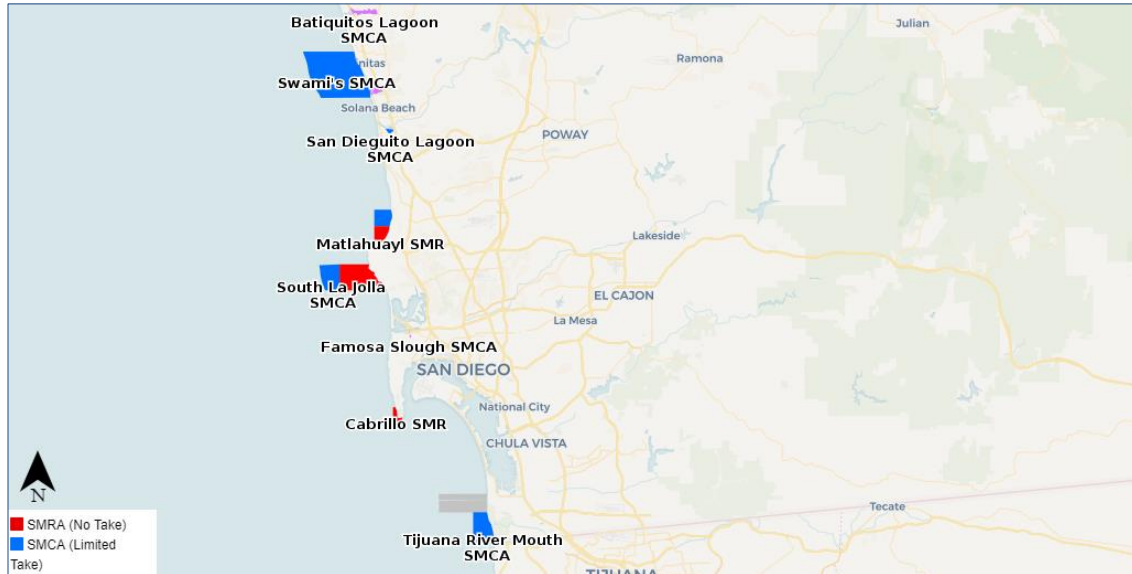




Marine Protected Area (MPA) Watch Regional Report San Diego County January 1, 2020 - June 30, 2020



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

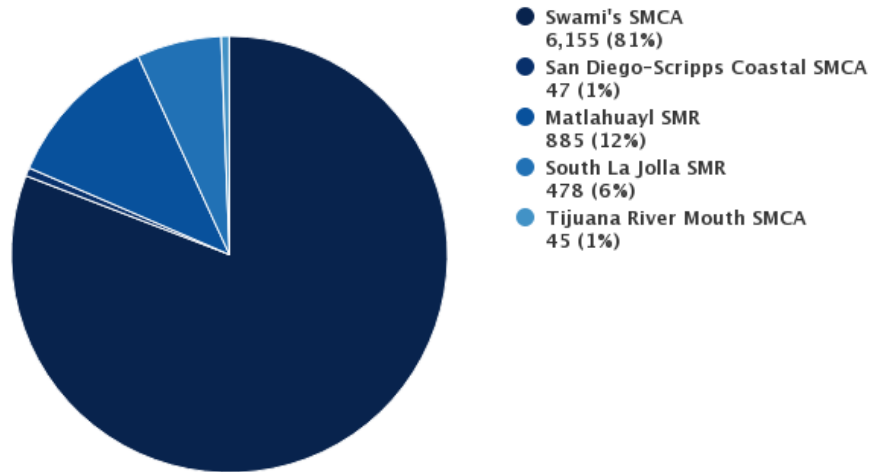
- Following local, state, and federal health guidelines regarding COVID-19, San Diego County's MPA Watch program suspended data collection from March 16, 2020 - April 27, 2020. Current volunteers resumed data collection on April 28, 2020. In-person trainings for new volunteers were suspended starting March 16, 2020 to adhere to physical distancing guidelines.
- A substantial increase in use was reported across all MPAs, possibly due to low sample sizes as a result of COVID-19 and/or an increase in use following the lift of the stay-at-home order.
- While 99.4% of reported activities were non-consumptive, volunteers report potential poaching is still a problem, especially in South La Jolla SMR.

Human Use of MPAs January - June 2020

Overview

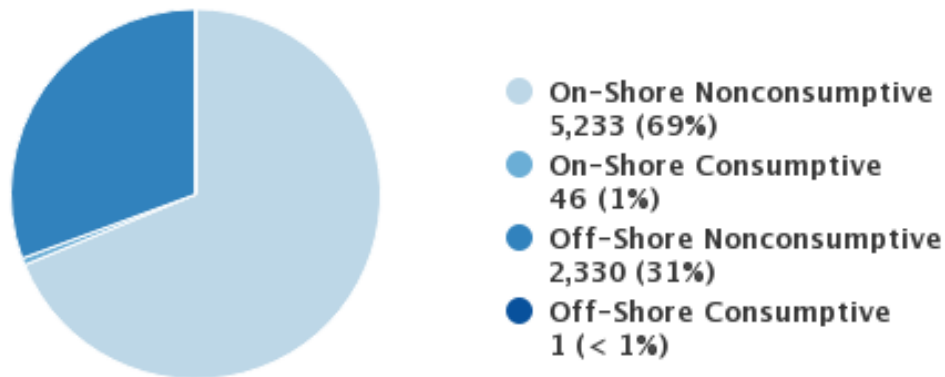
Top 5 MPAs by All Activity

January 1, 2020 - June 30, 2020
7,610 total activity events



All MPAs Combined

January 1, 2020 - June 30, 2020
7,610 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.

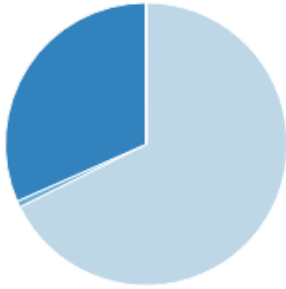
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

Activity by MPA

Swami's SMCA

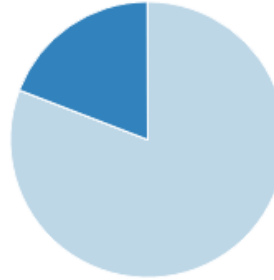
January 1, 2020 – June 30, 2020
6,155 activity events



- On-Shore Nonconsumptive
4,165 (68%)
- On-Shore Consumptive
44 (1%)
- Off-Shore Nonconsumptive
1,945 (32%)
- Off-Shore Consumptive
1 (< 1%)

San Diego–Scripps Coastal SMCA

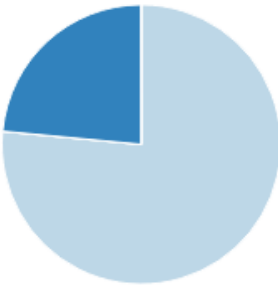
January 1, 2020 – June 30, 2020
47 activity events



- On-Shore Nonconsumptive
38 (81%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
9 (19%)
- Off-Shore Consumptive
0 (< 1%)

Matlahuayl SMR

January 1, 2020 – June 30, 2020
885 activity events



- On-Shore Nonconsumptive
677 (76%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
208 (24%)
- Off-Shore Consumptive
0 (< 1%)

South La Jolla SMR

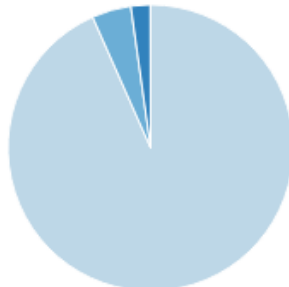
January 1, 2020 – June 30, 2020
478 activity events



- On-Shore Nonconsumptive
311 (65%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
167 (35%)
- Off-Shore Consumptive
0 (< 1%)

Tijuana River Mouth SMCA

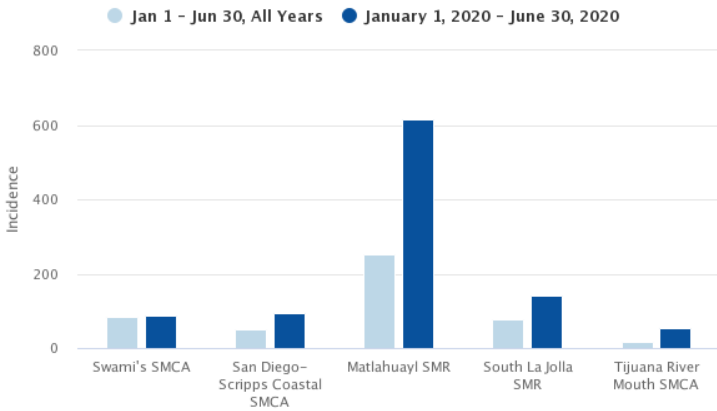
January 1, 2020 – June 30, 2020
45 activity events



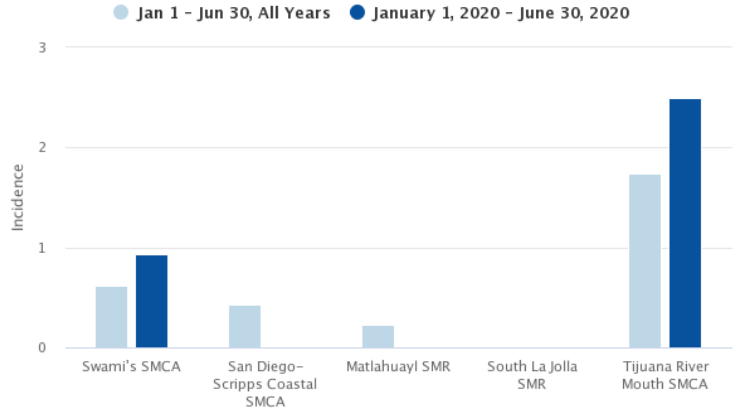
- On-Shore Nonconsumptive
42 (93%)
- On-Shore Consumptive
2 (4%)
- Off-Shore Nonconsumptive
1 (2%)
- Off-Shore Consumptive
0 (< 1%)

Activity Incidence by MPA

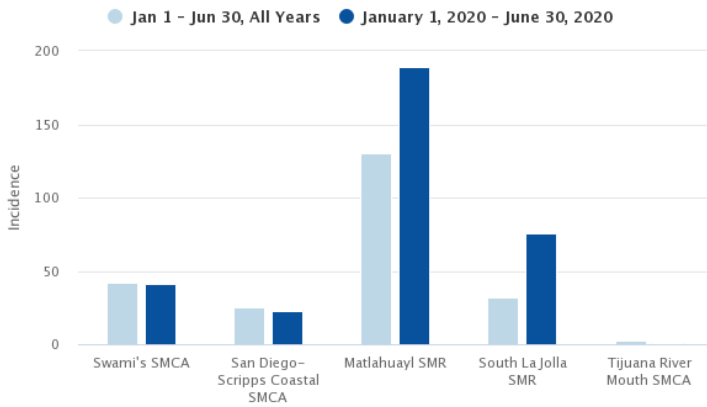
On-Shore, Non-Consumptive



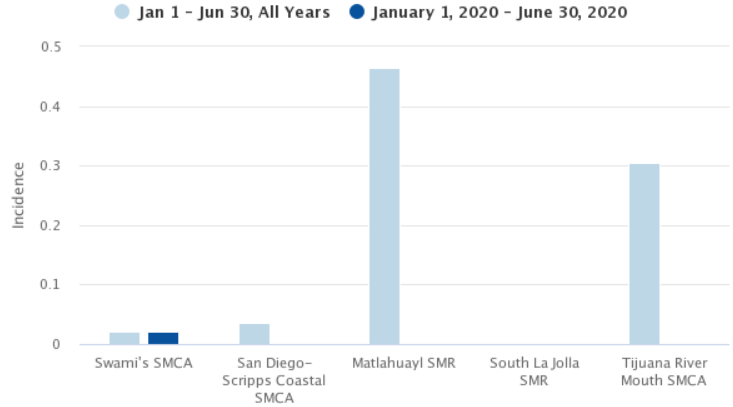
On-Shore, Consumptive



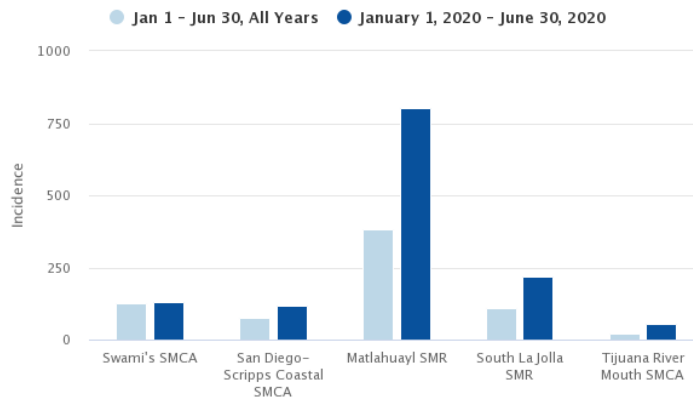
Off-Shore, Non-Consumptive



Off-Shore, Consumptive



All Activity



The above charts show incidence values for each MPA monitored by 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 Jun 30 All Years	♦	Jan 1, 2020 through Jun 30, 2020	♦	Jan 1, 2020 through Jun 30, 2020
Swami's SMCA			82.4		88.2
San Diego-Scripps Coastal SMCA			50.9		95.0
Matlahuayl SMR			251.4		615.5
South La Jolla SMR			77.5		141.4
Tijuana River Mouth SMCA			17.7		52.5
All MPAs Combined			57.9		101.2

MPA	Off-Shore				
	Non-Consumptive			Consumptive	
	^	♦	♦	♦	♦
	Jan 1 Jun 30 All Years	♦	Jan 1, 2020 through Jun 30, 2020	♦	Jan 1, 2020 through Jun 30, 2020
Swami's SMCA			42.1		41.2
San Diego-Scripps Coastal SMCA			25.2		22.5
Matlahuayl SMR			129.9		189.1
South La Jolla SMR			32.0		75.9
Tijuana River Mouth SMCA			2.2		1.3
All MPAs Combined			25.9		45.1

MPA	Total Combined			
	^	♦	♦	♦
	Jan 1 Jun 30 All Years	♦	Jan 1, 2020 through Jun 30, 2020	♦
Swami's SMCA			125.1	130.4
San Diego-Scripps Coastal SMCA			76.6	117.5
Matlahuayl SMR			382.0	804.5
South La Jolla SMR			109.5	217.3
Tijuana River Mouth SMCA			22.0	56.3
All MPAs Combined			85.1	147.2

The above table shows 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

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. The baseline rate for the South La Jolla SMR has been excluded as a result of insufficient MPA Watch data for the SLJ SMR in the given time frame.

COVID-19

San Diego County Beach Closures due to COVID-19 (some local variations may occur)

March 19, 2020 Encinitas closes all beach parking lots

March 23, 2020 Carlsbad and Del Mar close beaches

March 24, 2020 All beaches in City of San Diego closed

April 3, 2020 All beaches in San Diego County closed

April 27, 2020

-Beaches and shorelines: Only walking and running allowed. No stopping, sitting or lying down.

-Oceans: Swimming, surfing, kayaking and single-person paddling allowed.

-Bays: Single-household recreational boating. Fishing is allowed, but not from the shoreline.

-Closed: Boardwalks, piers, parking lots and Fiesta Island

-Not allowed anywhere: Gatherings and non-physical distancing activities

June 2, 2020 Beaches reopen for “passive activities” including sitting and sunbathing

June 8, 2020 Recreational boating and fishing resumes

June 9, 2020 Piers and beach boardwalks reopen

June 17, 2020 Most beach parking lots reopen

July 1, 2020 All State Beach and most other beach parking lots closed again

Following local, state, and federal health guidelines regarding COVID-19, San Diego County's MPA Watch program suspended data collection from March 16, 2020 - April 27, 2020. Current volunteers resumed data collection on April 28, 2020. In-person trainings for new volunteers were suspended starting March 16, 2020 to adhere to physical distancing guidelines.

Due to the COVID-19 stay-at-home order, several sites including those located in San Diego-Scripps Coastal SMCA and the Tijuana River Mouth SMCA have seen lower sampling rates than previous years, possibility resulting in error in the calculation of incidence rates due to low sample size. Also, all sites saw an increase in use compared to baseline rates. This may be an artifact of low sample size; however, volunteers anecdotally report large crowds at open beaches following lifting of COVID-19 restrictions, especially during the period in which indoor spaces remained closed, which may partially explain the increased usage reported.

Breakdown by MPA

Swami's State Marine Conservation Area

Between the months of January and June 2020, San Diego MPA Watch data shows a rate of 130.4 total use count per total miles surveyed in the Swami's State Marine Conservation Area (SMCA). This is a 4.2% increase compared to the rate calculated from the data collected by MPA Watch volunteers January - June in previous years.

People observed in the MPA were primarily taking part in non-consumptive activities both on and off-shore, like beach and ocean recreation. This accounted for 99.3% of the activities logged in MPA Watch surveys. The remaining 0.7% of human use was comprised of onshore and offshore consumptive activities. According to volunteers, recurring issues with the illegal take and disturbance of tide pool organisms continues to be a problem during low tides.

San Diego-Scripps State Marine Conservation Area

Between the months of January and June 2020, San Diego MPA Watch data shows a rate of 117.5 total use count per total miles surveyed in the San Diego-Scripps SMCA. This is a 53.4% increase 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 June in previous years.

People in the MPA were primarily taking part in both on and offshore, non-consumptive activities. These activities accounted for 100% of the observations logged in MPA Watch surveys. No consumptive activities were recorded during the reporting period. According to volunteers, illegal hook and line fishing from shore continues to be commonly observed. Regulations allow for take of pelagic baitfish and gear used by anglers in this area is often specific to larger inshore species.

Matlahuayl State Marine Reserve

Between the months of January and June 2020, San Diego MPA Watch data shows a rate of 804.5 total use count per total miles surveyed. This rate is double the baseline rate of use in the Matlahuayl State Marine Reserve (SMR). The increase in the rate of use recorded may be due to the suspension of data collected during WILD COAST's Explore My MPAs youth programs, which collect data on a less frequented section of Matlahuayl. Field programs were suspended and no data were collected by youth participants, due to COVID-19.

People in the MPA were only engaging in on and offshore, non-consumptive activities. This accounted for 100% of the activities logged in MPA Watch surveys. While the data may not show it in the first half of 2020, there is a history of violations within the Matlahuayl SMR. WILD COAST staff have previously observed kayakers fishing within the Matlahuayl SMR, and according to volunteers there are occasional take violation in the reserve including the collection of biota and illegal fishing from the shore.

South La Jolla State Marine Reserve

Between the months of January and June of 2020, San Diego MPA Watch data shows a use rate of 217.3. This is a 98.4% increase 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 June in previous years.

People in the MPA were primarily taking part in both on and offshore, non-consumptive activities. These activities accounted for 100% of the observations logged in MPA Watch surveys. No consumptive activities were recorded during the reporting period. 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. 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 June of 2020, San Diego MPA Watch data shows a rate of use of 56.3 total use count per total miles surveyed. This is two and a half times the baseline rate from previous years.

People observed in the MPA were primarily taking part in non-consumptive activities both on and off-shore, like beach and ocean recreation. This accounted for 93.4% of the activities logged in MPA Watch surveys. The remaining 6.6% of human use was comprised of onshore and offshore consumptive activities. Tijuana River Mouth SMCA allows for the take of certain species by hand-held dip net. While reported violations are uncommon in the Tijuana River Mouth SMCA, there is a serious problem with pollution in the area. Dumping in the Tijuana River and sewage runoff result in tons of pollution entering the ocean and the local MPA every year. The issue of dumping contributes tons of solid waste, such as plastics, tires, and much more; into the ocean each year. Alongside solid waste, sewage runoff flowing out of the river elevates bacteria counts in the ocean to unsafe levels for offshore recreation in nearby coastal communities, ranging as far north as San Diego.

Potential Violations

Rate of consumptive activities observed 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. According to volunteers, recurring issues with the illegal take and disturbance of tide pool organisms in Swami's SMCA is an ongoing problem during low tides. Potentially illegal hook and line fishing from shore is commonly observed in San Diego – Scripps Coastal SMCA. Also, 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. 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.