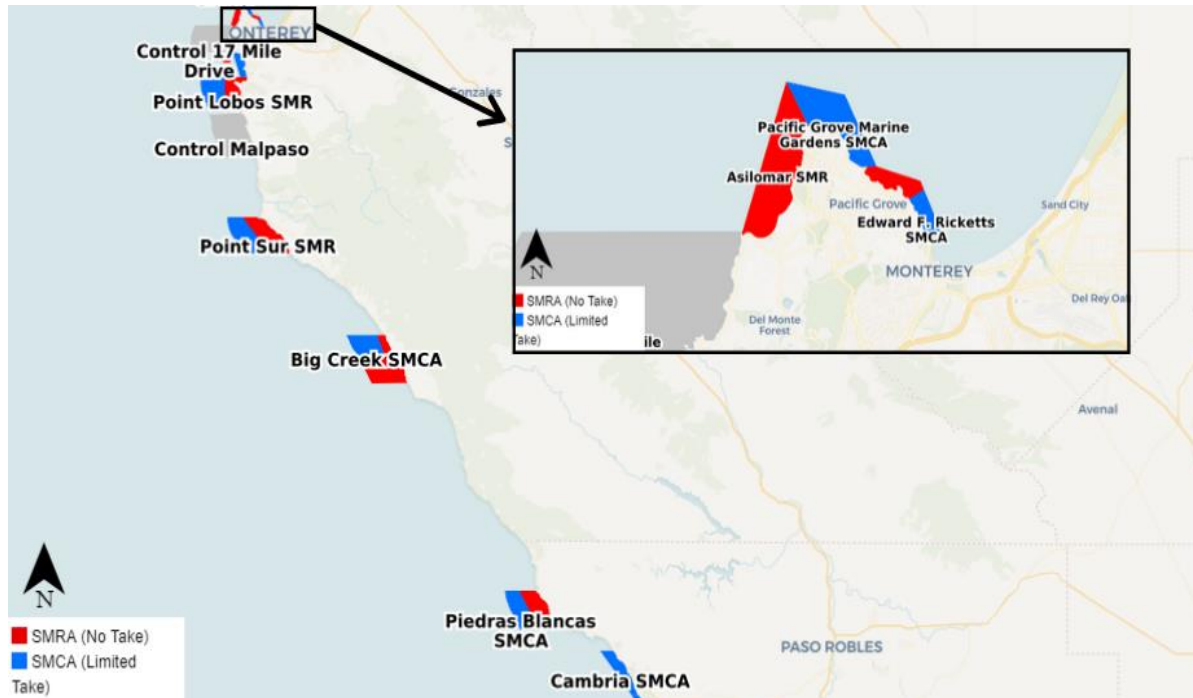


Marine Protected Area (MPA) Watch
Regional Report
 Central Coast
 January 1, 2019 – December 31, 2019



MPA Watch is a statewide collaborative effort to collect critical human use data to enhance the management and conservation of marine protected areas (MPAs). MPA Watch data informs the management, enforcement, and science of California's MPAs and allows us insight on how human uses are changing as a result of MPA implementation. By involving local communities in this important work, MPA Watch programs inspire and empower stewardship, and educate California communities about ocean ecosystems. The (MPA) Watch Program in the Central Coast surveys 7 MPAs, 4 of which volunteers are active and 3 that are inactive and are in need of more volunteers. Currently this program is organized by WILDCOAST, but will be managed by California's State Parks programs in the near future.

Executive Summary

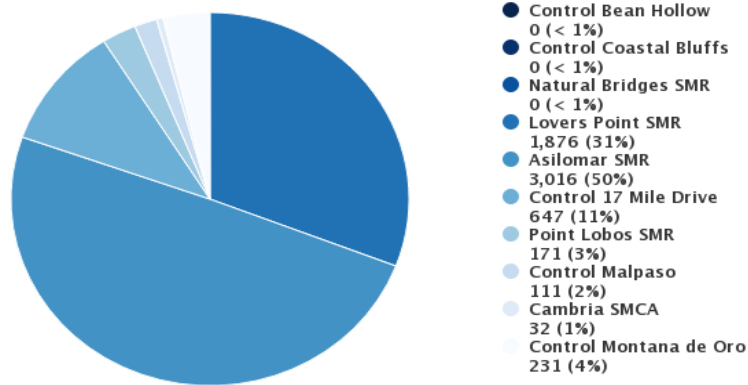
- The rate of use for the reporting period vs. baseline increased for Lovers Point SMR and Asilomar SMR by 8% and 16% respectively and decreased for Point Lobos SMR and Cambria SMCA by 1% and 10% respectively.
- Año Nuevo SMCA, Natural Bridges SMR, and Point Buchon SMR are not currently surveyed.
- Anecdotal evidence suggests hand collection of biota is occurring in Lovers Point and Asilomar SMRs, where all take is prohibited.

Human Use of MPAs January - December 2019

Overview

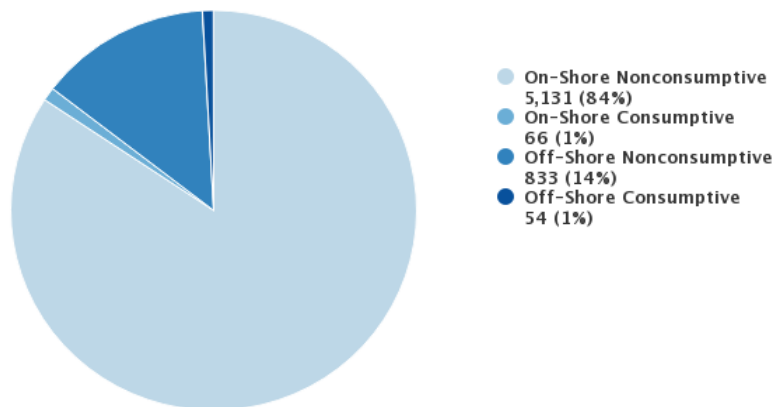
Top 10 MPAs by All Activity

January 1, 2019 – December 31, 2019
6,084 total activity events



All MPAs Combined

January 1, 2019 – December 31, 2019
6,084 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.

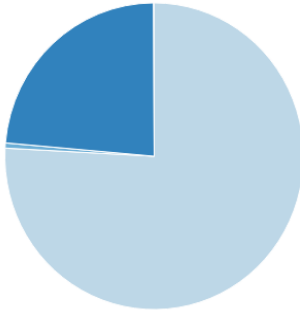
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

Activity by MPA

Lovers Point SMR

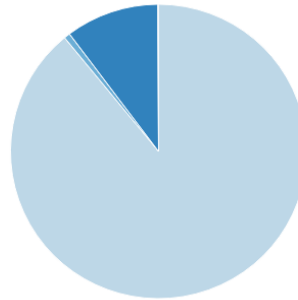
January 1, 2019 – December 31, 2019
1,876 activity events



- On-Shore Nonconsumptive
1,423 (76%)
- On-Shore Consumptive
10 (1%)
- Off-Shore Nonconsumptive
442 (24%)
- Off-Shore Consumptive
1 (< 1%)

Asilomar SMR

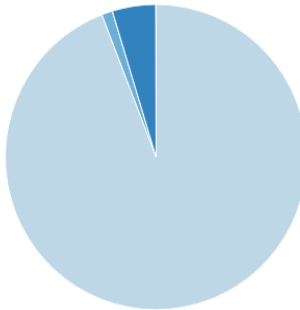
January 1, 2019 – December 31, 2019
3,016 activity events



- On-Shore Nonconsumptive
2,686 (89%)
- On-Shore Consumptive
20 (1%)
- Off-Shore Nonconsumptive
308 (10%)
- Off-Shore Consumptive
2 (< 1%)

Point Lobos SMR

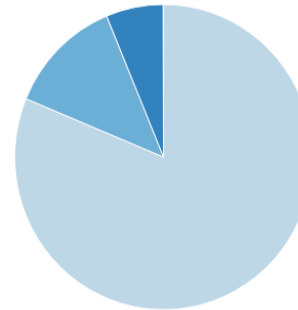
January 1, 2019 – December 31, 2019
171 activity events



- On-Shore Nonconsumptive
161 (94%)
- On-Shore Consumptive
2 (1%)
- Off-Shore Nonconsumptive
8 (5%)
- Off-Shore Consumptive
0 (< 1%)

Cambria SMCA

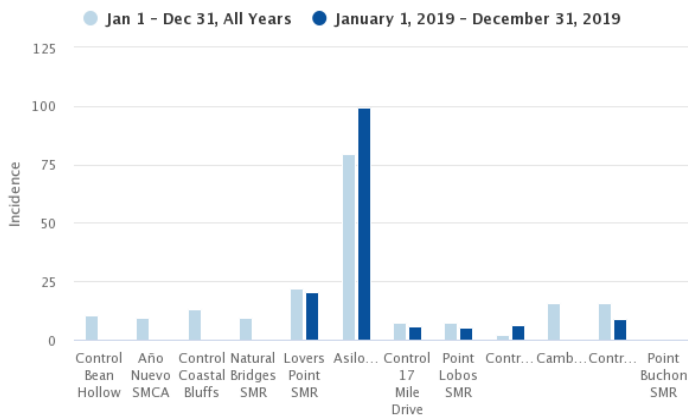
January 1, 2019 – December 31, 2019
32 activity events



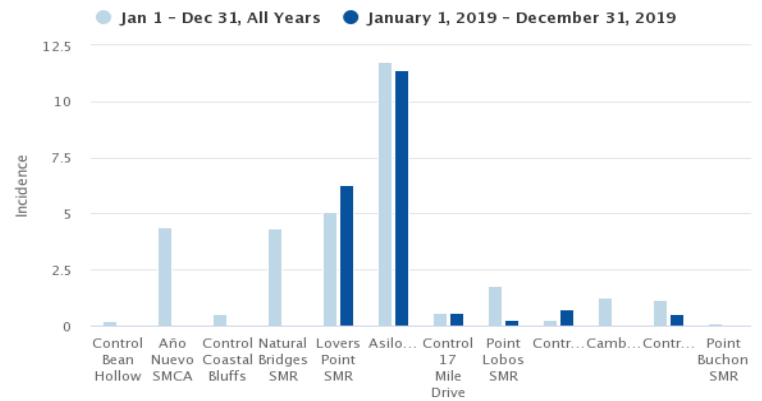
- On-Shore Nonconsumptive
26 (81%)
- On-Shore Consumptive
4 (13%)
- Off-Shore Nonconsumptive
2 (6%)
- Off-Shore Consumptive
0 (< 1%)

Activity Incidence by MPA

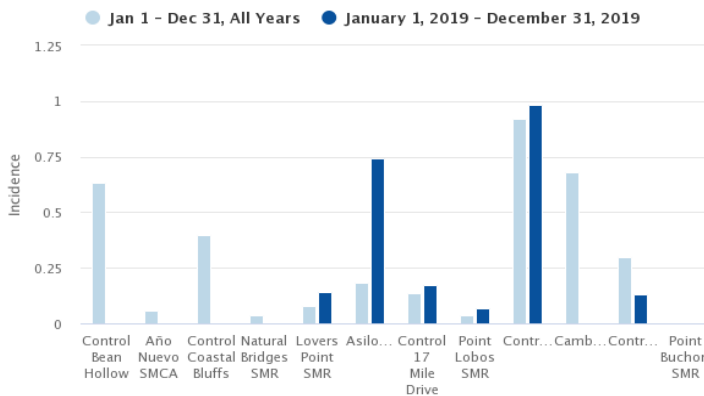
On-Shore, Non-Consumptive



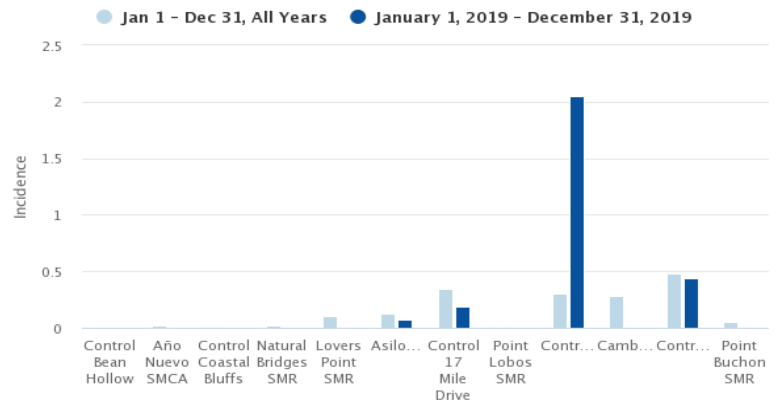
Off-Shore, Non-Consumptive



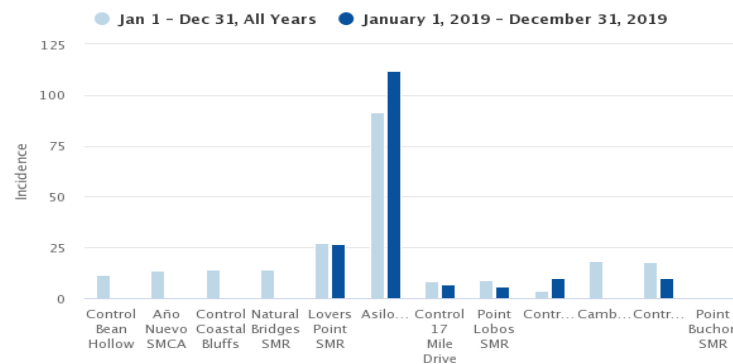
On-Shore, Consumptive



Off-Shore, Consumptive



All Activity



The above charts show incidence values for each MPA monitored by MPA Watch in the Central Coast. 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	Jan 1, 2019 through Dec 31, 2019	Jan 1 Dec 31	Jan 1, 2019 through Dec 31, 2019	
	All Years		All Years		
Control Bean Hollow	10.6	nan	0.6	nan	
Año Nuevo SMCA	9.3	nan	0.1	nan	
Control Coastal Bluffs	13.1	nan	0.4	nan	
Natural Bridges SMR	9.5	nan	0.0	nan	
Lovers Point SMR	21.7	20.2	0.1	0.1	
Asilomar SMR	79.3	99.5	0.2	0.7	
Control 17 Mile Drive	7.1	6.0	0.1	0.2	
Point Lobos SMR	7.2	5.4	0.0	0.1	
Control Malpaso	2.1	6.2	0.9	1.0	
Cambria SMCA	15.9	inf	0.7	inf	
Control Montana de Oro	15.8	9.0	0.3	0.1	
Point Buchon SMR	0.0	nan	0.0	nan	
All MPAs Combined	16.0	20.1	0.3	0.3	

MPA	Off-Shore				
	Non-Consumptive			Consumptive	
	Jan 1 Dec 31	Jan 1, 2019 through Dec 31, 2019	Jan 1 Dec 31	Jan 1, 2019 through Dec 31, 2019	
	All Years		All Years		
Control Bean Hollow	0.2	nan	0.0	nan	
Año Nuevo SMCA	4.4	nan	0.0	nan	
Control Coastal Bluffs	0.5	nan	0.0	nan	
Natural Bridges SMR	4.3	nan	0.0	nan	
Lovers Point SMR	5.1	6.3	0.1	0.0	
Asilomar SMR	11.7	11.4	0.1	0.1	
Control 17 Mile Drive	0.6	0.6	0.4	0.2	
Point Lobos SMR	1.8	0.3	0.0	0.0	
Control Malpaso	0.3	0.7	0.3	2.1	
Cambria SMCA	1.2	inf	0.3	nan	
Control Montana de Oro	1.2	0.5	0.5	0.4	
Point Buchon SMR	0.1	nan	0.1	nan	
All MPAs Combined	2.5	3.3	0.2	0.2	

MPA	Total Combined	
	Jan 1 Dec 7 All Years	Jan 1, 2019 through Dec 7, 2019
Control Bean Hollow	11.8	0.0
Año Nuevo SMCA	14.0	0.0
Control Coastal Bluffs	14.3	0.0
Natural Bridges SMR	14.0	0.0
Lovers Point SMR	28.3	26.6
Asilomar SMR	92.5	111.7
Control 17 Mile Drive	8.2	6.9
Point Lobos SMR	9.1	5.7
Control Malpaso	3.6	9.9
Cambria SMCA	18.5	0.0
Control Montana de Oro	17.9	10.0
Point Buchon SMR	0.2	0.0
All MPAs Combined	19.5	23.8

The above tables show incidence value for each MPA monitored by MPA Watch in the central coast. 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 MPA's 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 MPA's 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.

Breakdown by MPA

Lovers Point State Marine Reserve

Between the months of January and December 2019, the Central Coast MPA Watch data shows a rate of 26.65 total use per count per total miles surveyed in the Lovers Point State Marine Reserve (SMR). This is a 5.95% decrease compared to the rate calculated from the data collected by MPA Watch volunteers January-December in previous years. People observed in the MPA were primarily taking part in non-consumptive activities both on and offshore. This accounted for 99.4% of activities logged in MPA Watch surveys. The remaining 0.6% of human use was comprised of consumptive activities on and offshore.

Asilomar State Marine Reserve

Between the months of January and December 2019, the Central Coast MPA Watch data shows a rate of 111.70 total use count per total miles surveyed in the Asilomar SMR. This is a 20.8% increase compared to the rate calculated from data collected by MPA Watch volunteers between January- and December in previous years. People in the MPA were primarily taking part in both on and offshore, non-consumptive activities. These activities accounted for 99.23% of observations logged in MPA Watch surveys. The remaining 0.77% was consumptive activity, on and offshore.

Point Lobos State Marine Reserve

Between the months of January and December 2019, the Central Coast MPA Watch data shows a rate of 5.72 total use count per total miles surveyed in Point Lobos SMR. This is a 37.3% decrease in human use within the MPA compared to the rate calculated from by MPA Watch volunteers between the months of January and December in previous years. People in the MPA were primarily involved in non-consumptive, onshore activities, followed by non-consumptive activities offshore. Together, this accounted for 98.8% of the observed activities logged in MPA Watch surveys. The remaining 1.2% was onshore, consumptive activities.

Cambria State Marine Conservation Area

People observed in the MPA were primarily taking part in non-consumptive activities both on and offshore. This accounted for 87% of the activities logged in MPA Watch surveys. The remaining 13% of human use was comprised of on shore consumptive activities.

Potential Violations

Though it is reported that the rate of on shore consumptive activities decreased by 1% this year in comparison to the baseline data, volunteers still observed a high rate of collection of biota in both Asilomar SMR and Lovers Point SMR, and illegal fishing in Asilomar SMR despite the regulations that state that all take is prohibited in a State Marine Reserve. This in turn suggest that the rates may be higher than reflected in the data. The reported incidences may have been lower this year due to decreased volunteer activity in comparison to other years.

Next Steps

The Central Coast MPA Watch program was previously run by the Otter Project and is now organized by WILDCOST. Management of the MPA Watch Program is intended to transition to California State Parks in the near future. Currently WILDCOAST is working toward maintaining current volunteers and increase outreach for MPA Watch to increase the number of volunteers. With more volunteers we will be able to publish more data from more locations, especially where current volunteers have been less active in the past year.

MPA Watch intends to collaborate with the California Department of Fish and Wildlife (CDFW) to distribute MPA Watch reports to regional managers in order to improve the management and enforcement of MPAs. MPA Watch is also looking to expand its network of partner organizations to enhance the scale and scope of MPA monitoring across California. MPA Watch will be making our human use data available on our website to make it accessible to partners, resource agencies, municipalities, and other interested parties. One of the hopes of MPA Watch is that volunteers and community members help spread knowledge and awareness of MPAs to the communities that surround them, inspiring marine stewardship in our populations.

Additional Information

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.

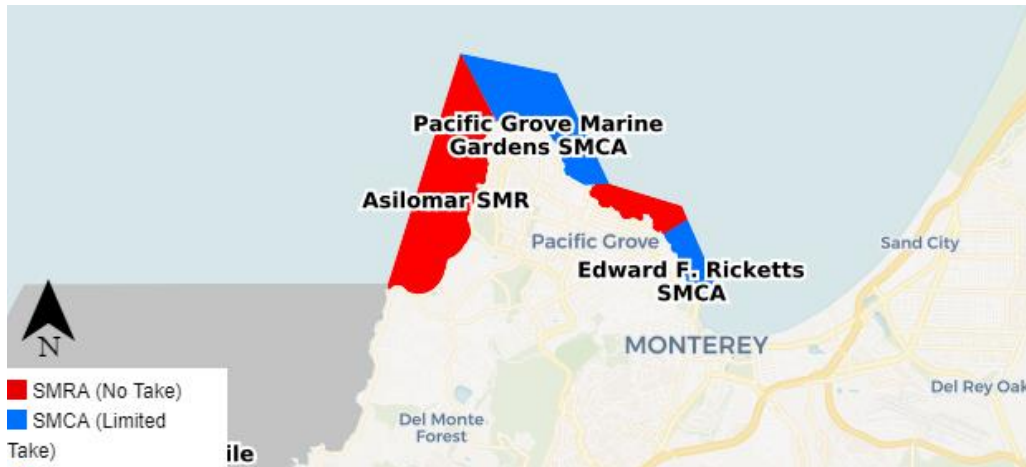
For additional information regarding MPAs and regulations specific to the various classifications of MPAs please visit wildlife.ca.gov/MPAs. If you see an activity that violates MPA regulations, please call CalTip to report the violation at (888)-334-2258.

For more information about the work WILDCOAST does to conserve California's MPAs and other conservation projects please visit wildcoast.org.

Marine Protected Area (MPA) Watch Regional Report

Monterey County

January 1, 2019-December 31, 2019



MPA Watch is a statewide community science program that collects data about human usage, both consumptive and non-consumptive, in our state's Marine Protected Areas (MPAs). Local MPAs are monitored by volunteers, who are first trained in collecting unbiased data about conditions at the MPAs, from temperature and weather to human activities such as kayaking, surfing, tidepooling and more. In turn, this collected data informs the management, enforcement, and science of California's MPAs. Monterey County's Marine Protected Area (MPA) Watch Program is overseen by the Pacific Grove Museum of Natural History, through which volunteers have monitored two sites in 2019.

Executive Summary

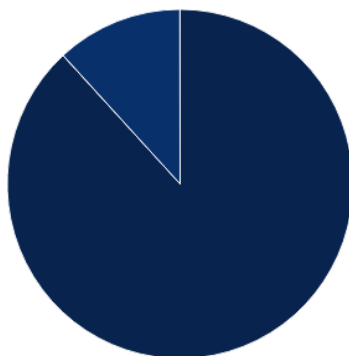
- In 2019, the vast majority of recorded activities in our MPA's have been non-consumptive with less than 2% of activities being consumptive. Of those non-consumptive activities, 80% (841) were on-shore and 19% (205) were offshore.
- At Lovers Point SMR and Asilomar SMR, less than 5% of reported activities have been consumptive over the past year. At Lovers Point SMR, our volunteers have reported 2 incidents of on-shore consumptive activity and 4 incidents of off-shore consumptive activity. On the other hand, Asilomar SMR has had 5 reported on-shore consumptive activities and no reported off-shore consumptive activities.

Human Use of MPAs January - December 2019

Overview

Top 2 MPAs by All Activity

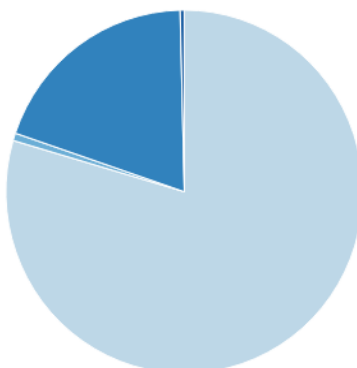
Jan 1 - Dec 31, All Years
1,057 total activity events



- Lovers Point SMR
932 (88%)
- Asilomar SMR
125 (12%)

All MPAs Combined

Jan 1 - Dec 31, All Years
1,057 activity events



- On-Shore Nonconsumptive
841 (80%)
- On-Shore Consumptive
7 (1%)
- Off-Shore Nonconsumptive
205 (19%)
- Off-Shore Consumptive
4 (< 1%)

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.

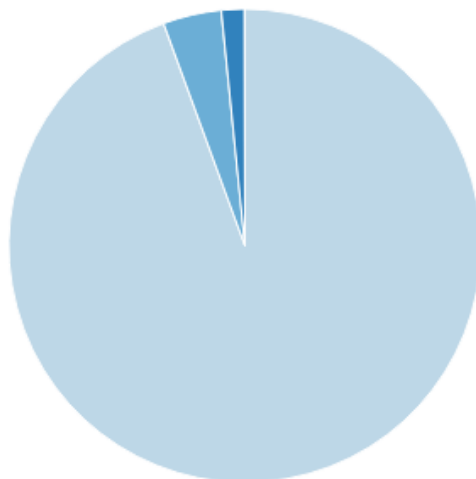
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

Activity by MPA

Asilomar SMR

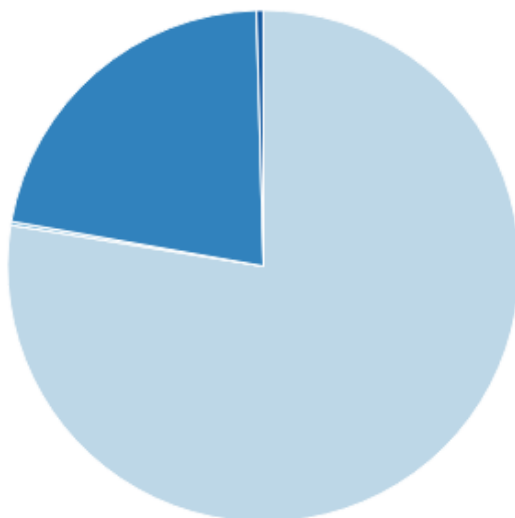
Jan 1 – Dec 31, All Years
125 activity events



- On-Shore Nonconsumptive
118 (94%)
- On-Shore Consumptive
5 (4%)
- Off-Shore Nonconsumptive
2 (2%)
- Off-Shore Consumptive
0 (< 1%)

Lovers Point SMR

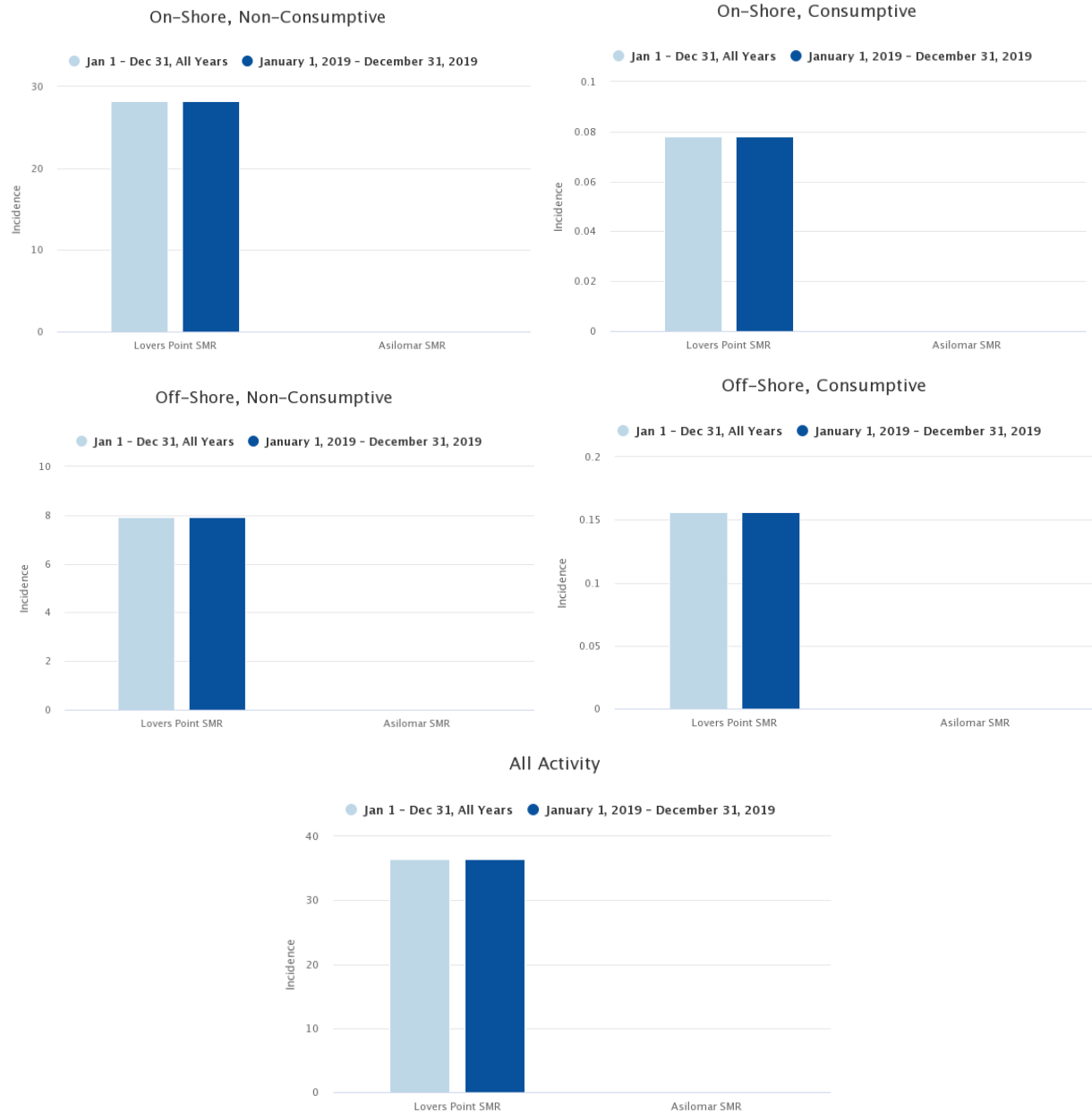
Jan 1 – Dec 31, All Years
932 activity events



- On-Shore Nonconsumptive
723 (78%)
- On-Shore Consumptive
2 (< 1%)
- Off-Shore Nonconsumptive
203 (22%)
- Off-Shore Consumptive
4 (< 1%)



Activity Incidence by MPA



The above charts show incidence values for each MPA monitored by MPA Watch in Monterey County. Incidence is calculated as number of activities recorded divided by total survey-miles.

Activity Incidence by MPA

The tables below show incidence values for each MPA monitored by CA State Parks MPA Watch. Incidence is calculated as number of activities recorded divided by total survey-miles.

MPA	On-Shore				
	Non-Consumptive			Consumptive	
	▲	Jan 1 Dec 31	Jan 1, 2019 through Dec 31, 2019	◆	Jan 1 Dec 31
		All Years			through Dec 31, 2019
Lovers Point SMR		28.2	28.2		0.1
Asilomar SMR		inf	inf		inf
All MPAs Combined		32.9	32.9		0.3

MPA	Off-Shore				
	Non-Consumptive			Consumptive	
	▲	Jan 1 Dec 31	Jan 1, 2019 through Dec 31, 2019	◆	Jan 1 Dec 31
		All Years			through Dec 31, 2019
Lovers Point SMR		7.9	7.9		0.2
Asilomar SMR		inf	inf		nan
All MPAs Combined		8.0	8.0		0.2

MPA	Total		
	Combined		
	▲	Jan 1 Dec 31	Jan 1, 2019 through Dec 31, 2019
		All Years	
Lovers Point SMR		36.4	36.4
Asilomar SMR		inf	inf
All MPAs Combined		41.3	41.3

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 MPA's 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 MPA's 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.

Breakdown by MPA

Lovers Point SMR

Between the months of January and December 2019, Lovers Point SMR data shows 932 total activity events recorded by MPA Watch volunteers. These activities make up 88% of all MPA Watch data collected by our volunteers. Out of these activities, 926 (99.4%) were non-consumptive and 6 (<1%) were consumptive. At Lovers Point SMR, volunteers reported potential violations mainly related to shore-based fishing and shore-based hand collecting of biota. Common non-consumptive activities included shore-based recreation (sandy and rocky) and offshore recreation such as swimming, surfing and SCUBA/snorkeling.

Asilomar SMR

Between the months of January and December 2019, Asilomar SMR data shows 125 total activity events recorded by MPA Watch volunteers. These activities make up 12% of all MPA Watch data collected by our volunteers. Out of these reported activities, 120 (96%) were non-consumptive and 5 (4%) were consumptive. At Asilomar SMR, volunteers reported potential violations mainly related to shore-based hand collection of biota and shore-based hook and line fishing (rocky). Common non-consumptive activities included tidepooling, domestic animals off and on leash and shore-based recreation (rocky and sandy) and sailing.

Potential Violations

Both Lovers Point SMR and Asilomar SMR have reported very low numbers of consumptive activity between the months of January and December of 2019. Out of 1,057 reported activities, only 11 were reported as consumptive, making up less than 2% of all activities. Consumptive behavior included shore-based hook and line fishing (rocky), shore-based hand collecting of biota (sandy and rocky). There has also been wildlife feeding reported at Lovers Point SMR. There is no take allowed in either Lovers Point or Asilomar SMRs.

Next Steps

The Pacific Grove Museum of Natural History is working to increase the number of volunteers we have collecting human use data within our local MPAs by discussing the program in our Volunteer Training Class and encouraging incoming and current volunteers to take part in the program.

Additional Information

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.

For additional information regarding MPAs and regulations specific to the various classifications of MPAs please visit wildlife.ca.gov/MPAs. If you see an activity that violates MPA regulations, please call CalTip to report the violation at (888)-334-2258.

For additional information regarding Pacific Grove Museum of Natural History's MPA Watch Program, please contact maddenfulk@pgmuseum.org.

