



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

Marin County January 1, 2025 – June 30, 2025



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 provides insight into 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 Marin County Marine Protected Area (MPA) Watch Program, organized by the Environmental Action Committee of West Marin, engages community scientists in four MPAs in Marin County and one adjacent site.

### **Executive Summary**

This report includes MPA Watch data from January 1 – June 30, 2025<sup>1</sup>. In this period, 126 surveys were conducted by 35 volunteers who observed 2,341 activities over 163 survey miles.

Highlights include that Duxbury Reef continues to have the highest activity incidence of all locations, followed by Control PRSOUTH. Activity rates increased at Estero de Limantour (though remains very low), Point Reyes SMR, and Duxbury Reef, but decreased at Control PRSOUTH and Corte Madera Marsh.

- Point Reyes State Marine Reserve (Point Reyes SMR), Estero de Limantour State Marine Reserve (Estero de Limantour SMR), and Limantour Beach Control (Control PRSouth) are accessed through the Point Reyes National Seashore.
- Duxbury Reef State Marine Conservation Area (Duxbury SMCA) is accessed through Marin County Parks and Open Space at Agate Beach.

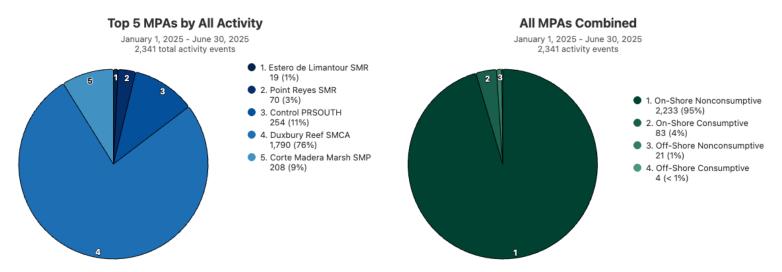
<sup>&</sup>lt;sup>1</sup> Graphs and tables below include comparisons of data in mid-year 2025 with All Years.





 Corte Madera Marsh State Marine Park (Corte Madera Marsh SMP) is a Preserve accessed through the city of Corte Madera.

### HUMAN USE OF MPAS [January 1 - June 30, 2025]



### **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.

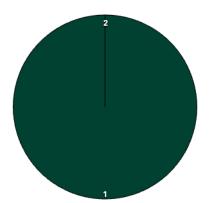
**Off-Shore** - Activities that take place offshore, typically in knee-deep water or deeper. Includes surfing, SCUBA diving, kayaking, boat fishing, etc.

**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<sup>1</sup> [January 1 - June 30, 2025]



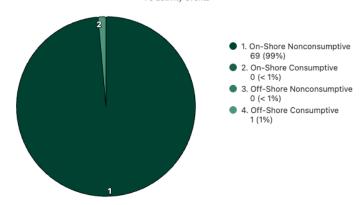
January 1, 2025 - June 30, 2025 19 activity events



- 1. On-Shore Nonconsumptive 19 (100%)
- 2. On-Shore Consumptive 0 (< 1%)</li>
- 3. Off-Shore Nonconsumptive 0 (< 1%)</li>
- 4. Off-Shore Consumptive 0 (< 1%)</li>

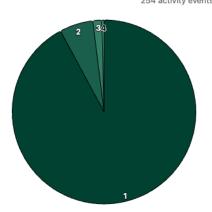
#### Point Reyes SMR

January 1, 2025 - June 30, 2025 70 activity events



#### Control PRSOUTH

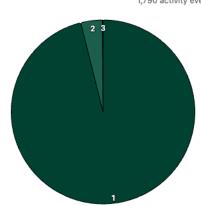
January 1, 2025 - June 30, 2025 254 activity events



- 1. On-Shore Nonconsumptive 234 (92%)
- 2. On-Shore Consumptive 15 (6%)
- 3. Off-Shore Nonconsumptive 4 (2%)
- 4. Off-Shore Consumptive 1 (< 1%)</li>

#### **Duxbury Reef SMCA**

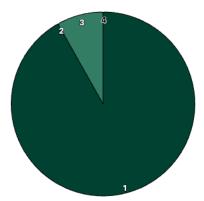
January 1, 2025 - June 30, 2025 1,790 activity events



- 1. On-Shore Nonconsumptive 1,720 (96%)
- 2. On-Shore Consumptive 68 (4%)
- 3. Off-Shore Nonconsumptive 0 (< 1%)</li>
- 4. Off-Shore Consumptive 2 (< 1%)</li>

#### Corte Madera Marsh SMP

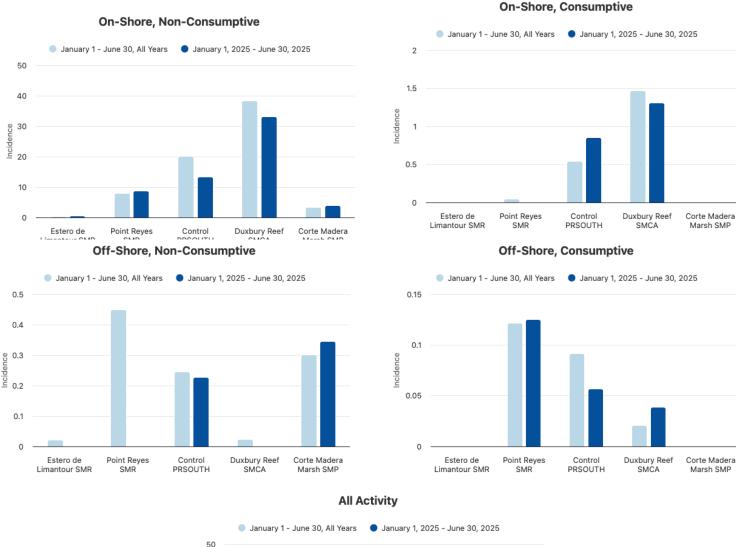
January 1, 2025 - June 30, 2025 208 activity events

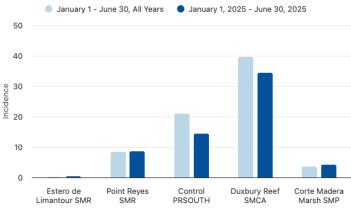


- 1. On-Shore Nonconsumptive 191 (92%)
- 2. On-Shore Consumptive 0 (< 1%)</li>
- 3. Off-Shore Nonconsumptive 17 (8%)
- 4. Off-Shore Consumptive 0 (< 1%)</li>

<sup>&</sup>lt;sup>1</sup> Observation count of activities (onshore / offshore) and type (consumptive / non-consumptive) in each survey area.

# ACTIVITY INCIDENCE<sup>2</sup> BY MPA: Comparing All Years<sup>3</sup> and 2025





<sup>&</sup>lt;sup>2</sup> The charts display incidence values for each MPA monitored by MPA Watch in Marin County. Incidence is calculated as the number of activities recorded divided by the total survey-miles (accounts for differences in number of surveys conducted at each site).

<sup>&</sup>lt;sup>3</sup> Activity Incidence "All Years" data includes 2016 through 20:

### ACTIVITY INCIDENCE<sup>4</sup> TABLES<sup>5</sup> BY MPA

		On-Shore			
	Non-Cor	Non-Consumptive		Consumptive	
MPA	January 1 June 30 All Years	January 1, 2025 through June 30, 2025	January 1 June 30 All Years	January 1, 2025 through June 30, 2025	
Estero de Limantour SMR	0.3	0.5	0.0	0.0	
Point Reyes SMR	7.9	8.6	0.0	0.0	
Control PRSOUTH	20.1	13.3	0.5	0.9	
Duxbury Reef SMCA	38.3	33.1	1.5	1.3	
Corte Madera Marsh SMP	3.4	3.9	0.0	0.0	
All MPAs Combined	11.4	13.7	0.3	0.5	

	Off-Shore			
	Non-Consumptive		Consumptive	
MPA	January 1 June 30 All Years	January 1, 2025 through June 30, 2025	January 1 June 30 All Years	January 1, 2025 through June 30, 2025
Estero de Limantour SMR	0.0	0.0	0.0	0.0
Point Reyes SMR	0.4	0.0	0.1	0.1
Control PRSOUTH	0.2	0.2	0.1	0.1
Duxbury Reef SMCA	0.0	0.0	0.0	0.0
Corte Madera Marsh SMP	0.3	0.3	0.0	0.0
All MPAs Combined	0.2	0.1	0.0	0.0

	Total			
	Combined			
MPA	January 1 June 30 All Years	January 1, 2025 through June 30, 2025		
Estero de Limantour SMR	0.4	0.5		
Point Reyes SMR	8.5	8.8		
Control PRSOUTH	21.0	14.4		
Duxbury Reef SMCA	39.8	34.5		
Corte Madera Marsh SMP	3.7	4.2		
All MPAs Combined	12.0	14.3		

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> The tables display incidence values for each MPA monitored by MPA Watch in Marin County. Incidence is calculated as the number of activities recorded divided by the total survey-miles

### **BREAKDOWN BY MPA**

This report includes MPA Watch data from January 1 – June 30, 2025<sup>6</sup>. The data is collected by trained on-shore observers and is organized into categories and tables that highlight on-shore and off-shore consumptive and non-consumptive uses at MPAs located in Marin County.

Data collection in the winter of 2025 at Drakes Beach was limited due to beach closure and access restrictions. Point Reyes SMR and Drakes Estero/Estero de Limantour are surveyed there. The table below summarizes the access closures and limitations by MPA and dates of impact during 2025.

MPA Name	2025 Closures	
Point Reyes SMR	Drakes Beach access closed January 8 – April 20, 4:00 pm to 10:00 am when Seashore staff are absent to ensure safe interactions for elephant sea pupping.	
Estero de Limantour SMR		
Control PRSouth	No closure	
Duxbury Reef SMCA	No closure	
Corte Madera Marsh SMP	No closure	

a. Estero de Limantour State Marine Reserve (Estero de Limantour SMR):

This MPA is observed from two survey transects within Point Reyes National Seashore and accessed from either 1) Limantour Beach and walking north-west, or 2) Drakes Beach and walking east. This MPA does not allow any on-shore or offshore consumptive uses.

Volunteers conducted 9 surveys during this period in this remote MPA and recorded a use rate of less than 1 activity per mile surveyed: 0.5 total use count per survey mile. Though the use rate remains very low, this represents an increase from 0.1 activities per mile for the same period in 2024, and slightly more than the average rate over All Years (0.4).

Similar to 2024, 100% of the 19 recorded activities counted in 2025 in this MPA were non-consumptive and on-shore. Non-consumptive observations in this MPA included on-shore sandy beach recreation, and wildlife viewing.

Dogs are restricted from this MPA as it is critical habitat for the Western Snowy Plover and the seasonal presence of marine mammals. Similar to 2024, zero (0) animals on- or off-leash were recorded.

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<sup>&</sup>lt;sup>6</sup> Graphs and tables include full year comparisons of data in "

# MPA<sup>®</sup> WATCH

### MARINE PROTECTED AREA (MPA) WATCH REGIONAL REPORT

In total, there were no violations recorded in Estero de Limantour in 2025.

### b. Point Reyes State Marine Reserve (Point Reyes SMR)

This MPA is observed from two survey transects within the Point Reyes National Seashore and accessed from either 1) Limantour Beach and walking northwest, or 2) Drakes Beach. Beach access at Drakes Beach was closed from January 8 through April 20, 2024, due to elephant seal pupping. This MPA does not allow any on-shore or offshore consumptive uses.

From January through June 2025, volunteers conducted 10 surveys of this MPA (similarly 13 surveys during this period in 2024 but much less than 2023 with 58 surveys). With 70 recorded activities, this MPA had a use rate of 8.8 activities per mile surveyed. This marks an increase of 40% compared to the 2024 rate of 6.3 (and 4.3 in 2023) activities per mile, yet slightly greater than the All Years average of 8.5.

During 2025, 99% of the observations in the MPA were on-shore, non-consumptive beach recreation, mostly sandy, and 2 observations for rocky beach recreation. There was one recorded offshore consumptive use which was active recreational boat fishing with line.

Dogs are restricted from beach access at Drakes Beach (sandy beach access to this MPA) and the north-west portion of Limantour Beach as it is critical habitat for the Western Snowy Plover and the seasonal presence of marine mammals. There were no observations of animals on or off leash during this period.

There was 1 observation of a potential MPA violation observed during this period in 2025, which was consumptive boat fishing.

### c. Limantour Beach (Control PRSOUTH)

This transect is observed within the Point Reyes National Seashore and accessed at Limantour Beach. This area borders an MPA but is not itself within an MPA, therefore consumptive uses – like fishing from shore or offshore – are allowable within the appropriate season and with licenses.

Volunteers conducted 8 surveys and recorded 254 activities in this MPA control site during the first half of 2025, with a use rate of 14.4 activities per mile surveyed. This represents a 20% decrease compared to 2024's rate of 18.0 during this same period. This use rate is also less than the All Years use rate of 21.0.

92% of the observations in Control PRSouth were on-shore, non-consumptive uses (82% sandy beach recreation, 5% animals on-leash, 6% animals off- leash). On-shore consumptive hook-and-line fishing constituted 6% of the total, with 1 observation of hand collection of biota. Off-shore non-consumptive recreation made up 1% of the total, and off-shore consumptive boat fishing was less than 1%.



# MPA<sup>®</sup> WATCH

### MARINE PROTECTED AREA (MPA) WATCH REGIONAL REPORT

Leashed dogs are allowed to access the southern portion of Limantour Beach. Dogs are restricted from the north-west portion of the beach as it is critical habitat for the Western Snowy Plover and the seasonal presence of marine mammals. Volunteers recorded 26 animal observations: 12 on-leash and 14 off-leash.

In total, there were no MPA violations recorded in this transect in 2025, but the observations of dogs off-leash are a violation of NPS rules.

### d. Duxbury Reef State Marine Conservation Area (Duxbury SMCA)

This MPA is observed from within Marin County Parks and Open Space and Point Reyes National Seashore and accessed at Agate Beach, managed by Marin County Parks and Open Space. This MPA allows hook and line fishing from shore and abalone harvest with appropriate open season and licenses.

From January 1st through June 30th, 2025, 47 surveys were conducted. This is greater than the 30 surveys conducted in 2024 during this period. Volunteers recorded 1,790 activities with a use rate of 34.5 activities per mile surveyed; an 18% increase from 2024's use rate of 29.2, and represents a general increased trend since 2018, when the use rate was 14.0. The All Years higher average use rate of 39.8 is influenced by a data outlier in 2021 with a use rate of 77.5, when many coastal areas experienced a significant increase in visitation during the pandemic. Duxbury Reef generally experiences the highest use rate of all the MPAs monitored by Marin MPA Watch in yearly data. In this mid-year period, 76% of all Marin MPA Watch activity occurred at Duxbury Reef.

96% of the mid-year observations were onshore, non-consumptive uses, slightly more than last year (93%). Non-consumptive tidepooling represented the majority of observations: 64% (1,146); sandy beach recreation made up 23% of observations (413); rocky beach recreation totaled 3% (51); and animals off-leash represented 2% of observations (40).

Onshore consumptive activities during the first half of 2025 consisted of 4% of observations compared with 7% in 2024 and 4% in 2023. Consumptive activities included 54 (3%) observations of hand collection of biota, which is above the All Years average of 2%. There were 14 (1%) observations of shore-based hook-and-line fishing (3% in 2024), with 1% in All Years average. There were 2 observations of consumptive offshore recreational boat fishing in 2025.

The number of potential violations counted by volunteers was 119 in January-June 2025, greater than 2024 which was 68. This is a much greater incidence of violations than any other MPA survey site, with only 1 other potential violation observed (Point Reyes SMR) across the other survey sites combined.

Leashed dogs are allowed on Agate Beach and Duxbury Reef. In the 47 surveys conducted, volunteers recorded 31 on-leash dog observations and 40 off-leash.





Duxbury Reef SMCA continues to have a high use compared to other MPAs surveyed by Marin MPA Watch, accounting for 61% of all activities (throughout All Years) in Marin MPA Watch locations in one of the smallest survey areas. Duxbury Reef is a sensitive intertidal habitat where human impacts (trampling and collecting) may have long-term negative impacts on habitat and species. The Duxbury Docent program was launched in January 2022 in response to the MPA Watch data showing high use and potential violations. Thirty volunteers have been trained from 2022-2025 to educate visitors on rocky intertidal marine ecology, MPAs, and tidepool stewardship practices.

Volunteer docents have noted that when engaging with individuals who are collecting biota, they observed that most collection was by people who do not know of or understand MPA regulations at Duxbury Reef. Most people who engage with docents appreciate learning about the impacts of handling and collecting, and replaced the organisms.

e. Corte Madera Marsh State Marine Park (Corte Madera Marsh SMP)

This MPA is observed within the city limits of Corte Madera and accessed by the network of public trails at Corte Madera Ecological Reserve. This area is a State Marine Park and as such consumptive uses, like recreational hook and line fishing are allowable within the appropriate season and licenses.

Volunteers conducted 52 surveys and recorded a use rate of 4.2 activities per mile surveyed, a marginal decrease compared to 2024's rate of 4.6, but higher than All Years average of 3.7.

On-shore non-consumptive activities comprised 92% of the activities, mostly including recreation (66%), animals on-leash (13%), wildlife viewing (5%) and driving (5%, and mostly consists of bike riding with one report of PGE vehicle).

Offshore, nonconsumptive activities accounted for the remaining 18% of observations, with activities such as other boating comprising 7% (most of these observations were of the Golden Gate Commuter Ferry), with the remaining 1% of observations being power boat and sailing.

Leashed dogs are allowed on the walking paths, but not in the wetland or marsh. Of the 52 surveys conducted, volunteers recorded 33 dog observations, including 28 on-leash and 5 off-leash. No observations of dogs in the wetland were reported and no MPA violations were recorded, yet preserve rules state that dogs must be on-leash.



### POTENTIAL VIOLATIONS

The rate of consumptive activities observed in all Marin MPA Watch sites was somewhat lower in the first half of 2025 (87 observations, 4% of the total). This is less than last year (6%), yet greater than All Years (3%). Almost all consumptive observations this period in 2025 come from Duxbury Reef, mostly consisting of hand collection of biota (54 recorded observations).

Recurring issues with the illegal take and disturbance of tidepool organisms in Duxbury Reef SMCA is an ongoing problem during low tides. Evidence suggests consumptive activity rates are higher than reflected in the MPA Watch data, as shown by docent shift reports from EAC's Duxbury Docent program. In addition to MPA Watch surveys, Docents report observations of "take" observed during their docent shifts. Most observations consist of picking up organisms and collecting for observation (e.g. by curious visitors including children) and not for eating. The docents' engagement with visitors is usually successful; by learning about the MPA regulations and sensitivity of marine life, visitors tend to cease collection, and return the marine life to the tidepool.

With growing outreach to educate the community through temporary signage on the Agate Beach trail, social media posts and other online platforms, and direct engagement including tabling at the trailhead, we are working to inform visitors about tidepool stewardship practices before and during their visit. We continue to communicate with Marin County Parks and Open Space, Point Reyes National Seashore, California Department of Fish and Wildlife, and the California Fish and Game Commission to inform these agencies about poaching activities and the need for increased enforcement presence and improved signage to help inform visitors.

### **NEXT STEPS**

Marin MPA Watch continues to collect data in MPAs that are accessed from Marin County with a goal of two surveys per month, per MPA. During our training season so far in 2025, Marin MPA Watch has trained 33 new volunteers (15 of them from a high school class). We have two more training sessions scheduled for July 19<sup>th</sup> and August 2<sup>nd</sup> at Limantour Beach and Corte Madera Marsh respectively, plus we hope to partner again with the same high school group to train in early September.

Public access to Drakes Beach was limited for a short time during the winter of this year and will likely occur each year as elephant seals continue to use Drakes Beach for pupping. We continue to have the fewest active volunteers at Drakes Beach, but we plan to continue recruitment outreach into the fall.

Marin MPA Watch intends to collaborate with the California Department of Fish and Wildlife to distribute MPA Watch reports to regional managers and other stakeholders to improve outreach about MPA Watch and contribute to the management and enforcement of MPAs. MPA Watch continues to expand its network of partner organizations to enhance the scale and scope of MPA monitoring across California.

Each year, MPA Watch makes our human use data available on their website to make it accessible to partners, resource agencies, municipalitie

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 communities.

### 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 <a href="mailto:mpawatch.org">mpawatch.org</a>. 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.

The Marin MPA Watch program is a partnership of the Environmental Action Committee of West Marin (EAC), California Academy of Science, and Point Reyes National Seashore. The program is managed by EAC. For more information / to become involved with the program, please visit <a href="mailto:eacmarin.org/mpa-watch">eacmarin.org/mpa-watch</a>.

### 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.

# Graphs of dog use trends at Limantour Beach, Corte Madera Marsh, and Agate Beach/Duxbury Reef

Graphs of activity for dogs on and off-leash will be included annually in year-end reports.

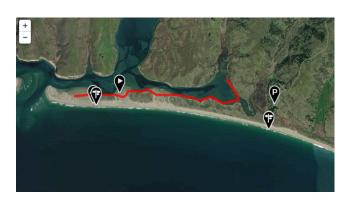
### **MAPS**

\*Note: Red lines imply the observation edges (Estero de Limantour, Point Reyes SMR, and Corte Madera Marsh) and for others, walking pathways for the transects (Point Reyes SMR, Limantour Beach, Duxbury Reef) and Corte Madera Marsh.



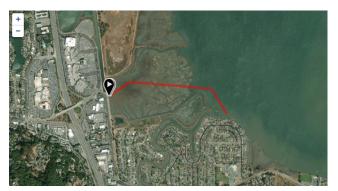


Estero de Limantour State Marine Reserve (Estero de Limantour SMR)





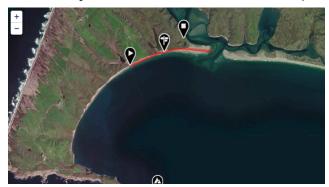
Corte Madera Marsh State Marine Park (Corte Madera Marsh SMP)

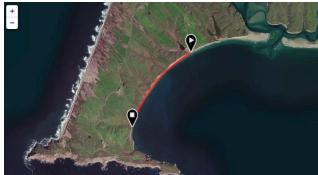






Point Reyes State Marine Reserve (Point Reyes SMR)







Limantour Beach (Control PRSOUTH)



Duxbury Reef State Marine Conservation Area (Duxbury SMCA)



