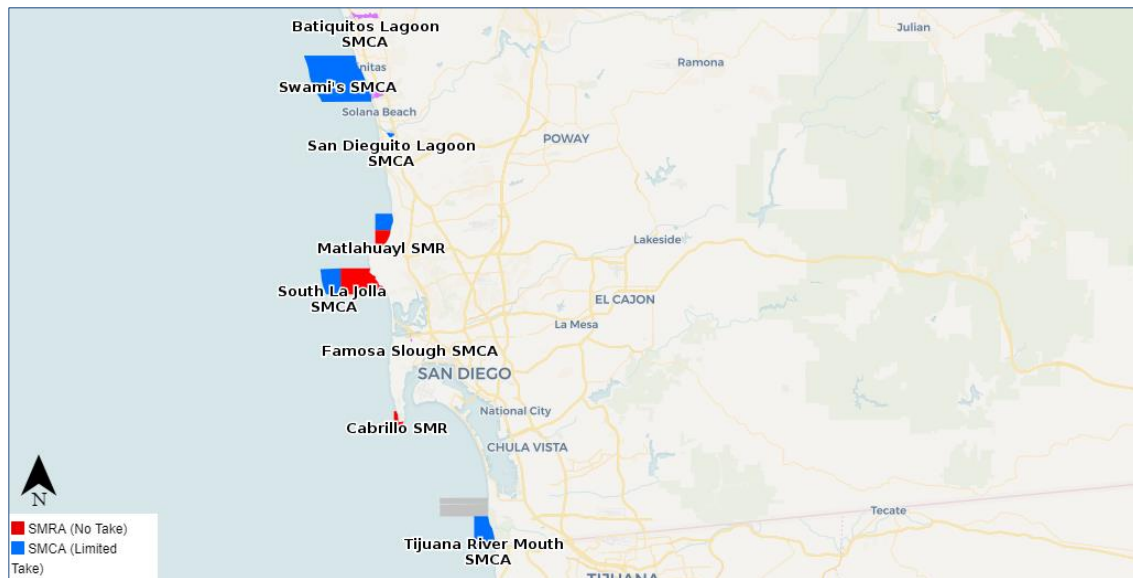


**Marine Protected Area (MPA) Watch
Regional Report
San Diego County
January 1, 2019 – December 31, 2019**



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. MPA Watch trains volunteers to observe and collect unbiased data on coastal and marine resource use. The San Diego Marine Protected Area (MPA) Watch Program, organized by WILD COAST, engages community scientists in five MPAs in San Diego County.

Executive Summary

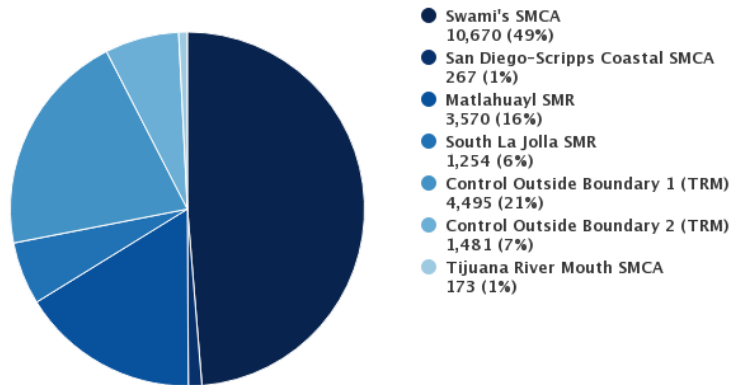
- Non-consumptive activities accounted for nearly 100% of observations in every MPA except the Tijuana River Mouth SMCA, in which 4% of observations were consumptive activities such as fishing.
- According to volunteers, there were recurring issues with beach closure in Tijuana River Mouth SMCA due to poor water quality from sewage contamination.
- While current MPA Watch data does not show any potential violations in recent months, WILD COAST staff has seen illegal fishing activity (aka poaching) in the South La Jolla SMR.

Human Use of MPAs January - December 2019

Overview

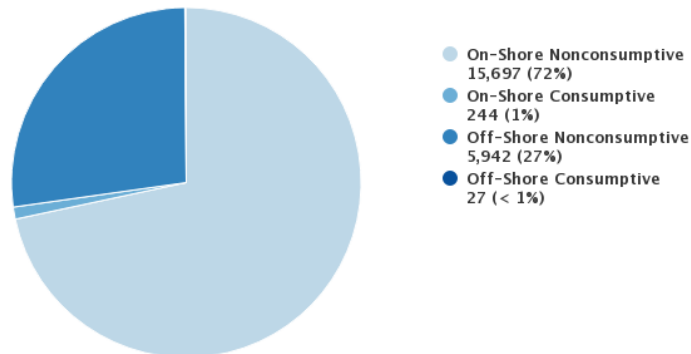
Top 7 MPAs by All Activity

January 1, 2019 - December 31, 2019
21,910 total activity events



All MPAs Combined

January 1, 2019 - December 31, 2019
21,910 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.

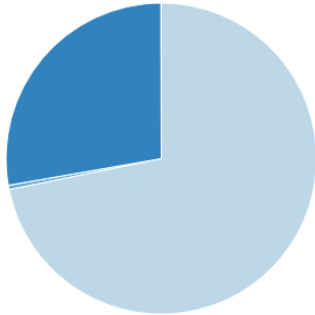
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

Activity by MPA

Swami's SMCA

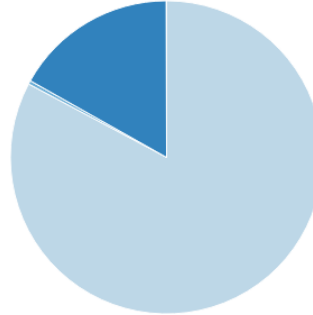
January 1, 2019 – December 31, 2019
10,670 activity events



- On-Shore Nonconsumptive
7,662 (72%)
- On-Shore Consumptive
48 (< 1%)
- Off-Shore Nonconsumptive
2,960 (28%)
- Off-Shore Consumptive
0 (< 1%)

San Diego–Scripps Coastal SMCA

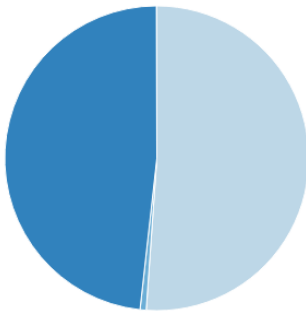
January 1, 2019 – December 31, 2019
267 activity events



- On-Shore Nonconsumptive
221 (83%)
- On-Shore Consumptive
1 (< 1%)
- Off-Shore Nonconsumptive
45 (17%)
- Off-Shore Consumptive
0 (< 1%)

Matlahuayl SMR

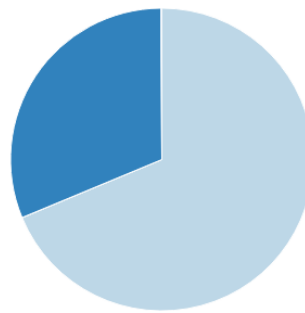
January 1, 2019 – December 31, 2019
3,570 activity events



- On-Shore Nonconsumptive
1,825 (51%)
- On-Shore Consumptive
23 (1%)
- Off-Shore Nonconsumptive
1,722 (48%)
- Off-Shore Consumptive
0 (< 1%)

South La Jolla SMR

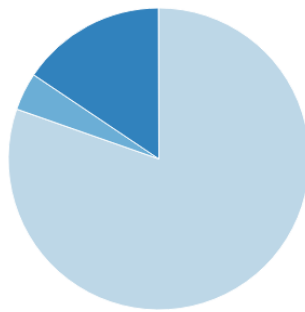
January 1, 2019 – December 31, 2019
1,254 activity events



- On-Shore Nonconsumptive
862 (69%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
391 (31%)
- Off-Shore Consumptive
1 (< 1%)

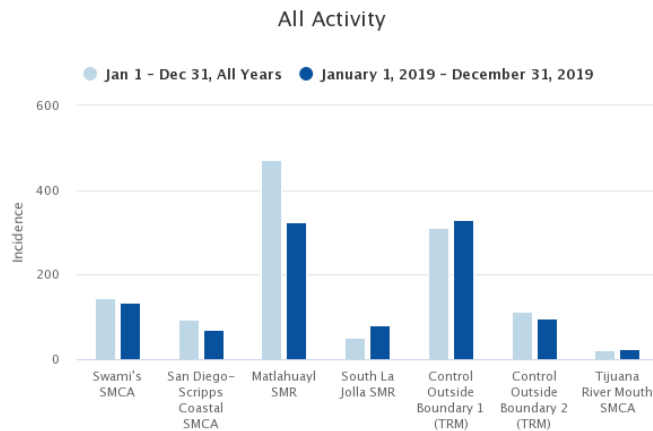
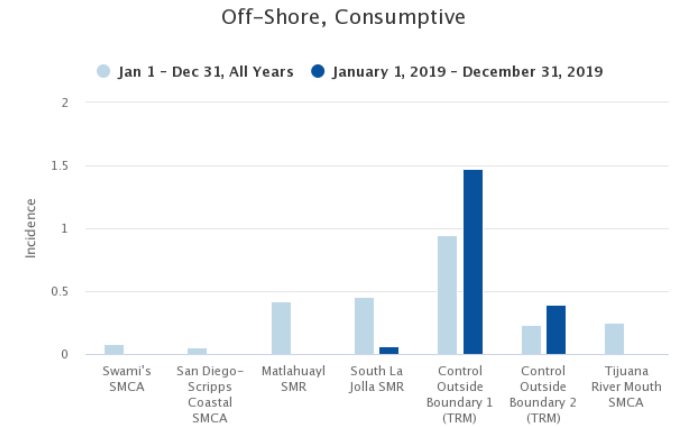
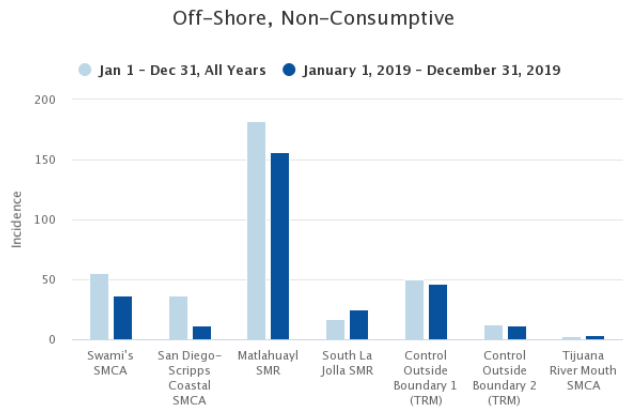
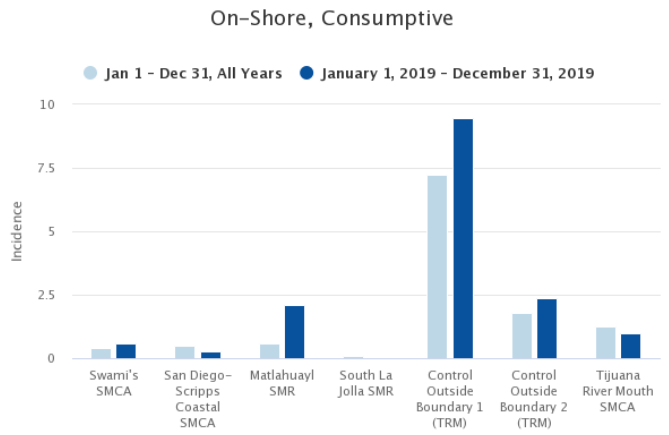
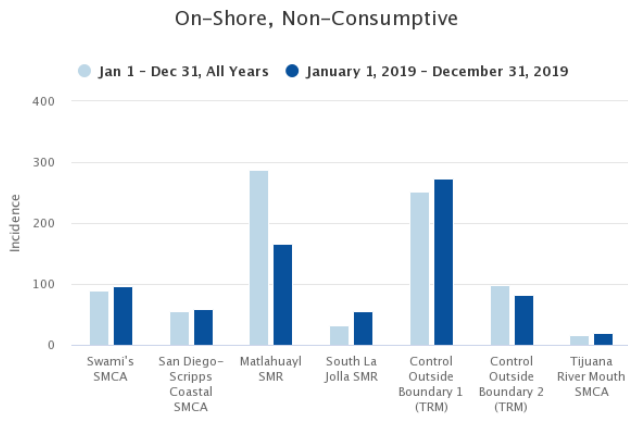
Tijuana River Mouth SMCA

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



- On-Shore Nonconsumptive
139 (80%)
- On-Shore Consumptive
7 (4%)
- Off-Shore Nonconsumptive
27 (16%)
- Off-Shore Consumptive
0 (< 1%)

Activity Incidence by MPA



The above charts show incidence values for each MPA monitored by MPA Watch in San Diego 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, 2019 through Dec 31, 2019	◆	Jan 1 Dec 31 All Years	◆	Jan 1, 2019 through Dec 31, 2019
Swami's SMCA		88.6		95.9		0.4		0.6
San Diego-Scripps Coastal SMCA		55.5		58.2		0.5		0.3
Matlahuayl SMR		288.2		165.9		0.6		2.1
South La Jolla SMR		32.5		55.6		0.1		0.0
Control Outside Boundary 1 (TRM)		252.1		273.5		7.2		9.5
Control Outside Boundary 2 (TRM)		97.9		82.9		1.8		2.4
Tijuana River Mouth SMCA		16.8		19.3		1.2		1.0
All MPAs Combined		70.2		107.3		1.1		1.7

MPA	Off-Shore							
	▲	Non-Consumptive		Consumptive				
		Jan 1 Dec 31 All Years	◆	Jan 1, 2019 through Dec 31, 2019	◆	Jan 1 Dec 31 All Years	◆	Jan 1, 2019 through Dec 31, 2019
Swami's SMCA		55.8		37.0		0.1		0.0
San Diego-Scripps Coastal SMCA		37.0		11.8		0.1		0.0
Matlahuayl SMR		181.8		156.5		0.4		0.0
South La Jolla SMR		17.2		25.2		0.5		0.1
Control Outside Boundary 1 (TRM)		49.6		46.0		0.9		1.5
Control Outside Boundary 2 (TRM)		12.4		11.2		0.2		0.4
Tijuana River Mouth SMCA		2.9		3.8		0.2		0.0
All MPAs Combined		35.0		40.6		0.2		0.2

MPA	Total Combined				
	▲	Jan 1 Dec 31 All Years		Jan 1, 2019 through Dec 31, 2019	
		◆	◆	◆	◆
Swami's SMCA		144.9		133.5	
San Diego-Scripps Coastal SMCA		93.0		70.3	
Matlahuayl SMR		470.9		324.5	
South La Jolla SMR		50.2		80.9	
Control Outside Boundary 1 (TRM)		309.9		330.5	
Control Outside Boundary 2 (TRM)		112.3		96.8	
Tijuana River Mouth SMCA		21.2		24.0	
All MPAs Combined		106.6		149.8	

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

Swami's State Marine Conservation Area

Between the months of January and December 2019, San Diego MPA Watch data suggests a rate of 133.5 total use count per total miles surveyed in the Swami's State Marine Conservation Area (SMCA). This is a 7.9% 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 off-shore, such as beach and ocean recreation. This accounted for almost 100% of the activities logged in the MPA Watch surveys. Less than 1% of human use was comprised of onshore consumptive activities.

San Diego-Scripps State Marine Conservation Area

Between the months of January and December 2019, San Diego MPA Watch data shows a rate of 70.3 total use count per total miles surveyed in the San-Diego Scripps SMCA. This is a 24.4% decrease in human use within the MPA compared to the rate calculated from the data collected by MPA Watch volunteers between the months of 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 almost 100% of the observations logged in MPA Watch surveys. Less than 1% of observations were onshore, consumptive activities.

Matlahuayl State Marine Reserve

Between the months of January and December 2019, San Diego MPA Watch data shows a rate of 324.5 total use count per total miles surveyed in the Matlahuayl State Marine Reserve (SMR). This is a 31% decrease compared to the rate calculated from data collected by MPA Watch volunteers between the months of January and December in previous years.

On and offshore, non-consumptive activities accounted for 99% of observations logged in MPA Watch surveys. The remaining 1% were onshore, consumptive activities such as collection of biota and illegal fishing from the shore.

South La Jolla State Marine Reserve

Between the months of January and December 2019, San Diego MPA Watch data shows a use rate of 80.9. This is a 61% increase compared to the rate calculated from data collected by MPA Watch volunteers between the months of January and December in previous years. It is important to note that sites within this MPA have only been surveyed since 2018, so baseline rates are still being established.

People in the MPA were primarily taking part in non-consumptive, on and offshore activities. Almost 100% of activities observed were non-consumptive, while less than 1% of observations were offshore consumptive activities such as illegal fishing. Fish and wildlife crimes are reported to the California Department of Fish and Wildlife via the CalTip hotline. Observed illegal fishing activities are cross-referenced with the through the M2 program that is run from Bird Rock to monitor the MPA.

Tijuana River Mouth State Marine Conservation Area

Between the months of January and December of 2019, San Diego MPA Watch data shows a rate of use of 24 total use count per total miles surveyed. This is about 12% increase compared to the rate calculated from the data collected by MPA Watch volunteers January- December in previous years.

People in the Tijuana River Mouth SMCA were primarily taking part in non-consumptive activities both on and off shore. This accounted for 96% of the activities logged in the MPA Watch surveys. The remaining 4% of human use was comprised of onshore consumptive activities.

Potential Violations

Rate of consumptive activities observed still remains relatively low in all MPAs surveyed, accounting for less than 1% of all observations recorded. Anecdotal evidence suggests rates may be higher than reflected in the data. While current MPA Watch data does not show any potential violations in recent months, WILD COAST staff have seen illegal fishing activity (aka poaching) in the South La Jolla SMR. Even if the noncompliance rate is low, it is important to note that any illegal take from MPAs jeopardizes the success of the MPA and health of the ecosystems which they protect.

Next Steps

WILD Coast is working to implement boat based MPA Watch surveys into our data reporting to monitor human use within our MPAs. Once we are able to publish that data we will be able to accurately represent offshore usage within our MPAs. In San Diego County, WILD Coast is working to increase outreach for MPA Watch and increase the number of volunteers we have collecting human use data within our local MPAs.

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 WILD Coast does to conserve California's MPAs and other conservation projects please visit wildcoast.org.