

MBNMS Permit Report

February 7, 2012



MULTI-2009-005-A3 - Active

Effective Date: 12/31/2011 **Expiration Date:** 08/31/2012

Project Title: Ecology and populations dynamics of white sharks in the northeastern Pacific

Applicant Name: Dr. Barbara Block

Affiliation: Stanford University

Project Summary:

The Tagging of Pacific Predators (TOPP) project has been conducting White Shark research in the Monterey Bay and Gulf of the Farallones National Marine Sanctuaries (Sanctuaries) since 2005. The main objectives of TOPP's white shark research has been to: 1) determine population size and trajectory, 2) determine essential habitat, migration patterns and ecological niche, 3) investigate the physiological and environmental determinants of the white shark niche, and 4) examine the genetic structure of the northeastern Pacific population. The research has involved tagging white sharks and tracking their movements locally and regionally. Acoustic monitors have been installed in key white shark aggregation areas and record when a tagged shark is in vicinity of the recorder:

- one receiver off Pt. Reyes Headland,
- two receivers off southeast Farallon Island,
- one receiver off Tomales Pt., and
- two receivers off Ano Nuevo Island

Latest Event:

12/19/2011 Amendment issued

MBNMS-2012-002 - Active

Effective Date: 02/04/2012 **Expiration Date:** 06/30/2012

Project Title: Overflight request to take video and still images of MBARI campus and Elkhorn Slough

Applicant Name: Mr. Chris Scholin

Affiliation: MBARI

Project Summary:

The purpose of this project is to collect aerial video and still image footage of the MBARI campus, MBARI's vessel the R/V Western Flyer, and footage of the Elkhorn Slough (including



the LOBO array) to the ocean. A Robinson R44 or a Bell JetRanger helicopter from Specialized Aviation in Watsonville will be used as the shooting platform.

Footage collected will be used extensively in our public outreach program, particularly in the video presented to the public at MBARI's annual Open House. It will also be used by other production companies for establishing shots in their private productions. The flight would take place on Saturday, February 4, 2012. The entire flight duration is estimated to be approximately one hour, and will coincide with the R/V Western Flyer leaving MBARI on its way to the Gulf of California. MBARI is a leading research facility on the central coast. They conduct extensive research programs, most often in Sanctuary waters.

Latest Event:

02/01/2012 Permit issued

MBNMS-2012-001 - Pending

Effective Date: 04/01/2012

Expiration Date: 01/01/2015

Project Title: Environmental Variability, Functional Redundancy, and the Maintenance of Ecological Processes: Experiments in a Model Intertidal Ecosystem in the Mont

Applicant Name: Dr. Mark Denny

Affiliation: Hopkins Marine Station

Project Summary:

Applicant will address the question of how an intertidal community of herbivorous snails and their algal food sources will respond to changing environmental variability (e.g., temperature).

The replicated experimental design calls for 144 plates (10-cm diameter) to be mounted to flat, vertical rock faces at each of two shore heights in the high intertidal zone, at approximately 2.5 and 2 meters above mean lower low water within the Lovers Point State Marine Reserve for 24 months. Each plate will attach with a single ¼" bolt mounted through the middle of the circular plate. One third of the plates (the control treatment) will be mounted directly to the rock face, using a 2-inch deep hole and masonry anchor (removable after the experiment) to capture the bolt. By being mounted to the rock surface, these plates should recreate the current natural variation in temperature during low tide.

Latest Event:

02/03/2012 Permit signed copy received



MBNMS-2011-034 - Active

Effective Date: 02/03/2012

Expiration Date: 06/01/2014

Project Title: Topographical effects on sub-millimeter scale flow in the rocky intertidal zone

Applicant Name: Mr. Tom Hata

Affiliation: Hopkins Marine Station

Project Summary:

Within the Lovers Point State Marine Reserve (off Hopkins Marine Station), applicant proposes to install and remove a pressure sensor device (at five sites), and install and remove a 5-volt data/power cable, while using new and existing eye bolts to secure device and cable.

The hydrodynamic forces generated by breaking waves are one of the greatest environmental stressors experienced by organisms residing in the rocky intertidal zone of wave-swept shores. Although past studies have developed methods to measure water velocity in the field on the scale of centimeters—a scale relevant to relatively large organisms such as barnacles and limpets—measuring at finer scale has not been possible because the delicate laboratory instrumentation usually used for this purpose is unfit for the extreme physical conditions of the intertidal zone. Flow at sub-millimeter scales is important to characterize, however, as it affects the distribution of small benthic organisms as well as the larval state

Latest Event:

02/06/2012

Permit signed copy received

MBNMS-2011-031

Effective Date: n/a

Expiration Date:

Project Title: Filming of "Of Men and Mavericks"

Applicant Name: Mr. Michael Chickey

Affiliation: Iron Cross, LLC

Project Summary:

Filming of "Of Men and Mavericks" is about Surfer Jay Moriarity who was known for surfing the big waves at Mavericks. The portion of the film being shot on Mavericks beach is anticipated to be approximately for 4-6 hrs on one day between November 29 and December 13, 2011. The most likely shoot date is December 1. Filming operations on Mavericks Beach is anticipated to include 40-45 people and 2 pop up tent sites (each 10x20 ft). Within the tent sites will be 1)



requirements with other state agencies.

Latest Event:

09/29/2011 Additional information requested

MBNMS-2011-013

Effective Date:

Expiration Date:

Project Title: Authorization of CCC Emergency CDP for Alder Creek Landslide, postmile 7.75

Applicant Name: Mr. Steve Price

Affiliation: California Department of Transportation Caltrans

Project Summary:

A Landslide at Alder Creek along the Big Sur Coast has over-topped the Highway and closed the roadway in both directions.

The toe of the slide slid downslope and seaward of highway one, and came to rest upon the beach. As of 04/22/11 the toe of the slide is being eroded into the National Marine Sanctuary from wave action.

Latest Event:

10/07/2011 Additional information requested

MBNMS-2011-010

Effective Date: tbd

Expiration Date:

Project Title: System and Methods for Cultivating, Harvesting, and Processing Biomass to Produce Renewable Hydrocarbon Fuels on a Global Scale

Applicant Name: Dr. Dennis Yancey

Affiliation: Coastal Water Biotechnology Group LLC

Project Summary: tbd

Latest Event:

04/21/2011 Additional information requested



MBNMS-2011-002-A1 - Pending

Effective Date: 02/29/2012

Expiration Date: 04/30/2012

Project Title: Equipment Prototype Testing at the Kelp Forest Observatory within Lovers Point State Marine Reserve

Applicant Name: Dr. James Barry

Affiliation: Monterey Bay Aquarium Research Institute

Project Summary:

Applicant proposes to install equipment on the seafloor within the Lovers Point State Marine Reserve, to test anchoring methods during winter storms. The equipment is associated with the recently permitted (MBNMS-2010-002) power/data cable array extending from shore into the Lovers Point State Marine Reserve (Kelp Forest Observatory; KFO). The equipment will not be connected to the power cable during the anchor test period. The permit would allow seafloor disturbance for the installation and removal of research equipment.

Latest Event:

02/01/2012 Amendment signed copy received

MBNMS-2010-002-A2 - Active

Effective Date: 03/01/2010

Expiration Date: 02/28/2012

Project Title: Kelp Forest Array at Hopkins Marine Station

Applicant Name: Dr. Fiorenza Micheli

Affiliation: Hopkins Marine Station

Project Summary:

This project establishes a kelp forest array off Hopkins Marine Station; and includes the installation, maintenance, and recovery of scientific instruments including, a mooring, a mooring array, Acoustic Doppler Current Profiler, CTDs, video camera, a powered data cable, and associated equipment in order to better characterize and understand the nearshore ecosystem.

Latest Event:

02/02/2012 Additional information received



MBNMS-2009-036-A1 - Active

Effective Date: 03/09/2009

Expiration Date: 03/08/2016

Project Title: Santa Cruz Fire Department MPWC Search & Rescue Operations, Marine Safety Division

Applicant Name: Mr. Rob Oatey

Affiliation: Santa Cruz Fire Department

Project Summary:

Activity Objectives:

Develop and maintain public agency MPWC SAR operating skills critical for hazardous incident response at sea under adverse conditions.

Latest Event:

01/19/2012 Amendment issued

