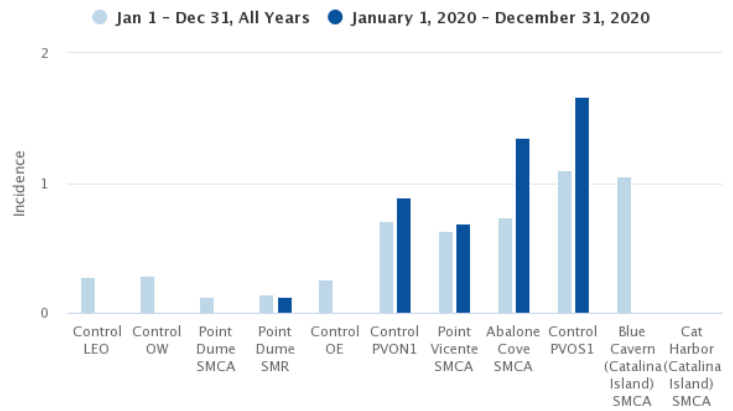
On-Shore, Consumptive



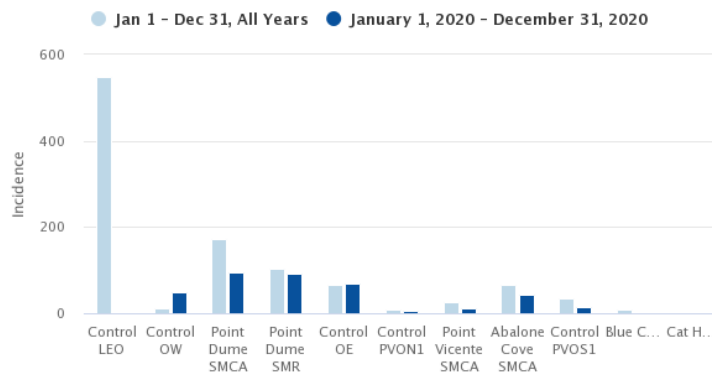
Off-Shore, Non-Consumptive



Off-Shore, Consumptive



All Activity



The above charts show incidence values for each MPA monitored by the MPA Watch Program in Los Angeles 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
Control LEO	494.4	nan		5.8	nan
Control OW	9.8	46.0		0.4	0.0
Point Dume SMCA	140.2	78.1		0.3	0.3
Point Dume SMR	90.3	77.7		0.3	0.4
Control OE	57.2	47.5		0.4	0.6
Control PVON1	4.0	2.3		1.3	0.7
Point Vicente SMCA	17.3	5.4		0.2	0.3
Abalone Cove SMCA	57.6	35.9		0.8	0.1
Control PVOS1	25.8	6.3		2.6	0.0
Blue Cavern (Catalina Island) SMCA	0.0	nan		0.0	nan
Cat Harbor (Catalina Island) SMCA	inf	nan		inf	nan
All MPAs Combined	71.7	34.8		0.5	0.3

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
Control LEO	46.7	nan		0.3	nan
Control OW	1.5	2.0		0.3	0.0
Point Dume SMCA	31.0	16.8		0.1	0.0
Point Dume SMR	13.4	12.2		0.1	0.1
Control OE	9.0	21.1		0.3	0.0
Control PVON1	3.7	1.9		0.7	0.9
Point Vicente SMCA	6.3	4.6		0.6	0.7
Abalone Cove SMCA	7.7	6.8		0.7	1.4
Control PVOS1	6.1	5.0		1.1	1.7
Blue Cavern (Catalina Island) SMCA	8.6	nan		1.1	nan
Cat Harbor (Catalina Island) SMCA	inf	nan		inf	nan
All MPAs Combined	13.8	8.6		0.3	0.6

MPA	Total	
	Combined	
	▲ Jan 1 Dec 31 All Years	◆ Jan 1, 2020 through Dec 31, 2020 ◆
Control LEO	547.2	nan
Control OW	11.9	48.0
Point Dume SMCA	171.6	95.2
Point Dume SMR	104.2	90.5
Control OE	66.9	69.2
Control PVON1	9.7	5.8
Point Vicente SMCA	24.5	11.0
Abalone Cove SMCA	66.8	44.1
Control PVOS1	35.5	13.0
Blue Cavern (Catalina Island) SMCA	9.7	nan
Cat Harbor (Catalina Island) SMCA	inf	nan
All MPAs Combined	86.4	44.3

The above table shows incidence values for each MPA monitored by the MPA Watch program in Los Angeles County.

**Incidence is calculated as number of activities recorded divided by total survey-miles.**

#### 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 MPAs 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 MPAs 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. In the tables, “inf” references a rate too small to calculate and “nan” references a rate of 0.

## COVID-19

Heal the Bay's shore-based MPA Watch program in Los Angeles County was significantly impacted by COVID-19 related shutdowns and regulations in 2020. Below is a comprehensive timeline of beach closures in LA County:

- **March 17:** California State Parks closed campgrounds – beaches and trails remained open.
- **March 19:** Los Angeles County enacted “Safer at Home” measure.
- **March 22:** Beach parking lots in Los Angeles County were closed due to COVID-19 risks.
- **March 23:** Beach parking lots in Malibu were closed due to COVID-19 risks.
- **March 25:** Heal the Bay MPA Watch program was officially closed.
- **March 26:** Beach parking lots in Palos Verdes were closed due to COVID-19 risks.
- **March 27:** All beaches and trails were closed due to COVID-19 risks in Los Angeles County.
- **May 8:** Beaches in Malibu, but not parking lots, were opened to locals with social distancing restrictions.
- **May 9:** Beaches and trails in Los Angeles County, but not parking lots, were opened with social distancing restrictions.
- **May 13:** Trails and beaches in Palos Verdes, including parking, were opened with social distancing and restrictions.
- **June 11:** Canopies, coolers, and chairs were now allowed on Los Angeles County Beaches. Los Angeles county parking lots were opened on a site-specific basis.
- **July 1:** Heal the Bay MPA Watch program officially reopened with increased safety restrictions.
- **July 3-6:** Trails and beaches, as well as Heal the Bay MPA Watch, were temporarily closed for the Independence Day holiday.
- **July 7:** Beaches re-open and remain open for the remainder of the calendar year.

Of the coastal counties in California, Los Angeles had some of the longest and strictest beach closures and regulations due to COVID-19. As a result, Heal the Bay's MPA Watch program was suspended for just over three months. COVID-19 decreased volunteer retention and participation before and after the closures, which resulted in a massive loss of data for the year. In 2019, Heal the Bay's MPA Watch program collected 465 surveys, however in 2020 our volunteers only collected 249 surveys, a 47% decrease. In 2019, volunteers reported a total of 17,203 observed activities, however this year, only 5,580 activities were observed, a 68% decrease. Some of the decrease in activities observed may be due to different human behaviors in response to COVID-19 rather than only a decrease in total surveys.

Heal the Bay's MPA Watch program reopened on July 1 2020 with increased safety measures, including an additional safety agreement that must be signed by all active volunteers. In late spring and early summer, the Heal the Bay MPA Watch team redesigned our MPA Watch training as an entirely virtual format to begin bringing on new volunteers safely. Through the help of training videos, online quizzes, and virtual classrooms, we trained 17 new volunteers virtually in July, 12 new volunteers in August, and 24 new volunteers in October. While new volunteers were needed and helped gather more data, volunteer participation remained relatively low in the second half of the year. In 2019, 14 volunteers



conducted surveys in October and 11 in November. In 2020, 7 volunteers conducted surveys in October and November. In 2020, 118 of our surveys, 47%, were performed by a single volunteer, John Wells. In 2019 the top contributor, Toshiro Tokunaga, only accounted for 23% of the total surveys with 106 surveys.

COVID-19 has also had an enormous impact on LA County's rocky intertidal zone, both inside and outside MPAs. While the MPA Watch data will undoubtedly miss a great deal of this take, both volunteers and MPA managers have anecdotally noticed an enormous uptick in take from the tidepools of Abalone Cove SMCA and surrounding areas. This may be attributed to increased unemployment and lack of food security due to COVID-19, but we are still unsure of the cause.

### **Breakdown by MPA**

#### **Point Dume State Marine Reserve**

Point Dume became a State Marine Reserve (SMR) in 2012 as part of the third phase of the California Marine Life Protection Act (MLPA). Point Dume SMR is located at Point Dume in Malibu, California and encompasses a total of 7.53 square miles. Classified as an SMR, all take is strictly prohibited in this MPA. With panoramic views and miles of visibility down the Malibu coast, Point Dume is known today as an ideal location for hiking, rock climbing, and beach recreation.

Centuries before the settlement of Spanish missionaries in the area, the Indigenous Chumash tribe inhabited Point Dume. Living closely in relation to their natural environment, the Chumash treated Point Dume as a sacred place and a sun shrine. Point Dume's significance relates directly to its position, as it juts out into the Pacific Ocean. Chumash people used the top of Point Dume as a lookout to observe seasonal migrations of marine mammals, schools of fish, and movements of people along the coastline.<sup>1</sup>

In 2020, non-consumptive activity incidence decreased in the Point Dume SMR, both onshore and offshore. Onshore consumptive activity, however, increased by 33% from the previous average, from 0.3 observations per survey mile to 0.4 observations per survey mile. This consumptive only activity accounts for less than 1% of all recorded observations. This slight increase may be attributed to an increase in the observation of hook and line fishing from sandy beaches and collection of tide pool species. The most common activities observed in this MPA are sandy beach recreation, surfing, and leashed domestic animals. Four hook and line fishing violations were reported by MPA Watch volunteers in this MPA in 2020, more than any other MPA.

#### **Point Dume State Marine Conservation Area**

Located adjacent to the Point Dume State Marine Reserve, Point Dume SMCA encompasses 15.92 square miles and runs along Zuma and El Matador beaches in Malibu, CA to the

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<sup>1</sup> Robinson, T., Draft Initial Study and Mitigated Negative Declaration - Point Dume Natural Preserve (2003). Retrieved from [https://www.parks.ca.gov/pages/980/files/Point Dume MND\\_ Draft2.pdf](https://www.parks.ca.gov/pages/980/files/Point_Dume_MND_Draft2.pdf)



northwest of Point Dume. Adopted in 2012 along with Point Dume SMR during phase three of the MLPA adoption process, this MPA was chosen as the location for a SMCA due to diverse habitats, high species diversity, and monitoring & research opportunities. Similar to the Point Dume SMR, this site plays a significant role in Chumash maritime culture and is well suited for tribal co-management, maritime cultural preservation, and education and outreach.

As a conservation area, Point Dume SMCA does allow some consumptive activity. The recreational take by spearfishing of white seabass and pelagic finfish is permitted, along with the commercial take of swordfish by harpoon and coastal pelagic species by round haul net, brail gear, and light boat. There is an incidental take limit of no more than 5% by commercial fishing activity, and take pursuant to beach nourishment and sediment management practices is also permissible.

Point Dume SMCA had the most recorded activity of all survey sites in LA County with 43% of recorded activities. This MPA also had the highest activity incidence of all four MPAs and control sites, indicating it is the most heavily used site. Onshore non-consumptive activity is by far the most common, making up 82% of the recorded activity observations. All activity in this MPA experienced a decrease in incidence from the previous average by 44.5%. Onshore non-consumptive activity saw the greatest decrease in incidence of all activity types from the previous average, a total of 62% less. Offshore non-consumptive activity decreased from 31.0 observations per survey mile to 16.8 observations per survey mile, a 46% decrease. These decreases in activity incidence may be attributed to beaches closures and COVID-19 social distancing restrictions, but lack of data collection during the closure time limits the ability to directly correlate this decrease with the closures. The most common activities in this MPA are sandy beach recreation, unleashed domestic animals, and surfing. Only eight consumptive activities were documented and no violations were reported in this MPA throughout 2020.

### **Point Vicente No-Take State Marine Conservation Area**

Point Vicente State Marine Conservation Area (SMCA) is a no-take MPA established in 2012. This MPA protects key habitats and covers fifteen square miles. Home to the Point Vicente Lighthouse and 3.7 miles of scenic shoreline, Point Vicente attracts many tourists. Beach access in this MPA is limited which makes beach recreation and other activities less common, however, tourists can still enjoy the views and occasional wildlife viewing from the bluff trails. As a no-take SMCA, no recreational or commercial take is permitted within its boundaries. Specially permitted incidental take for infrastructure maintenance is legally permissible.

Point Vicente SMCA had more offshore activity than any other LA MPA in 2020, making up 48% of the total observed activity. Consumptive activity accounted for a total of 9% of the activities observed, much more than any other MPA. Total activity incidence saw a decrease from the previous average during this timeframe, from 24.5 observations per survey mile to 11.0 observations per survey mile, a 55% decrease. However, consumptive activity incidence saw an increase from the previous average, both onshore and offshore, of 55% and 14% respectively. Volunteers recorded the most surveys in this MPA during this timeframe, a total of 115, making up 46% of the total number of surveys conducted. The most common activities recorded were

rocky beach recreation, wildlife viewing, and recreational boating. Work boats, power boats, kayaks, dive boats, and sailboats were all regularly sighted. Most of the consumptive activity recorded in this MPA was boat-based and the most common gear-type was line. Two violations were reported in the Point Vicente SMCA in 2020.

### **Abalone Cove State Marine Conservation Area**

Located adjacent to Point Vicente SMCA, Abalone Cove SMCA spans just 1.2 miles of shoreline and encompasses only 4.7 square miles. The smallest of the MPAs in LA County, this protected area is located on the south of the Palos Verdes Peninsula. It was adopted in 2012 and along with Point Vicente SMCA, includes the only south-facing headland in the entire region. The shoreline of this MPA is known for its rocky intertidal habitat. As an SMCA, Abalone Cove SMCA does allow some take of marine organisms. Within the MPA boundaries, the recreational take by spearfishing of white seabass and pelagic finfish; and market squid by hand-held dip net is permitted. The commercial take of swordfish by harpoon; and coastal pelagic species and Pacific bonito by round haul net, brail gear, and light boat are also permitted. Additionally, like Point Vicente SMCA, Abalone Cove SMCA partially contains a superfund site, and therefore take pursuant to the mitigation actions of the superfund site is permitted.

In 2020, Abalone Cove SMCA saw the second highest percentage of consumptive activity compared to other Los Angeles County MPAs, a total of 4%. Abalone Cove had a large increase in off-shore consumptive activity incidence compared to previous years, a 50% increase. All other activity types decreased from previous years, with total activity decreasing from 66.8 observations per survey mile to 44.1 observations per survey mile, a 34% decrease. Onshore consumptive activity incidence had the biggest decrease from the previous average, 87.5%. The most common activities observed in this MPA were rocky beach recreation, sandy beach recreation, tidepooling, SCUBA diving, and boating. Only one violation was reported by volunteers in this MPA.

### **Potential Violations**

The rate of consumptive activities across all LA MPAs surveyed by MPA Watch remains relatively low in most MPAs, however some MPAs saw substantial increases in consumptive activity. Consumptive activities accounted for only 2% of total activity in LA MPAs in 2020. If we focus on specific MPAs and specific activities, however, there were substantial increases in potential poaching in 2 of the 4 MPAs in LA County. MPA Watch volunteers only reported a total of 7 violations throughout the year, most of which were recorded in the Palos Verdes MPAs (Point Vicente and Abalone Cove). Evidence from the surveys themselves and anecdotal evidence from volunteers and managers, however, shows that these reported violations vastly underrepresent the true level of poaching and noncompliance occurring within these MPAs. MPA Watch volunteers report only a small fraction of the potential compliance violations they record.

MPA Watch volunteers recorded the highest rates of consumptive activity in the Point Vicente SMCA and the Abalone Cove SMCA. Point Vicente SMCA, in particular, showed a record high

percentage of documented consumptive activity as compared to total activity, accounting for 9% of all activity recorded. As a no-take SMCA, all of the 41 consumptive activities documented by MPA Watch volunteers in 2020 were potential MPA violations. Incidence rates of both onshore and offshore activity in this MPA increased from previous averages, as shown in the charts and discussion sections above. This indicates a concerning compliance issue in this particular MPA.

Additionally, based on observations and anecdotal evidence from Heal the Bay staff, park rangers, wardens, and other MPA managers and non-profit partners, there is a large number of potential onshore consumptive violations taking place in the tide pools of the Abalone Cove SMCA that are not captured by MPA Watch surveys. This is due to the location and time of day where the poaching occurs. Heal the Bay highly recommends increased enforcement and outreach activity in this MPA in response to these potential violations, and an increase in documentation of violations in these areas by CDFW outreach and enforcement staff.

### **Next Steps**

As we head in 2021, Heal the Bay's MPA Watch team will prioritize the implementation of an entirely virtual training program developed this past year that will allow for the safe recruitment and training of new MPA Watch volunteers during the COVID-19 pandemic. This training program consists of training videos, presentations, and virtual classrooms to fully prepare a new cohort of volunteers to accurately conduct MPA Watch surveys. This training technique was successfully implemented last year to train dozens of new volunteers who are now in the field safely collecting survey data.

In addition to training new volunteers, we have and will continue to prioritize virtual refresher courses for our current volunteers to keep them informed of survey protocol. Our team is also prioritizing the update of our training and outreach materials. Last year, we released an updated data sheet and plan to release an updated training manual in the summer of 2021. This training manual will have new difficulty ratings for each transect and accessibility labels to improve volunteer experience. The manual will also include additional information on MPA science, climate change, tribal and Indigenous lands, and traditional ecological knowledge.

We also continue to collaborate with PhD students in the Barber Lab at UCLA to complete a 2-year eDNA study in the MPAs of Malibu. In lieu of in-person eDNA events, staff will continue to collect samples with research partners. Sampling will conclude in the spring of 2021 and we look forward to working with the research team on data analysis. Heal the Bay's MPA Watch team is dedicated to furthering our program during these uncertain times while ensuring the safety of our staff and volunteers.

### **Additional Information**

LA County MPA Watch is part of a larger statewide MPA Watch effort. For more information about this program, please visit [www.mpawatch.org](http://www.mpawatch.org). If you are interested in joining the Heal the Bay MPA Watch volunteer team, please attend one of our monthly volunteer orientations for more information. Volunteer orientations are held once quarterly, and are a necessary prerequisite to attend one of our four yearly MPA Watch trainings.

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](http://mpawatch.org). Connect with MPA Watch on social media @MPAWatchOrg.

To learn more about Heal the Bay's MPA Watch Program and to register for an orientation or training, please visit [www.healthebay.org/take-part](http://www.healthebay.org/take-part). For information on California's network of marine protected areas, please visit [californiampas.org](http://californiampas.org). For details on the rules, regulations and management of California's MPAs, please visit [wildlife.ca.gov/MPAs](http://wildlife.ca.gov/MPAs).

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*MPA Watch Volunteer Training, Pelican Cove*