Marine Protected Area (MPA) Watch
Regional Report from Beach Watch
Mendocino, Sonoma, Marin, San Francisco, and San Mateo Counties
January 1, 2021 – December 31, 2021

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.
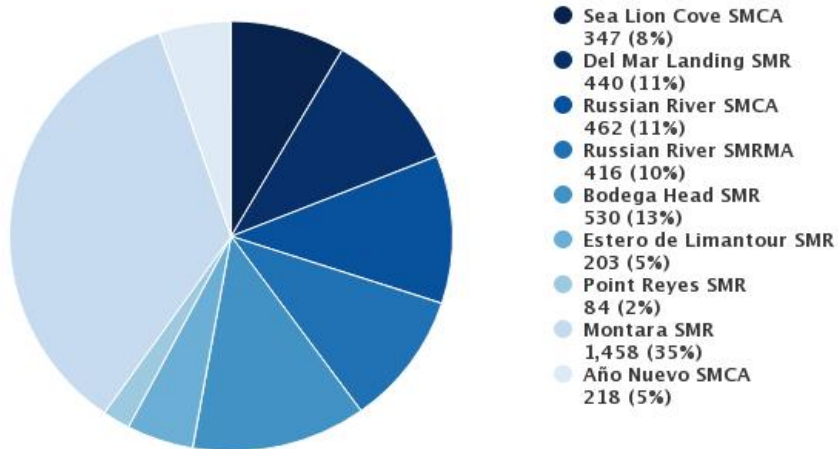
Executive Summary

- In the wake of COVID-19 guidelines and restrictions impacting MPA Watch in 2020, there has been a return to regular operations in 2021.
- Over 99% of activities monitored by surveyors were on and offshore nonconsumptive activities. Though consumptive activities account for less than 1% of all activities observed, they should be further monitored to ensure there is no illegal take within MPA boundaries.
- Recently use rates have varied wildly from year to year in individual MPAs, however across all MPAs monitored by Greater Farallones Association the use rate is 15.9 compared to the historical rate of 14.9.

mpawatch.org   klindquist@farallones.org   https://farallones.org/

Human Use of MPAs January - December 2021
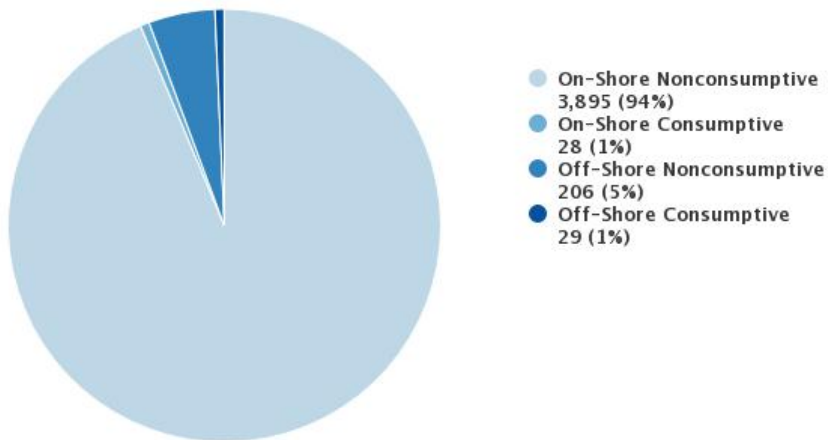
Top 9 MPAs by All Activity

January 1, 2021 – December 31, 2021
4,158 total activity events

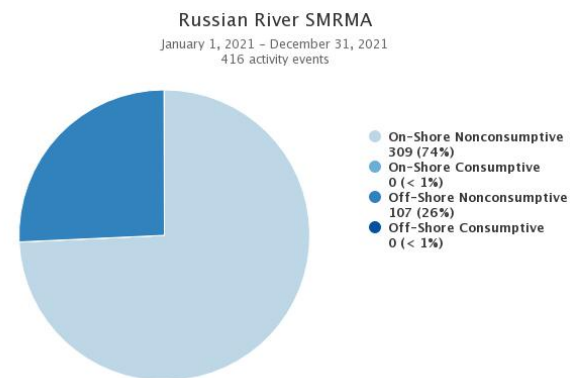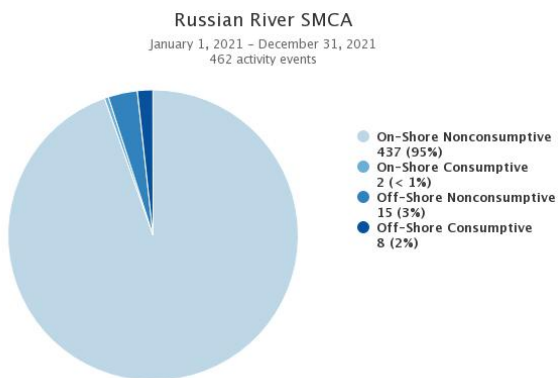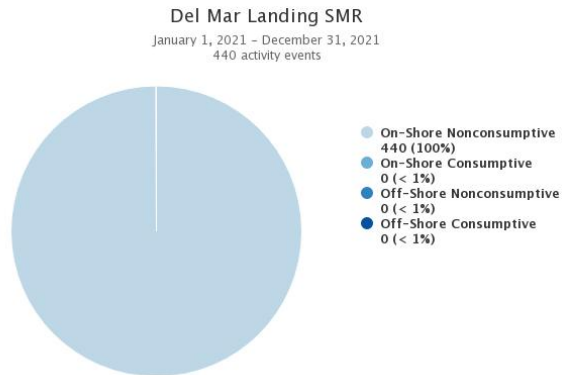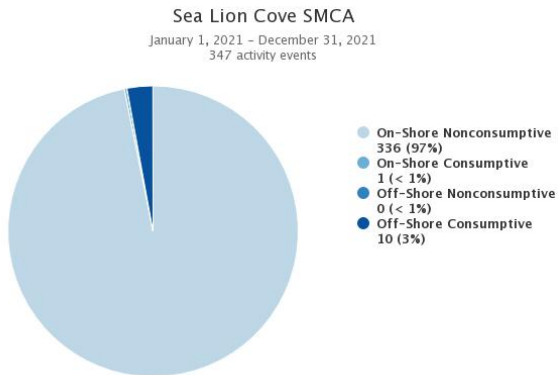- **Sea Lion Cove SMCA** 347 (8%)
- **Del Mar Landing SMR** 440 (11%)
- **Russian River SMCA** 462 (11%)
- **Russian River SMRMA** 416 (10%)
- **Bodega Head SMR** 530 (13%)
- **Estero de Limantour SMR** 203 (5%)
- **Point Reyes SMR** 84 (2%)
- **Montara SMR** 1,458 (35%)
- **Año Nuevo SMCA** 218 (5%)

Overview

All MPAs Combined

January 1, 2021 – December 31, 2021
4,158 activity events

- **On-Shore Nonconsumptive** 3,895 (94%)
- **On-Shore Consumptive** 28 (1%)
- **Off-Shore Nonconsumptive** 206 (5%)
- **Off-Shore Consumptive** 29 (1%)

Activity by MPA

Sea Lion Cove SMCA
January 1, 2021 – December 31, 2021
347 activity events

- On-Shore Nonconsumptive
  336 (97%)
- On-Shore Consumptive
  1 (< 1%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  10 (3%)

Del Mar Landing SMR
January 1, 2021 – December 31, 2021
440 activity events

- On-Shore Nonconsumptive
  440 (100%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
  0 (< 1%)

Russian River SMCA
January 1, 2021 – December 31, 2021
462 activity events

- On-Shore Nonconsumptive
  437 (95%)
- On-Shore Consumptive
  2 (< 1%)
- Off-Shore Nonconsumptive
  15 (3%)
- Off-Shore Consumptive
  8 (2%)

Russian River SMRMA
January 1, 2021 – December 31, 2021
416 activity events

- On-Shore Nonconsumptive
  309 (74%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  107 (26%)
- Off-Shore Consumptive
  0 (< 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.
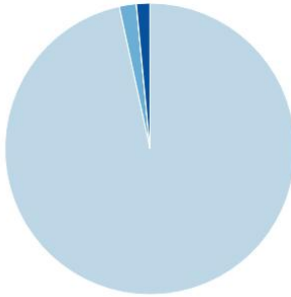**Off-Shore -** Activities that take place offshore, typically in knee-deep water or deeper. Includes surfing, SCUBA diving, kayaking, boat fishing, etc.
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected.
Non-Consumptive - An activity in which a natural resource is not collected.
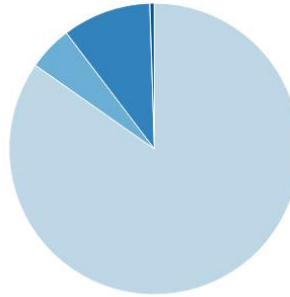
Bodega Head SMR
January 1, 2021 – December 31, 2021
530 activity events

- On-Shore Nonconsumptive
  512 (97%)
- On-Shore Consumptive
  10 (2%)
- Off-Shore Nonconsumptive
  0 (< 1%)
- Off-Shore Consumptive
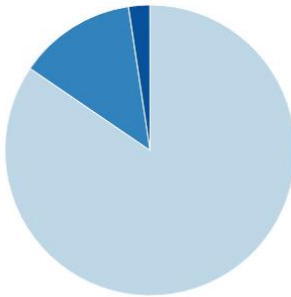 8 (2%)

Estero de Limantour SMR
January 1, 2021 – December 31, 2021
203 activity events

- On-Shore Nonconsumptive
  172 (85%)
- On-Shore Consumptive
  10 (5%)
- Off-Shore Nonconsumptive
  20 (10%)
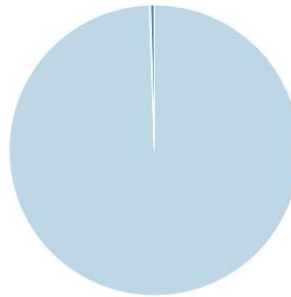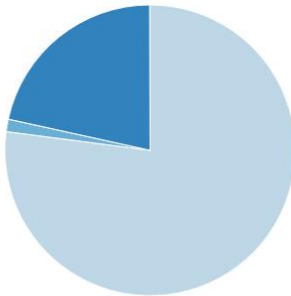- Off-Shore Consumptive
  1 (< 1%)

Point Reyes SMR
January 1, 2021 – December 31, 2021
84 activity events

- On-Shore Nonconsumptive
  71 (85%)
- On-Shore Consumptive
  0 (< 1%)
- Off-Shore Nonconsumptive
  11 (13%)
- Off-Shore Consumptive
  2 (2%)

Montara SMR
January 1, 2021 – December 31, 2021
1,458 activity events

- On-Shore Nonconsumptive
  1,450 (99%)
- On-Shore Consumptive
  2 (< 1%)
- Off-Shore Nonconsumptive
  6 (< 1%)
- Off-Shore Consumptive
  0 (< 1%)

Año Nuevo SMCA
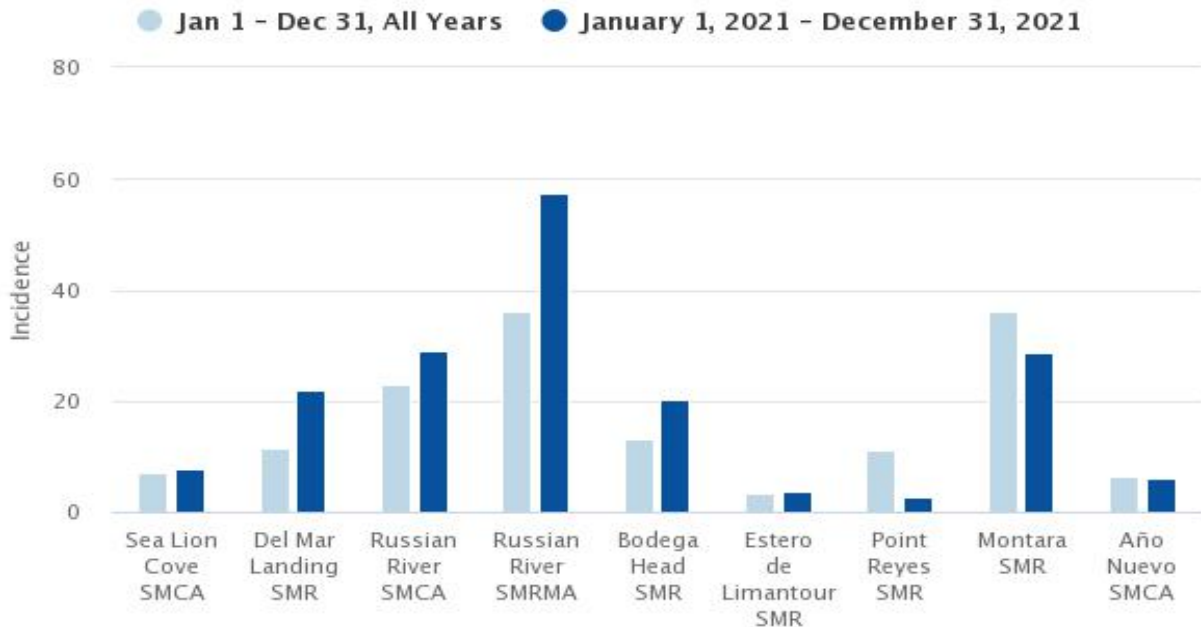January 1, 2021 – December 31, 2021
218 activity events

- On-Shore Nonconsumptive
  168 (77%)
- On-Shore Consumptive
  3 (1%)
- Off-Shore Nonconsumptive
  47 (22%)
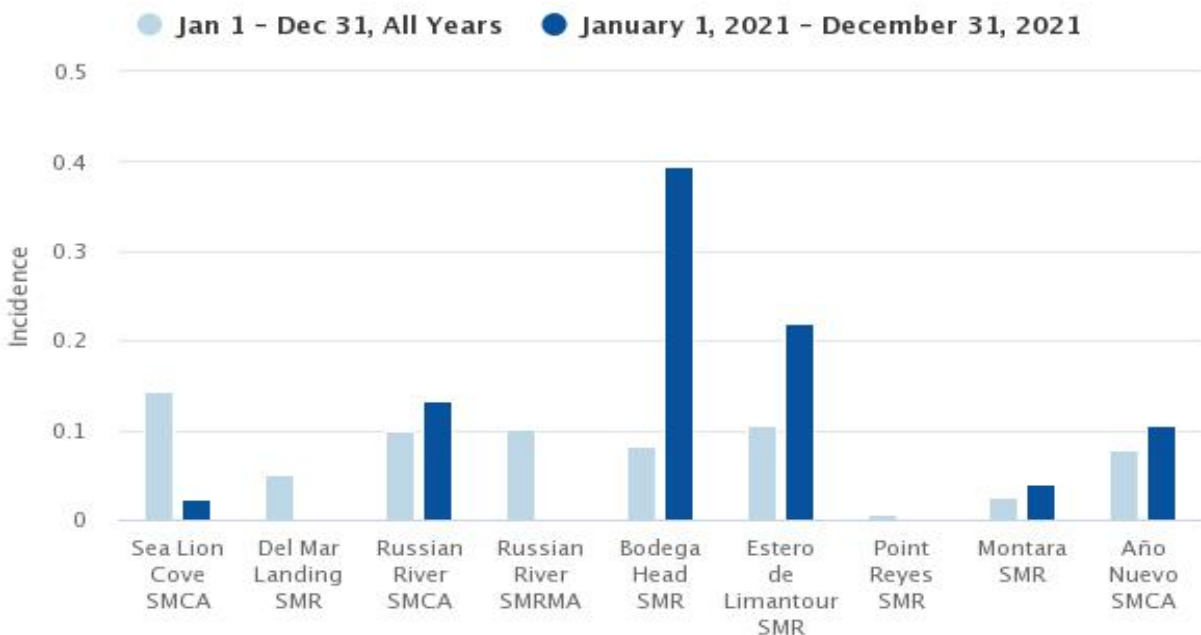- Off-Shore Consumptive
  0 (< 1%)

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.**
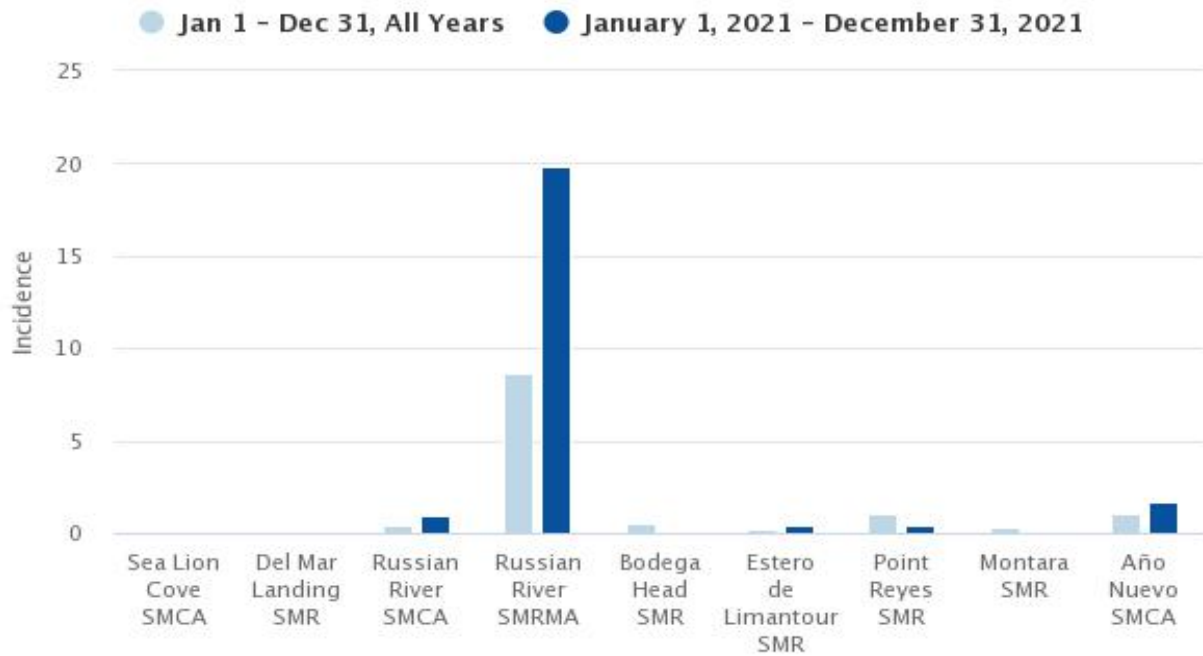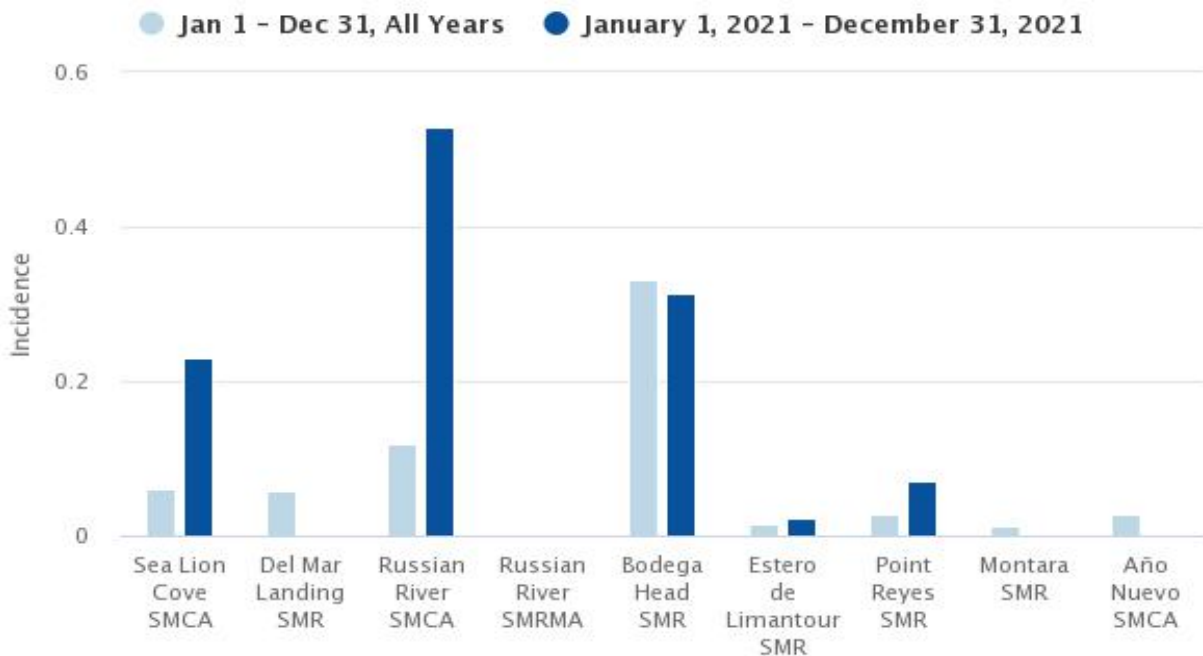
On-Shore, Non-Consumptive

● Jan 1 – Dec 31, All Years ● January 1, 2021 – December 31, 2021

On-Shore, Consumptive

● Jan 1 – Dec 31, All Years ● January 1, 2021 – December 31, 2021

Off-Shore, Non-Consumptive

● Jan 1 – Dec 31, All Years   ● January 1, 2021 – December 31, 2021

Off-Shore, Consumptive

● Jan 1 – Dec 31, All Years   ● January 1, 2021 – December 31, 2021

Activity Incidence by MPA

MPA	On-Shore			
	Non-Consumptive		Consumptive	
	Jan 1 Dec 31 All Years	Jan 1, 2021 through Dec 31, 2021	Jan 1 Dec 31 All Years	Jan 1, 2021 through Dec 31, 2021
Sea Lion Cove SMCA	7.1	7.8	0.1	0.0
Del Mar Landing SMR	11.5	22.0	0.1	0.0
Russian River SMCA	22.9	28.9	0.1	0.1
Russian River SMRMA	36.2	57.2	0.1	0.0
Bodega Head SMR	13.1	20.2	0.1	0.4
Estero de Limantour SMR	3.3	3.8	0.1	0.2
Point Reyes SMR	11.3	2.6	0.0	0.0
Montara SMR	36.1	28.7	0.0	0.0
Año Nuevo SMCA	6.2	5.9	0.1	0.1
All MPAs Combined	14.1	14.9	0.1	0.1

MPA	Off-Shore			
	Non-Consumptive		Consumptive	
	Jan 1 Dec 31 All Years	Jan 1, 2021 through Dec 31, 2021	Jan 1 Dec 31 All Years	Jan 1, 2021 through Dec 31, 2021
Sea Lion Cove SMCA	0.0	0.0	0.1	0.2
Del Mar Landing SMR	0.0	0.0	0.1	0.0
Russian River SMCA	0.5	1.0	0.1	0.5
Russian River SMRMA	8.6	19.8	0.0	0.0
Bodega Head SMR	0.5	0.0	0.3	0.3
Estero de Limantour SMR	0.2	0.4	0.0	0.0
Point Reyes SMR	1.0	0.4	0.0	0.1
Montara SMR	0.3	0.1	0.0	0.0
Año Nuevo SMCA	1.1	1.7	0.0	0.0
All MPAs Combined	0.7	0.8	0.1	0.1

MPA	Jan 1 Dec 31 All Years	Jan 1, 2021 through Dec 31, 2021
Sea Lion Cove SMCA	131	27
Del Mar Landing SMR	119	20
Russian River SMCA	206	21
Russian River SMRMA	132	18
Bodega Head SMR	248	28
Estero de Limantour SMR	153	19
Point Reyes SMR	244	14
Montara SMR	564	79
Año Nuevo SMCA	409	37
All MPAs Combined	2,264	263

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

Sea Lion Cove State Marine Conservation Area

Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 8.0 total uses per mile surveyed in this MPA. This is an 9.6% increase compared to the baseline data rate (2014-2020). 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 97% of the activities logged in the MPA Watch surveys. Less than <4% of human use was comprised of onshore consumptive activities, a increase of 50%.

Del Mar Landing State Marine Reserve

Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 22 total uses per mile surveyed in this MPA. This is an 89% increase compared to the baseline data rate (2014-2020). People observed in the MPA were taking part in non-consumptive activities onshore, such as beach recreation. This accounted for 100% of the activities logged in the MPA Watch surveys. No consumptive activities were observed.

Russian River State Marine Conservation Area

Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 30.6 total uses per mile surveyed in this MPA. This is a increase of 29% compared to the baseline data rate (2014-2020). 95% of people observed in the MPA were taking part in non-consumptive activities on-shore, such as beach recreation with some surfing. Consumptive activities made up 3% of activities, an increase of 50%.

Russian River State Marine Recreational Management Area

Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 77.0 total uses per mile surveyed in this MPA. This is a 71% increase compared to the baseline data rate (2014-2020). 74% of people observed in the MPA were taking part in non-consumptive activities. Less than 1% of human use was comprised of onshore and off-shore consumptive activities, no change from baseline.

Bodega Head State Marine Reserve
Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 20.9 total uses per mile surveyed in this MPA. This is a 49% increase compared to the baseline data rate (2014-2020). 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 97% of the activities logged in the MPA Watch surveys. 4% of human use were comprised of onshore and off-shore consumptive activities, an increase of 25%.

Estero de Limantour State Marine Reserve
Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 4.5 total uses per mile surveyed in this MPA. This is a 22% increase compared to the baseline data rate (2014-2020). People observed in the MPA were primarily taking part in non-consumptive activities both on and off-shore, such as beach and ocean recreation, wildlife watching and surfing. This accounted for almost 85% of the activities logged in the MPA Watch surveys. 6% of human use was comprised of hook and line fishing, a 33% increase from baseline.

Point Reyes State Marine Reserve
Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 3.0 total uses per mile surveyed in this MPA. This is a 76% decrease compared to the baseline data rate (2014-2020), which may be due to Federal Park Closures for construction in 2021. 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 98% of the activities logged in the MPA Watch surveys. 1% of human use were comprised of consumptive activities.

Montara State Marine Reserve
Between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 28.8 total uses per mile surveyed in this MPA. This is a 21% decrease compared to the baseline data rate (2014-2020), due to prolonged park closures related to the pandemic. 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 99% of the activities logged in the MPA Watch surveys. Less than 2% of all activities were consumptive.

Año Nuevo State Marine Conservation Area between the months of January and December 2021, GFA's MPA Watch data suggests a rate of 7.7 total uses per mile surveyed in this MPA. This is a 4% increase from baseline data rate (2014-2020). People observed in the MPA were primarily taking part in non-consumptive activities on

shore, this accounted for almost 100% of the activities logged in the MPA Watch surveys. Less than 2% of activities were consumptive, either shore based or offshore.

Next Steps

Greater Farallones Association intends to maintain its 160 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.