Marine Protected Area (MPA) Watch
Regional Report from Beach Watch
Mendocino, Sonoma, Marin, San Francisco, and San Mateo Counties
January 1, 2022 – June 30, 2022

Background

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

- The human activity surge observed at all sites during the pandemic seems to be leveling off in this area. Some sites had slightly higher activity rates than January to June 2022 and others had lower.
- Shore-based recreational activities account for 96% of activities. Water-based recreational activities account for 3% of observed activities. Consumptive shore and water-based activities accounted for less than 2% of observed activities.
- Shore-based consumptive activities increased by 12% historic baseline for these months (1994-2022) and more than 3 times that of consumptive activities at the site in January to June 2022.
- Potential MPA violations by MPA appear to have increased Bodega Head and Del Mar Landing, both sites have new volunteers and staff are following up with them to ensure their findings.
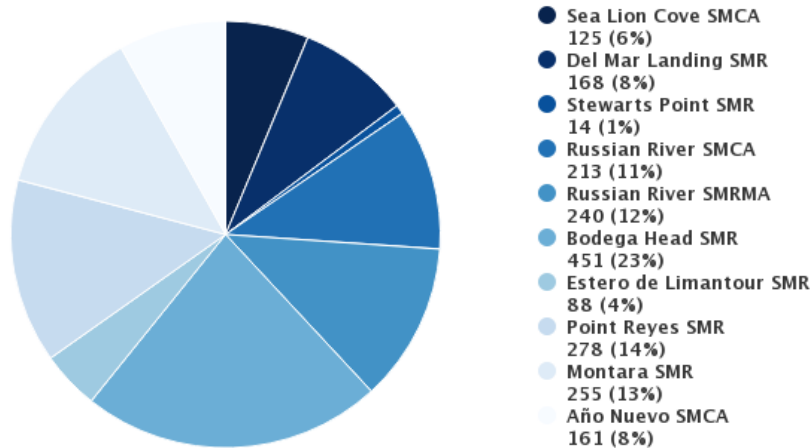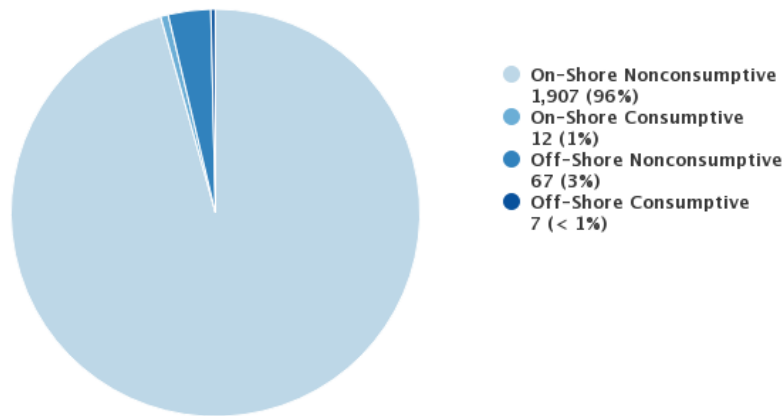
Human Use of MPAs January - June 2022

Overview

Top 10 MPAs by All Activity

January 1, 2022 – June 30, 2022
1,993 total activity events

- ● Sea Lion Cove SMCA
  125 (6%)
- ● Del Mar Landing SMR
  168 (8%)
- ● Stewarts Point SMR
  14 (1%)
- ● Russian River SMCA
  213 (11%)
- ● Russian River SMRMA
  240 (12%)
- ● Bodega Head SMR
  451 (23%)
- ● Estero de Limantour SMR
  88 (4%)
- ● Point Reyes SMR
  278 (14%)
- ● Montara SMR
  255 (13%)
- ● Año Nuevo SMCA
  161 (8%)

All MPAs Combined

January 1, 2022 – June 30, 2022
1,993 activity events

- ● On-Shore Nonconsumptive
  1,907 (96%)
- ● On-Shore Consumptive
  12 (1%)
- ● Off-Shore Nonconsumptive
  67 (3%)
- ● Off-Shore Consumptive
  7 (< 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.
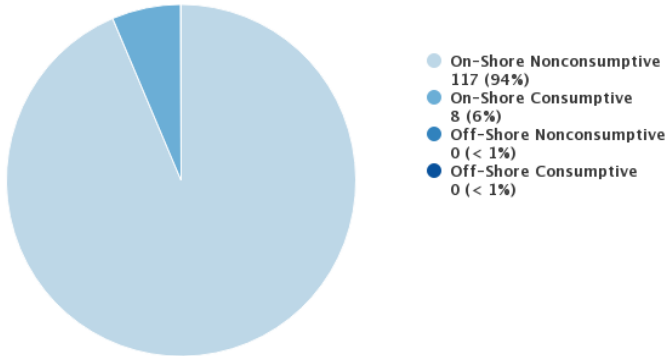**Consumptive -** An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.
Non-Consumptive - An activity in which a natural resource is not collected.
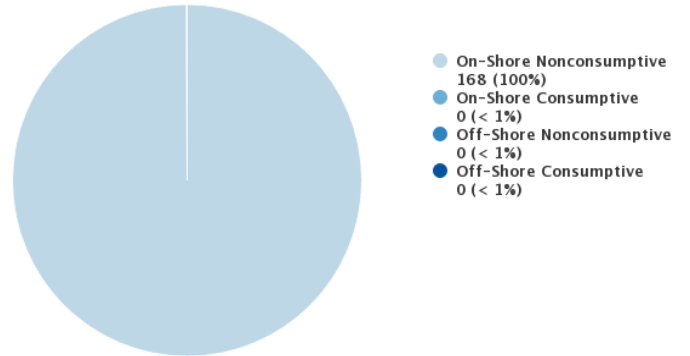
Activity by MPA

Sea Lion Cove SMCA

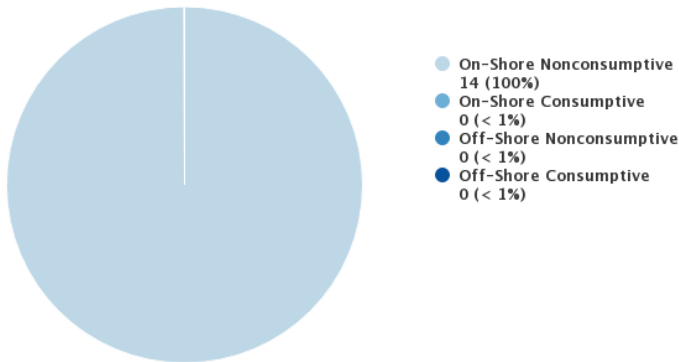January 1, 2022 – June 30, 2022
125 activity events

- On-Shore Nonconsumptive
  117 (94%)
- On-Shore Consumptive
  8 (6%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  0 (< 1%)

Del Mar Landing SMR

January 1, 2022 – June 30, 2022
168 activity events

- On-Shore Nonconsumptive
  168 (100%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  0 (< 1%)

Stewarts Point SMR

January 1, 2022 – June 30, 2022
14 activity events

- On-Shore Nonconsumptive
  14 (100%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  0 (< 1%)

Russian River SMCA

January 1, 2022 – June 30, 2022
213 activity events

- On-Shore Nonconsumptive
  211 (99%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  1 (< 1%)
- Off-Shore Consumptive
  1 (< 1%)
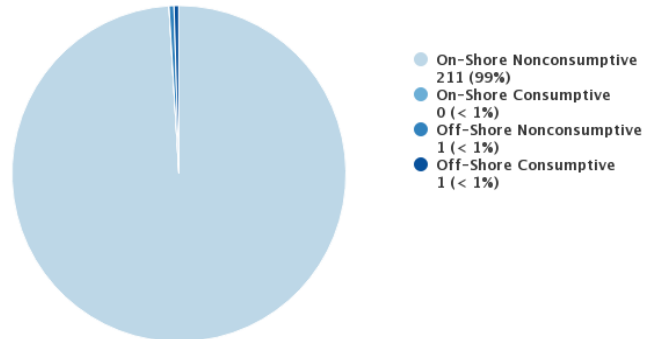
Russian River SMRMA

January 1, 2022 – June 30, 2022
240 activity events

- On-Shore Nonconsumptive
  201 (84%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  39 (16%)
- Off-Shore Consumptive
  0 (< 1%)
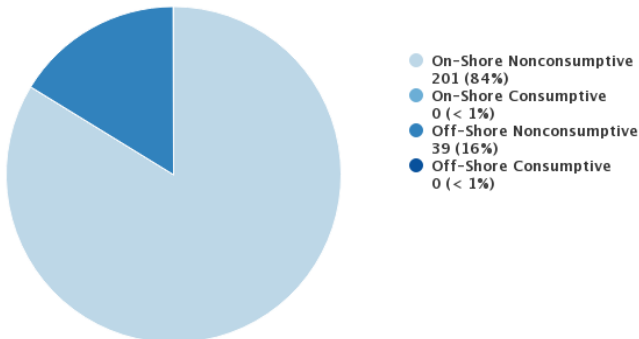
Bodega Head SMR

January 1, 2022 – June 30, 2022
451 activity events

- On-Shore Nonconsumptive
  445 (99%)
- On-Shore Consumptive
  2 (< 1%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  4 (1%)
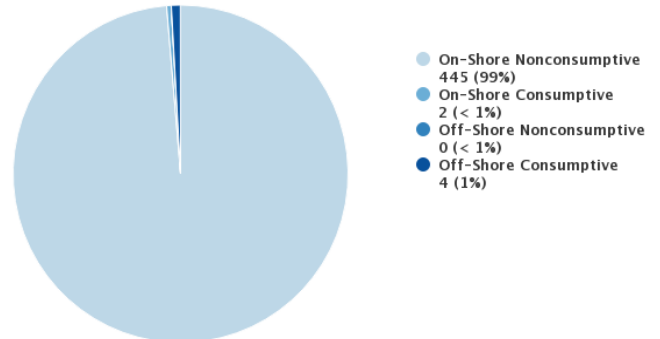
Estero de Limantour SMR

January 1, 2022 – June 30, 2022
88 activity events

- On-Shore Nonconsumptive
  84 (95%)
- On-Shore Consumptive
  2 (2%)
- Off-Shore Nonconsumptive
  1 (1%)
- Off-Shore Consumptive
  1 (1%)
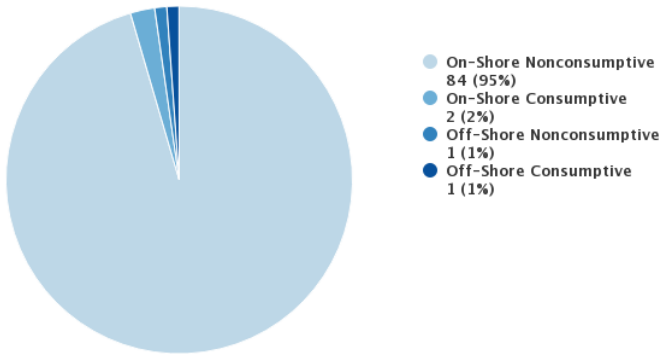
Point Reyes SMR

January 1, 2022 – June 30, 2022
278 activity events

- On-Shore Nonconsumptive
  269 (97%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  9 (3%)
- Off-Shore Consumptive
  0 (< 1%)
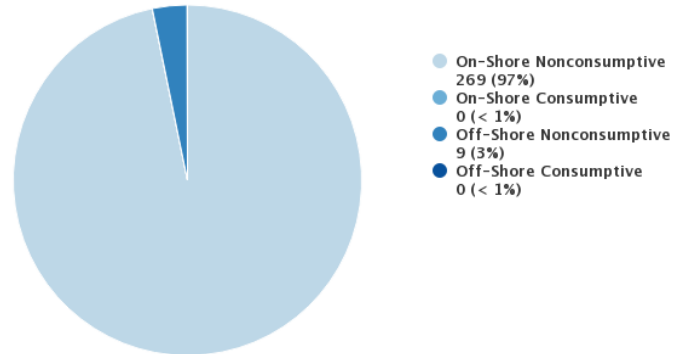
Montara SMR

January 1, 2022 – June 30, 2022
255 activity events

- On-Shore Nonconsumptive
  255 (100%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  0 (< 1%)
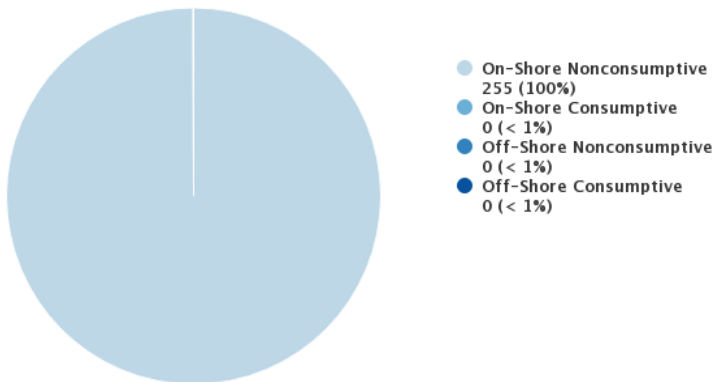
Año Nuevo SMCA

January 1, 2022 – June 30, 2022
161 activity events

- On-Shore Nonconsumptive
  143 (89%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  17 (11%)
- Off-Shore Consumptive
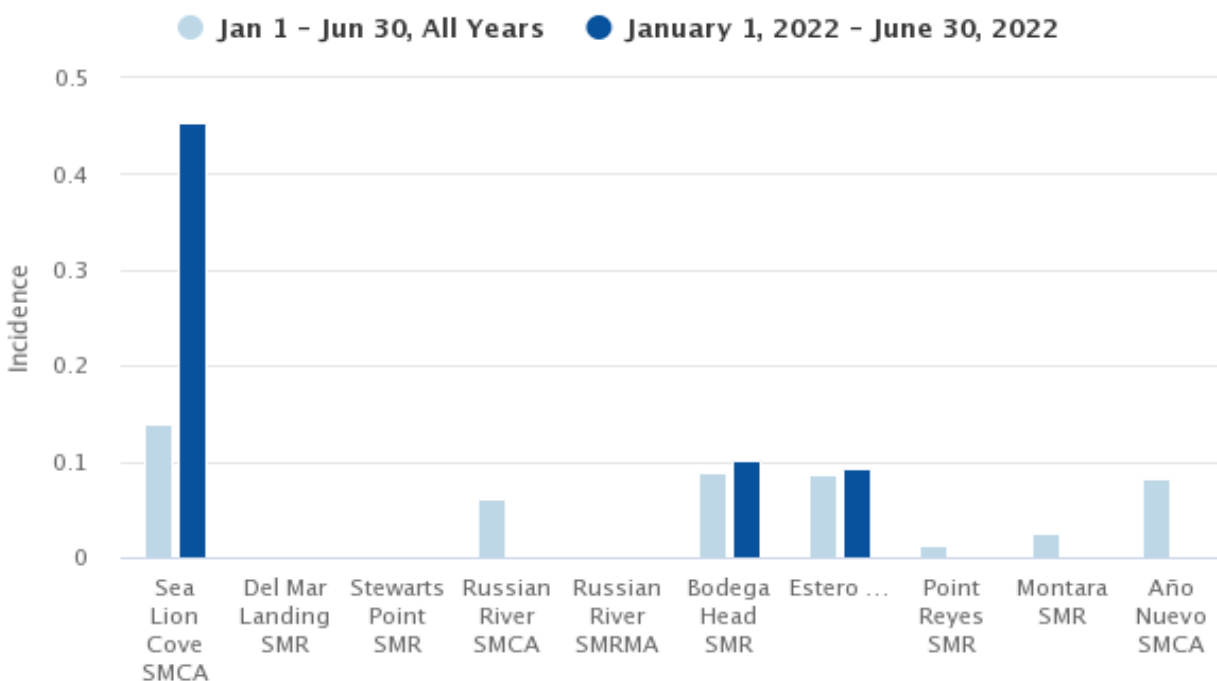 1 (1%)
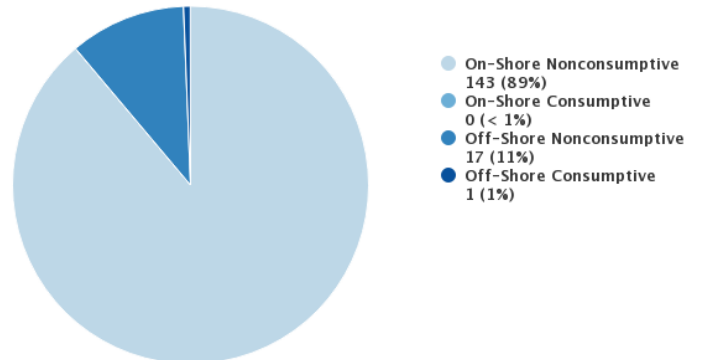
Activity Incidence by MPA

The charts below show incidence values for each MPA monitored by Greater Farallones Association Beach Watch program. **Incidence is calculated as number of activities recorded divided by total survey-miles.**

On-Shore, Non-Consumptive

● Jan 1 – Jun 30, All Years   ● January 1, 2022 – June 30, 2022

On-Shore, Consumptive

● Jan 1 – Jun 30, All Years   ● January 1, 2022 – June 30, 2022

Off-Shore, Non-Consumptive

● Jan 1 – Jun 30, All Years ● January 1, 2022 – June 30, 2022

Off-Shore, Consumptive

● Jan 1 – Jun 30, All Years ● January 1, 2022 – June 30, 2022

Activity Incidence by MPA

	On-Shore					Off-Shore			
	Non-Consumptive		Consumptive			Non-Consumptive		Consumptive	
MPA	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022	MPA	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022
Sea Lion Cove SMCA	5.8	6.6	0.1	0.5	Sea Lion Cove SMCA	0.0	0.0	0.0	0.0
Del Mar Landing SMR	11.0	24.0	0.0	0.0	Del Mar Landing SMR	0.0	0.0	0.1	0.0
Stewarts Point SMR	5.0	5.8	0.0	0.0	Stewarts Point SMR	0.5	0.0	0.3	0.0
Russian River SMCA	24.5	20.7	0.1	0.0	Russian River SMCA	0.2	0.1	0.0	0.1
Russian River SMRMA	37.0	51.5	0.0	0.0	Russian River SMRMA	6.8	10.0	0.0	0.0
Bodega Head SMR	16.0	22.5	0.1	0.1	Bodega Head SMR	0.3	0.0	0.2	0.2
Estero de Limantour SMR	3.2	3.9	0.1	0.1	Estero de Limantour SMR	0.2	0.0	0.0	0.0
Point Reyes SMR	10.8	11.8	0.0	0.0	Point Reyes SMR	0.8	0.4	0.0	0.0
Montara SMR	42.4	19.3	0.0	0.0	Montara SMR	0.2	0.0	0.0	0.0
Año Nuevo SMCA	7.0	5.8	0.1	0.0	Año Nuevo SMCA	1.0	0.7	0.0	0.0
All MPAs Combined	15.2	13.3	0.1	0.1	All MPAs Combined	0.5	0.5	0.1	0.0

	Total	
	Combined	
MPA	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022
Sea Lion Cove SMCA	6.0	7.1
Del Mar Landing SMR	11.1	24.0
Stewarts Point SMR	5.7	5.8
Russian River SMCA	24.7	20.9
Russian River SMRMA	43.7	61.5
Bodega Head SMR	16.7	22.8
Estero de Limantour SMR	3.5	4.1
Point Reyes SMR	11.6	12.2
Montara SMR	42.7	19.3
Año Nuevo SMCA	8.1	6.5
All MPAs Combined	15.9	13.9

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.

Potential Violations by MPA

MPA	Jan 1 Jun 30 All Years	Jan 1, 2022 through Jun 30, 2022
Sea Lion Cove SMCA	0	0
Del Mar Landing SMR	73	29
Stewarts Point SMR	6	0
Russian River SMCA	63	4
Russian River SMRMA	8	1
Bodega Head SMR	408	161
Estero de Limantour SMR	37	3
Point Reyes SMR	12	0
Montara SMR	272	0
Año Nuevo SMCA	68	7
All MPAs Combined	947	205

Breakdown by MPA

Sea Lion Cove State Marine Conservation Area
Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 7.1 total uses per mile surveyed in this MPA. This is an 12% increase compared to the January-June 2022 data rate. People observed in the MPA were primarily taking part in non-consumptive activities on-shore, such as beach recreation and wildlife viewing. This accounted for 93% of the activities logged in the MPA Watch surveys. 7% of human use was comprised of onshore consumptive activities, a 100% increase.

Del Mar Landing State Marine Reserve
Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 24 total uses per mile surveyed in this MPA. This is an 25% compared to the January-June 2022 data rate. People observed in the MPA were taking part in non-consumptive activities onshore, such as beach recreation which accounted for 91% of activities and dogs on leash (9%). Consumptive activities accounted for less than 1% of activities observed.

Russian River State Marine Conservation Area
Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 20.9 total uses per mile surveyed in this MPA. This is an 14.6% decrease compared to the January-June 2022 data rate. 96% of people observed in the MPA were taking part in non-consumptive activities on-shore, such as beach recreation and wildlife viewing. Animals both on and off leash made up 1% of activities each. Consumptive activities accounted for less than 1% of activities ob

Russian River State Marine Recreational Management Area

Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 61.5 total uses per mile surveyed in this MPA. This is a 5.5% increase compared to the January-June 2022 data rate. 77% of people observed in the MPA were taking part in land-based and water-based non-consumptive activities such as beach recreation, wildlife watching, kayaking and standup paddleboarding. Consumptive activities accounted for less than 1% of activities observed.

Bodega Head State Marine Reserve

Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 22.8 total uses per mile surveyed in this MPA. This is a 60.6% increase compared to the January-June 2022 data rate. People observed in the MPA were primarily taking part in non-consumptive activities onshore recreation, such as beach recreation and wildlife watching. This accounted for almost 82% of the activities logged in the MPA Watch surveys. Consumptive activities accounted for less than 2% of activities observed.

Estero de Limantour State Marine Reserve

Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 4.1 total uses per mile surveyed in this MPA. This is no change compared to the January-June 2022 data rate. People observed in the MPA were primarily taking part in non-consumptive activities such as beach recreation, wildlife watching, for a combined 84%, kayaking and surfing for 11%. 3% of human use was comprised of hook and line fishing, a 50% decrease from 2022.

Point Reyes State Marine Reserve

Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 12.2 total uses per mile surveyed in this MPA. This is a 281% increase compared to the January-June 2022 data rate, which is due to Federal Park Closures for construction in 2022. People observed in the MPA were primarily taking part in non-consumptive activities both on and off-shore, such as beach recreation and wildlife watching (83%) and ocean recreation surfing (10%) and kayaking (6%). Consumptive activities accounted for less than 1% of activities observed.

Montara State Marine Reserve

Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 19.3 total uses per mile surveyed in this MPA. This is a 47% decrease compared to the January-June 2022 data rate. People observed in the MPA were primarily taking part in non-consumptive activities both on and off-shore, such as tide pooling (52%)

beach recreation and wildlife watching (47%) and ocean recreation. This accounted for 99% of the activities logged in the MPA Watch surveys. Consumptive activities accounted for less than 1% of activities observed.

Año Nuevo State Marine Conservation Area
Between the months of January and June 2022, GFA's MPA Watch data suggests a rate of 6.5 total uses per mile surveyed in this MPA. This is a 18.7% decrease compared to the January-June 2022 data rate. People observed in the MPA were primarily taking part in non-consumptive activities on shore such as wildlife watching and beach recreation (74%), and surfing (17%). Less than 2% of activities were consumptive, either shore based or offshore.

Next Steps

Greater Farallones Association intends to maintain its 150 volunteers through continuing education. 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 the Greater Farallones Association does to conserve California's Federal and California MPAs and other conservation projects please visit farallones.org.