

MBNMS Permit Report
For April 25, 2014 meeting



MULTI-2014-010

Effective Date: 05/01/2014

Expiration Date: 05/01/2015

Project Title: Pacific Hake Acoustic Integrated Trawl Surveys and Research, Groundfish Bottom Trawl Surveys, Hook and Line Rockfish Surveys of the Southern California

Applicant Name: Dr. John Stein

Affiliation: NOAA Northwest Fisheries Science Center

Project Summary:

West Coast Bottom Trawl Groundfish Survey: The NWFSC conducts annual stock assessment surveys of groundfish resources of the West Coast on the continental shelf and upper slope (30 - 700 fm); providing a measure of change in abundance, distribution and condition of these stocks from Cape Flattery, WA to the U.S./Mexico border from May through October. The survey is comprised of two passes down the coast using two vessels in a stratified-random sampling design. Trawl sampling locations will be selected from the following: three depth categories: shelf (30-100 fm), shallow (101-300 fm) and deep (301-700 fm). Each vessel will be assigned 188 primary stations for a total of 852 stations. Assessments based on these data are used by the Pacific Fisheries Management Council to establish appropriate fishing quotas and implement sustainable management plans. US-Canada Joint Pacific Hake Integrated Acoustic-Trawl Survey (IATS): Scheduled June through September annually with the NOAA Ship

Permit Type: Research

Latest Event:

03/13/2014 Application received

MULTI-2013-008 - Active

Effective Date: 12/20/2013

Expiration Date: 01/31/2019

Project Title: Long-term Monitoring Program and Experiential Training for Students (LiMPETS)

Applicant Name: Ms. Amy Dean

Affiliation: Farallones Marine Sanctuary Association

Project Summary:

The Farallones Marine Sanctuary Association manages the LiMPETS program within the Gulf of the Farallones and northern management area of the Monterey Bay national marine sanctuary regions. LiMPETS is a state-wide, student-based citizen science program for students, teachers and community groups. Our citizen scientists are involved with the collection of long-term sandy beach and rocky intertidal data along the coast of California. Sixteen established LiMPETS

sandy beach sites are located in this region. LiMPETS sites are located on outer coast beaches between Salmon Creek to the north and Pescadero to the south with the exception of one beach site located just inside of the San Francisco Bay at Crissy Field. Four established LiMPETS rocky intertidal sites are located in the Gulf of the Farallones management area, at Duxbury Reef, Fitzgerald Marine Reserve (Montara SMR), Pillar Point and Pigeon Point to the south. Sites are established and maintained as permanent monitoring areas

Permit Type: Research

Latest Event:

04/11/2014

MBNMS-2014-018

Effective Date: 04/22/2014

Expiration Date: 04/30/2015

Project Title: Autonomous Vehicle Research in Monterey Bay

Applicant Name: Dr. Douglas Horner

Affiliation: Naval Postgraduate School

Project Summary:

The Naval Postgraduate School (NPS) Center for Autonomous Vehicle Research (CAVR) was founded in 1987 to educate future leaders of the Department of Defense (DOD) in the development and utilization of unmanned systems technologies. NPS students and faculty conduct relevant research in maritime environments using several developmental and commercial unmanned vehicle systems and sensors. CAVR hereby requests authorization to conduct research activities that require the temporary discharge and recovery of autonomous vehicles into Monterey Bay. These activities will support the following research programs:

1) Temporary installation of an underwater docking station on the sandy seabed near the existing Monterey Inner Shore Observatory (MISO) to conduct autonomous underwater vehicle (AUV) docking experiments. The ability to periodically dock during a mission to recharge its battery and upload oceanographic data to researchers on shore is a key enabler for persistent scientific operations

Permit Type: Research

Latest Event:

04/15/2014 Application deemed complete

MBNMS-2014-017

Effective Date: n/a

Expiration Date:

Project Title: Seawall Aesthetic Improvement Repairs at 2970 Pleasure Point Drive

Applicant Name: Mr. Timothy Kirsh

Affiliation: Private Individual

Project Summary:

The property owner intends to tint an existing concrete wall to lessen its visual impact and plant cascading vegetation in existing planters.

Permit Type: Authorization

Latest Event:

03/26/2014 Permit not required

MBNMS-2014-016

Effective Date: tbd

Expiration Date:

Project Title: Low Angle Laser Test

Applicant Name: Dr. Scheibner Karl

Affiliation: Lockheed Martin Space Systems Company (LMSSC)

Project Summary: more info needed

Latest Event:

01/15/2014 Additional information requested

MBNMS-2014-015

Effective Date: 03/17/2014

Expiration Date: 06/30/2014

Project Title: The effect of offshore protection status on recruitment in the central California rocky intertidal, and Invertebrate grazers as facilitators in cent

Applicant Name: Mr. Michael Esgro

Affiliation: California State University Monterey Bay

Project Summary:

This project will assess the role of offshore protection status on intertidal settlement and recruitment dynamics. Such an assessment requires comparison of sites that represent varying levels and durations of protection. The applicant hypothesize that intertidal communities adjacent to marine protected areas (MPAs) will experience lower levels of recruitment than intertidal communities adjacent to fished areas, due to a higher number of planktivorous fish in the subtidal. To test this hypothesis, the applicant will compare recruitment of red algae at two sites in the central California rocky intertidal: Hopkins Marine Station, the oldest marine protected area in California, and Otter Cove, which has a lower protection status and a shorter history of

protection but nearly identical oceanographic and climatic conditions. The applicant will also study invertebrate grazers as facilitators in central California rocky intertidal communities.

Permit Type:Research

Latest Event:

04/16/2014 Record closed

MBNMS-2014-014 - Active

Effective Date: 03/17/2014

Expiration Date: 06/30/2014

Project Title: A survey of sea star wasting syndrome in Monterey Bay

Applicant Name: Mr. Michael Hang

Affiliation: California State University Monterey Bay

Project Summary:

This study aims to determine species diversity of the sea star wasting syndrome, spatial distribution of the syndrome in the intertidal, and observe the effects of community structure in the presence of afflicted sea stars. The study sites are located in intertidal areas of Point Lobos State Reserve, Point Pinos and Lover's Point. The applicant will sample a large rectangular area using band transects. A 100m transect line will be placed from the upper intertidal at a fixed bolt marker to the lower intertidal. A second transect tape will be laid out perpendicular to the 100m line. All sea stars within a specified distance of the second transect will be recorded. Sea stars with/without the affliction will be identified. The applicant will use existing stainless steel bolts if they are able to locate them and if the bolts are at a useful distance from each other. If not, the applicant will install additional bolts, a maximum of eight (8) bolts in the rocky intertidal

Permit Type: Research

Latest Event:

04/09/2014 Permit signed copy received

MBNMS-2014-013

Effective Date: n/a

Expiration Date:

Project Title: USGS: Surf Zone Motorized Personal Watercraft Training

Applicant Name: Mr. Jackson Currie

Affiliation: USGS

Project Summary:

The USGS Coastal & Marine Science Center, located in Santa Cruz, CA routinely conducts near-shore bathymetric surveys that require personnel to operate MPWC in the surf zone. We are

in the process of developing a training program for additional USGS staff to learn techniques for safe MPWC operation in this hazardous environment. Training would require students to get time operating MPWC's in the surf zone at surf states ranging from fairly small and forgiving to the upper range of surf conditions that would still be considered safe enough to collect bathymetric data. Generally, we would not put personnel on MPWC to survey in surf greater than 5 feet.

Permit Type: Authorization

Latest Event:

04/09/2014 Application returned unprocessed

MBNMS-2014-012

Effective Date: tbd

Expiration Date:

Project Title: Caltrans - Piedras Blancas Rock Slope Protection Removal project

Applicant Name: Ms. Cecilia Boudreau

Affiliation: CalTrans dept of transportation

Project Summary:

Realignment Project to determine best pathway for either restoration or leaving rip rap in place

Permit Type: Authorization

Latest Event: additional info requested

MBNMS-2014-011

Effective Date: 10/04/2014

Expiration Date: 10/04/2014

Project Title: City of Santa Cruz 100-year Wharf Fireworks Celebration

Applicant Name: Ms. Lisa McGinnis

Affiliation: City of Santa Cruz

Project Summary:

The City of Santa Cruz Parks and Recreation Department in cooperation with the Santa Cruz Beach Boardwalk will present a fireworks display with duration of 20 minutes on Santa Cruz Main Beach on Saturday, October 4, 2014 at 9:00 pm. Vendor works with City of Santa Fire Department and Santa Cruz Beach Boardwalk to stage the show. Approximate number of shells to be announced. Load in occurs the morning of event and set up occurs from 8:00 am to 8:00 pm with the show scheduled for 9:00 pm. Clean up and inspection of the beach occurs post-event and additional clean-up including sand sifting is performed the following morning. City of Santa Cruz Police Department, Parks and Recreation Rangers, Santa Cruz Beach Lifeguards and Marine Rescue provide security for the event.

Permit Type: Authorization

Latest Event:

04/18/2014 Additional information received

MBNMS-2014-010 - Pending

Effective Date: 07/11/2014

Expiration Date: 07/10/2019

Project Title: RWQCB NPDES Permit No. CA0047996 for the Carmel Area Wastewater District

Applicant Name: Mr. Kenneth Harris

Affiliation: Regional Water Quality Control Board RWQCB

Project Summary:

The Carmel Area Wastewater District is currently discharging treated sewage pursuant to Order No. R3-2014-0012. This application is essentially a renewal of existing operations with some improvements to management practices.

Permit Class: Class A

Permit Type: Authorization

Activity Purpose: Public Works

Latest Event:

05/22/2014 Approval granted by other agency

MBNMS-2014-009 - Pending

Effective Date: 07/11/2014

Expiration Date: 07/10/2019

Project Title: Waste Discharge Requirements For The Monterey Regional Water Pollution Control Agency Regional Treatment Plant Under NPDES No. CA0048551

Applicant Name: Mr. Kenneth Harris

Affiliation: Central Coast Regional Water Quality Control Board

Project Summary:

Renewal of this draft permit, proposed under the Central Coast Regional Water Quality Control Board (RWQCB) Order No. R3-22014-0013, updates existing WDR's for the discharge of secondary treated domestic wastewater and brine waste to the Monterey Bay National Marine Sanctuary. This renewal will allow the discharge of up to 29.6 million gallons per day (MGD) of treated wastewater from the MRWPCA's Regional Treatment Plant.

Discharge from the Regional Treatment Plant at Discharge Point 001 occurs through an 11,260-foot outfall/diffuser system that terminates at a depth of approximately 100 feet in the Pacific Ocean (Monterey Bay) at 36° 43' 40" N. latitude and 121° 50' 14" W longitude. The receiving water is part of the Monterey Bay National Marine Sanctuary.

Discharges through Discharge Point 001 consist of secondary treated wastewater and/or brine

wastes, as described above. The minimum probable initial dilution for Discharge Point 001 is 145 to 1

Permit Type: Authorization

Activity Purpose: Public Works

Latest Event:

05/22/2014 Approval granted by other agency

MBNMS-2014-008 - Pending

Effective Date: 07/01/2014

Expiration Date: 07/31/2015

Project Title: Long-term monitoring of benthic infaunal assemblages in Elkhorn Slough and sandy bottom communities

Applicant Name: Ms. Kamille Hammerstrom

Affiliation: Moss Landing Marine Laboratories

Project Summary:

This sampling is part of a long-term data set with some stations initiated prior to the formation of the MBNMS. Benthic infauna are some of the best indicator species for tracking environmental change. In Elkhorn Slough, the applicant's historical data demonstrate the relationship between loss of fine sediments and a shift from larger to smaller surface active weedy benthic organisms but the applicant doesn't know if the faunal changes they observed in 2003 are ongoing. Recent bathymetric surveys by CSUMB's Seafloor Mapping Lab reveal further erosion in some areas of the slough and deposition in others. The applicant would like to resample to see if bathymetric and sedimentary changes influence the infaunal community. In sandy bottom, the applicant's historical data demonstrate the effect of decreased productivity on the benthos and those data enables the applicant to make predictions about changes in the benthic community as a result of interdecadal shifts in the California current.

Permit Type: Research

Latest Event:

03/17/2014 Permit signed copy received

MBNMS-2014-007

Effective Date: 03/20/2014

Expiration Date: 03/20/2014

Project Title: Application for Monterey Bay National Marine Sanctuary Overflight from Globo Telenovella

Applicant Name: Mr. Brian P. Forti

Affiliation: Senior Producer Xlerator Media Group

Project Summary:

This film project will be used as an episode for a long running Brazilian TV series popular with families. This production company was drawn to the Big Sur Coast by the inherent beauty of this unique area. A number of shots will utilize the helicopter as a camera platform. A second helicopter will have a stunt/photographer parachute from approximately 4,000 ASL in a squirrel suit parachute to one of the Grimes Ranch pastures south of Rocky Pt. Restaurant. A film crew will record and support this one day project.

Permit Type: Special Use

Latest Event:

03/10/2014 Application received

MBNMS-2014-006 - Active

Effective Date: 03/01/2014

Expiration Date: 02/28/2015

Project Title: Ages, growth rates, and climate reconstructions from deep-sea Primnoidae corals

Applicant Name: Dr. Branwen Williams

Affiliation: Claremont Colleges

Project Summary:

Seamounts create vertical topographic relief in the deep ocean resulting in different community composition than the adjacent sea floor. Seamounts also provide hard substrate, accelerated water currents, and increased productivity essential to deep-sea corals (DSC). However, there is little information regarding the differences in relative abundance, diversity, age structure and general resilience of organisms living in submarine canyons versus on seamounts. This is particularly true for the DSCs, which significantly contribute to the diversity of fauna on seamounts and likely canyon walls as well by providing physical structure and feeding grounds for fish.

Applicant will collect coral specimens at Monterey Canyon and Davidson Seamount. Target specimens will be at least six large (>1 meter), and thus presumably old, specimens to provide upper threshold of Primnoidae lifespans. Large coral specimens are necessary to appropriately discern growth patterns. Information on growth rate

Permit Type: Research

Latest Event:

03/20/2014 Permit signed copy received

MBNMS-2014-005 - Active

Effective Date: 03/01/2014

Expiration Date: 02/29/2016

Project Title: Collaborative Research: Investigations on the Cycling of Mercury from the Ocean to Fog and Deposition to Land in Coastal California

Applicant Name: Dr. Kenneth Coale

Affiliation: Moss Landing Marine Laboratories

Project Summary:

Marine advective fog, which is common along the coast of California during the summer season, is an important input to the hydrologic cycle. Many endemic flora and fauna are known to derive a significant portion of their water intake from fog drip. The chemistry of Pacific marine fog is poorly characterized. In particular, the potential for coastal ocean upwelling to contribute volatile organic mercury to the overlying atmosphere where it could be incorporated into cloud droplets as monomethyl mercury (MMHg) is not well understood. Preliminary research by this group has indicated that fog water inputs to certain coastal locations may contribute up to 99% of the MMHg flux to land compared to the MMHg flux in rain. Data from two sites in 2011 in Santa Cruz, California showed that fog water as collected with an active strand collector contained up to 50 pM of MMHg, with MMHg making up 100% of the total Hg in some samples. Oceanographic data during the upwelling season in Monterey Ba

Permit Type: Research

Latest Event:

02/27/2014 Permit signed copy received

MBNMS-2014-004 - Active

Effective Date: 03/01/2014

Expiration Date: 04/30/2014

Project Title: In situ wave-current observations during AirSWOT

Applicant Name: Dr. Tim Janssen

Affiliation: Theiss Research

Project Summary:

The purpose of this project is to collect in situ observations of waves and surface currents in the footprint of airplane and satellite (Jason 2) overflights. These observations will ground-truth data collected from airplane and satellite remote sensing instruments. Satellite and the airplane-based instrument Air Surface Water and Ocean Topography (AirSWOT) will be used to track drifters. No low overflights are planned within MBNMS low overflight zones. In this project applicant will hand-deploy approximately ten (10) surface drifters (10-inch diameter, 8 lbs) off the RV Fulmar to collect surface motion data (waves and currents). The drifters will be deployed daily

between 20 and 40 miles offshore, be left to drift for several hours, and then collected for data retrieval. Applicant will repeat deployment and retrieval for approximately ten days. The drifters' motions are tracked using an internal GPS sensor package, located using Iridium satellite communication, and then retrieved.

Permit Type: Research

Latest Event:

02/19/2014 Permit issued

MBNMS-2014-003 - Active

Effective Date: 01/27/2014

Expiration Date: 01/31/2017

Project Title: Collection of Nearshore Ambient Water Samples for Analysis of Persistent Organic Pollutants and Nutrients

Applicant Name: Mr. Jonathan Toal

Affiliation: Kinnetic Laboratories Incorporated

Project Summary:

The Central Coast Long-Term Environmental Assessment Network (CCLEAN) program was designed to monitor regional effects of point and non-point source discharges, understand the major sources of contaminants to the Monterey Bay National Marine Sanctuary (MBNMS), and determine the long-term status and trends in quality of nearshore waters, sediments, and beneficial uses. The new regional perspective was first to incorporate assessment of contaminant contributions from the four major rivers and waste water effluent discharges to the Sanctuary.

The CCLEAN program in 2004 selected to collect and analyze nearshore water for concentrations of persistent organic pollutants (POPs) and nutrients employing the same general sampling methods and schedule employed in the sampling of effluent and rivers. Sampling in previous years was approved through the issuance of permits MBNMS-2004-004 and MBNMS-2006-006. This task will repeat the previous program where a 200-liter water sample will be collected f

Permit Type: Research

Latest Event:

01/27/2014 Permit issued

MBNMS-2014-002 - Active

Effective Date: 02/10/2014

Expiration Date: 09/01/2015

Project Title: Elucidating how prey hardness influences tool use frequency and bite performance in the southern sea otter

Applicant Name: Dr. Joseph Tomoleoni

Affiliation: U.S. Geological Survey

Project Summary:

The goal of this project is to collect sea otter prey species and elucidate how the mechanical failure (hardness) of these prey influences tool use frequency and bite performance in southern sea otter populations residing in central California for a more mechanistic understanding of sea otter dietary specialization. Within a population, individual southern sea otters (*Enhydra lutris nereis*) exhibit great dietary specialization as well as great variation in tool-use during feeding; some individuals treat rocks, shells, and even prey as anvils and hammers to break open hard-shelled prey, whereas others do not use tools yet still feed on hard-shelled prey. This leads to the question, "what determines whether otters use tools to feed?" Despite the large number of studies on sea otter life history, dietary preferences, and ecological importance, how the mechanical failure (hardness) of prey influences the propensity to use tool and feeding performance in sea otters has yet...

Permit Type: Research

Latest Event:

02/12/2014 Permit signed copy received

MBNMS-2014-001 - Active

Effective Date: 01/01/2014

Expiration Date: 12/31/2018

Project Title: Superintendent's Permit

Applicant Name: Mr. Paul Michel

Affiliation: NOAA Monterey Bay National Marine Sanctuary

Project Summary:

The following activities are authorized by this permit:

Alteration of the seabed in the following manner; Installation, maintenance, and recovery of temporary scientific and education-related equipment and structures, such as quadrats; Installation, maintenance, and recovery of mooring and boundary buoys; Small scale coring of the seabed to collect benthic samples; Small scale collection of sediments or non-commercial rocks, minerals, vegetation, or invertebrates; Small scale trawls to evaluate and monitor the status of living resources; Removal of ordnance, containers, conveyances, equipment, debris, or any other items that pose a threat to sanctuary resources or qualities, that alter natural habitat within the sanctuary, or that could otherwise cause a user conflict. As well as other activities which will allow the superintend and staff to better manage the MBNMS.

Permit Type: Managerial

Latest Event:

01/24/2014 Permit signed copy received

MBNMS-2013-021

Effective Date: n/a

Expiration Date:

Project Title: Characterizing groundwater flow into the ocean at Lovers Point Beach

Applicant Name: Dr. Alexandria Boehm

Affiliation: Stanford University

Project Summary:

Permit Class: Class A

Permit Type: Research

Activity Purpose: Research

Latest Event:

03/12/2014 Application abandoned

MBNMS-2013-018-A1 - Active

Effective Date: 01/22/2014

Expiration Date: 12/31/2014

Project Title: Naval Postgraduate School Tactical Oceanography course

Applicant Name: Mr. John Joseph

Affiliation: Naval Postgraduate School

Project Summary:

The Naval Postgraduate School (NPS) Oceanography Department offers the "Tactical Oceanography" course twice a year. The course focuses on environmental effects on underwater acoustics. As part of the course, students are assigned projects that involve collecting and analyzing real world environmental data sets and present their findings at the end of the quarter. NPS will conduct approximately two 6-hr oceanography course cruises per year during the summer and winter quarters. Students will deploy and retrieve autonomous gliders, deploy and retrieve a sub-surface mooring (with acoustic receivers), collect sediment, and tow a sound source from research vessel.

Permit Type: Research

Latest Event:

01/27/2014 Amendment signed copy received

MBNMS-2013-011

Effective Date: tbd

Expiration Date:

Project Title: California American Water, CalAm, Desal Slant Well Test

Applicant Name: n/a Kevin Thomas

Affiliation: on behalf of CalAm,

Project Summary:

On behalf of California American Water, RBF Consulting (RBF) is submitting this application to the Monterey Bay National Marine Sanctuary. The Temporary Slant Test Well, herein referred to as the "Project", is located in the northwest portion of the City of Marina, CA, located on Assessor Parcel Number 203-011-019-000. This parcel is owned by CEMEX, Inc. The Project is primarily located on the beach, approximately 0.5 miles north of the existing CEMEX facility. The siting of the Project site and access route is within the "swash zone" (wave run-up beach area), approximately 5 feet west of the mean high tide. The temporary slant test well will extend west, underground, approximately 800 linear feet.

The temporary test well Project will provide field data concerning geologic, hydrogeologic, and water quality characteristics of the Sand Dunes Aquifer, Salinas Valley

Permit Type: Authorization

Latest Event:

03/27/2013 Additional information requested