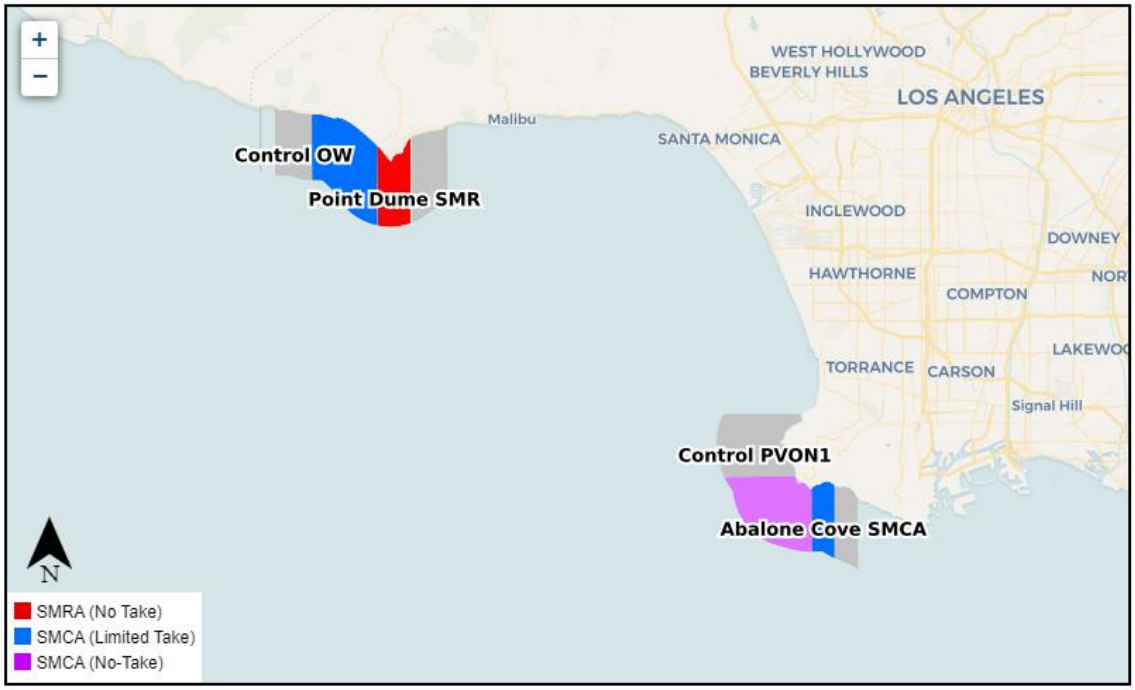
Marine Protected Area (MPA) Watch
Regional Report
LA County Shore-Based
January 1, 2022 – June 30, 2022

Heal the Bay

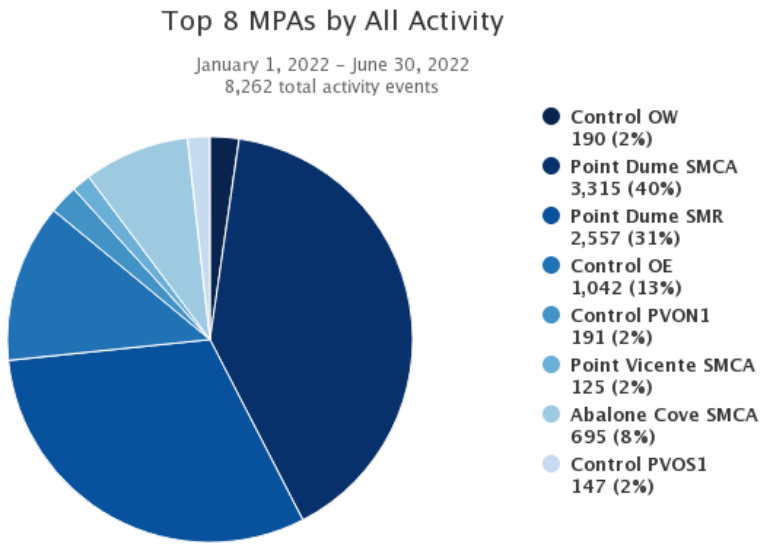


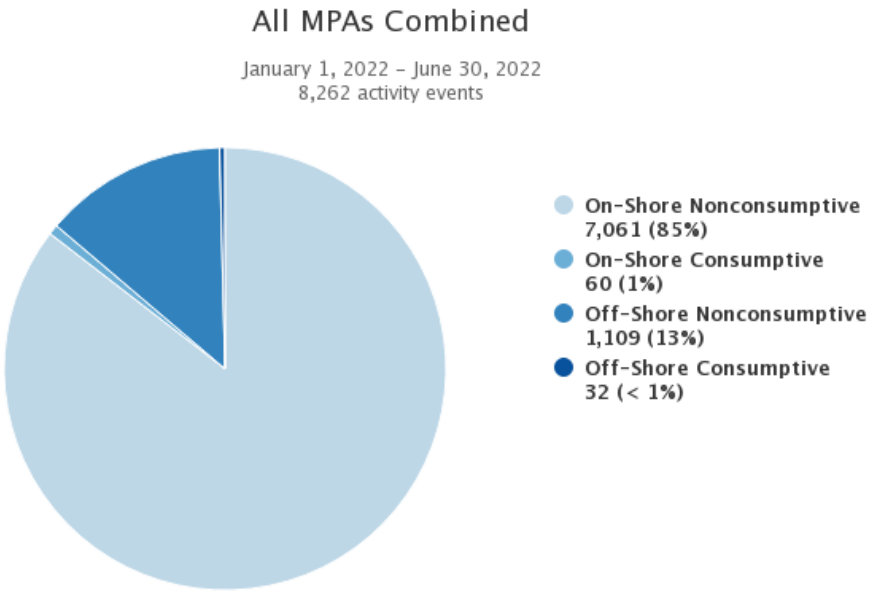
California's network of Marine Protected Areas (MPAS) was established by the Marine Life Protection Act (MLPA) of 1999 to safeguard our marine resources and ecosystems. To ensure success and to inform adaptive management, long-term monitoring of these protected areas must be conducted. Developed in 2011, MPA Watch was designed as a community science program to collect data on the 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 January-June of 2022, 24 MPA Watch volunteers conducted a total of 235 surveys across 159 total survey miles and recorded a total of 8,262 activities
- Consumptive activity continues to decrease in LA County MPAs as compared to 2021 and 2020 observed activities.
- Potential violations decreased again this year to just 0.2% of activities observed, indicating continued improvement in MPA compliance following an increase in poaching activity in 2020.
- Heal the Bay's MPA Watch program has successfully transitioned to a fully hybrid training program and has officially surpassed 1,000 total volunteers trained over the past 11 years as of Summer 2022.

Human Use of MPAs January - December 2021

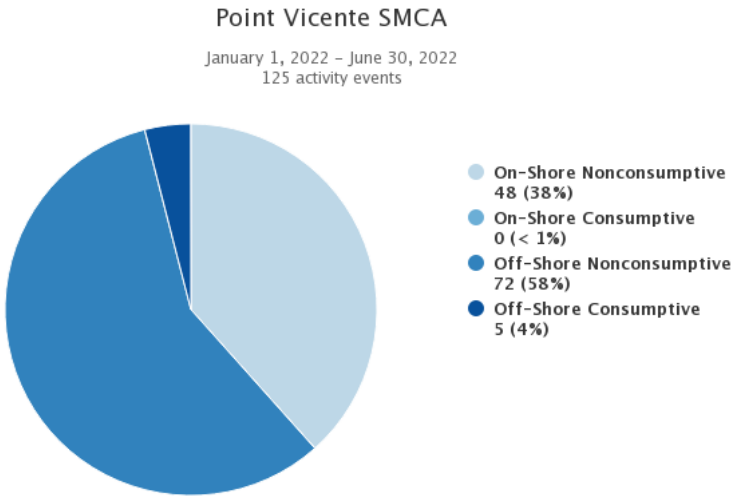


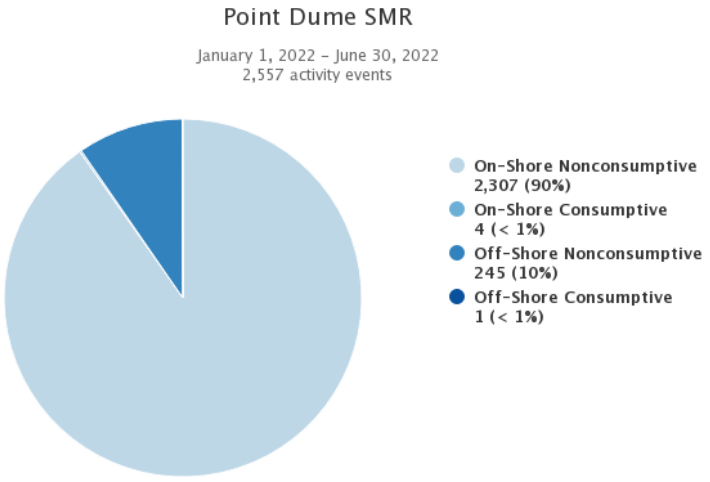


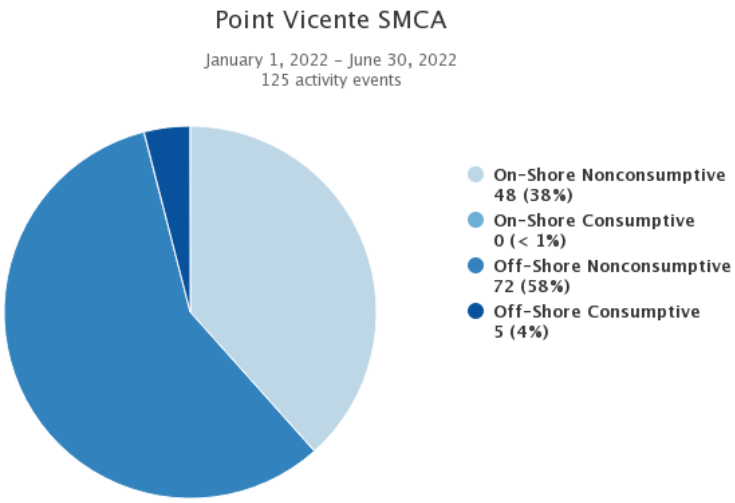
Activity Classifications

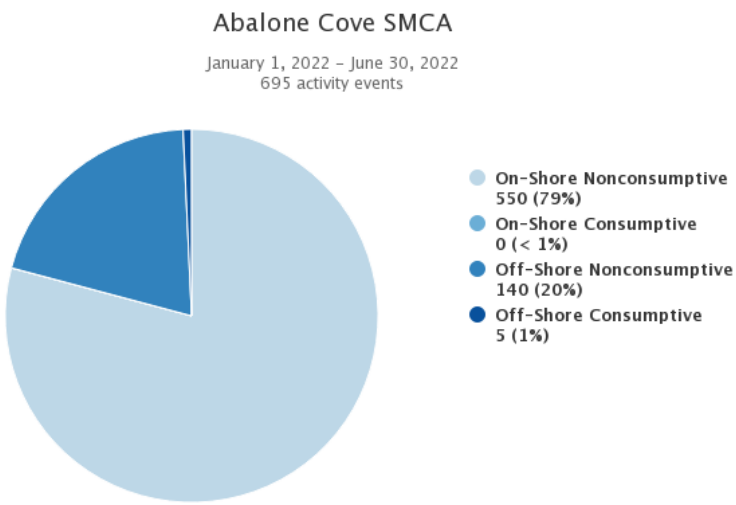
On-Shore - Activities that take place on a sandy or rocky beach. Excludes bluffs, trails, sea walls, parking lots, or other man-made structures. Includes recreation, tidepooling, shore-based fishing, etc.
Off-Shore - Activities that take place offshore, typically in knee-deep water or deeper. Includes 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



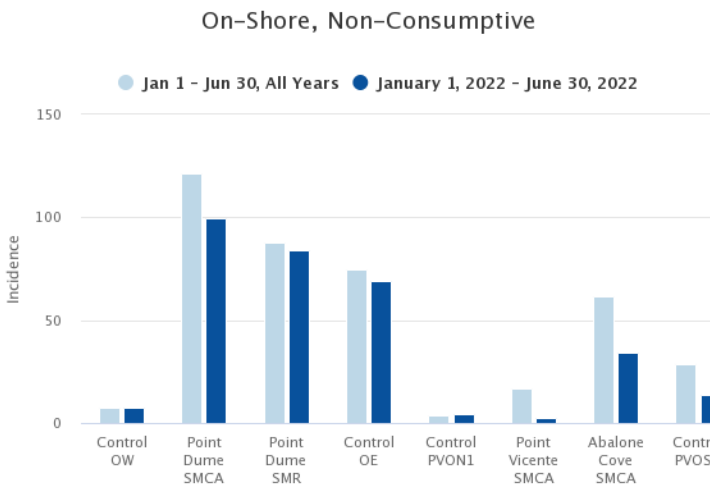


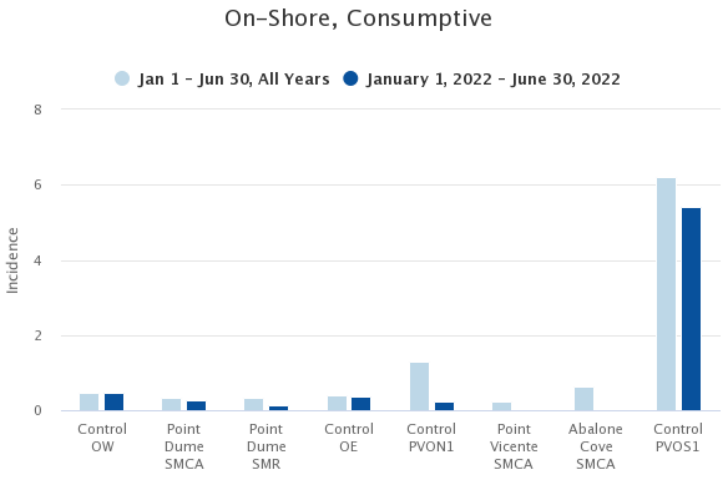


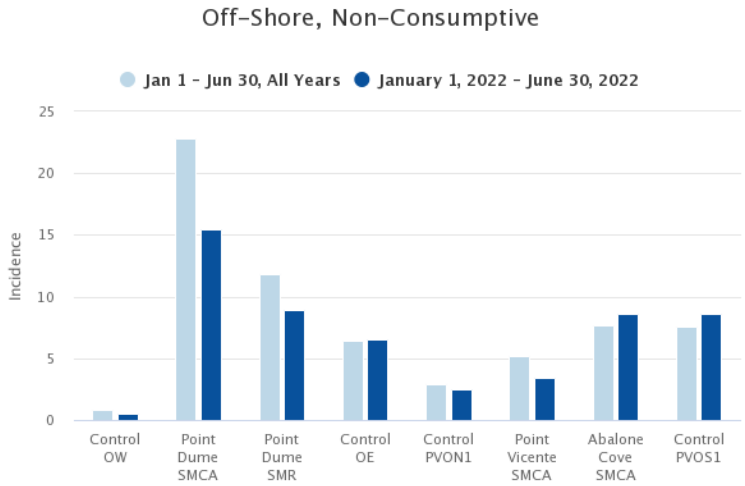


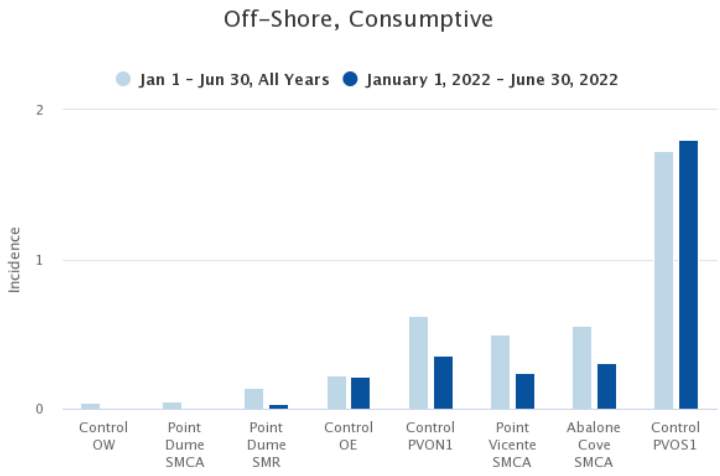
The above pie charts on pages 1 & 2 show the raw number of activities observed by the MPA Watch Program in Los Angeles County and do not correct for the number of surveys performed.

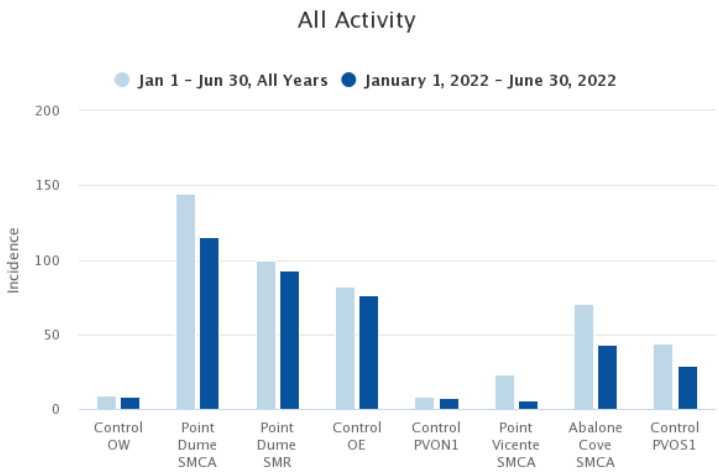
Activity Incidence by MPA











The above charts show incidence values for each MPA monitored by the MPA Watch Program in Los Angeles County. ***Incidence is calculated as the number of activities recorded divided by total survey miles.***

Activity Incidence by MPA

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022
Control OW	7.5	7.6	0.5	0.5
Point Dume SMCA	121.6	99.3	0.3	0.3
Point Dume SMR	87.6	83.9	0.3	0.1
Control OE	74.9	69.0	0.4	0.4
Control PVON1	3.8	4.5	1.3	0.2
Point Vicente SMCA	17.0	2.3	0.2	0.0
Abalone Cove SMCA	61.6	34.0	0.6	0.0
Control PVOS1	28.9	13.6	6.2	5.4
All MPAs Combined	68.0	44.3	0.5	0.4

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022
Control OW	0.8	0.5	0.0	0.0
Point Dume SMCA	22.8	15.5	0.0	0.0
Point Dume SMR	11.8	8.9	0.1	0.0
Control OE	6.4	6.5	0.2	0.2
Control PVON1	2.9	2.5	0.6	0.4
Point Vicente SMCA	5.2	3.4	0.5	0.2
Abalone Cove SMCA	7.7	8.6	0.6	0.3
Control PVOS1	7.6	8.6	1.7	1.8
All MPAs Combined	11.0	7.0	0.3	0.2

MPA	Total Combined Jan 1 Jun 30 All Years	Total Combined Jan 1, 2022 through Jun 30, 2022
Control OW	8.9	8.6
Point Dume SMCA	144.7	115.1
Point Dume SMR	99.9	93.0
Control OE	82.0	76.1
Control PVON1	8.7	7.6
Point Vicente SMCA	23.0	6.0
Abalone Cove SMCA	70.4	42.9
Control PVOS1	44.4	29.4
All MPAs Combined	79.8	51.8

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

Incidence is calculated as the 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.

COVID-19 and Program Updates

Heal the Bay's MPA Watch program has largely recovered from the COVID-19 pandemic thus far in 2022; however, the program has undergone subsequent permanent or semi-permanent changes as a result of the pandemic. Our program fully reopened on July 1 2020 after a 3-month closure and has since operated quite successfully using hybrid training, virtual programming, and digital recruitment and management. As of summer 2021, Heal the Bay has been utilizing a hybrid training program consisting of training videos, online quizzes, and a virtual classroom training session combined with an in-person field training. This change, while originally designed to maintain training during the pandemic, has become a permanent change to our training protocol as it requires fewer resources and allows our program to be more accessible to volunteers while maintaining the scientific rigor required to train MPA Watch volunteers. We trained over 50 volunteers in 2021 using this method and, thus far in 2022, have trained nearly 80 volunteers, many of whom are already conducting surveys on their own and becoming dedicated and reliable volunteers.

Volunteer participation continues to remain high following the increases we experienced in 2021, indicating successful program recovery from the pandemic. We are seeing steady rates of surveys completed, volunteers trained, volunteer retention, and active volunteers this year. While many of the surveys are still being conducted by a handful of top volunteers, our program has fully returned to pre-pandemic survey levels. Heal the Bay is still taking precautions for COVID-19, including additional safety training, a Volunteer Safety Agreement that all volunteers must sign, and COVID vaccine requirements for all our volunteers. We will continue to monitor COVID-19 very carefully and make appropriate changes to keep our team and volunteers safe.

As reported in 2020 and in the first half of 2021, COVID-19 and subsequent increased visitation and harvesting of organisms 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 anecdotally noticed an enormous uptick in take from the tidepools of Abalone Cove SMCA and surrounding areas in 2020. Thankfully, this take lessened during the summer of 2021 and has remained at relatively normal levels since then, however, Heal the Bay is still monitoring the situation closely. Our MPA Watch team, including managers and interns, conducted a series of tidepool visitation surveys at four locations across LA County during the summer of 2021, both inside and outside MPAs. We spoke to over 200 visitors and gathered data on languages spoken by visitors, where visitors were coming from, and what activities they were participating in at the tidepools. We have completed an analysis of this data and included it and recommended actions in our MPA Decadal Management Review report to the California Department of Fish and Wildlife submitted this past January.

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.[1]

Thus far in 2022, non-consumptive activity incidence both onshore and offshore remains below the all-year average, continuing last year's trend in Point Dume SMR. Onshore consumptive activity rate was only 0.1 incidences per survey mile for the first half of 2022. Offshore consumptive activity dropped to zero last year and has stayed at zero for the first half of 2022. While only a single count of consumptive activity (unknown fishing) was recorded for the entire year in 2021 for Point Dume SMR, 5 counts have been recorded thus far in 2022. These included sandy beach hand collection of biota and sandy beach hook and line fishing. The most common activities in this MPA thus far in 2022 were sandy beach recreation (82%), surfing (5%), offshore recreation (4%), and off-leash animals (3% - an increase from last year). Last year, surveying in this MPA was difficult due to multiple transect closures caused by access barriers. While only 24 surveys were conducted in Point Dume SMR last year, 30 have already been conducted so far this year. This is most likely due in part to increased access, a testament to how important coastal access is for MPA monitoring success and the need for sea level rise mitigation in the Malibu area.

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 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 an 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.

[1] 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

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.

As with previous years, Point Dume SMCA had the most recorded activity of all survey sites in LA County thus far in 2022 with 40% of recorded activities. Also similar to last year and the all-year average, this MPA has had the highest activity incidence (115.1 activities observed per mile surveyed) thus far in 2022 of all four MPAs and control sites, indicating it is the most heavily trafficked site. Onshore non-consumptive activity is by far the most common, making up 86% of the recorded activity observations. All activity types were below the all-year average for activity incidence for the survey period. Of particular note, the onshore consumptive activity rate dropped from 0.5 incidences per survey mil last year to 0.3 this year, and offshore consumptive activity remains at zero. Surveyors reported 5 hook and line fishers, from both rocky and sandy beach, across the 34 surveys collected for the year and 3 counts of hand collection of biota from the sandy beach. The most common activities in this MPA in 2021 were sandy beach recreation (making up 83% of the total activities), surfing (6%), offshore recreation (6%), and animals on leash (1%).

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.

Consistent with previous trends, Point Vicente SMCA had more offshore activity than any other LA MPA thus far in 2022, making up 58% of the total observed activity, up from 56% last year, 48% in 2020, and only 23% for the 11-year survey period. Consumptive activity accounted for a total of 4% of the activities observed, remaining the highest percentage of consumptive activity of all LA County MPAs. Total activity incidence remains below the all-year average during this timeframe, from 23.0 observations per survey mile to only 6.0 observations per survey mile. As with last year, volunteers surveyed this MPA the most during this timeframe with a total of 60 surveys, making up 25% of the total number of surveys conducted. The most common activities recorded were rocky beach recreation (25%), power boating (24%), sandy beach recreation (12%), and sailing (10%). The consumptive activity recorded in this MPA was all boat-based and included both unknown fishing activity and commercial net fishing. Both observed violations were reported via CalTIP to DFW, an increase from zero reports called in from this MPA last year.

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 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.

Thus far in 2022, consumptive activity continues to decrease in Abalone Cove SMCA. Consumptive activity made up only 1% of observations this year, down from 2% last year and 4% in 2020. Onshore consumptive activity dropped to zero with no tidepool collection activities being observed while offshore consumptive activity dropped from 0.4 last year to 0.3 incidences per survey mile so far in 2022 (this is below the all-year average of 0.6). Total activity in this MPA is below the all-year average across all activity types (down to 42.9 from 70.4 observations per survey mile). Consumptive activity all took place from boats and included hook and line fishing (a violation in this MPA) and a spear-fishing vessel (allowed in this MPA). Tidepooling activity is more common here than any other MPA with 80 observations made (12% of the total). The other most-common activities observed in this MPA so far in 2022 were rocky and sandy beach recreation (41% and 26% respectively), kayaking (8%), and power boating (5%).

Potential Violations

The rate of consumptive activities across all LA MPAs surveyed by MPA Watch remains relatively low in LA County main-shore MPAs. Consumptive activities accounted for only 1% of total activities in these MPAs during the first half of 2022, down from 2% last year. As in years past, the highest rates of consumptive activity occur at control site PVOS1, also known as Sacred Cove, located just south of the Abalone Cove SMCA. This site is often given as an alternative for fishing and tidepool collecting to Abalone Cove by local rangers and docents. So far in 2022, 36 counts of consumptive activity were recorded at this transect, making up 24% of all observations at this site. Onshore consumptive activity rate was 5.4 incidences per survey mile, much higher than any other site, and offshore consumptive activity rate was 1.8 incidences per survey mile, higher than the all-year average. That this control site accounts for a great deal of the total observed consumptive activity is indicative of effective MPA regulations and relatively good compliance in this area.

Of the observed consumptive activities, only 16 observations were violations (0.2% of observations) in the first half of 2022. Violations were observed in every single MPA monitored by MPA Watch in LA County with 2 in Abalone Cove, 8 in Point Dume SMCA, 4 in Point Dume SMR, and 2 in Point Vicente SMCA. These observations were made across nine surveys,

accounting for 4% of total surveys conducted, down from 6% of total surveys reporting violations last year and 8.5% of surveys in 2020.

Of these violation observations made thus far in 2022, only 2 were reported by MPA Watch volunteers. Volunteers noted in comments of these surveys that they chose not to report due to a lack of clarity on either the allowance of the activity itself or whether the activity was truly taking place inside the MPA or not. For example, one volunteer noted they were unaware at the time of the survey that shell collection was a violation data as their reason for not reporting and were only made aware as they were entering the. Another noted being unsure of whether the boats they observed were inside the MPA, resulting in a hesitancy to call CalTIP. This is a trend we have seen in previous years and indicates that, while volunteers are trained in CalTIP reporting procedure, many potential violations go unreported by MPA Watch volunteers in LA County. In a response to this trend, Heal the Bay has begun including additional CalTIP reporting tools in our MPA Watch training program, including practice phone calls and sample call scripts. We are strongly encouraging our volunteers to report violations to CalTIP and will continue doing so in the hopes these reporting numbers will increase.

Next Steps

Looking forward to the rest of 2022, Heal the Bay's MPA Watch team will continue utilizing our new model of hybrid trainings with virtual classroom sessions and training videos combined with in-person mandatory field trainings to train our new volunteers. This new model has shown to be incredibly successful and has produced dedicated and well-versed volunteers. We are making this a permanent change to increase accessibility to our program. We have also completed an analysis of volunteer retention rates to gain a better understanding of why some volunteers stick with us while others do not and to identify drop-off points. We are now strategizing on how to use that information to improve the program and increase retention.

We will also continue to prioritize updating training materials and hosting virtual refresher courses for our current volunteers to keep them informed of survey protocols. In 2020 we released a brand new training manual to our volunteers with improved survey instructions and guidance, difficulty and accessibility ratings, additional scientific information, and updated photos. Later this year, we will release another version of this manual with more updated instructions and a new Traditional Ecological Knowledge section to honor Indigenous management of coastal and marine ecosystems. We also hope to expand our very successful private training program to include local educational institutions and continue hosting MPA docent trainings as a supplement to our MPA Watch program.

Finally, we plan to continue collaborating with PhD students in the Barber and/or Eagle Lab at UCLA to begin a second 2-year eDNA study in the MPAs of Malibu in addition to analyzing the data from the first 2-year study from our 2019-2021 partnership. A grant proposal has been submitted and we are awaiting funding approval to start this program back up. We are very excited to see what these data will show and to contribute to advanced long-term monitoring of our local MPAs.

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. 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 prerequisite to attending 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. 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 healthebay.org/mpa. For information on California's network of marine protected areas, please visit californiampas.org. For details on the rules, regulations, and management of California's MPAs, please visit wildlife.ca.gov/MPAs.

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MPA Watch Volunteer Trainings: *Left - Abalone Cove, July 2022. Right – Point Dume, June 2022.*