

**Issued MBNMS Permits, Amendments and Authorizations  
(7/31/2019 to 9/30/2019)**

**Report created for the**

**October 18, 2019**

**Monterey Bay National Marine Sanctuary Advisory Council Meeting**

**MULTI-2019-019**

**Permit Type:** Research /Education

**Permit Holder Name (Affiliation):** Salvador Jorgensen (Monterey Bay Aquarium)

**Project Title:** Ecology and Population Dynamics of White Sharks in the Northeastern Pacific

**Project Location(s):** Within GFNMS: 1) White shark attraction activities are permitted outside of 300 feet and within two (2) nautical miles of the Southeast Farallon Islands, around Point Reyes National Seashore, around Tomales Point, and offshore of Bodega Head and 2) Filming activities may occur in the same regions of the sanctuaries as all permitted White shark research activities listed above. Filming white sharks attracted to the vessel will only occur in conjunction with the authorized research activities in the authorized locations listed in this amended permit. Filming activities shall occur above the water; no diving or use of cages is allowed.

Within MBNMS: 3) White shark attraction activities are permitted offshore of Año Nuevo Island; and 4) Filming activities may occur in the same regions of the sanctuaries as all permitted White shark research activities listed above. Filming white sharks attracted to the vessel will only occur in conjunction with the authorized research activities in the authorized locations listed in this amended permit. Filming activities shall occur above the water; no diving or use of cages is allowed.

**Permitted Activity:**

White Shark Attraction, Tagging, ID, and Sampling

1. Attracting White sharks (*Carcharodon carcharias*) for the purposes of tagging, obtaining photographic and video images, and taking biopsy samples of White sharks in the following locations with the following limitations:

- a) No more than 50 external acoustic tags (approx. 10 per each year this permit is valid) and 25 pop-up satellite archival tags (PAT) (approx. 5 per each year this permit is valid) may be deployed on the sharks' dorsal musculature throughout all locations authorized in this permit.
- b) No more than 25 internal stomach tags (approx. 5 per each year this permit is valid) may be deployed by means of feeding sharks the tags embedded in a small piece of marine mammal blubber (less than 3 kilogram [kg]).
- c) No more than 75 biologging clamp tags (approx. 15 per each year this permit is valid) may be deployed by using non-invasive dorsal fin clamps.
- d) No more than 150 tissue samples (approx. 30 per each year this permit is valid) shall be taken using a small biopsy punch. These samples shall be taken in conjunction with the acoustic and satellite tagging.

White shark attraction activities can be conducted near Southeast Farallon Island, Tomales Point/Point Reyes, off Bodega Head and around Año Nuevo Island. Tagging, photo/video ID, and biopsy sampling may also be conducted between Salinas River and

Capitola provided that no attractants (either decoys or scent or bait) are used. No stomach tags may be deployed in the area between Salinas River and Capitola.

2. Discharging into the sanctuaries scent from marine mammal blubber for attracting White sharks.

3. Temporarily discharging into the sanctuaries PAT tags, stomach tags, and clamp tags (intended to be retrieved although some may be lost to the marine environment) and permanently discharging acoustic tags (not intended to be retrieved) into the sanctuaries.

White shark attraction methods are limited to use of a decoy made of a soft material shaped into the silhouette of a local marine mammal and use of a small (i.e., less than 3 kg) piece of pinniped or cetacean blubber as specified in the Special Terms and Conditions of this permit. Attraction of white sharks is authorized only by these means and solely for the purpose of scientific research (e.g., sport, recreational viewing, and unauthorized film making are prohibited).

#### Filming

Filming of White sharks for documentary and educational films by the Monterey Bay Aquarium is authorized in conjunction with the White shark research activities being conducted by Dr. Salvador Jorgensen, and authorized personnel in accordance with permit number MULTI-2019-019.

**Permitted dates:** September 30, 2019 through September 30, 2024

**Comments/Notes:** GFNMS lead; The permittee has been issued a scientific collection permit (SCP) from the California Department of Fish and Wildlife (CDFW). SC-1349 is valid through 8/22/2020.

#### **MBNMS-2019-023**

**Permit Type:** Research

**Permit Holder Name (Affiliation):** Steve Goldman and Kirk Lynn (California Department of Fish and Wildlife (CDFW))

**Project Title:** Coastal Pelagic Species Near-shore Cooperative Survey (CPS-NCS)

**Project Location(s):** Plane flights are allowed within NOAA Regulated Overflight Zones off of Moss Landing, Santa Cruz and Big Sur in MBNMS and UAS flights are allowed within NOAA Regulated Overflight Zone off of Moss Landing in MBNMS

**Permitted Activity:** The following activities supporting the development of sampling methodologies for estimating Coastal Pelagic Species (CPS) biomass are authorized: Low overflight at no less than 500 feet above sea level (ASL) by manned aircraft within three (3) NOAA Regulated Overflight Zones in MBNMS to identify and assist in the capture of sardine and anchovy schools by seine vessels and flying an Unmanned Aerial System (UAS) at no less than 50 feet ASL(except for launching and landing) within NOAA Regulated Overflight Zones in MBNMS to collect footage of CPS fish school behavior before and during capture by seine.

**Permitted dates:** September 11, 2019 through June 30, 2020

**Comments/Notes:** Special Terms and Conditions include extensive mitigations for seabird, marine mammal and sea turtle harassment; longer permitted time-frame for the same activities as those permitted by MBNMS-2019-020

#### **MULTI-2019-013**

**Permit Type:** Research

**Permit Holder Name (Affiliation):** Tim Elfers (United States Geological Survey)

**Project Title:** Characterization and Mapping of Substrate and Sediment Types in the Federal and State Waters of the San Francisco Littoral Cell.

**Project Location(s):** From various locations in GFNMS and northern MBNMS. See Permit Attachment 1 “Coring Locations” for details of permitted potential coring locations.

**Permitted Activity:** The permittee is authorized to disturb the seabed in order to collect a maximum of 50 sediment grab samples and 50 sediment vibracore samples (15 of each sample type in State waters and 35 of each sample type in Federal waters). Each sediment grab samples will collect approximately 0.025 cubic meters of sediment and each vibracore will collect approximately 0.0375 cubic meters of sediment (down to 4 meters of core depth and 4 inches-in-diameter per core).

**Permitted dates:** September 16, 2019 through October 24, 2019

**Comments/Notes:** GFNMS lead; MBNMS-2019-022 permits USGS to collect core samples in southern MBNMS to address other goals.

### **MBNMS-2019-022**

**Permit Type:** Research

**Permit Holder Name (Affiliation):** Tim Elfers (United States Geological Survey)

**Project Title:** California Deepwater Investigations and Groundtruthing (CalDIG): Piston core sampling in MBNMS

**Project Location(s):** soft sediments in southern MBNMS.

**Permitted Activity:** The permittee is authorized to alter the submerged lands to collect a maximum of seven (7) piston cores samples to collect long-term geological samples to better characterize paleoceanographic patterns, better understand submarine channel systems in central California and sample the Big Sur pockmark field.

**Permitted dates:** September 16, 2019 through September 25, 2019

**Comments/Notes:** MULTI-2019-013 permits USGS to collect core samples in GFNMS and northern MBNMS to address other goals.

### **Letter of Authorization (LOA) under MBNMS-2019-001**

**Permit Type:** Authorization

**Permit Holder Name (Affiliation):** Karen Grimmer (MBNMS)

**Authorized Activity Description:** Temporary placement of traps and associated systems on the submerged lands of MBNMS to reveal numerous innovative and cost-effective ropeless gear systems that aim to reduce whale and sea turtle entanglements within MBNMS.

**Authorized Activity Location:** Off Del Monte Beach in MBNMS in approximately 30 fathoms (55 meters) of water

**Permitted dates:** September 6, 2019

### **MULTI-2019-016**

**Permit Type:** Research

**Permit Holder Name (Affiliation):** Captain Marc Moser (National Oceanic and Atmospheric Administration)

**Project Title:** Expanding Pacific Research and Exploration of Submerged Systems (EXPRESS) Offshore Mapping Project from NOAA Ship Fairweather, 2019

**Project Location(s):** MBNMS, GFNMS, and CBNMS

**Permitted Activity:** Discharge of approximately 110 expendable bathythermographs (XBTs) and abandonment of those XBTs on the submerged lands of MBNMS, GFNMS, and CBNMS for profiling the water column as part of a hydrographic survey.

**Permitted dates:** September 1, 2019 through October 30, 2019

**Comments/Notes:** MBNMS Lead

### **MBNMS-2017-042-A1**

**Permit Type:** Research

**Permit Holder Name (Affiliation):** Patrick Robinson (University of California, Santa Cruz)

**Project Title:** UAS intertidal surveys at Mud Creek Slide and Paul's Slide, Big Sur

**Project Location(s):** Big Sur NOAA regulated overflight zone around the area of Mud Creek Slide and Paul's Creek Slide

**Permitted Activity:** Flying an Unmanned Aerial System (UAS) for up to six (6) surveys per year, with each survey consisting of approximately six (6) individual flights at a minimum elevation of 20 feet and an average elevation of 30 feet, at each of the two permitted sites within the Big Sur NOAA regulated overflight zone in MBNMS to conduct aerial surveys of the intertidal zone to monitor black abalone critical habitat (see Special Terms and Conditions for further details).

**Permitted dates:** August 27, 2019 through October 21, 2022

**Comments/Notes:** Amendment created to include Paul's Slide to the Permitted Activity Locations. Amendment also updated specific mitigations in the Terms and Conditions to avoid wildlife disturbance.

### **MBNMS-2019-020**

**Permit Type:** Research

**Permit Holder Name (Affiliation):** Steve Goldman and Kirk Lynn (California Department of Fish and Wildlife (CDFW))

**Project Title:** Coastal Pelagic Species Near-shore Cooperative Survey (CPS-NCS)

**Project Location(s):** Plane flights are allowed within NOAA Regulated Overflight Zones off of Moss Landing, Santa Cruz and Big Sur in MBNMS and UAS flights are allowed within NOAA Regulated Overflight Zone off of Moss Landing in MBNMS

**Permitted Activity:** The following activities supporting the development of sampling methodologies for estimating Coastal Pelagic Species (CPS) biomass are authorized: Low overflight at no less than 500 feet above sea level (ASL) by manned aircraft within three (3) NOAA Regulated Overflight Zones in MBNMS to identify and assist in the capture of sardine and anchovy schools by seine vessels and flying an Unmanned Aerial System (UAS) at no less than 50 feet ASL within NOAA Regulated Overflight Zones in MBNMS to collect footage of CPS fish school behavior before and during capture by seine.

**Permitted dates:** August 12, 2019 through August 23, 2019

**Comments/Notes:** Special Terms and Conditions include extensive mitigations for seabird, marine mammal and sea turtle harassment

If you are interested in learning more about a specific permit, amendment or authorization action, please contact:

**Sophie De Beukelaer**

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