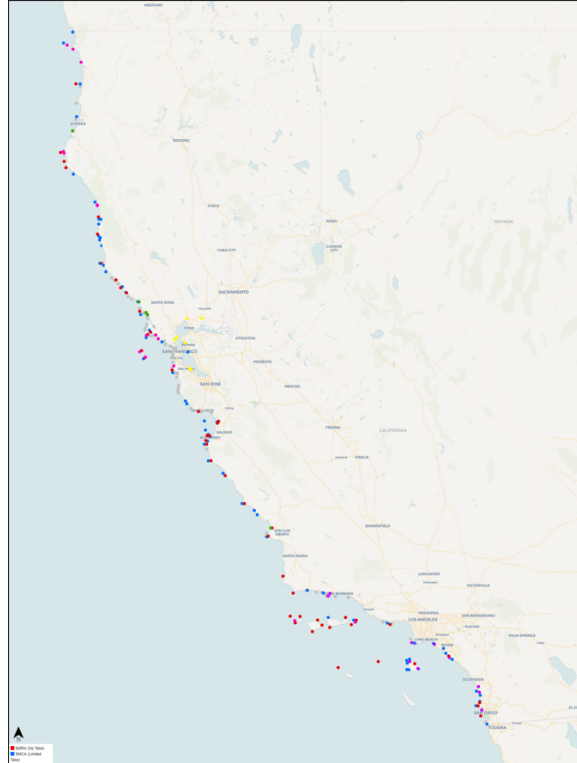




Marine Protected Area (MPA) Watch Regional Report

Humboldt, Mendocino, San Mateo, Santa Cruz,
Monterey, San Luis Obispo, Santa Barbara, Orange, and San Diego Counties
January 1, 2021 - December 31, 2021



California State Parks has received Once-Through Cooling funding from the Ocean Protection Council to support a team of MPA interpreters and an MPA Outreach and Education Project Coordinator in eight State Parks districts along the California coast. One of the grant deliverables includes training these specialized MPA interpreters as well as additional State Parks staff and docents in MPA Watch protocol and data entry.

Executive Summary

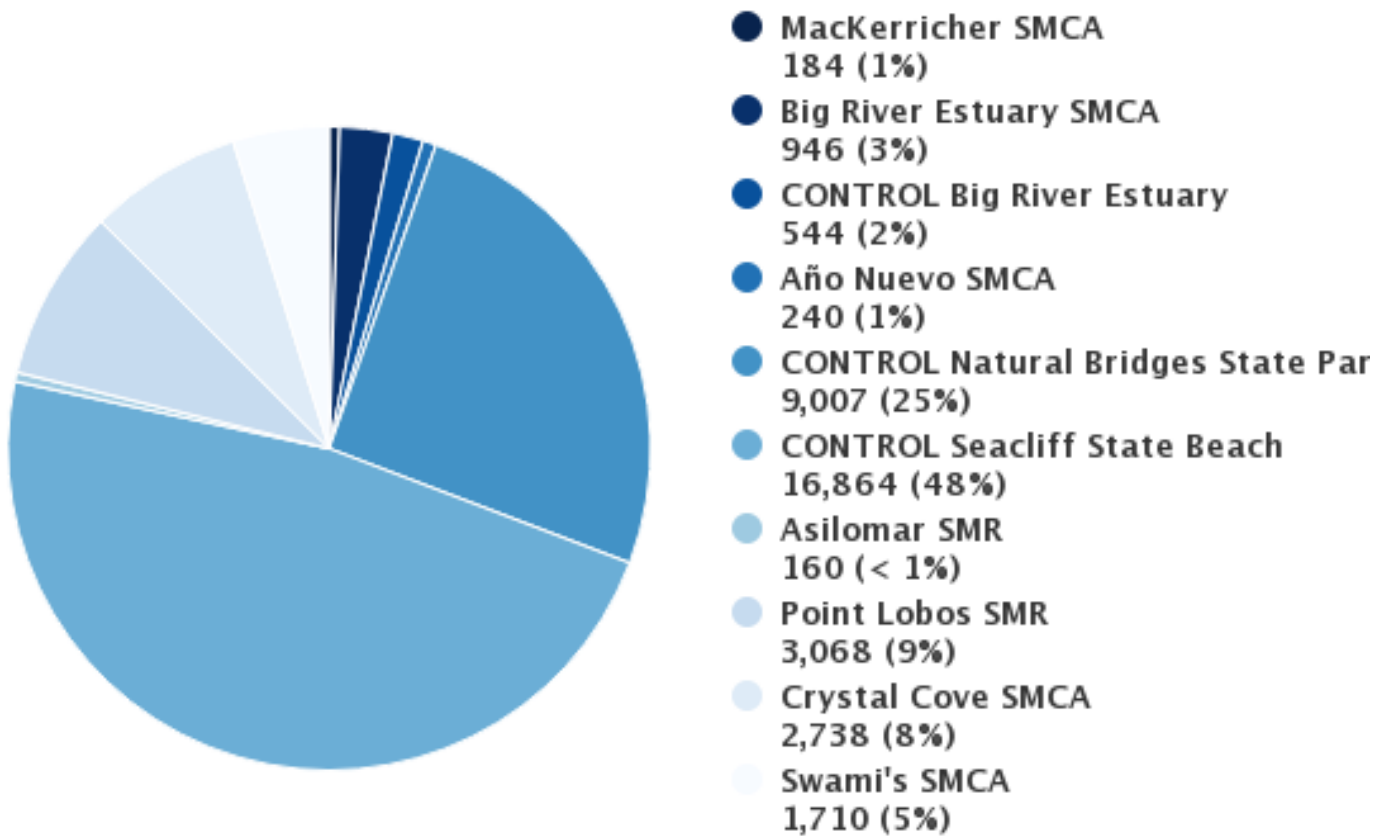
- 544 surveys were completed by State Parks staff and volunteers in 2021
- More than 50 participants submitted surveys
- 14 MPAs and six control sites were surveyed
- In 2021, four MPA Watch trainings were held for:
 - 16 full and part-time California State Parks staff
 - 21 California State Parks volunteers
- Two new transects were set up in San Luis Obispo County at Morro Bay State Park in the Morro Bay State Marine Recreational Management Area.
- One new control transect was set up in Santa Barbara County at Refugio State Beach, east of Kashtayit SMCA.

Human Use of MPAs January – December 2021

Overview

Top 10 MPAs by All Activity

January 1, 2021 – December 31, 2021
35,461 total activity events



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.

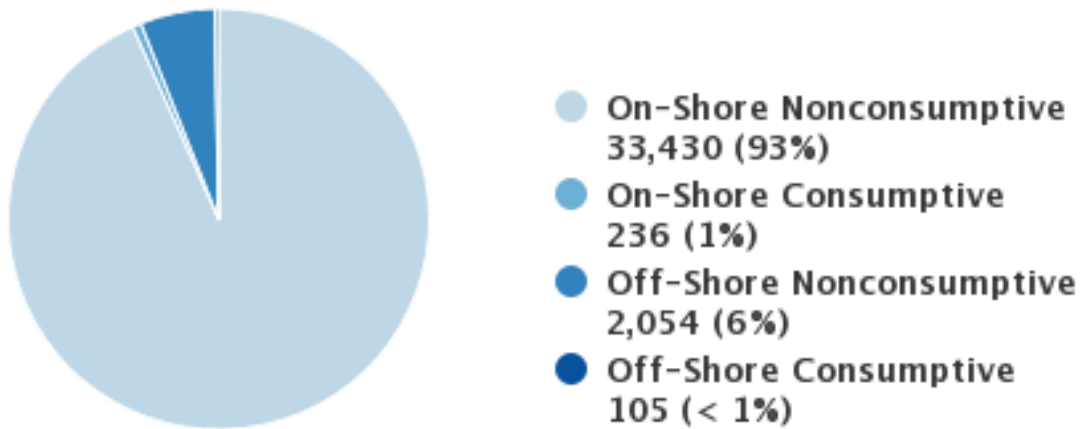
Consumptive - An activity in which a natural resource (i.e., fish, kelp, shells) is being collected.

Non-Consumptive - An activity in which a natural resource is not collected.

Overview

All MPAs Combined

January 1, 2021 – December 31, 2021
35,825 activity events



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.

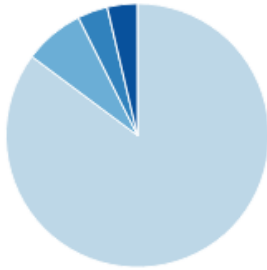
Non-Consumptive - An activity in which a natural resource is not collected.

Activity by MPA

HUMBOLDT COUNTY

Reading Rock SMCA

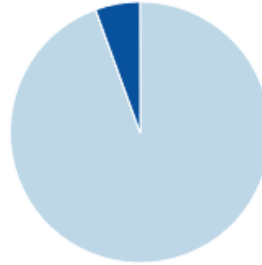
January 1, 2021 – December 31, 2021
27 activity events



- On-Shore Nonconsumptive 23 (85%)
- On-Shore Consumptive 2 (7%)
- Off-Shore Nonconsumptive 1 (4%)
- Off-Shore Consumptive 1 (4%)

CONTROL Kuchel Visitor Center

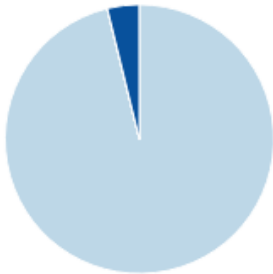
January 1, 2021 – December 31, 2021
18 activity events



- On-Shore Nonconsumptive 17 (94%)
- On-Shore Consumptive 0 (< 1%)
- Off-Shore Nonconsumptive 0 (< 1%)
- Off-Shore Consumptive 1 (6%)

Samoa SMCA

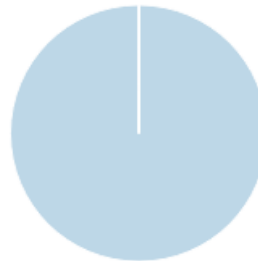
January 1, 2021 – December 31, 2021
26 activity events



- On-Shore Nonconsumptive 25 (96%)
- On-Shore Consumptive 0 (< 1%)
- Off-Shore Nonconsumptive 0 (< 1%)
- Off-Shore Consumptive 1 (4%)

CONTROL Manila Dunes

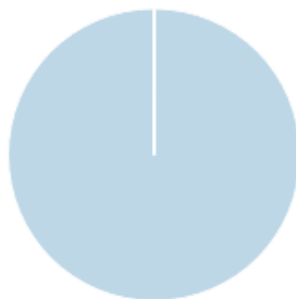
January 1, 2021 – December 31, 2021
61 activity events



- On-Shore Nonconsumptive 61 (100%)
- On-Shore Consumptive 0 (< 1%)
- Off-Shore Nonconsumptive 0 (< 1%)
- Off-Shore Consumptive 0 (< 1%)

Sea Lion Gulch SMR

January 1, 2021 – December 31, 2021
14 activity events

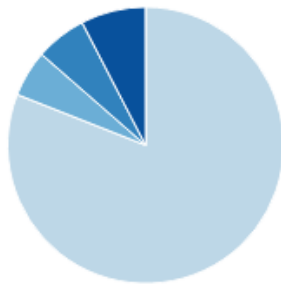


- On-Shore Nonconsumptive 14 (100%)
- On-Shore Consumptive 0 (< 1%)
- Off-Shore Nonconsumptive 0 (< 1%)
- Off-Shore Consumptive 0 (< 1%)

MENDOCINO COUNTY

Mackerricher SMCA

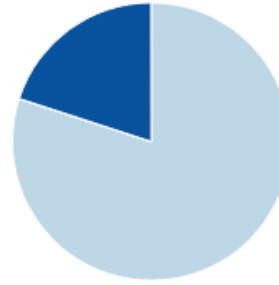
January 1, 2021 – December 31, 2021
184 activity events



- On-Shore Nonconsumptive
149 (81%)
- On-Shore Consumptive
10 (5%)
- Off-Shore Nonconsumptive
11 (6%)
- Off-Shore Consumptive
14 (8%)

Point Cabrillo SMR

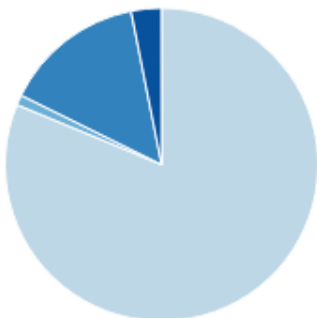
January 1, 2021 – December 31, 2021
10 activity events



- On-Shore Nonconsumptive
8 (80%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
0 (< 1%)
- Off-Shore Consumptive
2 (20%)

Russian Gulch SMCA

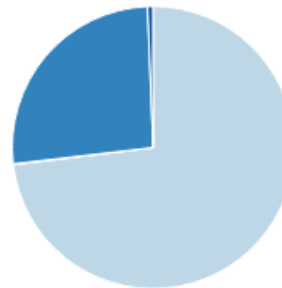
January 1, 2021 – December 31, 2021
96 activity events



- On-Shore Nonconsumptive
78 (81%)
- On-Shore Consumptive
1 (1%)
- Off-Shore Nonconsumptive
14 (15%)
- Off-Shore Consumptive
3 (3%)

Big River Estuary SMCA

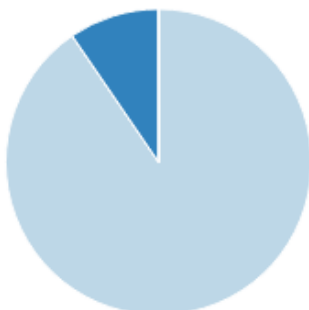
January 1, 2021 – December 31, 2021
946 activity events



- On-Shore Nonconsumptive
691 (73%)
- On-Shore Consumptive
1 (< 1%)
- Off-Shore Nonconsumptive
248 (26%)
- Off-Shore Consumptive
6 (1%)

CONTROL Big River Estuary

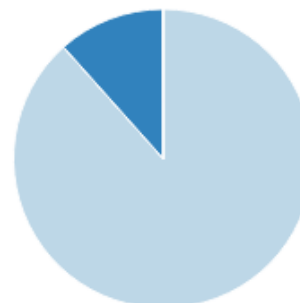
January 1, 2021 – December 31, 2021
544 activity events



- On-Shore Nonconsumptive
492 (90%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
52 (10%)
- Off-Shore Consumptive
0 (< 1%)

Van Damme SMCA

January 1, 2021 – December 31, 2021
69 activity events

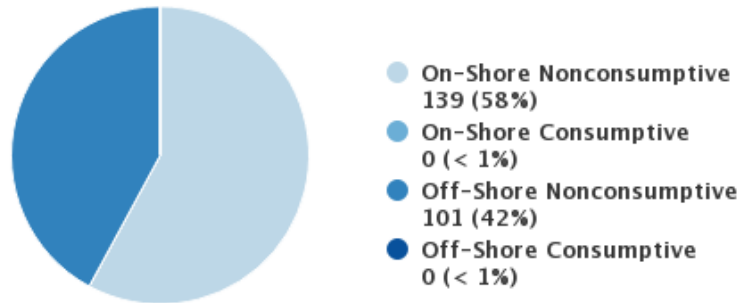


- On-Shore Nonconsumptive
61 (88%)
- On-Shore Consumptive
0 (< 1%)
- Off-Shore Nonconsumptive
8 (12%)
- Off-Shore Consumptive
0 (< 1%)

SANTA CRUZ COUNTY

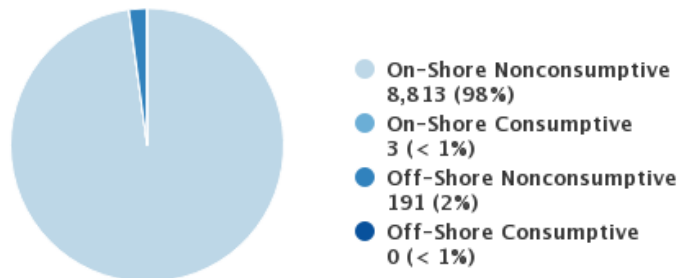
Año Nuevo SMCA

January 1, 2021 – December 31, 2021
240 activity events



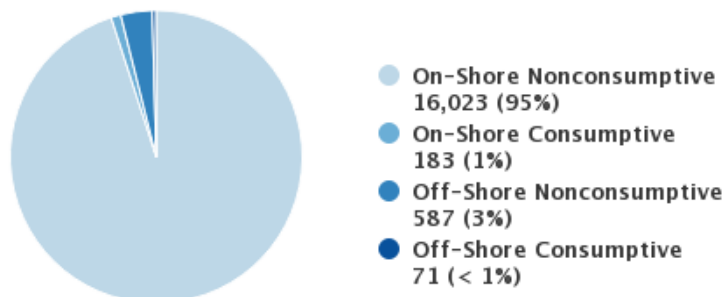
CONTROL Natural Bridges State Park

January 1, 2021 – December 31, 2021
9,007 activity events



CONTROL Seacliff State Beach

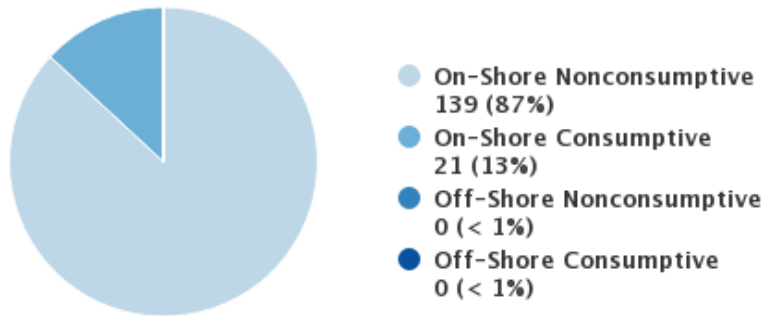
January 1, 2021 – December 31, 2021
16,864 activity events



MONTEREY COUNTY

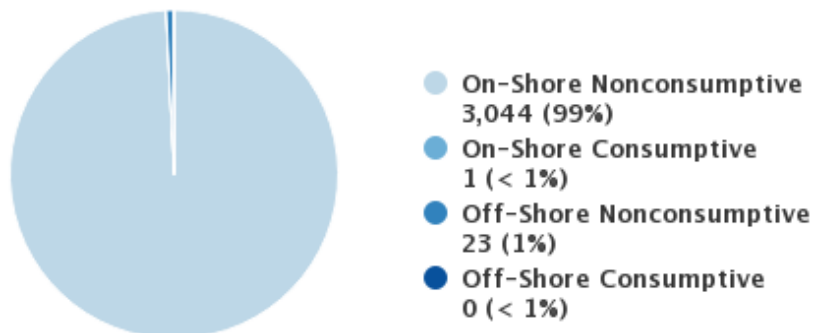
Asilomar SMR

January 1, 2021 - December 31, 2021
160 activity events



Point Lobos SMR

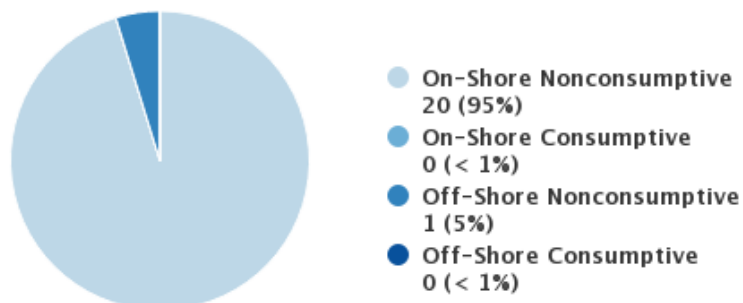
January 1, 2021 - December 31, 2021
3,068 activity events



SAN LUIS OBISPO COUNTY

Morro Bay SMRMA

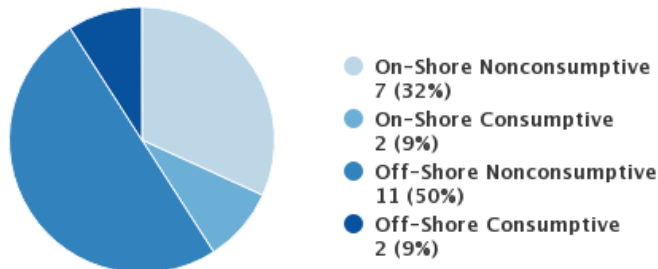
January 1, 2021 - December 31, 2021
21 activity events



SANTA BARBARA COUNTY

CONTROL Refugio SB

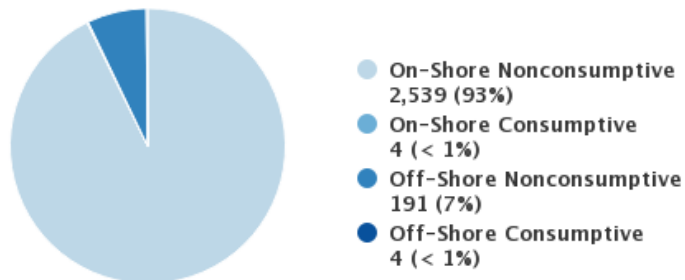
January 1, 2021 – December 31, 2021
22 activity events



ORANGE COUNTY

Crystal Cove SMCA

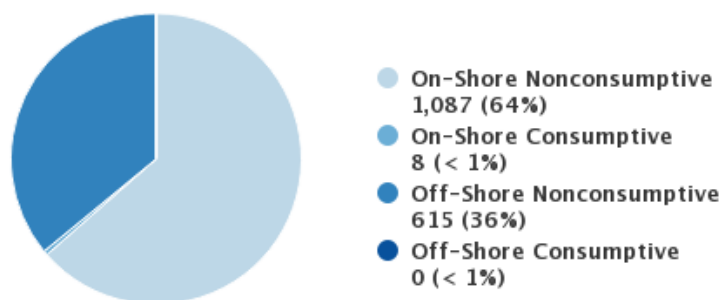
January 1, 2021 – December 31, 2021
2,738 activity events



SAN DIEGO COUNTY

Swami's SMCA

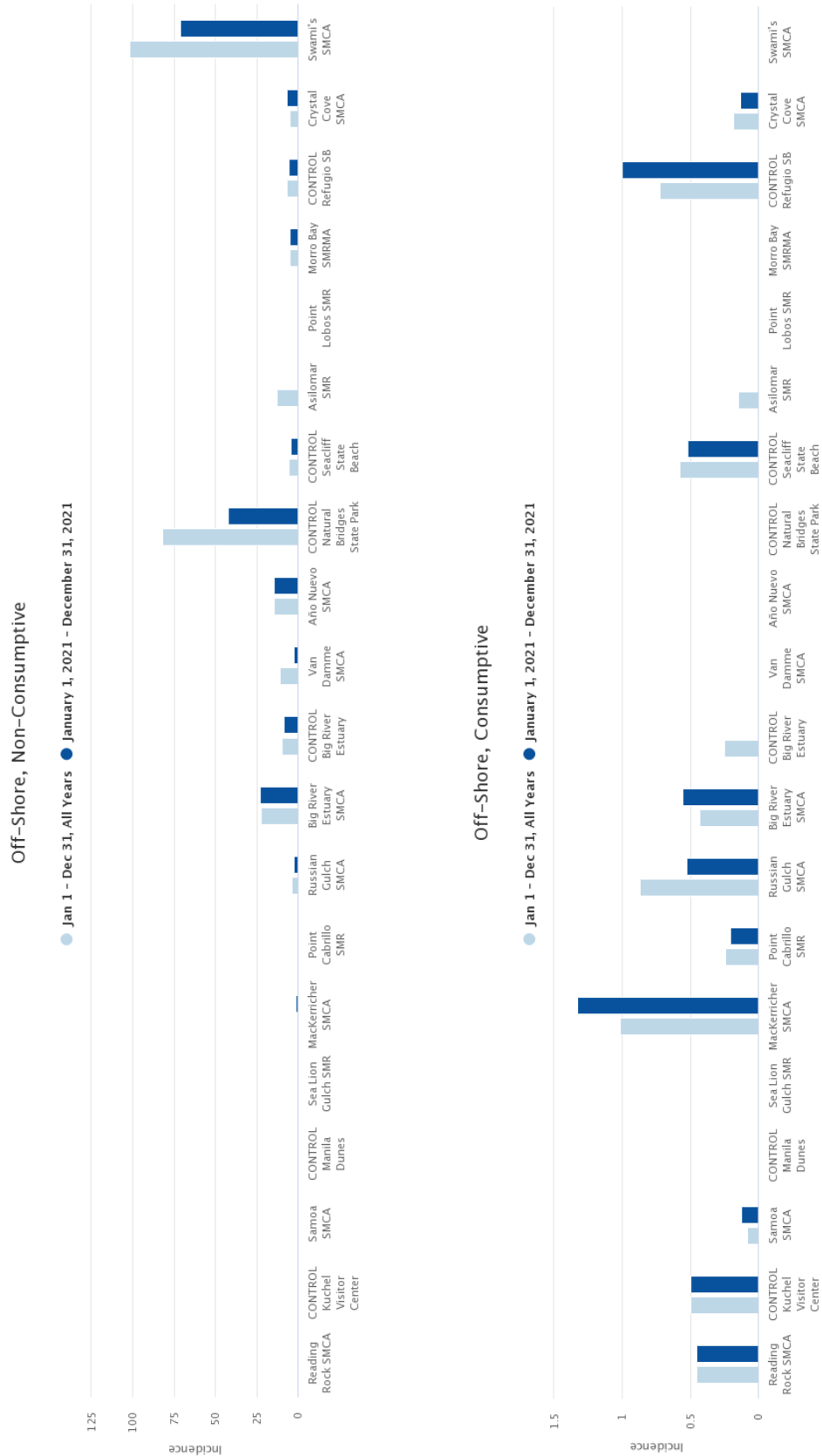
January 1, 2021 – December 31, 2021
1,710 activity events



Off-Shore Activity Incidence by MPA

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 ◆
Swami's SMCA	101.9	71.5		0.0	0.0
CONTROL Natural Bridges State Park	82.4	42.4		0.0	0.0
Big River Estuary SMCA	22.3	23.0		0.4	0.6
Año Nuevo SMCA	14.4	14.4		0.0	0.0
CONTROL Big River Estuary	9.9	8.3		0.2	0.0
Crystal Cove SMCA	4.9	6.4		0.2	0.1
CONTROL Refugio SB	6.5	5.5		0.7	1.0
Morro Bay SMRMA	5.0	5.0		0.0	0.0
CONTROL Seacliff State Beach	5.6	4.3		0.6	0.5
Van Damme SMCA	11.1	2.7		0.0	0.0
Russian Gulch SMCA	3.9	2.5		0.9	0.5
MacKerricher SMCA	0.8	1.0		1.0	1.3
Reading Rock SMCA	0.5	0.5		0.5	0.5
Point Lobos SMR	0.3	0.3		0.0	0.0
CONTROL Kuchel Visitor Center	0.0	0.0		0.5	0.5
Samoa SMCA	0.0	0.0		0.1	0.1
CONTROL Manila Dunes	0.0	0.0		0.0	0.0
Sea Lion Gulch SMR	0.0	0.0		0.0	0.0
Point Cabrillo SMR	0.6	0.0		0.2	0.2
Asilomar SMR	12.5	0.0		0.1	0.0
All MPAs Combined	7.5	6.0		0.4	0.3

Off-Shore Activity Incidence by MPA



On-Shore 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 ♦
CONTROL Natural Bridges State Park	1,555.6	1,958.4	0.4	0.7
Swami's SMCA	192.9	126.4	1.2	0.9
CONTROL Seacliff State Beach	93.9	116.7	1.4	1.3
Morro Bay SMRMA	100.0	100.0	0.0	0.0
Crystal Cove SMCA	77.3	84.9	0.3	0.1
CONTROL Big River Estuary	81.9	78.1	0.0	0.0
Big River Estuary SMCA	63.3	64.0	0.1	0.1
Asilomar SMR	57.1	57.9	4.0	8.8
Point Lobos SMR	37.1	38.1	0.0	0.0
Van Damme SMCA	21.5	20.3	0.0	0.0
Año Nuevo SMCA	19.9	19.9	0.0	0.0
MacKerricher SMCA	26.6	14.2	1.3	1.0
Russian Gulch SMCA	26.8	13.7	0.1	0.2
Reading Rock SMCA	10.5	10.5	0.9	0.9
CONTROL Kuchel Visitor Center	8.5	8.5	0.0	0.0
Sea Lion Gulch SMR	5.6	5.6	0.0	0.0
CONTROL Manila Dunes	6.9	5.5	0.1	0.0
CONTROL Refugio SB	8.7	3.5	0.4	1.0
Samoa SMCA	3.3	3.1	0.0	0.0
Point Cabrillo SMR	1.9	0.8	0.0	0.0
All MPAs Combined	90.0	97.3	0.9	0.7

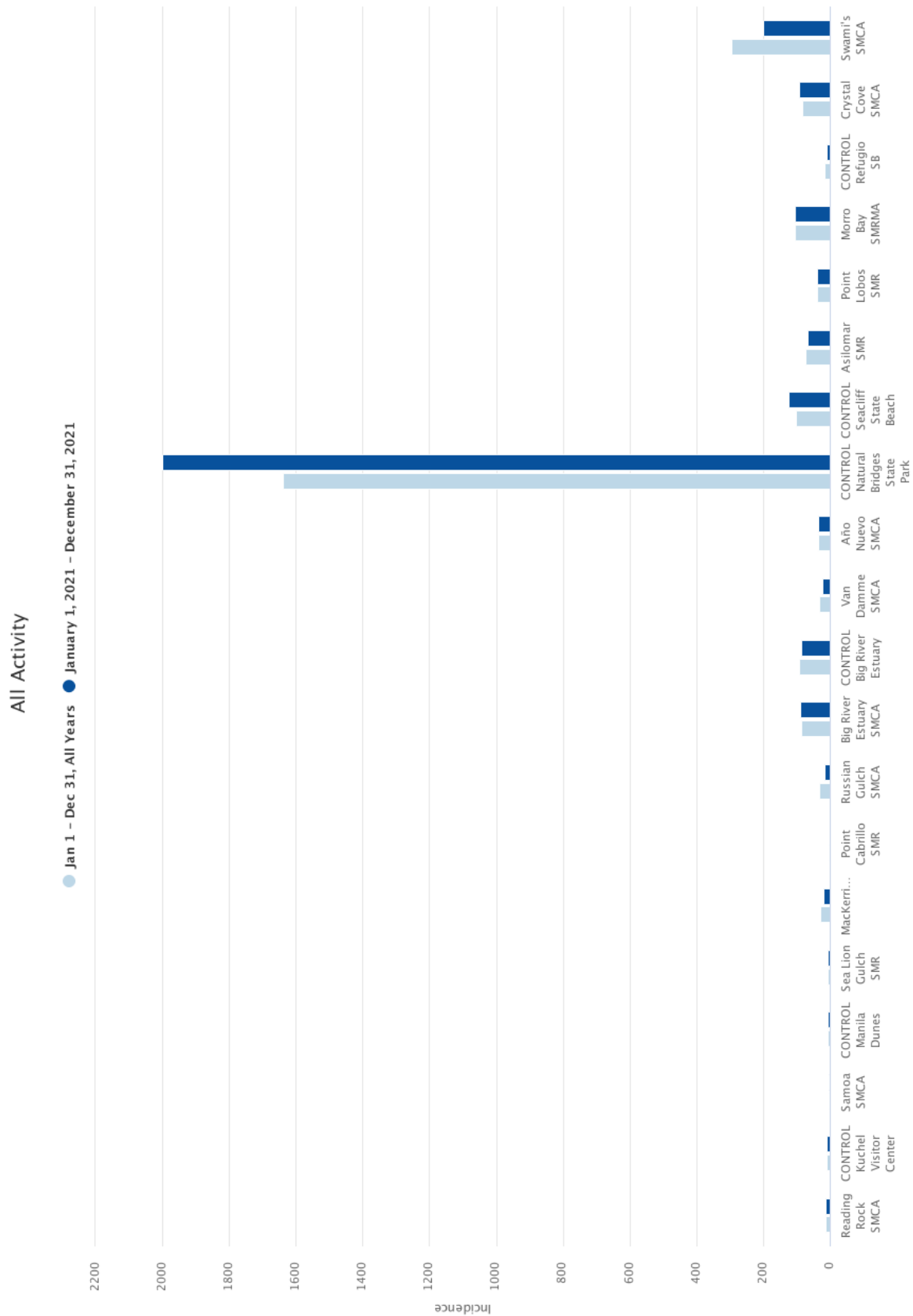
On-Shore Activity Incidence by MPA



All Activity Incidence by MPA

MPA	Total	
	Combined	
	Jan 1 Dec 31 All Years	Jan 1, 2021 through Dec 31, 2021
CONTROL Natural Bridges State Park	1,638.5	2,001.6
Swami's SMCA	296.0	198.8
CONTROL Seacliff State Beach	101.5	122.8
Morro Bay SMRMA	105.0	105.0
Crystal Cove SMCA	82.7	91.6
Big River Estuary SMCA	86.1	87.6
CONTROL Big River Estuary	92.0	86.3
Asilomar SMR	73.7	66.7
Point Lobos SMR	37.4	38.4
Año Nuevo SMCA	34.3	34.3
Van Damme SMCA	32.5	23.0
Mackerricher SMCA	29.7	17.5
Russian Gulch SMCA	31.7	16.8
Reading Rock SMCA	12.3	12.3
CONTROL Refugio SB	16.4	11.0
CONTROL Kuchel Visitor Center	9.0	9.0
Sea Lion Gulch SMR	5.6	5.6
CONTROL Manila Dunes	7.1	5.5
Samoa SMCA	3.3	3.3
Point Cabrillo SMR	2.7	1.0
All MPAs Combined	98.8	104.2

All Activity Incidence by MPA



*The above charts show incidence values for each MPA monitored by MPA Watch in California.
Incidence is calculated as number of activities recorded divided by total survey-miles.*

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.

COVID-19 Impacts

In the winter months of early 2021, there were still a mix of Covid-related park closures and work restrictions for State Parks staff and docents. Fortunately, a couple of trainings were offered for staff and docents at Point Lobos State Natural Reserve in a hybrid format where they received the initial presentation over Zoom, then met in small groups to practice the survey protocol in the field (outside and masked). Staff and volunteers were able to collect data in the spring working independently in the field to walk the survey transects. Later into the summer, fall and winter of 2021, it was possible to host masked and socially distanced in-person trainings.

BREAKDOWN BY MPA/CONTROL SITE

HUMBOLDT COUNTY: SUMMARY

Reading Rock SMCA

This is a new transect established in the summer of 2021. Less usage due to low/mid tide accessibility. This transect is a popular beach for dogs off leash and family picnics. Fishing from shore is allowed just south of the boundary of the MPA.

Kuchel Visitor Center Control

This is a new transect established in the summer of 2021. The site is located within Redwood National and State Parks and is near a very busy visitors center and public picnic area.

Samoa SMCA

This is a somewhat remote transect which experiences very sparse use year-round primarily by local residents.

Manila Dunes Control Site

Slightly higher use by recreational beach users and off leash-dogs. Some shell collecting has been observed.

Sea Lion Gulch SMR

This remote transect is located in the King Range National Forest and does not “belong” to State Parks program; however, it was surveyed once in July of 2021 when the MPA Outreach and Education Project Coordinator was hiking the Lost Coast with members of the MPA Collaborative Network. The transect is only accessible by foot, boat, or air as no roads lead to this section of the coast.

MENDOCINO COUNTY: SUMMARY

Ten Mile SMR

This is a new transect with no data logged yet. Adding this transect is exciting as it is a very popular beach for individuals to recreate at all throughout the year. This beach is a county beach which is well used as a dog beach.

MacKerricher SMCA

There are two transects within this MPA. The northern transect of the MacKerricher State Park State Marine Conservation Area begins at the northern MacKerricher harbor seal rookery and ends at the busy Laguna Point Parking lot. This area of beach is highly used during peak summer season (Memorial Day weekend through Labor Day weekend). The gentle sloping sands and view of the small bay attracts locals and visitors alike. On this stretch of beach, one will commonly find families picnicking, birthday parties, kayaking enthusiasts, wildlife watchers, and beach sports. During the rainy winter months, access to this area is often flooded or dangerous due to wave activity, offering very little beach activity.

The southern transect of the MacKerricher State Park State Marine Conservation Area begins at the Laguna Point parking lot, continues along the scenic boardwalk, and finishes along a cliff-top trail adjacent to the MacKerricher Haul Road trail. The most used areas of this transect are the MacKerricher tidepools, accessible from the boardwalk, and the southern harbor seal rookery. The tidepools are often full of adventuring families eager to find sea snails, hermit crabs, anemone, and a wide variety of colorful tidepool creatures. Summer programs and field trips are hosted in the tidepools to help

spread education about the fragile nature of this habitat. The southern harbor seal rookery is easily viewed from the furthestmost platform of the boardwalk.

Point Cabrillo SMR

This State Marine Reserve is a gem to marine life in Mendocino County. It is visited by lighthouse enthusiasts, bird watchers, and nature lovers alike. The trail system is located up on the bluff to offer a better view of the water below where harbor seals relax and many seabirds nest. There are some rocky recreation opportunities (tide pools), but most visitors do not dare to balance on the slippery, uneven path to get down into the intertidal area.

Russian Gulch SMCA

This transect is in Russian Gulch State Park which has a day use fee and is also in between the town of Mendocino and Fort Bragg. The data shows light usage in the fall, winter and spring when the campground is closed and is just open for pay day use visitors. When the campground is open during the summertime, this beach, and the day use areas on the edge of the MPA are full.

Big River Estuary SMCA

Big River State Estuary SMCA starts on the east side of the HWY 101 bridge and continues up stream to the end of the beach. Thousands of visitors and families use this large sandy beach and watershed to kayak, stand-up paddleboard, swim, sandy beach recreation, crab, and walk their dogs.

Big River Estuary Control Site

Big River is a hot spot for thousands of visitors every year. It is busy all throughout the year with tourists but experiences some down time during the wet colder months of the year. It is located just next to the Mendocino town proper. People mostly come to enjoy sandy recreation, body surfing, surfing, kayaking, swimming, and some trap crab collection, when in season. It was historically used as a dog friendly beach when Mendocino Land Trust owned this land.

Van Damme SMCA

Van Damme SMCA has a good mix of sandy, rocky, on shore, and offshore recreation and fishing. This SMCA is home to sea cave kayak tours, boats, spearfishing, fisherman, and rocky intertidal collection. Dogs are not a big issue here and 100% of the dogs observed during surveys are kept on leash. Since the closure of the abalone fishery this beach is mainly used to enjoy a beautiful day on the sandy shore, or tide pooling while staying protected from the mean north winds. Kayaking through the sea caves, stand-up paddleboarding, and long-distance paddling are huge recreational

activities here. This is a smaller beach and there are less visitors than in the surrounding beaches and can be closed due to high tides, king tides, or larger surf events from the south and west directions.

SAN MATEO COUNTY: SUMMARY

Año Nuevo SMCA

The number of surveys conducted on this transect is beginning to increase as new staff has been trained on the survey techniques. Most commonly, wind surfers are seen at this location. During the elephant seal breeding season at Año Nuevo State Park, some elephant seals use Waddell Beach to haul out. People also use this beach for walking.

SANTA CRUZ COUNTY: SUMMARY

Natural Bridges State Park Control Site

This transect spans the entire length of a popular beach at Natural Bridges State Beach. There are tidepools along one edge that see high traffic with collection. Surfers occasionally use this beach, but most people are participating in on-shore beach recreation.

Seacliff State Beach Control Site

These transects regularly see a mixture of consumptive and non-consumptive uses. Fishing is allowed with the proper California Department of Fish and Wildlife permits. After periods of high surf, people can be seen combing through the rocks looking for sea glass. Dogwalkers are also a frequent sight and less than 1% of dogs observed were off leash. The beaches see larger numbers of beach recreators during the summer months.

MONTEREY COUNTY: SUMMARY

Asilomar SMR

This State Beach is popular amongst locals and visitors alike and the transects cover sandy beaches and rocky shorelines. Illegal take/collection of biota is frequently observed here and from conversations with transgressors, it is understood that both locals and visitors alike are guilty of collecting shells from the pocket beaches between tidepool areas. Frequently, there are so many individuals and small groups collecting shells in bags and buckets that there isn't enough time to speak to each person while completing the transect.

Point Lobos SMR

This MPA surround Point Lobos State Natural Reserve, known as the “crown jewel” of California State Parks and the gateway to the spectacular Big Sur coastline.

Unfortunately, due to the park’s popularity, the shorelines are often picked clean of shells and driftwood. Active Parks staff and docents work to remind the public that no collecting is allowed.

In April 2021, two State Parks staff members and 14 volunteer docents at Point Lobos State Natural Reserve were trained on MPA Watch survey protocol and data entry. The enthusiastic group began surveying the two new transects in May, collecting data on weekdays and weekends. It is expected that this volunteer force will likely provide enough data for future reports from this area to have scientific significance as they are completing surveys almost daily on these transects. From eight month of data, we can infer that most visitors to Point Lobos SMR are following the rules and not collecting biota; however, anecdotally, many staff and volunteers report that collection is a big problem in the Weston Beach area.

SAN LUIS OBISPO: SUMMARY

Morro Bay SMRMA

Kayaking, stand-up paddleboarding and wildlife watching are popular activities in this location. Two new MPA Watch transects were created in the fall of 2021, both of which are in Morro Bay State Park. With these two new MPA Watch transects will provide easier access for staff and volunteers to complete surveys. There was only one survey completed before the end of the year, so there has not been enough data collected from the site to draw any conclusions at this time. There are three other MPA Watch transects within this MPA that don’t fall inside of a State Park.

SANTA BARBARA COUNTY: SUMMARY

Refugio Control Site

This transect was established in December 2021 to serve as a control site for Kashtayit SMCA. Refugio State Beach is a popular recreation site for surfing, scuba diving, kayaking, and fishing. Shore based activities including tide pooling and wildlife viewing. The site sees higher use during the summer months, than during the winter season. There has not been enough data collected from the site to draw any conclusions at this time.

ORANGE COUNTY: SUMMARY

Crystal Cove SMCA

Crystal Cove State Marine Conservation Area (SMCA) is a highly visited MPA for onshore and offshore recreation. Tide pooling is a very popular activity for park visitors and the intertidal zone receives high traffic year-round. There is seasonal usage with summer months presenting more human use and impact on marine resources. However, Crystal Cove SMCA is busy year-round, and it appears that warmer days bring more visitors. In October the park was affected by an oil spill off Huntington Beach that leaked 126,000 gallons of crude oil into the waters of coastal Orange County. Crystal Cove State Park's SMCA was closed for onshore and offshore recreation for several days, halting human use. Southern California fisheries were closed, and the closure remained in effect until November 30th, 2021. During the month of October, the park tried to complete as many MPA Watch surveys as possible so that there would be a document of the possible changes in the ways that people use the beach during the spill and after the spill. This document also aims to better understand the relationship between environmental disasters and human use of the coastline.

SAN DIEGO: SUMMARY

Swami's SMCA

This transect is located on San Elijo State Beach, Cardiff Reef and Cardiff State Beaches. San Elijo contains a campground, and it is a popular surfing spot. Surfing continues to be one of the most popular activities. Cardiff Reef and Cardiff (Seaside) are popular with dog owners and have high visitation. These beaches and campgrounds are visited year-round, with the highest concentration occurring during holidays and summer months. As for being on hand to observe poachers and educate the public, State Park Interpreters work mostly at San Elijo, so Cardiff Reef and Cardiff rely on traveling lifeguards throughout the winter months, with more on-site lifeguards during the summer months.

In December 2021, an MPA Watch training was held and three State Parks staff and two State Parks volunteers were trained. The training was held in collaboration with The Nature Collective who had approximately 15 volunteers join MPA Watch.

POTENTIAL VIOLATIONS

HUMBOLDT COUNTY: POTENTIAL VIOLATIONS

Reading Rock SMCA

Some backpackers were observed with fishing rods strapped to the outsides of their packs.

Kuchel Visitor Center Control

None

Samoa SMCA

None

Manila Dunes Control Site

None

Ten Mile SMR

It is very well maintained and there has not been any violations or fishing activity occurring here as it is a part of the Ten Mile SMR.

Sea Lion Gulch SMR

Several backpackers walking the Lost Coast Trail were observed with fishing poles strapped to the outside of their backpacks. If fishing from shore did occur in the SMR, it would be minimal. The real concern would be off-shore consumptive use because this section of the coast is so remote that there would be little likelihood of the prohibited activities being observed, reported, or enforced.

MENDOCINO COUNTY: POTENTIAL VIOLATIONS

MacKerricher SMCA

The most common violations are during the high traffic summer months. This area becomes littered, but with the help of “Mendocino Mermaids” volunteers, the trash is quickly picked up. This transect also sees many dogs off leash and the collecting of shells, but during these high traffic times State Park Rangers and Lifeguards are commonly patrolling the area to educate visitors and cite violations.

Along this transect visitors can visit tidepools and view a harbor seal rookery, leading to the opportunity for violations. Visitors have been seen collecting from the tidepools and

putting tidepool animals in buckets for better viewing, not knowing that this kind of activity is harmful to the tidepool creatures. During low tide, visitors have also been known to wander into the harbor seal rookery in hopes of a better picture, or simply not knowing that the animals are resting on the rocks above eye level. This area is not accessible by vehicle, so Ranger and Lifeguard interactions with the public are limited, but often volunteers and interpreters will engage with members of the public to educate them about the area, the regulations, and are often told by visitors that they simply did not know that they were breaking any rules.

Point Cabrillo SMR

The only violations that take place here are offshore when a fishing boat passes through the MPA and it looks like they are trolling or fishing. This is a rare occurrence and most of the fishing vessels know what they are supposed to be doing in these waters. When this is seen it is reported to Cal-Tip or to State Parks rangers.

Russian Gulch SMCA

It is rare to see violations occurring here as it is mainly home to locals and well enforced by Park's staff for dogs to stay on leash and fishing rules and regulations handed out by Park kiosk staff. Locals who see anyone breaking the rules of the MPA will report the information to Cal-Tip when in a good service zone. This MPA protects the giant kelp and bull kelp and all the marine life when it is out of normal fishing season. Some people go fishing off the rocks or try to go spearfishing, but it is a desert below the surface and very rare to catch a fish.

Big River Estuary SMCA

The main violation occurring on this section of the beach are dogs off-leash at 6% of the time, and on-leash 3% of the time. This is due to the locals and visitors who historically know this beach as a dog beach and do not want it to change and the low enforcement due to low amount of rangers to cover the 100+ miles of coastal parks they have to patrol each day. The new and improved signage at Big River seems to be helping to reduce the number of violations that are seen.

Big River Estuary Control Site

Since State Parks has ownership, it is trying to enforce the dogs on leash policy, but it is still the number one violation seen here and in the MPA east of the bridge. Dogs off-leash account for 13% and on-leash 6% of the time.

Van Damme SMCA

Possible violations here (but have not been seen during a survey) are collection of bull or giant kelp, collection of abalone on lower tides, and fishing out of season. This beach is in a low service zone on the south end by the parking lot and makes reporting violations more difficult while on scene of the crimes being committed.

SAN MATEO COUNTY: POTENTIAL VIOLATIONS

Año Nuevo SMCA

There have been instances of people getting too close to the elephantseals.

SANTA CRUZ COUNTY: POTENTIAL VIOLATIONS

Natural Bridges State Park Control Site

Despite efforts of staff and volunteers to educate visitors of the rules, hand collection of biota still occur.

Seacliff State Beach Control Site

Staff is looking to expand the volunteer program this spring which will increase the number of surveys that are conducted.

MONTEREY COUNTY: POTENTIAL VIOLATIONS

Asilomar SMR

The two violations observed most frequently are hand-collection of biota and shore-based hook-and-line fishing.

Point Lobos SMR

Hand collection of biota is the most frequently observed violation in this MPA.

SAN LUIS OBISPO COUNTY: POTENTIAL VIOLATIONS

Morro Bay SMRMA

This MPA has fairly loose regulations allowing for the take of finfish, oysters, and waterfowl. Not enough data was collected to draw conclusions.

SANTA BARBARA COUNTY: POTENTIAL VIOLATIONS

Refugio Control Site

No violations were observed for during the surveys conducted during December 2021.

ORANGE COUNTY: POTENTIAL VIOLATIONS

Crystal Cove SMCA

Hand collection of biota in the tidepools remains the most prevalent violation of MPA rules and regulations at Crystal Cove SMCA. Visitors collect shells and rocks and place intertidal organisms in buckets, handling them outside of their pools. These violations occur predominately in the Rocky Bight tidepool area near the park's restaurant and popular Historic District.

SAN DIEGO COUNTY: POTENTIAL VIOLATIONS

Swami's SMCA

Most human interaction is located at the southern end of San Elijo and the entire strip of beach is used for recreation at Cardiff Reef. At Cardiff/Seaside, there is an area of protected Sand Dune habitat, but much of the remaining beach, especially concentrated between Lifeguard towers 10 and 11 is heavily used.

While there is less than 1% of On-Shore Consumptive Activity recorded at Swami's, it is interesting to note that Activity Incidence by MPA Comparison Charts show that Swami's leads all San Diego MPAs when looking at activities recorded divided by total survey miles. It seems that, for its size, Swami's has a higher rate of on-shore consumptive activity.

One thing to note, beach-goers occasionally report to staff that they see folks gathering items like shells or even tidepool creatures (hand collection of biota). The MPA Watch data does not reflect these anecdotal reports. It is suggested that there are more on-shore consumptive activities (violations) than the MPA Watch reveals.

NEXT STEPS

HUMBOLDT COUNTY: NEXT STEPS

Expand involvement of lifeguards in data collection (due to the nature of their work and ease of access to these locations). Recruit additional consistent volunteers and provide tokens of appreciation/team building opportunities as the team expands (funding needed).

MENDOCINO COUNTY: NEXT STEPS

Ten Mile SMR

This transect ends on the Ten Mile River and connects to Ten Mile State Beach which is a well-known habitat for Snowy Plovers and sea birds. This is a new transect with no data logged yet. Adding this transect is exciting as it is a very popular beach for individuals to recreate at all throughout the year. This beach is a county beach which is well used as a dog beach. It is exciting to get more volunteers trained for MPA Watch and watch the data roll in like the tides here!

MacKerricher SMCA

To increase the amount of data coming from the MacKerricher transects, it is a goal to continue training more volunteers through our cooperating non-profit, Mendo Parks, volunteer programs through the Sonoma Mendocino Coast District Resources Department, and engaging with camp hosts who may be interested in citizen science. As the volunteer program continues to grow, it is hopeful to continue growing the amount of data collected from the MacKerricher transects.

Point Cabrillo SMR

The data collected here slows down significantly during the wet and colder months as the staff and volunteers do not want to brave the harsh spring winds or the atmospheric river systems witnessed this year with no protections. The rain is nice, but it inhibits data collection. It is a hope in 2022 to get the light house staff and volunteers trained and on board with MPA Watch surveys!

Russian Gulch SMCA

To amplify survey numbers, the trained parks staff must visit this transect more as there is a fee to enter park and not close to town.

Big River Estuary SMCA

It is a goal that with a greater amount of data collected by the team and volunteers, it will get more support to enforce the dogs-on-leash policies and help protect wildlife from disturbances.

Big River Estuary Control Site

The transect has been surveyed often with the help of State Park volunteers and there is a hope to train more volunteers this year.

Van Damme SMCA

Hope to continue to collect regular data from this location.

SAN MATEO COUNTY: NEXT STEPS

Año Nuevo SMCA

Expanding data collection as more staff and volunteers are trained in MPA Watch protocol.

SANTA CRUZ COUNTY: NEXT STEPS

Natural Bridges State Park Control Site

Aiming for continued staff and volunteer involvement in collecting data from one of the busiest State Beaches we survey!

Seacliff State Beach Control Site

This site has dedicated MPA Watch volunteers who collect surveys like clockwork. It is one of the most consistently surveyed sites in our statewide

MONTEREY COUNTY: NEXT STEPS

Asilomar SMR & Point Lobos SMR

In the spring of 2022, two new MPA interpreters and new Point Lobos State Natural Reserve docents will be trained in the program and begin collecting data at the three transects.

SAN LUIS OBISPO COUNTY: NEXT STEPS

Morro Bay SMRMA

There is a control site within Montaña de Oro State Park, just north of Point Buchon SMR. The goal is to train California State Park volunteers who rove these trails to partake in MPA Watch surveys at this site.

Plans for 2022 is to create a new MPA Watch transect along the Piedras Blancas SMR. This new MPA Watch transect would be along the Boucher trail leading from the Piedras Blancas Elephant Seal Rookery in Hearst San Simeon State Park north towards the Piedras Blancas Lightstation. There is a volunteer group called Friends of the Elephant Seal that rove this trail. The plan is to train these California State Park volunteers on MPA Watch so that this MPA can be represented and monitored while they do their other volunteer work.

Going in to 2022, it is a hope to host MPA Watch trainings for California State Park staff and volunteers. Starting these new transects that are within California State Parks, will allow for an increase in MPA Watch data collection by trained staff and volunteers.

SANTA BARBARA COUNTY: NEXT STEPS

Refugio Control Site

In 2022 there are plans to train additional volunteers to conduct MPA Watch Surveys at Gaviota State Beach (Kashtayit SMCA) and Refugio State Beach (Control Site). In addition, as the summer camp hosts join at Refugio SB, the interpretive staff will train them to conduct surveys as part of their regularly scheduled duties performed in the park. The Interpretive Staff recently gained access to the transect at Kashtayit SMCA, previously set up by a Santa Barbara Channel Keeper, and will conduct surveys from this site in 2022. The park will also create a goal for MPA Watch Surveys to be conducted during the new year.

ORANGE COUNTY: NEXT STEPS

Crystal Cove SMCA

Crystal Cove State Park will be hosting an MPA Watch training in January to educate park staff and volunteers about the importance of collecting data regarding human use of the MPA. Park staff will continue to contribute monthly surveys for the MPA Watch program. Resources will be provided for all of the park volunteers so that they can better communicate the importance of MPA Watch to park visitors.

SAN DIEGO COUNTY: NEXT STEPS

Swami's SMCA

It is a goal that there will be a minimum of 5 MPA Watch Data Sheets collected each month at all three sections of the transect, varying the time of day, tide levels and temperature. More training will be scheduled as needed and the interpretive team from San Elijo will continue to work together to recruit and train volunteers to complete monthly MPA Watch data collection. In addition, a continued collaboration is planned to recruit volunteers from the Environmental Club at San Pasqual High School. The volunteers will be trained to act as tidepool stewards and participants in MPA Watch data collection, as Covid guidelines allow. In addition, the goal is for volunteers to provide increased interpretation at the area adjacent to the tide pools at Cardiff (Seaside).

Adult volunteers will have the option of joining interpreters or scheduling themselves to collect data on their own. This will offer flexibility for those wanting to join a group, or those who prefer to work alone and on their own schedule, hopefully to encourage volunteer retention.

Another 2021 goal was to teach team members how to analyze their own data and summarize their findings. This document was prepared by the Interpreter 1 at San Elijo and it provides an opportunity to consider this year's data and draw conclusions, which help to guide the "next steps".

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 additional information about California State Parks Marine Protected Area Outreach and Education Program, please contact Erika Delemarre at erika.delemarre@parks.ca.gov or at (916) 704-5042.

SITES MONITORED

