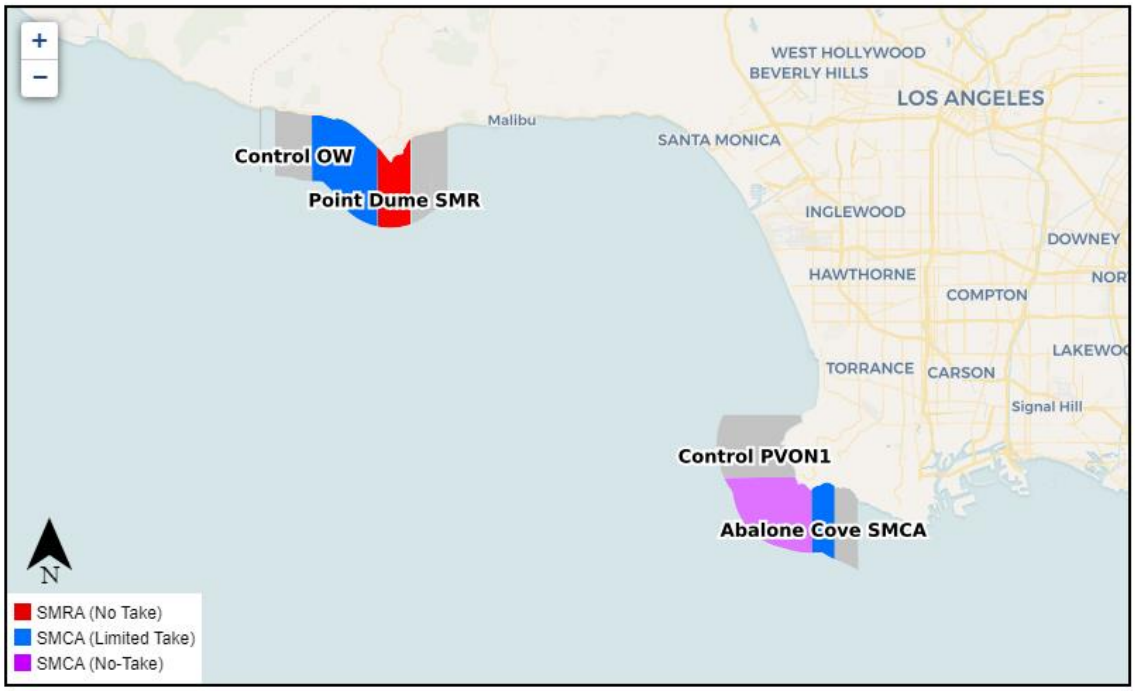
Marine Protected Area (MPA) Watch Regional Report

LA County Shore-Based

January 1, 2023 – June 30, 2023

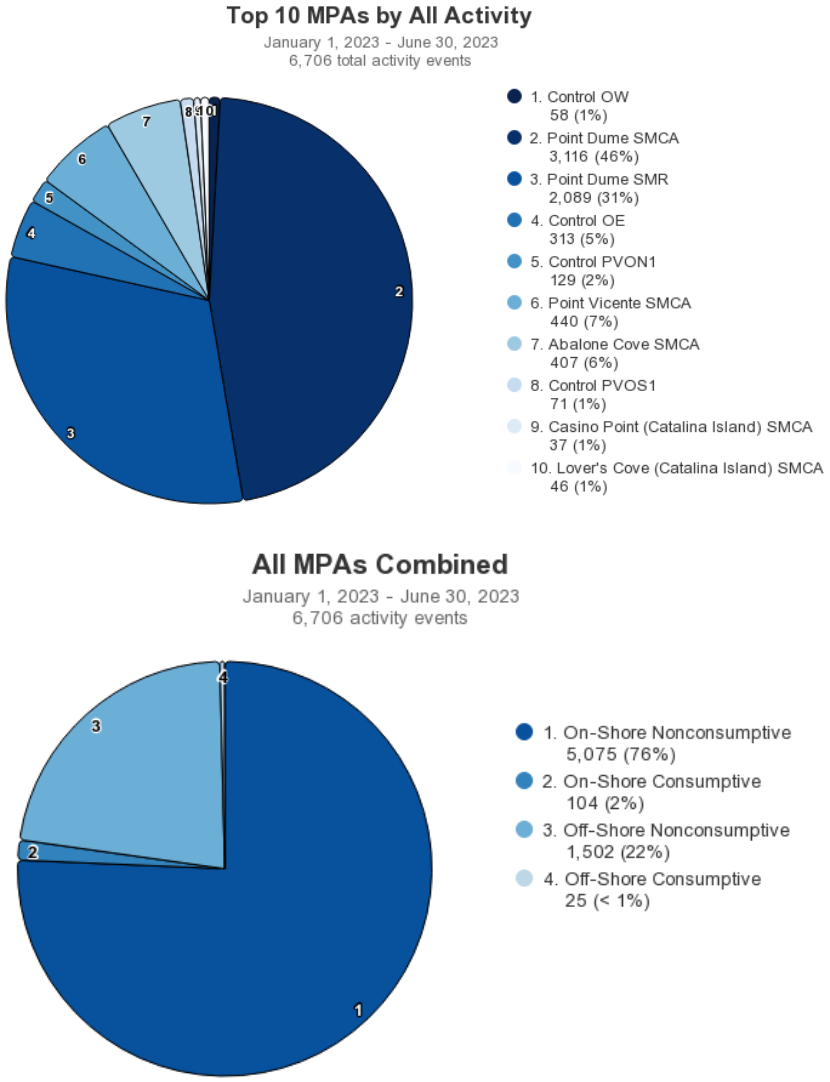


California's network of Marine Protected Areas (MPAs) was established by the Marine Life Protection Act (MLPA) of 1999 to safeguard our marine resources and ecosystems. To ensure success and to inform adaptive management, long-term monitoring of these protected areas must be conducted. Developed in 2011, 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. This work takes place on ancestral lands of the Gabrielino Tongva and Chumash people and we pay our respect to elders past, present, and emerging.

Executive Summary

- In January-June of 2023, 43 MPA Watch volunteers conducted a total of 286 surveys across 190 total survey miles and recorded a total of 6,706 activities.
- Activity incidence across all activity noticeably decreased from last year, possibly due to the wet winter resulting in poor beach weather and beach closures.
- Potential violations made up only 0.3% of all observations, a slight increase from 0.2% in 2022. Most violations were observed in Point Dume SMCA.
- Heal the Bay's MPA Watch program is expanding with the relaunch of eDNA events and MPA Signage Survey 123 Trainings this year.

HUMAN USE OF MPAS



Figures 1a and 1b: Pie charts of human activity by MPA or Control site.

ACTIVITY CLASSIFICATIONS

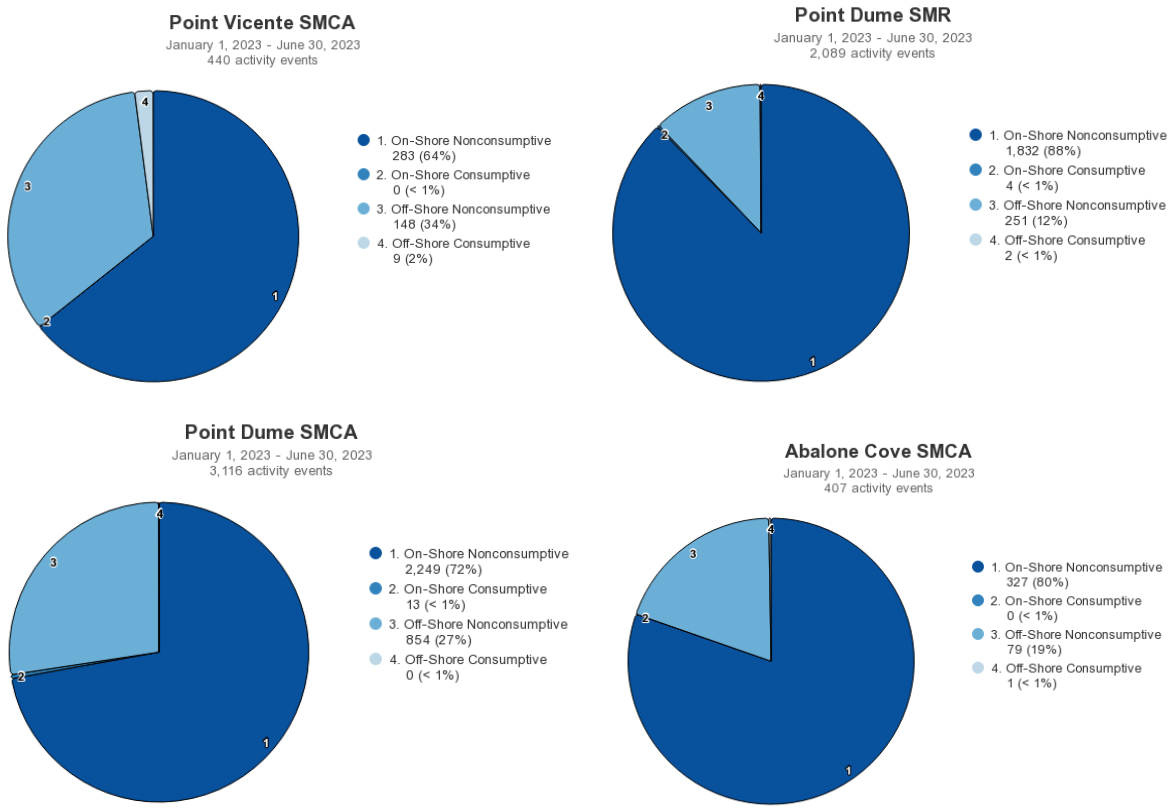
On-Shore - Activities that take place on a sandy or rocky beach. Excludes bluffs, trails, sea walls, parking lots, or other man-made structures. Includes recreation, tidepooling, shore-based fishing, etc.

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.

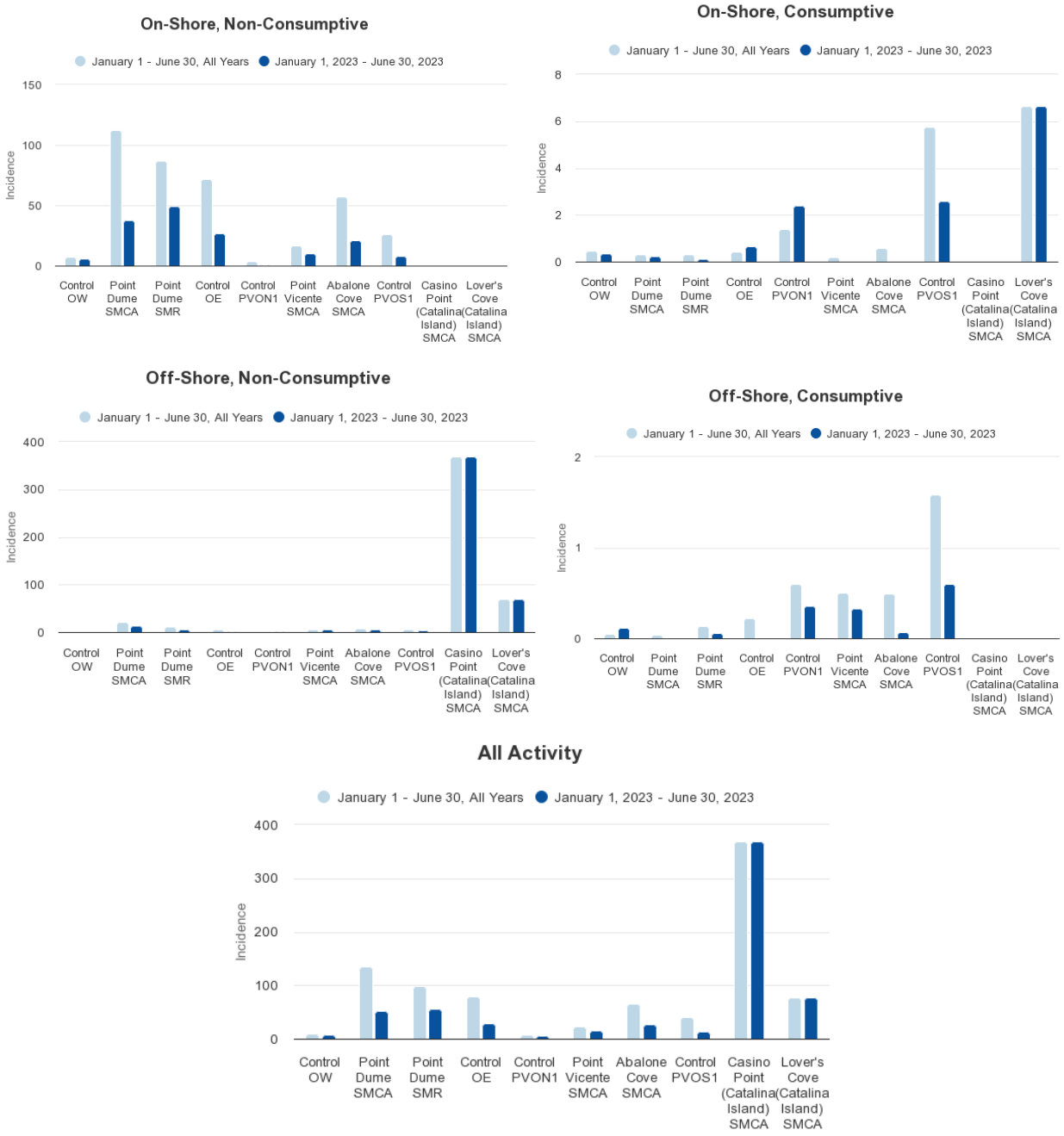
ACTIVITY BY MPA



Figures 2a) Point Dume SMR, 2b) Point Vicente SMCA, 2c) Abalone Cove SMCA, and 2d) Point Dume SMCA in order of left to right and top to bottom show pie charts of activity type by MPA or Control site.

Figures 1 and 2 show raw number of activities observed by the MPA Watch Program in Los Angeles County and are not standardized for the number of surveys performed.

ACTIVITY INCIDENCE BY MPA



Figures 3a (onshore non-consumptive), 3b (onshore consumptive), 3c (offshore non-consumptive), 3d (offshore consumptive), and 3e (all activity) in order of left to right and top to bottom: activity rate bar charts for 2022 compared to all years since 2011. NOTE: Catalina Island MPAs are included in these charts but were not included in overall analysis. See Catalina Island MPAs section below for details. ***Incidence is calculated as the number of activities recorded divided by total survey miles.***

ACTIVITY INCIDENCE BY MPA

	On-Shore			
	Non-Consumptive		Consumptive	
MPA	January 1 June 30 All Years	January 1, 2023 through June 30, 2023	January 1 June 30 All Years	January 1, 2023 through June 30, 2023
Control OW	7.4	6.0	0.4	0.4
Point Dume SMCA	112.2	37.6	0.3	0.2
Point Dume SMR	87.2	49.1	0.3	0.1
Control OE	72.0	26.6	0.4	0.7
Control PVON1	3.5	0.4	1.4	2.4
Point Vicente SMCA	16.8	10.4	0.2	0.0
Abalone Cove SMCA	57.1	21.0	0.6	0.0
Control PVOS1	25.8	7.8	5.7	2.6
Casino Point (Catalina Island) SMCA	0.0	0.0	0.0	0.0
Lover's Cove (Catalina Island) SMCA	0.0	0.0	6.7	6.7
All MPAs Combined	65.1	26.7	0.5	0.5

Table 1: Onshore activity incidence rate by MPA or Control site. Incidence is calculated as the number of activities recorded divided by total survey miles.

	Off-Shore			
	Non-Consumptive		Consumptive	
MPA	January 1 June 30 All Years	January 1, 2023 through June 30, 2023	January 1 June 30 All Years	January 1, 2023 through June 30, 2023
Control OW	0.8	0.5	0.1	0.1
Point Dume SMCA	21.8	14.3	0.0	0.0
Point Dume SMR	11.5	6.7	0.1	0.1
Control OE	6.2	2.0	0.2	0.0
Control PVON1	2.8	2.0	0.6	0.4
Point Vicente SMCA	5.2	5.4	0.5	0.3
Abalone Cove SMCA	7.3	5.1	0.5	0.1
Control PVOS1	6.7	3.2	1.6	0.6
Casino Point (Catalina Island) SMCA	370.0	370.0	0.0	0.0
Lover's Cove (Catalina Island) SMCA	70.0	70.0	0.0	0.0
All MPAs Combined	10.7	7.9	0.3	0.1

Table 2: Offshore activity incidence rate by MPA or Control site. Incidence is calculated as the number of activities recorded divided by total survey miles.

MPA	Total Combined January 1 June 30 All Years	Total Combined January 1, 2023 through June 30, 2023
Control OW	8.8	7.0
Point Dume SMCA	134.4	52.1
Point Dume SMR	99.2	56.0
Control OE	78.8	29.3
Control PVON1	8.3	5.1
Point Vicente SMCA	22.7	16.1
Abalone Cove SMCA	65.5	26.1
Control PVOS1	39.8	14.2
Casino Point (Catalina Island) SMCA	370.0	370.0
Lover's Cove (Catalina Island) SMCA	76.7	76.7
All MPAs Combined	76.6	35.3

Table 3: Total activity incidence rate by MPA or Control site. Incidence is calculated as the number of activities recorded divided by total survey miles. NOTE: Catalina Island MPAs are included in Tables 1-3 but were not included in overall analysis. See Catalina Island MPAs section below for details.

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.

PROGRAM STATUS AND UPDATES

Heal the Bay's MPA Watch Program has been full of expansions thus far in 2023. Following the successful implementation of our new hybrid training program, initialized in the Summer of 2021, Heal the Bay has surpassed 1,000 volunteers trained over the past twelve years and has successfully used this training system to bring on 29 new volunteers thus far in 2023 through both public and private trainings Heal the Bay volunteers have now surveyed 7,450 transects since the inception of the program. Our program has continued implementing increased volunteer engagement practices such as direct emailing to inactive volunteers and additional volunteer events and opportunities in efforts to increase survey rates and overall volunteer retention. We have hired a new full-time MPA Watch Senior Coordinator, Crystal Barajas, who has increased volunteer communication and made major improvements in engagement.

Our program is also participating in the Marine Protected Area network Decadal Management Review (DMR), sharing valuable data and insights from our work. We attended the MPA Forum hosted by the California Department of Fish and Wildlife (CDFW) in Monterey in March 2023 where we presented a poster and provided extensive comment on the DMR, including information gleaned from MPA Watch data. We have also published a blog post and created social media content highlighting the importance of the DMR and MPA Watch data.

Heal the Bay's MPA Watch program is currently participating in the statewide MPA signage inventory project hosted by the MPA Collaborative Network. We are developing a training program and will train MPA Watch volunteers to locate and document MPA signs using the Survey 123 platform while conducting MPA Watch transects in the field.

Finally, Heal the Bay's MPA Watch Intern program is in its thirteenth year and we have thus far had two successful cohorts of six total interns. This past spring, our interns conducted projects that resulted in a detailed comment letter on the DMR and a valuable project partnering with local rangers in Ranchos Palos Verdes to organize and analyze MPA violation observance data. CDFW Law Enforcement Division has taken an interest in this data and we are excited to take this MPA Watch intern project even further to inform MPA enforcement and compliance efforts.

We are happy to report that our program has fully recovered from the COVID-19 pandemic and, thus far, has had a successful year with a number of exciting projects to look forward to over the rest of 2023. For more information on these future projects, please see the "Next Steps" section on page eleven.

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 or consistent with the all-year average (Tables 1&2). Onshore consumptive activity rate was only 0.1 incidences per survey mile for the first half of 2023, identical to last year's rate in this category (Table 1). Offshore consumptive activity increased slightly to 0.1 incidences per survey mile (Table 2) from 0 at this time last year Consumptive activity in this MPA includes sandy beach hand collection of biota and hook and line fishing along with recreational hook and line fishing from a boat, neither of which is permitted. Activity incidence across all activities was highest in this MPA compared to all others for the first half of 2023 at 56 observations per survey mile (Table 3). This excludes Catalina Island MPAs, as further explained in the Catalina MPAs section below. The most common activities in this MPA thus far in 2023 were sandy beach recreation (73%), surfing (8%), rocky beach recreation (4% - a new addition from last year), off-leash animals (3%), and tidepooling (3% - also a new addition from last year).

Tidepooling was more common here than in any other MPA surveyed, a departure from previous years' trends where Abalone Cove had the highest numbers of observed tidepoolers. These changes are most likely resulting from the reopening of transect SMR2a which has allowed for surveying Dume Cove for the first time in two years. This transect accounted for 11 of the 15 total observations of tidepooling in this MPA during the survey period. Dume Cove has more rocky beach and tidepool areas, leading to more observed rocky beach recreation and tidepooling activity. Over the last couple years, surveying in this MPA was difficult due to multiple transect closures caused by access barriers. This far in 2023, 48 surveys have been conducted in this MPA compared to only 30 this time last year, most likely due to increased access with the reopening of the Point Dume trails/Dume Cove and Westward Beach transects, a testament to how important coastal access is for MPA monitoring success.

[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

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 and 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.

As with previous years, Point Dume SMCA had the most recorded activity of all survey sites in LA County thus far in 2023 with 46% of recorded activities (Figure 1a). Quite unlike previous years, however, this MPA did not have the highest activity incidence (52.1 activities observed per mile surveyed this year compared to double that last year) thus far in 2023 (Table 3). The reasons for decreased activity incidence in this MPA and across all MPAs in LA County are unknown but could possibly be attributed to the large increase in precipitation we have seen, resulting in poor beach weather, beach erosions, and even some closures. Onshore non-consumptive activity is by far the most common, making up 72% of the recorded activity observations (Figure 2c). All activity types were below the all-year average for activity incidence for the survey period (Table 3). The onshore consumptive activity rate dropped again from 0.5 incidences per survey mile in 2021 and 0.3 last year to 0.2 this year during the survey period (Table 1). Offshore consumptive activity still remains at zero as with previous years (Table 2). Surveyors reported ten incidences of sandy beach hand collection of biota, one incidence of rocky beach hand collection, and two hook and line fishers from sandy beaches across the 68 surveys collected for the year, twice as many as the 34 collected in this MPA this time last year. The most common activities in this MPA thus far in 2023 were sandy beach recreation (making up 68% of the total activities), surfing (14%), offshore recreation (7%), other board sports (6%), and animals off 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 36% of the total observed activity (Figure 2a), down from a three-year high of 58% this time last year. Consumptive activity accounted for a total of 2% of

the activities observed, remaining the highest percentage of consumptive activity of all LA County MPAs, but not by a large margin (Figure 2a). Total activity incidence remains below the all-year average during this timeframe, however increased from 6.0 incidences per survey mile this time last year to 16.1 incidences this year (Table 3). As with the last couple years, MPA Watch volunteers surveyed this MPA the most during this timeframe with a total of 76 surveys, making up 27% of the total number of surveys conducted but just 7% of all activities observed (Figure 1a). The most common activities recorded were rocky beach recreation (30%), wildlife viewing from sandy and rocky beaches (18% - a new addition to top activities from last year), sandy beach recreation (10%), and power boating (9%). Onshore consumptive activity in this MPA remained at 0 incidences per survey mile (Table 1), but offshore consumptive activity increased from 0.2 incidences per survey mile this time last year to 0.3 incidences this year (Table 2). This is still below the all-year activity incidence rate of 0.5 incidences (Table 2). The consumptive activity recorded in this MPA was all unknown fishing activity (9 observations). None of these observations were reported to CalTIP by MPA Watch volunteers. Based on comments provided, this was likely because the observers were unsure of the fishing activities they were observing and did not feel confident in reporting possible illegal activity.

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 2023, consumptive activity has decreased in Abalone Cove SMCA compared to January-June of 2022. Activity incidence for onshore consumptive activity remains at 0 (Table 1) and offshore activity incidence has dropped from 0.3 incidences per survey mile this time last year to 0.2 this year (Table 2). Consumptive activity made up less than 1% of observations this year (Figure 2d), down from 1% last year, 2% in 2021, and 4% in 2020. In fact, only one count of consumptive activity was reported for this MPA during the survey period, which was offshore spearfishing, a permitted activity in this MPA. Total activity in this MPA is lower this year than this time last year for all activity types – down to 26.1 from 42.9 observations per survey mile (Table 3). The most common activities observed in this MPA so far in 2023 were rocky and sandy beach recreation (57% and 10% respectively), tidepooling (10%), kayaking (6%), and power boating (4%), identical to last year's most common activities.

Catalina Island: Lover's Cove SMCA and Casino Point No-Take SMCA

Catalina Island hosts nine of the state's MPAs protecting around 22 square miles of coastal and marine habitat. At this time, select Heal the Bay volunteers and interns have access to four MPA

Watch transects on Catalina: Blue Cavern, Cat Harbor, Lover's Cove, and Casino Point. Casino Point, the state's smallest MPA at just 0.01 square miles, is located in Avalon. This MPA is a "no-take" state marine conservation area or SMCA and does not allow for any take of any kind, including all fishing activities. This MPA does allow, however, the feeding of fish, an included regulation unique to the island. Lover's Cove SMCA, also located in Avalon, is also a small MPA at only 0.06 square miles. This SMCA prohibits all take except for recreational hook and line fishing from Cabrillo Mole. Feeding of fish for marine life viewing, similarly to Casino Point, is allowed.

Each of these MPAs contains one MPA Watch transect and, over the course of this program, have only been surveyed a couple of times. Therefore, we have elected not to include any summary of this data as there is insufficient data to analyze. We hope to include analyses of this data in future reports.

POTENTIAL VIOLATIONS

While some consumptive activities are permitted in LA County MPAs, this metric is a good place to start when looking at compliance in MPAs, particularly state marine reserves and no-take state marine conservation areas. The rate of consumptive activities across all LA MPAs surveyed by Heal the Bay's MPA Watch program remains relatively low in LA County main-shore MPAs. Consumptive activities accounted for only 2% of total activities in these MPAs during the first half of 2023, up from 1% this time last year. The highest rates of consumptive activity in mainland MPAs in LA County occurred at control site PVON1 and PVOS1, located at the northern boundary of Point Vicente SMCA and the southern boundary of Abalone Cove SMCA respectively. Due to increased surveying in Catalina from MPA Watch interns, our program's data also reflects a high incidence rate of consumptive activity for the Lover's Cove SMCA, with a rate of 6.7 incidences per survey mile of onshore consumptive activity. As noted above, this data came from a single survey and should not be considered on its own as evidence of abnormally high consumptive activity in this area. Observations consisted of hook and line fishing, a permitted activity in parts of this MPA.

MPA	January 1 June 30 All Years	January 1, 2023 through June 30, 2023
Control OW	0	0
Point Dume SMCA	190	13
Point Dume SMR	289	5
Control OE	0	0
Control PVON1	0	0
Point Vicente SMCA	174	2
Abalone Cove SMCA	139	0
Control PVOS1	0	0
Casino Point (Catalina Island) SMCA	0	0
Lover's Cove (Catalina Island) SMCA	0	0
All MPAs Combined	797	20

Table 4: Raw counts of observed potential violations by MPA Watch volunteers between Januarv and June for all years of MPA

Of the 124 observed consumptive activities across all survey sites in LA County, only 20 observations were deemed potential violations (0.3% of observations) in the first half of 2023

(Table 4). Potential violations were observed in all but one MPA monitored by MPA Watch in LA County (Table 4). No potential violations were observed in Abalone Cove during the survey period (Table 4). These observations of potential violations were made across ten surveys, accounting for 3.5% of total surveys conducted.

Of these violation observations made thus far in 2023, only one was reported by MPA Watch volunteers, a decrease in CalTIP calls since last year. This call to CalTIP resulted in a call back by a warden who informed the volunteer that there were no marine patrols occurring that day and they were unable to respond to the call. Unlike previous years, volunteers did not make notes in the comments regarding why CalTIP was not called when the violation was observed. This is a concern for our program managers and a note that we will make more clear to our volunteers both during volunteer training and in communications with current volunteers. We will also be including an optional extra step in our Quality Assurance protocol to contact volunteers who observe violations but do not call CalTIP and do not provide an explanation in an effort to understand why the call was not made and encourage future calls. This trend of low CalTIP reporting is something 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 response to this trend, Heal the Bay now includes 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 2023, Heal the Bay's MPA Watch team will host two more public trainings to bring on new MPA Watch volunteers using our hybrid training model. We will also be hosting an ArcGIS Survey 123 signage inventory training for our MPA Watch volunteers to join the statewide MPA Watch signage inventory project and train team members on identifying and inputting MPA signage into the Survey 123 project.

Our team has embarked on a very exciting partnership with the Sacred Places Institute for Indigenous Peoples (SPI), an Indigenous-led, community-based organization located in the ancestral homelands of the Tongva People in Los Angeles and a participant in multiple statewide MPA management pillars. We will be working with SPI to complete an "Indigenization" of our MPA Watch program, including our training materials and public communication. We are looking forward to the final products of this partnership, including an updated manual that will contain information on the Indigenous nations whose land and coastal waters we survey, updated training slides, and other new inclusions to our overall program. The updated manual we will release will also contain transect specific updates, including updated photos, transect directions, accessibility ratings, and more.

Finally, we were thrilled to relaunch our partnership with the Eagle lab at UCLA to conduct a second 2-year environmental DNA (eDNA) study inside and outside the MPAs of Malibu. Following a long hiatus due to the COVID-19 pandemic, we have restarted monthly MPA eDNA events with PhD candidate Moriah Byrd, and have offered this new exciting community science opportunity to all volunteers at Heal the Bay. We will be working with this team and previous

UCLA team partners to analyze and hopefully publish the data from our first 2-year study sometime next year.

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.

CONTRIBUTING AUTHORS/EDITORS:

Emily Parker, Coastal and Marine Scientist at Heal the Bay (Lead Author)
Crystal Barajas, MPA Watch Program Manager at Heal the Bay (Contributor)
Katherine Pease, Science and Policy Director at Heal the Bay (Reviewer)

MPA Watch Volunteer Trainings: Top – Point Dume Public Training May 2023, Bottom – Terranea Resort Trail National Charity League Private Training June 2023