MBNMS Permit Report

August 14, 2012

MBNMS-2012-023

Effective Date: 08/17/2012 **Expiration Date:** 10/31/2013

Project Title: The effects of settlement timing on competition in juvenile rockfishes

Applicant Name: Mr. Christian Denney

Affiliation: Moss Landing Marine Laboratories

Project Summary:

Additional information needed

Latest Event:

08/09/2012 Additional information requested

MBNMS-2012-022 - Active

Effective Date: 08/03/2012 **Expiration Date:** 08/31/2012

Project Title: California Seafloor Mapping Project: use of an armored Jet RIB (R/V KelpFly) for intertidal and shallow subtidal habitat mapping in the surf zone outs

Applicant Name: Dr. Rikk Kvitek

Affiliation: California State University Monterey Bay

Project Summary:

The CSUMB Seafloor Mapping Lab is conducting a mapping survey using a jet-propelled aluminum-hull rigid inflatable boat with motorized fan (R/V KelpFly; otherwise known as motorized personal watercraft, MPWC). Mapping areas will include shallow, subtidal habitats within surf zones, over rocky shoals, and around pinnacles and wash rocks throughout the sanctuary. Special attention will be given to Marine Life Protection Act (MLPA) designated marine protected areas (MPAs) and reference areas.

The state sponsored MLPA MPA biological baseline monitoring programs are making use of the California Seafloor Mapping Project (CSMP) habitat maps to plan and interpret their biological monitoring efforts. Currently, many of the MLPA biological monitoring transect lines for many of the MPAs within the sanctuary are in the extensive nearshore CSMP data gaps, and thus over unknown habitat types

Latest Event:

08/03/2012 Permit issued

MBNMS-2012-020 - Pending

Effective Date: 10/12/2012 **Expiration Date:** 10/12/2017

Project Title: City of Scotts Valley RWQCB Wastewater Treatment Facility NPDES NO. CA0048828

Applicant Name: n/a

Affiliation: Central Coast Regional Water Quality Control Board

Project Summary:

The Facility discharges wastewater to the Pacific Ocean (via Monterey Bay), a water of the United States, and is currently regulated by Order R3-2007-0013, which was adopted on September 7, 2007 and expires on October 27, 2012. The terms and conditions of the current Order will be automatically continued and remain in effect until new Waste Discharge Requirements and a National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

Latest Event:

10/12/2012 Approval granted by other agency

MBNMS-2012-018 - Active

Effective Date: 08/08/2012 **Expiration Date:** 08/08/2017

Project Title: Sewer Authority Mid-Coastside NPDES Permit No. CA0038598

Applicant Name: n/a

Affiliation: Regional Water Quality Control Board

Project Summary:

Background. Sewer Authority Mid-Coastside (hereinafter Discharger) is currently discharging pursuant to Order No. R2-2007-0003 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038598. The Discharger submitted a report of waste discharge, dated August 31, 2011, and applied for an NPDES permit reissuance to discharge up to 4 MGD (average dry weather flow) of treated wastewater from its Wastewater Treatment Plant (Plant).

The Discharger owns and operates a sanitary sewage treatment plant and a collection system that collects sewage from satellite collection systems serving the City of Half Moon Bay, Granada Sanitary District, and Montara Sanitary District, and conveys it to the plant. The treatment system, which consists of influent screening, grit removal, primary clarification,

activated sludge, secondary clarification, chlorination, and dechlorination, provides secondary treatment of domestic and commercial wastewater from the service area. The combined se

Latest Event:
06/28/2012 Authorization issued

MBNMS-2012-017 - Active

Effective Date: 08/01/2012 **Expiration Date:** 08/31/2012

Project Title: Fine scale foraging behavior of humpback whales in Monterey Bay, California

Applicant Name: Dr. John Calambokidis

Affiliation: Cascadia Research Collective

Project Summary:

This project aims to improve our understanding of the underwater foraging behavior of humpback whales in Monterey Bay, while providing valuable insight into factors that lead to aggregations of foraging whales that mayleave them vulnerable to ship strikes and vessel disturbance.

Applicant will use advanced digital recording tags (Dtags) to document the fine scale underwater movements of whales, scientific echosounders to sample prey near a foraging whale, and net tows to ground truth acoustic data. The objectives of this research are to (1) quantify the effects of environmental processes, prey type, and prey patch characteristics on the fine scale foraging movements of humpback whales, and (2) determine the prevalence of individual foraging specializations in humpback whales and the extent to which prey characteristics influence these behaviors.

Specifically, the research includes the following the components:

1)Deploy suction-cup attached tags on humpback whales

Latest Event:
08/08/2012 Permit signed copy received

MBNMS-2012-016 - Active

Effective Date: 06/28/2012 **Expiration Date:** 06/28/2017

Project Title: Annual July 4 Fireworks event at Shamel Park

Applicant Name: Mr. Terry Farrell

Affiliation: American Legion Cambria Post 432

Project Summary:

Fireworks are planned to be displayed at the Shamel Park in Cambria on the beach. The site has been used annually for a small Independence Day fireworks display on July 4, which lasts approximately 20 minutes. The launch site is on a sandy beach at Shamel County Park, and the aerial shells are aimed to the west. Immediately north of the launch site is the mouth of Santa Rosa Creek and Lagoon. The marine venue is preferred for optimal public access and to avoid the fire hazard associated with terrestrial display sites. The fireworks display occurs at the height of the dry season in central California, when area vegetation is particularly prone to ignition from sparks or embers.

Latest Event:

06/28/2012 Approval granted by other agency

MBNMS-2012-015

Effective Date: 06/16/2012 **Expiration Date:** 06/17/2012

Project Title: Jet Ski from San Francisco to San Diego

Applicant Name: Mrs. Jon Grey

Affiliation:

Project Summary:

The applicant is requesting permission to cross through the sanctuaries to get to the open ocean so that he may JetSki from San Francisco to San Diego on June 16 & 17th to raise awareness and monies to benefit the American Diabetes Association.

Latest Event:

06/07/2012 Application withdrawn by applicant

MBNMS-2012-013 - Active

Effective Date: 06/11/2012 **Expiration Date:** 01/01/2014

Project Title: Evaluation of a cooperative trap survey for nearshore groundfish

Applicant Name: Dr. Edward Dick

Affiliation: NMFS, SWFSC, Fisheries Ecology Division

Project Summary:

Stock assessments of west coast groundfish rely on size and age composition data from

fishery-independent surveys to estimate two essential factors for determining stock productivity: the relative strength of cohorts and individual growth rates. Fishery-independent trawl surveys on the U.S. west coast are designed to sample species associated with low-relief shelf and slope habitats. Many nearshore groundfish species are not available to the trawl survey due to gear-specific depth and habitat restrictions, but are primary targets of both recreational and commercial (e.g. live fish) fisheries. This pilot survey aims to fill a gap in fishery-independent sampling of west-coast groundfish by evaluating a collaborative, fishery-independent trap survey methodology for species associated with nearshore and untrawlable habitats. Species-specific catch and effort information will be collected along with biological data to quantify the precision of catch rate estimates.

Latest Event:
06/05/2012 Permit issued

MBNMS-2012-012 - Active

Effective Date: 06/20/2012 **Expiration Date:** 09/01/2014

Project Title: Development of low-cost instrumentation for in-situ observation and monitoring of benthic organisms and their habitats

Applicant Name: Dr. Steven Moore

Affiliation: California State University Monterey Bay

Project Summary:

Benthic (bottom-dwelling) marine animals are difficult to observe and study, particularly when they inhabit depths beyond safe scuba diving limits. In recent decades, camera-equipped tow sleds, remotely-operated vehicles (ROVs), and autonomous underwater vehicles (AUVs) have provided a means to observe and study these animals and their habitats. Although these technologies can cover large distances to provide information about the locations of particular habitats or species, they also tend to be very expensive to use, and they typically provide only a "snapshot" in time. Some research questions could be answered more effectively with data collected at one (or several) locations continuously over longer periods of time. For example, Market Squid (Doryteuthis opalescens), a commercially important species, breed off of Cannery Row (Monterey) in areas that experience periodic, but unpredictable, pulses of unusually cold, oxygen-poor water. (William Gilly, personal communication).\

Latest Event:

06/19/2012 Permit signed copy received

MBNMS-2012-011 - Active

Effective Date: 06/16/2011 **Expiration Date:** 06/16/2016

Project Title: City of Santa Cruz Beach Management Planapproved under: Coastal Development Permit CDP 3-11-027 (City of Santa Cruz Beach Management Plan)

Applicant Name: Mr. Dan Carl

Affiliation: California Coastal Commission

Project Summary:

The Commission was interested in better understanding the balance being struck between facilitating beach recreational use and the effect of such operations on beach ecology, and the nature to which kelp was or was not resulting in water quality impacts, and three years was deemed an appropriate interim period to allow the City to look into such issues for the next iteration of the BMP.

Coastal development permit (CDP) number 3-11-027 was approved by the California Coastal Commission on June 16, 2011. CDP 3-11-027 authorizes the implementation of the City's Beach Management Plan at Cowell and Main Beaches for three years, including: general beach area maintenance activities (sand sifting, debris removal, etc.); kelp removal (including a two-year kelp water quality study with an associated environmental monitoring component); minor beach re-contouring (except along the San Lorenzo River and its lagoon); summer beach concessionaire; public recreation and education activities; seasonal

Latest Event:

04/24/2012 Authorization issued

MBNMS-2012-010 - Expired

Effective Date: 07/10/2012 **Expiration Date:** 07/31/2012

Project Title: Downstream Development of Turbulence After a Seagrass Patch

Applicant Name: Mr. Francisco Zarama

Affiliation: Stanford University

Project Summary:

Seagrass patches serve as breeding grounds for many aquatic organisms. They provide habitat and protection to diverse species of fish, crustaceans, and amphibians. Previous studies have focused on flow within homogenous canopies, but few studies have focused on flow after a

canopy. The current study examines the effects of transitions between a seagrass canopy and unvegetated regions. Laboratory experiments have found that the flow evolves in distinct phases with changes in the mean statistics happening early, while some turbulence statistics adjust further downstream. Elkhorn Slough is an ideal place to perform this kind of study because of the high fluid velocity and the ready availability of seagrass. The long-term health and survival of seagrass communities in the coastal ocean depends on the characteristics of the surrounding flow. Four moorings will be placed on the seafloor of Elkhorn Slough. The moorings are approximately one meter by one meter plastic structures. Three of t

Latest Event:
06/04/2012 Permit signed copy received

MBNMS-2012-009

Effective Date: **Expiration Date:**

Project Title: Moss Landing Harbor District Spring 2012 Dredging Episode

Applicant Name: Mr. Mark D'Avignon

Affiliation: US Army Corps of Engineers

Project Summary:
The Moss Landing Harbor District is proposing a one-time maintenance dredging episode under CA Coastal Commission Waiver 3-11-070-W. The project includes dredging & disposing up to 73,190 cubic yards of dredged material from six locations within the south harbor docking area.

All dredge spoils would be deposited at the US EPA & USACE approved offshore disposal site known as SF-12.

Latest Event:
04/04/2012 Authorization issued

MBNMS-2012-007 - Expired

Effective Date: 05/15/2012 **Expiration Date:** 06/20/2012

Project Title: Precision Atmospheric Marine Boundary Layer Experiment (PreAMBLE)

Applicant Name: Dr. Jeffrey French

Affiliation: University of Wyoming

Project Summary:

Scientists from the University of Wyoming propose to operate motorized aircraft at low altitude within the MBNMS overflight restriction zones, to examine atmospheric dynamics associated with the summertime marine atmospheric boundary layer (MABL) and any formations of the Coastally Trapped Wind Reversal (CTWR).

During 15 May to 20 June 2012, it is expected that at most 1 to 3 CTWRs may form in the region of Pt. Conception and propagate northward along the California coast. If a CTWR forms, applicant plans to study the pressure forcing as it moves northward from Pt. Conception to as far north as San Francisco Bay. The propagation time for the CTWR to cover this distance is about 2-3 days, maximum; during which time approximately four 4-hour flights are anticipated. Only one 4-hour flight for each CTWR will occur in the sanctuary.

Low overflight operations using a twin turbo prop Beechcraft King Air 200T, will be conducted at distances greater than one nautical mile from the shore

Latest Event:

04/04/2012 Permit signed copy received

MBNMS-2011-005-A1 - Active

Effective Date: 07/02/2012 **Expiration Date:** 12/31/2012

Project Title: Collaborative Research: Benthic Exchange Events and Near-Boundary Mixing on the Continental Shelf

Applicant Name: Dr. Erika McPhee-Shaw

Affiliation: Moss Landing Marine Laboratories

Project Summary:

The overall study timeline begins April 1, 2011 and ends by July 1, 2012, and is made up of three separate month-long field periods: one in spring 2011 (April 4 - May 6), the second in fall 2011 (Sep 23 - Oct 26), and the third in spring 2012 (exact dates TBD). During each month-long field period, several moorings will be deployed:

(1) Benthic Station-1 deployed at mid-self depth (45-65 m), (2) a Vertical Profiler Station deployed ~2 km offshore from the Benthic Station (at ~65-80 m depth), and (3) two bottom-mounted, long-range ADCPs in trawl-resistant anchors. In addition, during the second and third field periods a long-range autonomous underwater vehicle (LRAUV) will perform two week-long surveys along a 12-km across-shelf line that extends from ~10 km offshore and 2 km onshore from the Benthic Station-1. Lastly, from April 4 - Oct 26, a second Benthic Station ('USGS Benthic Station-2') will be deployed further offshore along our mooring line near the shelf break, at ~90 m depth.

Latest Event:
04/19/2012 Amendment signed copy received

MBNMS-2007-025-A1 - Active

Effective Date: 04/01/2012 **Expiration Date:** 03/31/2014

Project Title: California halibut and Pacific hagfish surveys of Monterey Bay

Applicant Name: Mr. Travis Tanaka

Affiliation: California Department of Fish and Game

Project Summary:
Sublegal-sized halibut will be surveyed using beach seines for maturity/age studies. This study will provide necessary life history information regarding California halibut including length and age distribution, and sex ratio. Pacific hagfish will be collected using traps for sex and maturity status.

Latest Event:
06/18/2012 Amendment request received

MBNMS-2007-009-A1 - Active

Effective Date: 04/16/2012 **Expiration Date:** 04/15/2017

Project Title: To conduct a variety of long-term monitoring programs in Elkhorn Slough

Applicant Name: Dr. Kerstin Wasson

Affiliation: Elkhorn Slough National Estuarine Research Reserve

Project Summary:
The ESNERR coordinates a variety of long-term monitoring programs in the estuarine ecosystems of Elkhorn Slough. The information from this monitoring is vital for tracking trends, informing restoration, supporting other research, and detecting emerging threats. The seven monitoring programs include: 1) crab monitoring; 2) fish monitoring; 3) seagrass monitoring; 4) mudflat community monitoring; 5) Olympia oyster monitoring; 6) bank erosion and habitat monitoring; and 7) water quality monitoring.

Latest Event:
04/16/2012 Amendment signed copy received