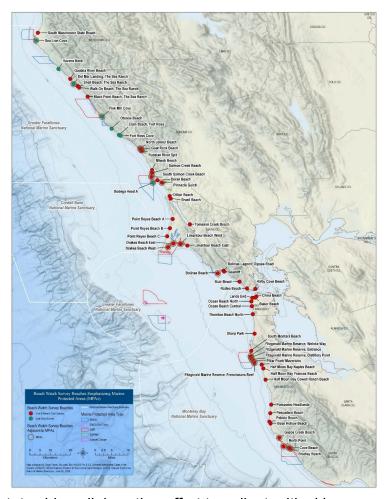


Marine Protected Area (MPA) Watch Regional Report



Mendocino, Sonoma, Marin, San Francisco, and San Mateo Counties January 1, 2023 - Dec 31, 2023





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, conducted by the Beach Watch project, a joint program of the Greater Farallones National Marine Sanctuary (GFNMS) and Greater Farallones Association (GFA) which engages 150 community scientists in 10 MPAs, spanning 5 counties. California State Parks has also collected MPA Watch data at Año Nuevo in the North-central Coast region that have been included in this report.

EXECUTIVE SUMMARY

- The human activity surge observed at all sites during the pandemic began to level off in 2022 and decreased further in 2023. One notable exception is visitation to Fitzgerald Marine Reserve and its sensitive rocky intertidal zones.
 Fitzgerald continues to see a 48% increase in human activities.
- Point Reyes closed beach access due to wildlife closures until June 2023.
- Shore-based recreational activities account for 95% (n=3,701) of observed activities. Offshore recreational activities account for 4% (n=155) of observed activities. Shore-based consumptive activities account for <1% (n=19) of observed activities. Offshore consumptive activities account for <1% (n=15) of observed activities. 4,220 activity events were observed during 2023 in MPAs, 24,051 activity events were observed in 2023 in MPAs and control sites combined.
- Potential MPA violations have increased in several MPAs: Del Mar, Russian River, Limantor, and Ano Nuevo are all primarily driven by shore-based line fishing.





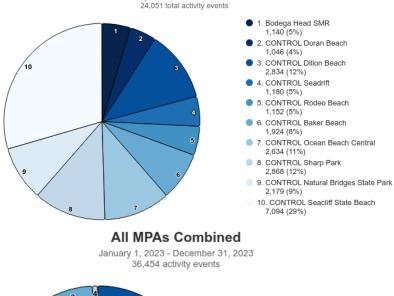
HUMAN USE OF MPAS

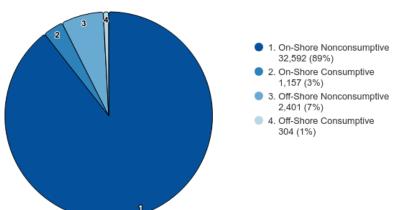
January 1, 2023 – December 31, 2023

OVERVIEW



January 1, 2023 - December 31, 2023





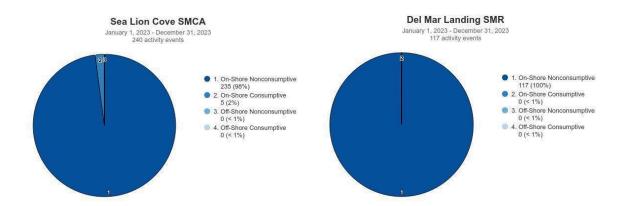
ACTIVITY CLASSIFICATIONS

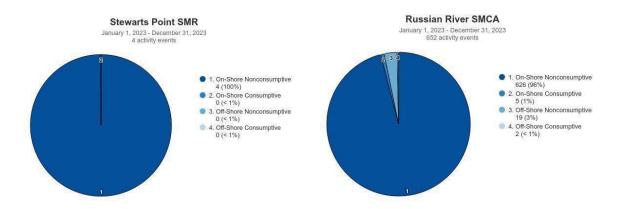
On-Shore - Activities that take place on a sandy or rocky beach. Excludes bluffs, trails, sea walls, parking lots, or other man-made structures. Includes recreation, tidepooling, shore-based fishing, etc.

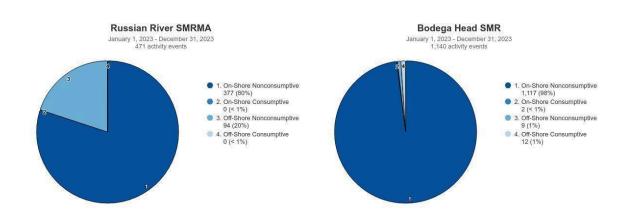
Off-Shore - Activities that take place offshore, typically in knee-deep water or deeper. Includes surfing, SCUBA diving, kayaking, boat fishing, etc.

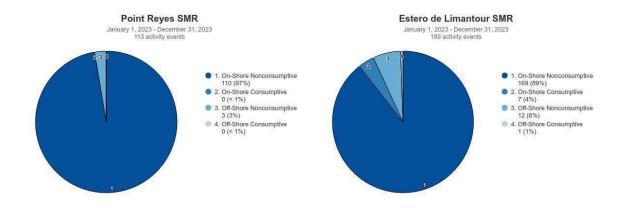
Consumptive - An activity in which a natural resource (i.e. fish, kelp, shells) is being collected. **Non-Consumptive** - An activity in which a natural resource is not collected.

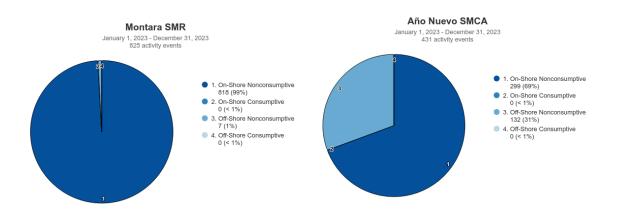
ACTIVITY BY MPA

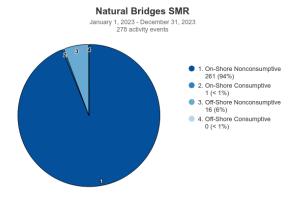






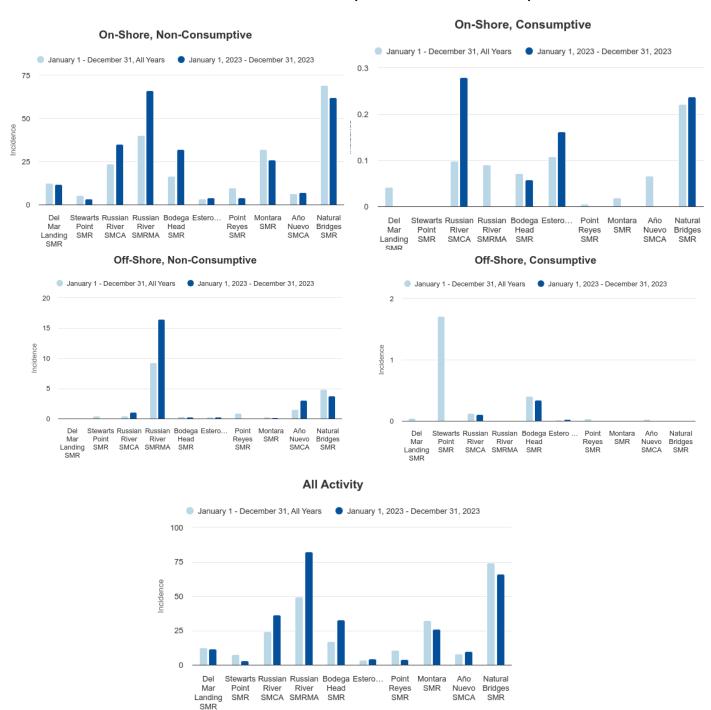




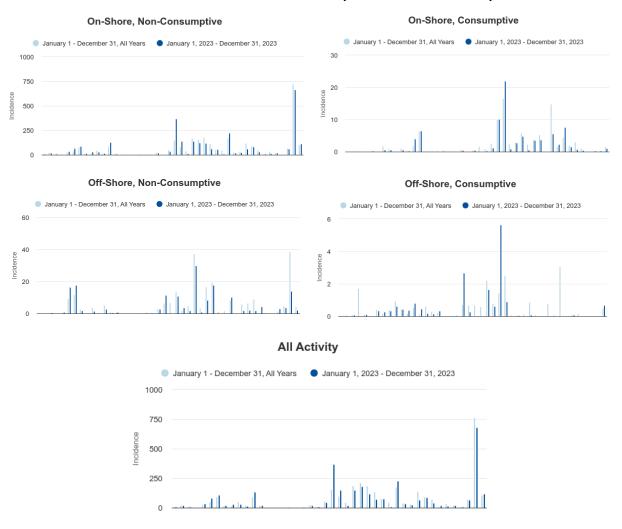


ACTIVITY INCIDENCE BY MPA

INCIDENCE BAR CHARTS (without control sites)



INCIDENCE BAR CHARTS (with control sites)



The charts above 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.

INCIDENCE TABLES (without control sites)

		On-Shore			
	Non-Co	Non-Consumptive		Consumptive	
MPA	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	
Sea Lion Cove SMCA	7.2	7.3	0.2	0.2	
Del Mar Landing SMR	12.5	11.7	0.0	0.0	
Stewarts Point SMR	5.4	3.3	0.0	0.0	
Russian River SMCA	23.6	35.0	0.1	0.3	
Russian River SMRMA	40.3	66.1	0.1	0.0	
Bodega Head SMR	16.4	32.1	0.1	0.1	
Estero de Limantour SMR	3.4	3.9	0.1	0.2	
Point Reyes SMR	9.9	4.0	0.0	0.0	
Montara SMR	32.0	26.5	0.0	0.0	
Año Nuevo SMCA	6.0	4.1	0.1	0.0	
All MPAs Combined	13.6	15.6	0.1	0.1	

		Off-Shore			
	Non-Co	Non-Consumptive		Consumptive	
MPA	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	
Sea Lion Cove SMCA	0.0	0.0	0.1	0.0	
Del Mar Landing SMR	0.0	0.0	0.0	0.0	
Stewarts Point SMR	0.4	0.0	1.7	0.0	
Russian River SMCA	0.5	1.1	0.1	0.1	
Russian River SMRMA	9.3	16.5	0.0	0.0	
Bodega Head SMR	0.4	0.3	0.4	0.3	
Estero de Limantour SMR	0.2	0.3	0.0	0.0	
Point Reyes SMR	0.9	0.1	0.0	0.0	
Montara SMR	0.3	0.2	0.0	0.0	
Año Nuevo SMCA	0.9	0.3	0.0	0.0	
All MPAs Combined	0.6	0.7	0.1	0.1	

		Total	
	Combined		
MPA	January 1 December 31 All Years		
Sea Lion Cove SMCA	7.	5 7.5	
Del Mar Landing SMR	12.	6 11.7	
Stewarts Point SMR	7.	6 3.3	
Russian River SMCA	24.	3 36.4	
Russian River SMRMA	49.	7 82.6	
Bodega Head SMR	17.	3 32.8	
Estero de Limantour SMR	3.	8 4.4	
Point Reyes SMR	10.	8 4.1	
Montara SMR	32.	3 26.7	
Año Nuevo SMCA	7.	0 4.4	
All MPAs Combined	14.	4 16.4	

INCIDENCE TABLES (without control sites)

On-Shore				
	Non-Consumptive Consumptive			
MPA	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Del Mar Landing SMR	12.5	11.7	0.0	0.0
CONTROL Walk On Beach	26.9	20.9	0.1	0.0
CONTROL Black Point Beach	10.2	8.0	0.1	0.0
Stewarts Point SMR	5.4	3.3	0.0	0.0
Russian River SMCA	23.6	35.0	0.1	0.3
Russian River SMRMA	40.3	66.1	0.1	0.0
CONTROL Miwok Beach	78.6	89.0	1.8	0.7
CONTROL Salmon Creek Beach	16.0	17.3	1.0	0.6
Bodega Head SMR	16.4	32.1	0.1	0.1
CONTROL Doran Beach	47.6	30.0	1.1	0.6
CONTROL Pinnacle Gulch	17.9	16.6	0.3	0.4
CONTROL Dillon Beach	88.9	129.0	1.8	4.0
CONTROL Brazil Beach	12.2	11.9	6.4	6.6
CONTROL Tomasini Creek Ranch	4.0	3.1	0.1	0.1
CONTROL Point Reyes Beach A	4.6	4.8	0.2	0.2
CONTROL Point Reyes Beach B	2.0	1.8	0.2	0.0
CONTROL Point Reyes Beach C	10.6	5.2	0.4	0.2
Estero de Limantour SMR	3.4	3.9	0.1	0.2
Point Reyes SMR	9.9	4.0	0.0	0.0
CONTROL Limantour Beach East	23.9	19.1	0.7	0.5
CONTROL Bolinas Lagoon, Dipsea Road	4.3	6.9	0.2	0.0
CONTROL Seadrift	50.0	36.7	0.6	0.5
CONTROL Muir Beach	148.8	370.0	1.8	0.0
CONTROL Rodeo Beach	82.0	138.3	0.9	0.4
CONTROL Kirby Cove	41.8	14.6	2.6	1.3
CONTROL Baker Beach	173.6	140.2	10.1	10.1
CONTROL China Beach	156.7	123.0	16.6	22.0
CONTROL Land's End	177.1	119.1	2.5	0.9
CONTROL Ocean Beach North	116.7	60.8	2.9	2.8
CONTROL Ocean Beach Central	53.3	54.9	5.7	4.8
CONTROL Thornton Beach North	45.5	9.2	2.4	0.6
CONTROL Sharp Park	169.7	223.7	3.8	3.6
CONTROL South Montara Beach	29.9	22.3	5.3	3.8
Montara SMR	31.9	26.1	0.0	0.0
CONTROL Pillar Point, Mavericks	121.1	60.3	14.9	5.6
CONTROL Half Moon Bay, Naples Beach	86.3	82.1	1.8	2.3
CONTROL Half Moon Bay, Frances Beach	54.5	32.3	4.5	7.7
CONTROL Pomponio Headlands	10.4	12.9	2.0	1.6
CONTROL Pescadero Beach	34.5	15.9	3.1	0.8
CONTROL Pebble Beach	20.1	20.0	1.1	0.5
Año Nuevo SMCA	6.6	7.0	0.1	0.0
Natural Bridges SMR	69.3	62.1	0.2	0.2
CONTROL Natural Bridges State Park	724.3	666.6	0.2	0.3
CONTROL Seacliff State Beach	102.7	116.1	1.6	1.1
All MPAs Combined	35.0	36.9	1.4	1.3
	2010			2.0

	Off charge				
	Off-Shore Non-Consumptive Consumptive				
		•		-	
MPA	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	
Del Mar Landing SMR	0.0	0.0	0.0	0.0	
CONTROL Walk On Beach	0.1	0.0	0.1	0.0	
CONTROL Black Point Beach	0.6	0.6	0.1	0.1	
Stewarts Point SMR	0.4	0.0	1.7	0.0	
Russian River SMCA	0.5	1.1	0.1	0.1	
Russian River SMRMA	9.3	16.5	0.0	0.0	
CONTROL Miwok Beach	11.8	17.7	0.4	0.3	
CONTROL Salmon Creek Beach	2.7	2.0	0.2	0.3	
Bodega Head SMR	0.4	0.3	0.4	0.3	
CONTROL Doran Beach	3.6	1.5	0.9	0.6	
CONTROL Pinnacle Gulch	0.5	0.0	0.4	0.4	
CONTROL Dillon Beach	5.3	2.9	0.2	0.4	
CONTROL Brazil Beach	1.1	0.7	0.6	0.8	
CONTROL Tomasini Creek Ranch	0.8	0.9	0.1	0.5	
CONTROL Point Reyes Beach A	0.2	0.0	0.6	0.2	
CONTROL Point Reyes Beach B	0.1	0.1	0.3	0.2	
CONTROL Point Reyes Beach C	0.3	0.1	0.2	0.3	
Estero de Limantour SMR	0.2	0.3	0.0	0.0	
Point Reyes SMR	0.9	0.1	0.0	0.0	
CONTROL Limantour Beach East	0.5	0.2	0.1	0.0	
CONTROL Bolinas Lagoon, Dipsea Road	3.1	2.9	0.7	2.7	
CONTROL Seadrift	6.5	11.7	0.7	0.3	
CONTROL Muir Beach	6.8	0.0	0.7	0.0	
CONTROL Rodeo Beach	13.9	10.9	0.6	0.0	
CONTROL Kirby Cove	2.3	3.8	2.2	1.7	
CONTROL Baker Beach	5.1	1.8	0.8	0.6	
CONTROL China Beach	37.6	30.0	1.5	5.7	
CONTROL Land's End	3.3	0.9	2.5	0.9	
CONTROL Ocean Beach North	16.9	8.4	0.1	0.0	
CONTROL Ocean Beach Central	19.3	17.7	0.0	0.1	
CONTROL Thornton Beach North	1.1	0.0	0.1	0.0	
CONTROL Sharp Park	1.9	0.2	0.9	0.1	
CONTROL South Montara Beach	8.4	10.4	0.1	0.0	
Montara SMR	0.3	0.2	0.0	0.0	
CONTROL Pillar Point, Mavericks	5.9	1.8	0.8	0.0	
CONTROL Half Moon Bay, Naples Beach	6.7	2.2	0.1	0.0	
CONTROL Half Moon Bay, Frances Beach	9.1	2.0	3.1	0.0	
CONTROL Pomponio Headlands	0.4		0.0		
CONTROL Pescadero Beach	0.7	0.1	0.1	0.1	
CONTROL Pebble Beach	0.1	0.1	0.2	0.0	
Año Nuevo SMCA	1.5	3.1	0.0	0.0	
Natural Bridges SMR	4.9		0.0		
CONTROL Natural Bridges State Park	38.7		0.0		
CONTROL Seacliff State Beach	4.5		0.5		
All MPAs Combined	3.1		0.3		
	311	2.17	5.0	0.5	

	Coi		
	Combined		
MPA	January 1 December 31 All Years	January 1, 2023 through December 31, 2023	
Del Mar Landing SMR	12.6	11.7	
CONTROL Walk On Beach	27.2	20.9	
CONTROL Black Point Beach	10.9	8.7	
Stewarts Point SMR	7.6	3.3	
Russian River SMCA	24.3	36.4	
Russian River SMRMA	49.7	82.6	
CONTROL Miwok Beach	92.7	107.7	
CONTROL Salmon Creek Beach	19.8	20.2	
Bodega Head SMR	17.3	32.8	
CONTROL Doran Beach	53.3	32.7	
CONTROL Pinnacle Gulch	19.2	17.4	
CONTROL Dillon Beach	96.2	136.3	
CONTROL Brazil Beach	20.2	20.0	
CONTROL Tomasini Creek Ranch	5.0	4.6	
CONTROL Point Reyes Beach A	5.6	5.3	
CONTROL Point Reyes Beach B	2.7	2.1	
CONTROL Point Reyes Beach C	11.5	5.7	
Estero de Limantour SMR	3.8	4.4	
Point Reyes SMR	10.8	4.1	
CONTROL Limantour Beach East	25.2	19.8	
CONTROL Bolinas Lagoon, Dipsea Road	8.3	12.5	
CONTROL Seadrift	57.8	49.2	
CONTROL Muir Beach	158.1	370.0	
CONTROL Rodeo Beach	97.3	149.6	
CONTROL Kirby Cove	48.9	21.3	
CONTROL Baker Beach	189.6	152.7	
CONTROL China Beach	212.4	180.7	
CONTROL Land's End	185.5	121.8	
CONTROL Ocean Beach North	136.6	72.0	
CONTROL Ocean Beach Central	78.4	77.5	
CONTROL Thornton Beach North	49.1	9.7	
CONTROL Sharp Park	176.3	227.6	
CONTROL South Montara Beach	43.7	36.5	
Montara SMR	32.2	26.3	
CONTROL Pillar Point, Mavericks	142.6	67.6	
CONTROL Half Moon Bay, Naples Beach	94.9	86.6	
CONTROL Half Moon Bay, Frances Beach	71.2	42.0	
CONTROL Pomponio Headlands	12.8	18.8	
CONTROL Pescadero Beach	38.5	16.9	
CONTROL Pebble Beach	21.5	20.6	
Año Nuevo SMCA	8.2	10.1	
Natural Bridges SMR	74.4	66.2	
CONTROL Natural Bridges State Park	763.2	680.9	
CONTROL Seacliff State Beach	109.4	120.2	
All MPAs Combined	39.9	41.3	

Total

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 MPAs 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 MPAs 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 2023, GFA's MPA Watch reports a rate of 7.5 total uses per mile surveyed in this MPA. This is comparable to the January-December 2022 data rate. People observed in the MPA were primarily taking part in non-consumptive activities on-shore, such as beach recreation, wildlife viewing, and on leash animal use. Onshore recreation accounted for 98% of the activities logged in the MPA Watch surveys. Onshore consumptive activities accounted for 2% of human use, no change from 2022.

Del Mar Landing State Marine Reserve

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 11.7 total uses per mile surveyed in this MPA. This is an 49% decrease compared to the January-December 2022 data rate. 100% of people observed in the MPA were taking part in non-consumptive activities onshore, such as beach recreation, wildlife watching, and dogs on leash. No consumptive activities were observed.

Stewarts Point State Marine Reserve

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 3.3 total uses per mile surveyed in this MPA. Survey effort was too low (n=2) to draw comparisons with previous years. 100% of people observed in the MPA were taking part in shore-based non-consumptive activities such as wildlife watching. No consumptive activities were observed.

Russian River State Marine Conservation Area

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 36.4 total uses per mile surveyed in this MPA. This is an 66% increase compared to the January-December 2022 data rate. 94% of people observed in the MPA were taking part in non-consumptive activities on-shore, such as beach recreation and wildlife viewing and 3% of activities were offshore non-consumptive, surfing. Consumptive activities accounted for 1% of activities observed both onshore and offshore.

Russian River State Marine Recreational Management Area

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 82.6 total uses per mile surveyed in this MPA. This is an 49% increase compared to the January-December 2022 data rate. 80% of people observed in the MPA were

taking part in shore-based non-consumptive activities such as beach recreation, wildlife watching, and 20% offshore recreation kayaking and paddle boarding. No consumptive activities were observed.

Bodega Head State Marine Reserve

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 32.8 total uses per mile surveyed in this MPA. This is a 28% increase compared to the January-December 2022 data rate. 98% of people observed in the MPA were taking part in non-consumptive activities onshore recreation, such as beach recreation and wildlife watching. Consumptive activities, both on and offshore, accounted for 2% of activities observed.

Estero de Limantour State Marine Reserve

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 4.4 total uses per mile surveyed in this MPA. This is comparable to the January-December 2022 data rate. 95% of people observed in the MPA were taking part in onshore non-consumptive activities such as beach recreation, wildlife watching, dog off leash, and surfing (4%). 5% of human use was comprised of hook and line fishing both on and offshore.

Point Reyes State Marine Reserve

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 4.1 total uses per mile surveyed in this MPA. This is a 41% decrease compared to the January-December 2022 data rate. 97% of people observed in the MPA taking part in non-consumptive shore-based activities such as beach recreation, and 3% in offshore non-consumptive recreation such as surfing and kayaking. No consumptive activities were observed.

Montara State Marine Reserve

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 26.7 total uses per mile surveyed in this MPA. This is a 47.5% increase compared to the January-December 2022 data rate. 99% of people observed in the MPA taking part in non-consumptive shore-based activities such as beach recreation, wildlife watching and tide-pooling (27%), and offshore non-consumptive surfing (1%). No consumptive activities were observed.

Año Nuevo State Marine Conservation Area

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 10.2 total uses per mile surveyed in this MPA. This is a 20% increase compared to the January-December 2022 data rate. 100% of people observed in the MPA were taking part in non-consumptive activities onshore and offshore recreation such as wildlife watching and beach recreation, on leash (1%) and off leash dogs (2%), and surfing (30%). Consumptive activities totaled less than 1% for both on and offshore.

Natural Bridges SMR

Between the months of January and December 2023, GFA's MPA Watch reports a rate of 66.2 total uses per mile surveyed in this MPA. 99% of people observed in the MPA were taking part in non-consumptive activities onshore and offshore recreation such as beach recreation (57%, tidepooling (36%), and surfing (4%). Consumptive activities totaled less than 1% for both on and offshore (hand collection of biota only).

CA State Parks conducts these surveys, however typically only during winter months when surveyors are out monitoring monarch butterflies. Most individuals visit the beach and control transect during the summer. While it's the slow season for the Visitor's Center, there are many weekend days where you cannot see across the short beach because of the density of people enjoying the beach. The beach is small, but they've had upwards of 600 people crammed onto the beach at once because it's one of the most popular beaches in Santa Cruz, both for locals and tourists. The tidepools within the MPA are popular during the summer, though the tides are not typically favorable.

Generally, people respect the rules of the park and the rules of the MPA. CA State Parks does occasionally see dogs in the tidepools and we frequently see dogs off leash in the small beach that is adjacent to the De Anza Mobile Home Park. Residents of the park frequently let their dogs run off leash here despite repeated reminders from interpreters. They rarely have collecting in the tidepools beyond a kid with a bucket who doesn't know better (who returns the animals when asked, of course).

CASP does still see lots of confusion from guests on where fishing is and isn't allowed, especially because a majority of our signage which was swept away during the January storms has not been replaced. It also isn't helped by the fact that the rock that marks the beginning of the MPA is currently covered with sand.

POTENTIAL VIOLATIONS

MPA	January 1 December 31 All Years	January 1, 2023 through December 31, 2023
Del Mar Landing SMR	183	14
Stewarts Point SMR	71	0
Russian River SMCA	154	15
Russian River SMRMA	32	1
Bodega Head SMR	1,303	363
Estero de Limantour SMR	97	13
Point Reyes SMR	28	0
Montara SMR	379	0
Año Nuevo SMCA	149	13
Natural Bridges SMR	1	1
All MPAs Combined	2,397	420

NEXT STEPS

GF/CBNMS and GFA continue to maintain roughly 150 volunteers through training new volunteers and continuing education for experienced volunteers. MPA Watch collaborates 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 maintains publicly accessible data on our website to make it accessible to partners, resource agencies, municipalities, and other interested parties. One of the goals 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.

CA State Parks has determined that more interpretive and regulatory signage explaining the Natural Bridges MPA, including replacements for their current signage which is faded. CASP plans to continue MPA Watch data collection, including training their new docent class on MPA Watch, and training/refreshing staff members on proper data collection and maintaining their docents MPA Watch data uploads. They are also going to more actively ask docents to take data to try to increase the number of surveys per month.

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 <u>wildlife.ca.gov/MPAs</u>. 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.