

***Issued MBNMS Permits, Amendments and Authorizations
(4/25/2018 to 5/30/2018)***

***Report created for the
June 15, 2018***

Monterey Bay National Marine Sanctuary Advisory Council Meeting

MBNMS-2016-010-A1

Permit Type: Research

Permit Holder Name (Affiliation): Crystal Ng (Hopkins Marine Station of Stanford University)

Project Title: The effects of ocean acidification and hypoxia on grazing interactions within giant kelp forests

Project Location(s): The activities will be conducted in the Lovers Point-Julia Platt State Marine Reserve, specifically the kelp forest next to the Hopkins Marine Station

Permitted Activity: Alteration of the seafloor and discharge for the temporary deployment of tiles and plastic cages secured to rocks with eyebolts to study the grazing rates on juvenile kelp, Alteration of the seafloor for the deployment and recovery of emergence traps and associated anchoring materials to survey the abundance of invertebrate grazing species across seasons, Discharge for the deployment and recovery of one oxygen sensor and one pH sensor attached to the ratchet straps (see below) with cable ties and hose clamps, and Alteration of the seafloor for the deployment and recovery of two (2) ratchet straps around a boulder to study the effects of pH and oxygen on grazing rates on juvenile kelp in situ.

Permitted dates: May 15, 2018 through October 30, 2018

Comments/Notes: The amendment focuses on changes to the tools used for research conducted to achieve Objective 1 (caging experiments). The permittee will deploy more but smaller settlement tiles, deploy smaller plastic cages and deploy sensors attached to a boulder using two ratchet straps. The vacuum sampling under Objective 2 (surveys) will not be continued (only trapping and transects) and all activities for Objective 3 (recruitment) are completed; applied for CDFW SCP amendment

MBNMS-2017-010-A1

Permit Type: Research

Permit Holder Name (Affiliation): Jonathan Warrick (United States Geological Survey)

Project Title: Assessing sediment dynamics changes from human activities and storm impacts to the shoreline and sea cliffs of Monterey Bay National Marine Sanctuary

Project Location(s): Sandy-beach fronted shorelines of Monterey Bay (operation of MUVs); Santa Cruz to Monterey Harbor and Pillar Point Harbor to Miramar (operation of MPWCs)

Permitted Activity: Alteration of submerged lands by driving a multi-utility vehicle (MUV) outfitted with survey-grade GPS equipment near the water line during semi-annual surveys to measure the topography of the beach near the surf zone and Operation of motorized personal watercraft (MPWC) in tandem outside of designated MPWC zones to collect profile data to determine the rates of net sediment transport.

Permitted dates: May 15, 2018 through July 1, 2020

Comments/Notes: Changes made in this amendment include extending the valid dates of the permit for 2.25 years to July 1, 2020 and broadening the geographic extent of the permitted study area to assess Monterey Bay National Marine Sanctuary's shorelines and littoral cells to the southern Monterey Bay (from Moss Landing to Monterey) to evaluate the effects of the

termination of sand mining in this region, and Half Moon Bay (from Pillar Point Harbor to Miramar) to evaluate the effects of a proposed sand beneficial reuse project on coastal erosion in this region; Permittee also conducts overflights related to this research above 1000 feet.

MBNMS-2018-008

Permit Type: Research

Permit Holder Name (Affiliation): Kerry Nickols (California State University, Northridge)

Project Title: Building a mechanistic understanding of water column chemistry alteration by kelp forests: emerging contributions of foundation species

Project Location(s): Monterey Bay National Marine Sanctuary

Permitted Activity: Alteration of the submerged seafloor by deploying sensors, associated anchors, weights and frames, and scraping of algae off of rocks with paint scrapers, discharge of SF6 tracer, and temporary discharge of items that will be recovered: cable ties, moorings and buoys, ADCP and its frame, sensors, anchors and flat acetal plates; to analyze how giant kelp affects water chemistry of the surrounding water.

Permitted dates: May 15, 2018 and December 1, 2020

Comments/Notes: Previous permits MBNMS-2008-011; applied for CDFW SCP

MBNMS-2018-010

Permit Type: Research

Permit Holder Name (Affiliation): Joseph Carlin (California State University Fullerton)

Project Title: Linking decadal-scale changes in continental shelf sediment accumulation to variability in ocean and terrestrial processes

Project Location(s): Sand samples will be collected from the swash zone or wet beach throughout Monterey Bay from the northern point on the Monterey Peninsula to Point Año Nuevo.

Permitted Activity: Alteration of the soft submerged lands of the Sanctuary to collect approximately 300 grams of sand from approximately 60 locations within the swash zone or wet beach using a small hand shovel to investigate decadal-scale changes in shelf sediment accumulation and variability in ocean and terrestrial processes.

Permitted dates: June 1, 2018 through July 1, 2018

Comments/Notes: Previous permits to collect data and samples linked to this current research: MBNMS-2017-022 and MBNMS-2015-024; CDFW SCP #13358

MBNMS-2018-009

Permit Type: Research

Permit Holder Name (Affiliation): Mara Orescanin (Naval Postgraduate School)

Project Title: Interaction of Ephemeral River Plumes with Coastal Seas

Project Location(s): Immediate vicinity of Carmel River mouth, Salinas River mouth and Pajaro River mouth

Permitted Activity: Flying an Unmanned Aerial System (UAS) for up to 8 individual flights per day and up to 80 flights per year per site at a minimum altitude of 100 feet within the Big Sur and Moss Landing NOAA regulated overflight zones in MBNMS to observe and monitor the hydrodynamic and morphological evolution of beaches during overtopping and breaching events of the Carmel River, the Pajaro River and the Salinas River (see Special Terms and Conditions for further details).

Permitted dates: May 4, 2018 through April 30, 2021

Comments/Notes: Other permit: MBNMS-2017-037(with MacMahan)

MULTI-2018-001

Permit Type: Research

Permit Holder Names (Affiliation): Julie Thomas and James Behrens (University of California at San Diego, Scripps Institution of Oceanography)

Project Title: Coastal Data Information Program (CDIP) Waverider buoys in MBNMS and CBNMS.

Project Location(s):

1. San Francisco Bar buoy (NDBC Station 46237, CDIP 142):
37.786, -122.635, Depth=15.6 m (in MBNMS)
2. Monterey Bay West buoy (NDBC Station 46114, CDIP 185):
36.7167, -122.35, Depth=1463 m (in MBNMS)
3. Point Cabrillo buoy (NDBC Station 46240, CDIP 158):
36.6263, -121.9071, Depth=17.8 m (in MBNMS)
4. Point Sur buoy (NDBC Station 46239, CDIP 157):
36.3411, -122.1017, Depth=366 m (in MBNMS)
5. Point Reyes buoy (NDBC Station 46214, CDIP 029):
37.948, -123.468, Depth=550 m (in CBNMS)

Permitted Activity: This permit is limited to alteration of the submerged seafloor by deploying and retrieving five (5) research moorings, discharge of five (5) buoys and the associated moorings, and abandonment of anchors of each of those moorings every 6 (six) years (see Special Terms and Conditions for additional information) to measure coastal environmental data.

Permitted dates: May 1, 2018 through June 30, 2022

Comments/Notes: Previous permits: MBNMS-2013-003, MBNMS-2013-003-A1, MBNMS-2013-003-A2, CBNMS-2015-001, CBNMS-2015-001-A1, CBNMS-2015-001-A2, and CBNMS-2015-001-A3

MULTI-2018-003

Permit Type: Research

Permit Holder Name (Affiliation): Geoffrey Shester (Oceana)

Project Title: Testing acoustic release buoy systems for potential to reduce risk of whale entanglements in California fixed gear fisheries

Project Location(s): Offshore of the Ports of Morro Bay, Monterey, Moss Landing, Santa Cruz, Half Moon Bay, San Francisco, Bodega Bay, and Fort Bragg on soft substrate at depths less than 100 m but not within state Marine Protected Areas (MPAs) or Essential Fish Habitat (EFH) Conservation Areas.

Permitted Activity: Discharge, placement on the soft submerged lands of the sanctuaries, and recovery of one (1) unbaited closed crab trap attached to an "on call" Fiobuoy AC 100 buoy system with line and one (1) unbaited closed crab trap attached to an "on call" Desert Star system, an Acoustic Release Control (ARC) unit called ARC-1XD, and line for up to five (5) individual deployments each of up to eight (8) hours each to conduct initial pilot testing of these systems, which could potentially reduce the risk of whale entanglements in fixed gear fisheries. Up to 40 additional deployments for testing can be requested (See Special Term and Condition #10).

Permitted dates: April 30, 2018 through April 30, 2019

Comments/Notes:

MBNMS-2018-011

Permit Type: Research

Permit Holder Name (Affiliation): Nicholas Seabaugh (Liquid Robotics Inc.)

Project Title: Wave height and vehicle dynamics

Project Location(s): MBNMS

Permitted Activity: Temporary discharge of up to four (4) Wave Gliders for approximately 60 days per survey for up to five (5) surveys to conduct engineering testing to understand Wave Glider mechanical performance and ballasting in a variety of sea states.

Permitted dates: April 25, 2018 through April 25, 2019

Comments/Notes: Previous permits: MBNMS-2017-046, MULTI-2012-004 (A1 and A2)

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

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