

**Marine Protected Area (MPA) Watch  
Regional Report**

Mendocino, Sonoma, Marin, San Francisco, and San Mateo Counties  
January 1, 2020 – December 31, 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 North-central Coast Marine Protected Area (MPA) Watch Program, organized by Greater Farallones Association's Beach Watch program, engages 150 community scientists in 10 MPAs, spanning 5 counties.



### Executive Summary

- Covid-19 decreased the number of surveys completed in 2020 by 45%. Reduced number of surveys were due to beach closures, co-PI NOAA limiting volunteer activities, and high-risk volunteers choosing to abstain from volunteering. Beach closures varied between our 5 counties, however most beaches remained closed to all human uses from March until late May. Shelter in place orders were reinstated for the month of December decreasing the number of surveys that month to 65% of normal.
- We observed a significant increase in human uses at all MPA sites. The average increase of human activity was 130%, dominated by on-shore recreation.
- Largest increases in activity were found at Russian River SMCA (186%), Russian River SMRMA (131%), Estero de Limantour (247%), and Año Nuevo (164%).

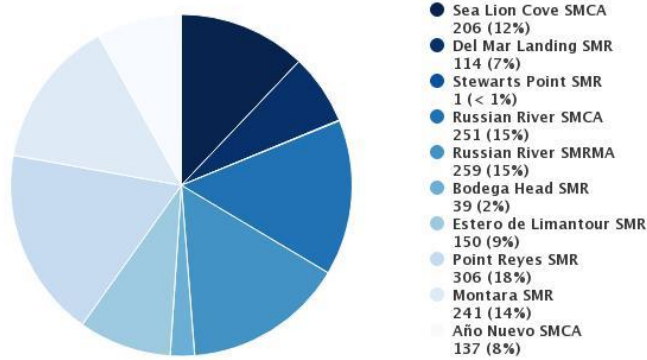


# Human Use of MPAs January 1, 2020 – December 31, 2020

## Overview

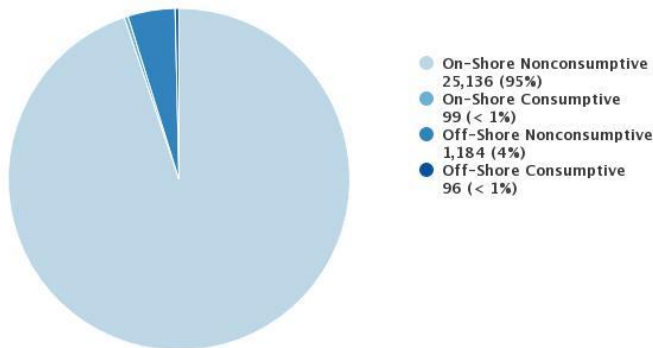
### Top 10 MPAs by All Activity

January 1, 2020 – December 31, 2020  
1,704 total activity events



### All MPAs Combined

Jan 1 – Dec 31, All Years  
26,515 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.

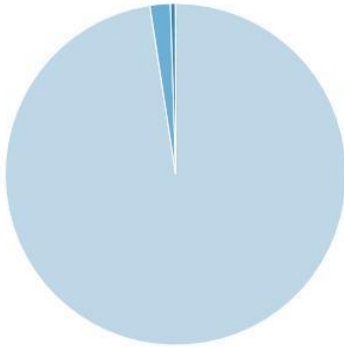
**Consumptive** - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.

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

## Activity by MPA

### Sea Lion Cove SMCA

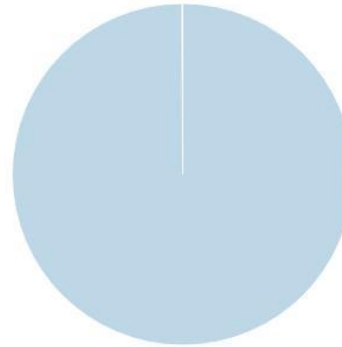
January 1, 2020 – December 31, 2020  
206 activity events



- On-Shore Nonconsumptive  
201 (98%)
- On-Shore Consumptive  
4 (2%)
- Off-Shore Nonconsumptive  
1 (< 1%)
- Off-Shore Consumptive  
0 (< 1%)

### Del Mar Landing SMR

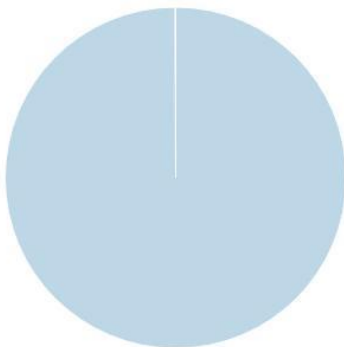
January 1, 2020 – December 31, 2020  
114 activity events



- On-Shore Nonconsumptive  
114 (100%)
- On-Shore Consumptive  
0 (< 1%)
- Off-Shore Nonconsumptive  
0 (< 1%)
- Off-Shore Consumptive  
0 (< 1%)

### Stewarts Point SMR

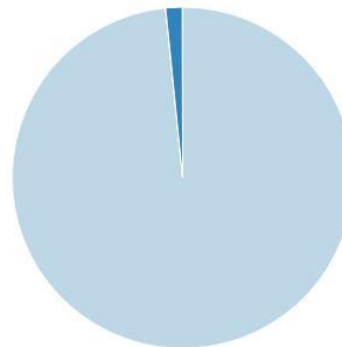
January 1, 2020 – December 31, 2020  
1 activity events



- On-Shore Nonconsumptive  
1 (100%)
- On-Shore Consumptive  
0 (< 1%)
- Off-Shore Nonconsumptive  
0 (< 1%)
- Off-Shore Consumptive  
0 (< 1%)

### Russian River SMCA

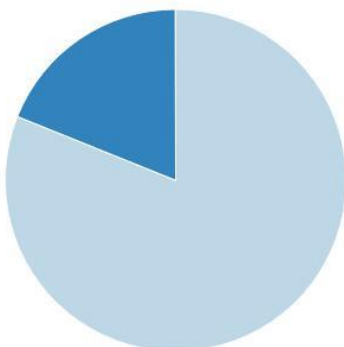
January 1, 2020 – December 31, 2020  
251 activity events



- On-Shore Nonconsumptive  
247 (98%)
- On-Shore Consumptive  
0 (< 1%)
- Off-Shore Nonconsumptive  
4 (2%)
- Off-Shore Consumptive  
0 (< 1%)

### Russian River SMRMA

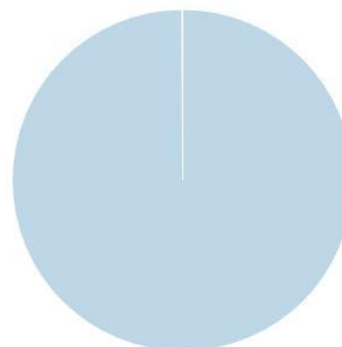
January 1, 2020 – December 31, 2020  
259 activity events



- On-Shore Nonconsumptive  
210 (81%)
- On-Shore Consumptive  
0 (< 1%)
- Off-Shore Nonconsumptive  
49 (19%)
- Off-Shore Consumptive  
0 (< 1%)

### Bodega Head SMR

January 1, 2020 – December 31, 2020  
39 activity events

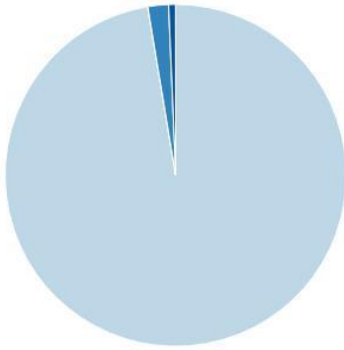


- On-Shore Nonconsumptive  
39 (100%)
- On-Shore Consumptive  
0 (< 1%)
- Off-Shore Nonconsumptive  
0 (< 1%)
- Off-Shore Consumptive  
0 (< 1%)



### Point Reyes SMR

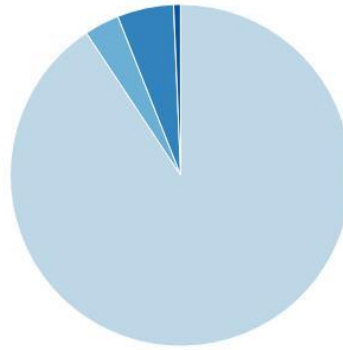
January 1, 2020 – December 31, 2020  
306 activity events



- On-Shore Nonconsumptive 298 (97%)
- On-Shore Consumptive 0 (< 1%)
- Off-Shore Nonconsumptive 6 (2%)
- Off-Shore Consumptive 2 (1%)

### Estero de Limantour SMR

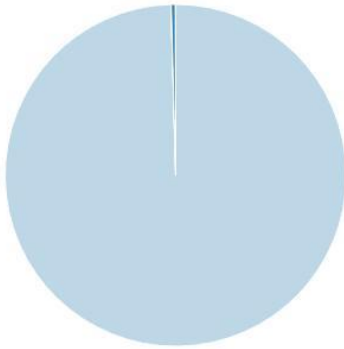
January 1, 2020 – December 31, 2020  
150 activity events



- On-Shore Nonconsumptive 136 (91%)
- On-Shore Consumptive 5 (3%)
- Off-Shore Nonconsumptive 8 (5%)
- Off-Shore Consumptive 1 (1%)

### Montara SMR

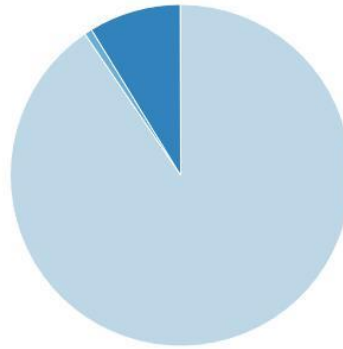
January 1, 2020 – December 31, 2020  
241 activity events



- On-Shore Nonconsumptive 240 (100%)
- On-Shore Consumptive 0 (< 1%)
- Off-Shore Nonconsumptive 1 (< 1%)
- Off-Shore Consumptive 0 (< 1%)

### Año Nuevo SMCA

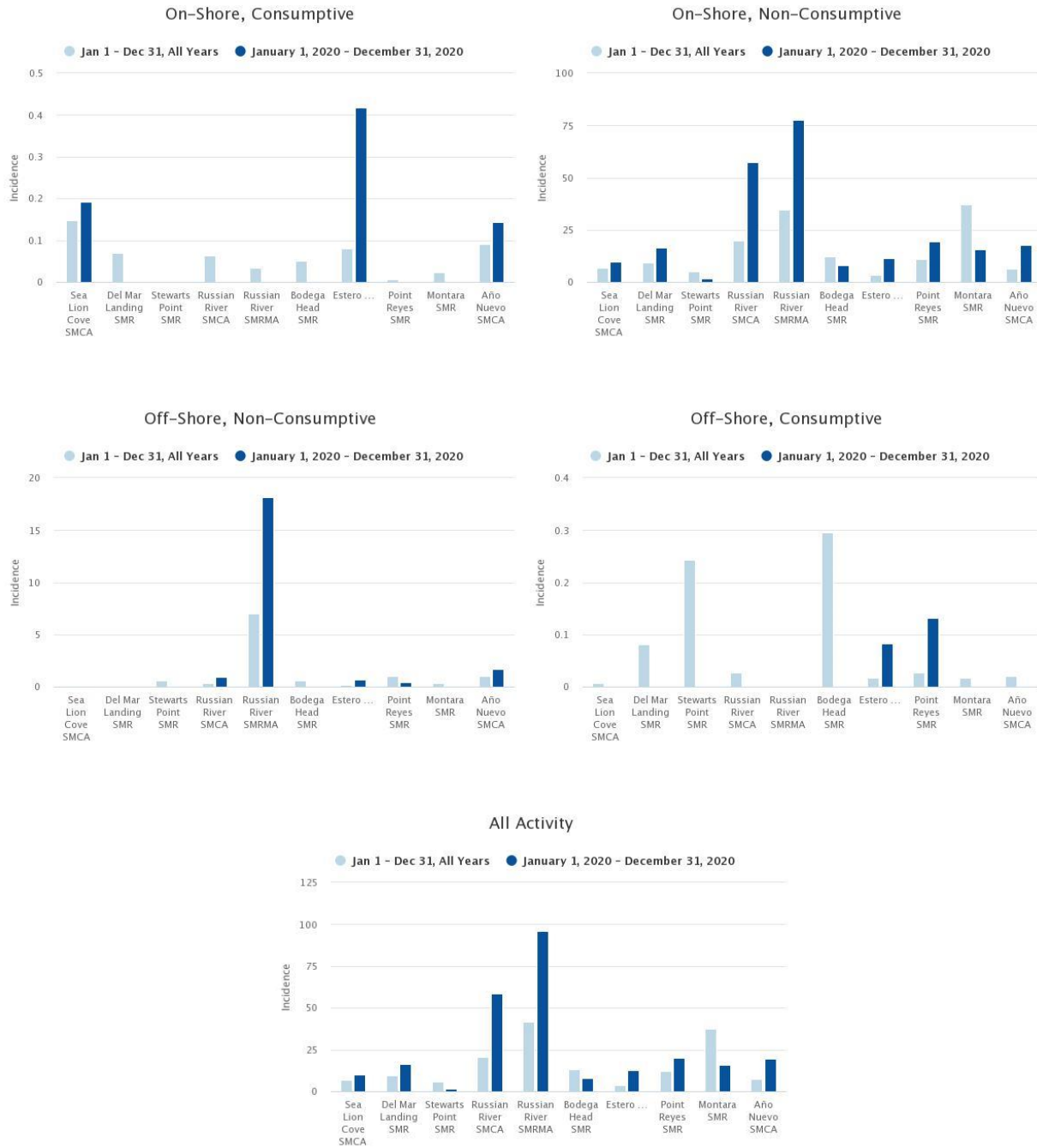
January 1, 2020 – December 31, 2020  
137 activity events



- On-Shore Nonconsumptive 124 (91%)
- On-Shore Consumptive 1 (1%)
- Off-Shore Nonconsumptive 12 (9%)
- Off-Shore Consumptive 0 (< 1%)



## Activity Incidence by MPA



The above charts show incidence values for each MPA monitored by Greater Farallones MPA Watch in North Central California. **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, 2020 through Dec 31, 2020	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020	
Sea Lion Cove SMCA	6.6	9.7	0.1	0.2	
Del Mar Landing SMR	9.1	16.3	0.1	0.0	
Stewarts Point SMR	5.0	1.7	0.0	0.0	
Russian River SMCA	20.0	57.4	0.1	0.0	
Russian River SMRMA	34.5	77.8	0.0	0.0	
Bodega Head SMR	12.2	8.1	0.1	0.0	
Estero de Limantour SMR	3.3	11.3	0.1	0.4	
Point Reyes SMR	11.1	19.6	0.0	0.0	
Montara SMR	37.3	15.6	0.0	0.0	
Año Nuevo SMCA	6.3	17.7	0.1	0.1	
All MPAs Combined	13.9	17.9	0.1	0.1	

MPA	Off-Shore				
	Non-Consumptive		Consumptive		
	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020	
Sea Lion Cove SMCA	0.0	0.0	0.0	0.0	
Del Mar Landing SMR	0.0	0.0	0.1	0.0	
Stewarts Point SMR	0.6	0.0	0.2	0.0	
Russian River SMCA	0.3	0.9	0.0	0.0	
Russian River SMRMA	7.0	18.1	0.0	0.0	
Bodega Head SMR	0.6	0.0	0.3	0.0	
Estero de Limantour SMR	0.2	0.7	0.0	0.1	
Point Reyes SMR	1.0	0.4	0.0	0.1	
Montara SMR	0.3	0.1	0.0	0.0	
Año Nuevo SMCA	1.0	1.7	0.0	0.0	
All MPAs Combined	0.7	0.9	0.1	0.0	

MPA	Total Combined	
	Jan 1 Dec 31 All Years	Jan 1, 2020 through Dec 31, 2020
	Sea Lion Cove SMCA	6.8
Del Mar Landing SMR	9.3	16.3
Stewarts Point SMR	5.9	1.7
Russian River SMCA	20.4	58.4
Russian River SMRMA	41.5	95.9
Bodega Head SMR	13.1	8.1
Estero de Limantour SMR	3.6	12.5
Point Reyes SMR	12.2	20.1
Montara SMR	37.6	15.6
Año Nuevo SMCA	7.4	19.6
All MPAs Combined	14.7	19.0

### 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. Rate of incidence includes all surveys entered and verified at time of report writing. **GFA completed at least 180 surveys within MPAs, 91 of which are not yet included here largely due to covid-19 impacts.**

## COVID-19

Following local, state, and federal health guidelines regarding COVID-19, GFA's MPA Watch program suspended normal data collection on March 17, 2020. Staff resumed limited surveys May 22, 2020. And current volunteers who could maintain social distancing resumed data collection on July 25, 2020. Surveys were again impacted by the Shelter in place order for the entire month of December. Covid-19 decreased the number of surveys completed in 2020 by 45%. Reduced number of surveys were due to beach closures, co-PI NOAA limiting volunteer activities, and high-risk volunteers choosing to abstain from volunteering. Beach closures varied between our 5 counties, however most beaches remained closed to all human uses from March until late May. Shelter in place orders were reinstated for the month of December decreasing the number of surveys that month to 65% of normal.

### Breakdown by MPA

#### **Sealion Cove State Marine Conservation Area**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 9.9 total uses per mile surveyed in this MPA. This is a 45% increase from the five-year baseline data rate (2014-2019). People observed in the MPA were primarily taking part in non-consumptive activities both onshore. This accounted for 98% of the activities logged in the MPA Watch surveys. 2% of human use was comprised of onshore consumptive activities. Consumptive activities, though rare, have increased significantly in the last 2 years.

#### **Del Mar Landing State Marine Reserve**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 16.3 total uses per mile surveyed in this MPA. This is a 75% increase from the five-year baseline data rate (2014-2019). People observed in the MPA were solely taking part in non-consumptive activities on-shore, such as beach. This accounted for 100% of the activities logged in the MPA Watch surveys. No consumptive activities were observed.

#### **Stewarts Point State Marine Reserve**

Between the months of January and December 2020, surveys were completed, however not verified at date of report. Findings are inconclusive at date of report.

#### **Russian River State Marine Conservation Area**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 58.4 total uses per mile surveyed in this MPA. This is a 186% increase from the five-year baseline data rate (2014-2019). 100% of people observed in the MPA were taking part in non-consumptive activities both on (98%) and off-shore (2%), such as beach and ocean recreation. No consumptive activities were observed.



### **Russian River State Marine Recreational Management Area**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 95.9 total uses per mile surveyed in this MPA. This is a 131% increase from the five-year baseline data rate (2014-2019). 100% of people observed in the MPA were taking part in non-consumptive activities both on (81%) and off-shore (19%), such as beach and ocean recreation. No consumptive activities were observed.

### **Bodega Head State Marine Reserve**

Between the months of January and December 2020, surveys were completed, however not verified at date of report. Findings are inconclusive at date of report.

### **Estero de Limantour State Marine Reserve**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 12.5 total uses per mile surveyed in this MPA. This is a 247% increase from the five-year baseline data rate (2014-2019). People observed in the MPA were primarily taking part in non-consumptive activities both on (91%) and off-shore (5%), such as beach and ocean recreation. This accounted for almost 96% of the activities logged in the MPA Watch surveys. Less than 4% of human use was comprised of consumptive activities, no change from 2019.

### **Point Reyes State Marine Reserve**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 20.1 total uses per mile surveyed in this MPA. This is a 65% increase from the five-year baseline data rate (2014-2019) despite Federal Park Closures in 2020 (wildfire and covid-19). People observed in the MPA were primarily taking part in non-consumptive activities both on-shore (97%) and off-shore (6%), such as beach and ocean recreation. This accounted for almost 100% of the activities logged in the MPA Watch surveys. <1% of activities observed were consumptive.

### **Montara State Marine Reserve**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 15.6 total uses per mile surveyed in this MPA. This is a 58% decrease from the five-year baseline data rate (2014-2018), due to complete closure of beaches from March 2020 through the end of the year. All observations were prior to March, 100% of people observed in the MPA were taking part in non-consumptive activities on-shore, such as beach recreation. No consumptive activities were observed.

### **Año Nuevo State Marine Conservation Area**

Between the months of January and December 2020, GFA's MPA Watch data suggests a rate of 19.6 total uses per mile surveyed in this MPA. This is a 164% increase from the five-year baseline data rate (2014-2019). People observed in the MPA were primarily taking part in non-consumptive activities on-shore (91%), and off-shore (9%). 1% of activities observed were consumptive.

## Next Steps

Greater Farallones Association intends to expand the volunteer pool in the Sonoma and Mendocino region in 2021 using a hybrid virtual and distanced in-person field format. Increasing our knowledge in this remote region struggling with severe Abalone declines. 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. And lastly in 2020-2021 the MPA Watch Post-Doctoral Student is conducting analyses of MPA Watch data across the state.

## 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](http://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](http://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 the Greater Farallones Association does to conserve California's Federal and California MPAs and other conservation projects please visit [farallones.org](http://farallones.org).