# Report on wildlife in Motorized Personal Watercraft Zone 5 and use of Motorized Personal Watercraft Zone 1 in Monterey Bay National Marine Sanctuary

## Prepared by

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## Introduction

In 2016, Monterey Bay National Marine Sanctuary (MBNMS) began reviewing activities and regulations within the sanctuary as part of the periodic management plan review process. MBNMS engaged the Greater Farallones National Marine Sanctuary (GFNMS) in the review, since GFNMS manages activities, except water quality issues, in MBNMS north of Santa Cruz County into Marin County. GFNMS identified and assessed potential regulatory changes to two MBNMS motorized personal watercraft (MPWC) zones in San Mateo County. This report reviews three-and-a-half years of data collected from the GFNMS Beach Watch program, a public-private partnership between GFNMS and the non-profit Greater Farallones Association, on human use and wildlife in MPWC Zones 1 and 5. Based on the data collected GFNMS recommends increasing MPWC access in Zone 5 and removing Zone 1.

## **Methods**

Since the fall of 1993, Beach Watch observers have conducted bi-monthly surveys along the coast of GFNMS and the northern portion of MBNMS. Over 150 citizen-scientists monitor 56 beaches spanning 210 miles (339 km) of coast from Point Año Nuevo in San Mateo County north to Manchester Beach in Mendocino County. Surveyors census an area on a regular and consistent basis recording wildlife (live and dead), oil deposition, and human recreational use. The information populates a long-term data set used to calculate an index of use for a particular area.

Surveyors must complete a 40-hour training on wildlife identification, oil evidence collection, chain-of-custody, and data collection methods for wildlife and human uses. In addition, surveyors must complete an annual advanced training course. If a surveyor wants to participate in oil spill response, then the surveyor must also complete a Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) course and annual refresher as well as a Shoreline Cleanup and Assessment Technique (SCAT) course.

The Beach Watch program surveys each beach segment 26 times a year, once every two weeks, on a regular and consistent basis based on a survey schedule. Surveys must be completed within a two-day window on each side of the scheduled survey. Surveyors collect data both within the upland boundaries of their beach segment and in the adjacent nearshore waters.

Minimum data recorded for each survey include: beach name, location, date, approximate tide height, Beaufort Wind number, visibility, the name of the person(s) making the observations, photographs of the beach profile, survey hours, mileage, and percent of beach covered during the survey. Surveyors record information on carcasses found on the beach including: species, age, sex (when possible), evidence for cause of death, presence of oil, state of decomposition, and evidence of scavenging. All live animals viewed within 300 feet (90 m) of the beach are documented as well as all identifiable marine mammals beyond 300 feet (90 m). In addition, surveyors collect visitor use and activities. The survey forms list 26 visitor use/activity codes including "person jet skiing.' Beach Watch observers typically record human use activities in

their data tables out to ¼ mile offshore. However, observers are instructed to record additional notes on any noteworthy recreational activities in the area, especially MPWC use, in the "notes" field of the observer logs and, thus, any MPWC observations beyond ¼ mile are captured in the survey comments. The sanctuary and its partners, such as State MPA Watch, use the data to evaluate human activities occurring at a particular beach as well as to assess wildlife disturbance impacts.

## **Results**

MPWC Zone 5 (located at the Mavericks Surf Break off Pillar Point)

GFNMS staff analyzed Beach Watch wildlife observation data from beach segment 3-35, Pillar Point/Mavericks Beach. From beach segment 3-35, surveyors have a direct line of sight to MPWC Zone 5. MPWC users have restricted seasonal access to Zone 5 from December to February and only when a High Surf Warning (HSW) has been issued by the NOAA National Weather Service. The restrictions limit MPWC use to the months and ocean conditions when sensitive wildlife are least likely to be present. From 2008 to 2017 surveyors observed harbor seals in the area around Zone 5 on average 3 times more frequently from March to November (See Figure 1).



Figure 1: Harbor seal mean monthly rates 2008-2017 (harbor seals per kilometer observed in the vicinity of Zone 5 during the open MPWC access months of Dec-Feb and closed MPWC access months of Mar-Nov).

Harbor seals were the most abundant pinniped found on 3-35 surveys. Figure 2, which includes all observations of pinnipeds (Harbor Seals, California and Steller sea lions, and all unidentified pinnipeds), shows that surveyors more frequently observed pinnipeds in the area during the months of March through November and less frequently during the months of December, January and February.

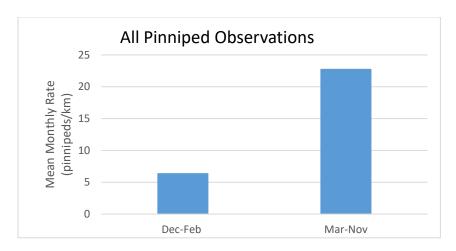


Figure 2: Pinniped mean monthly rates 2008-2017 (all pinnipeds per kilometer observed in the vicinity of Zone 5 during the open MPWC access months of Dec-Feb and closed MPWC access months of Mar-Nov).

Zone 5 is the northern extent of the Southern sea otter range. From 2014 to 2018, the U.S. Geological Survey recorded four reports of stranded sea otters in the region during summer months between Point San Pedro and Martin's Beach in San Mateo County. Three Southern sea otters were collected with shark bites and one had domoic acid poisoning. Prior to 2014, Beach Watch data has recorded four live Southern sea otter observations in the vicinity of Zone 5. Half of these were recorded during summer months (in June 1996 and July 2005) and half during winter months (in February 2007 and January 2011).

## MPWC Zone 1 (located nearshore in Half Moon Bay)

Beach segment 4-03 Naples and beach segment 4-05 Frances Beach located along the northern shore of Half Moon Bay provide surveyors a direct line of site to Zone 1 (See Figure 1). Surveyors have visual access to all of Zone 1 and document human use activities in the area as described above under the "Methods" section. These recorded observations include a description of the activity and type of use occurring.

GFNMS staff analyzed the data to determine the level of MPWC use occurring in Zone 1. From 2014-2017 one hundred and seventy-five surveys were completed for the two beach segments (See Figure 3).



Figure 3: MPWC zones 5 and 1 and Beach Watch survey segments 4-03 and 4-05 in Half Moon Bay.

Over the approximately three-and-a-half year period surveys occurred at least one time on every day of the week. Table 1 summarizes the number of surveys and days of the week when surveyors collected data.

Table 1: Number of days Beach Watch surveys occurred on beach segments 4-03 and 4-05 in 2014-2017.

Frances Beach	Number of Days Surveyed
Sunday	14
Monday	6
Tuesday	1
Thursday	4
Friday	2
Saturday	61
Total	88
Naples Beach	Number of Days Surveyed
Sunday	14
Monday	10
Tuesday	4
Wednesday	2
Thursday	4
Friday	8
Saturday	42
Total	84
Grand Total (both beaches)	172

Survey efforts were typically targeted for every other Saturday each month. Beach Watch data for this area indicate that weekends are the time of the week when recreational uses on the water are highest, so this survey schedule provides the best opportunity to record recreational MPWC

use in Zone 1. As weather conditions and/or surf conditions sometimes require surveyors to adjust their survey days, observers were also able to collect a cross-section of data during the week for comparison. Out of the 172 surveys conducted, Beach Watch data documents only one MPWC user within the vicinity of Zone 1 over the approximately three-and-half year survey period. Further, in the comments section of the data sheet, surveyors reported that this person was not a recreational user but an official from a life safety agency (lifeguard).

## **Discussion**

The Office of National Marine Sanctuaries established MPWC Zone 5 as a seasonal zone to minimize potential disturbance to wildlife. When establishing the zone, sanctuary staff analyzed Beach Watch and USGS sea otter data for presence and absence of marine mammals. Staff determined that the least amount of marine mammals were present during the months of December through February during HSWs. Upon recent review of Beach Watch and USGS sea otter data for marine mammals present in and around Zone 5, the data consistently demonstrated that December through February has the least marine mammal sightings in Zone 5 and that wildlife is not likely to be present in those months during either a HSWs or High Surf Advisory (HSA).

Over the last 10 years, the Office of National Marine Sanctuaries periodically received comments from the public that MPWC Zone 1 was not used. In response to anecdotal comments and recommendations from MBNMS staff, GFNMS analyzed three-and-a-half years of Beach Watch data on the presence and absence of MPWC in Zone 1. The majority of surveys occurred on weekends when the most human recreational activities are assumed to occur. Over the past three-and-a-half years, no MPWC recreational users were recorded in Zone 1.

## Conclusion

GFNMS recommends amending the MBNMS MPWC regulation for Zone 5 to allow MPWC use when a HSA has been issued by the NOAA National Weather Service during the months of December through February. Lowering the surf height threshold from a HSW to a HSA is not expected to result in a significant increase of wildlife disturbances given that December through February has the lowest recorded presence of marine mammals during the year in Zone 5. Beach Watch data supports maintaining the seasonal MPWC restriction for Zone 5 to avoid impacting marine mammals.

Based on the lack of MPWC use in Zone 1, as documented by Beach Watch monitoring data, GFNMS recommends amending the MBNMS regulations to eliminate Zone 1. Eliminating Zone 1 would not significantly impact recreational users as users would still be able to access the seasonal Zone 5 from Pillar Point harbor and as well as three other year-round MPWC zones in MBNMS at Santa Cruz, Moss Landing, and Monterey.