MBNMS Permit Report
December 2012
MULTI-2012-004 - Active

Effective Date: 09/14/2012  Expiration Date: 09/30/2014

Project Title: Wave Glider Operations: Conducting Marine Research

Affiliation: Liquid Robotics Inc.

Project Summary:
Liquid Robotics, Inc. (LRI) Wave Gliders are remotely operated, propelled under their own power, remotely attended from the Wave Glider Operations Center, moving at speeds of ~1 knot and designed to "lose" in any type of collision with any vessel. The Wave Glider unit is composed of a submerged glider with rudder and wings (sub; 75 inches x 24 inches), umbilical (up to 20 feet) leading to surface float (82 inches x 24 inches, surfboard size), solar panels, marker light, antenna, and mast extending 3 feet above the water surface supporting a flag (http://liquidr.com/technology/wave-glider-specifications/).

The Wave Glider's unique two-part architecture exploits this difference in motion to provide forward thrust. A rising wave lifts the float, causing the tethered sub to rise. The articulated wings on the sub are pressed down and the upward motion of the sub becomes an up-and-forward motion, in turn pulling the float forward and off the wave. This causes the sub to drop, the wings

Latest Event:
09/17/2012  Permit signed copy received

MULTI-2009-005-A5 - Active

Effective Date: 11/02/2012  Expiration Date: 08/31/2013

Project Title: Documentary filming of Stanford white shark tagging (TOPPS Program)

Affiliation: Stanford University

Project Summary:
This request is to support our ability to obtain footage of Stanford University's white shark tagging program (Research Permit MULTI-2009-005-A4 issued to Barbara Block), to be used only for the purposes of public education and outreach programs.

The first request is from the Monterey Bay Aquarium, who is a collaborator in our white shark research program. For the past several years the aquarium has featured a visitor program in their auditorium about white shark conservation research, which focuses in part on the tagging work happening at the Farallones. They are in the process of updating this presentation, and as part of that process they would like to shoot new HD video sequences to replace the older footage they have been using to date. They have agreed to share the footage they shoot with our research team for use in our own public education and outreach efforts, including web, classroom and media relations.

Latest Event:
11/02/2012  Amendment issued
**MULTI-2009-005-A3 - Expired**

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

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

**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

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**MBNMS-2012-034 - Active**

**Effective Date:** 11/01/2012  
**Expiration Date:** 10/31/2014  

**Project Title:** Acoustic Monitoring for Marine Mammals and Anthropogenic Noise  

**Affiliation:** Scripps Institution of Oceanography  

**Project Summary:**

A program of passive acoustic monitoring for marine mammals is proposed to study the environmental impacts of offshore geophysical surveys planned near the Diablo Canyon Power Plant during late 2012 and during an undetermined time in 2013. The goal of the proposed monitoring is to provide insight on the impact of seismic noise on harbor porpoise, coastal bottlenose dolphins, endangered baleen whales (blue, fin and humpback), and other marine mammals in the region.

Applicants proposes to deploy a passive acoustic monitoring device - High-frequency Acoustic Recording Package (HARP) - in the southern portion of the Monterey Bay National Marine Sanctuary (35° 33.7N, 121° 16.1W, depth = 200 m), which is just to the north of the area of the Diablo Canyon seismic survey. Deployment of a HARP in the Sanctuary will monitor the full range of marine mammal species present in the region as well as the received levels for seismic airgun shots. The HARP is the most capable instrument for passi

**Latest Event:**  
10/26/2012 Permit signed copy received
**MBNMS-2012-032 - Active**

**Effective Date:** 11/01/2012  
**Expiration Date:** 04/15/2013

**Project Title:** Installation, Repair, and Removal of Water Level Stations in California (CO-OPS TASK 12-04)

**Affiliation:** JOA Surveys, LLC

**Project Summary:**
NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) will be conducting a tide and sea level study in California, November 2012 - March 2013. The project is part of the nationwide NOAA VDATUM program (http://vdatum.noaa.gov/). The tide data will be used to support nautical charting, shoreline mapping, and surveying for projects that require accurate vertical heights near the water.

A temporary NOAA tide station will be installed at north end of Pacific Valley (middle Big Sur) along the coast of Los Padres National Forest in California. The temporary tide station will measure accurate water levels for 3 months using precise pressure sensors. NOAA/CO-OPS will calculate tidal datums and harmonic constituents based upon this data.

The data gathered there will enhance marine navigation as well as vertical datum models, coastal planning and management, long-term sea-level assessments, and emergency preparedness.

JOA Survey, LLC (JOA) under contract to NOAA/

**Latest Event:**
10/25/2012 Permit signed copy received

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**MBNMS-2012-031 - Active**

**Effective Date:** 10/03/2012  
**Expiration Date:** 10/30/2017

**Project Title:** Monte Foundation Annual Fireworks

**Affiliation:** Rudolph F. Monte Foundation

**Project Summary:**
This event is scheduled to take place in October at Seacliff State Beach.

This authorization is limited to discharges and incidental harassment of marine life within the MBNMS by the launching of commercial within the Sanctuary in October of each year that this authorization is valid.

The Aptos site has been used annually for a large fundraiser for Aptos area schools in October. The launch site is on the Aptos Pier and part of a grounded cement barge at Seacliff State Beach. The aerial shells are aimed above and to the south of the pier.

**Latest Event:**
10/02/2012 Authorization issued
MBNMS-2012-030 - Active

Effective Date: 10/05/2012  Expiration Date: 11/30/2014

Project Title: Environmental signal analysis: monitoring the impacts of climate change on rocky intertidal ecosystems across a cascade of scales

Affiliation: University of South Carolina

Project Summary:
Applicant proposes to install and remove temperature data loggers onto rock within mussel beds at Piedras Blancas to investigate the ongoing and future impacts of climate change on predator-prey interactions between seastar Pisaster and mussel Mytilus.

Approximately six data loggers (1.2 x 1.6 x 0.68 inches) will be deployed within various intertidal mussel beds below the Mean High Water mark and above the Mean Low Water mark during low tide. ONSET TidBit v2 Temperature Data Loggers will be encased in black-tinted Evercoat Marine Resin. Z-Spar Splash Zone Epoxy Putty will be used to attach the loggers to rock. Rock will be cleared (if necessary) using hand tools (e.g., hammer, screw driver). Loggers will be attached at previously attached locations. In 10-12 months, applicant will return to remove loggers and re-deploy new ones. No equipment will be left in the field or permanently secured to any rock or natural surface.

Black abalone will not be removed,

Latest Event:
10/04/2012 Permit signed copy received

MBNMS-2012-028 - Active

Effective Date: 10/01/2012  Expiration Date: 10/31/2014

Project Title: Discovery of Marine Natural Products from Marine Sediments

Affiliation: University of California Santa Cruz

Project Summary:
Applicant proposes to collect marine sediments using hand-held corers while SCUBA diving. During a two-year period, approximately 40 sites will be visited, to collect ten (2 x 5-gram) samples from each site.

This research project is part of a larger effort in Linington's laboratory to explore marine actinomycetes (marine bacteria) for bioactive secondary metabolites, and to apply these secondary metabolites to human health targets for discovering new leads for drug development. In the context of MBNMS, this project involves collection of small quantities of sediment, isolation of actinomycetes from these sediment samples, and identifying both the taxonomic grouping and chemical composition of these bacterial isolates. Although compounds may have biomedical applications, project is short-lived, small-scale, and not for commercial purposes.

Latest Event:
10/01/2012 Permit signed copy received
**MBNMS-2012-020 - Active**

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

**Project Title:** City of Scotts Valley Order No: R3-2012-0029  
Wastewater Treatment Facility NPDES NO. CA0048828  

**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

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**MBNMS-2011-013-A1**

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

**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:**  
11/07/2012 Authorization issued

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**MBNMS-2011-004 - Active**

**Effective Date:** 11/01/2011  
**Expiration Date:** 02/11/2016  

**Project Title:** California Coastal Commission Coastal Development Permit (CDP) 3-10-040, for Monterey Harbor Dredging and USACE PN 2009-00221S  

**Affiliation:** CA Coastal Commission  

**Project Summary:**  
Dredge up to 10,000 cubic yards of sediment annually for ten years at the Monterey Harbor/Marina (between Municipal Wharf's I and II), and deposit/dispose of dredge sediments through beach nourishment at two Del Monte Beach receiver sites just upcoast of Wharf II.
The City of Monterey Harbor Department proposes to dredge and use for beach nourishment up to 10,000 cubic yards of sediment annually for ten years at the Monterey Harbor and Marina in the City of Monterey, Monterey County. The Harbor Department would dredge in two general locations to a depth of -12 feet below mean lower low water, including in the area surrounding the 450 slip Marina and the Coast Guard Pier/Breakwater area, and would dispose of the dredged sediments at two sandy beach areas along Del Monte Beach just upcoast of Municipal Wharf Number 2 in order to nourish the beaches there. The Harbor Department indicates that sand shoaling has limited the use of harbor facilities, and the proposed project is necessary.

**Latest Event:**
- 09/23/2011 Authorization issued

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**MBNMS-2002-033-A2 - Expired**

**Effective Date:** 12/07/2009  
**Expiration Date:** 10/31/2012

**Project Title:** Monterey Bay Aquarium Substrate Collection

**Affiliation:** Monterey Bay Aquarium

**Project Summary:**
The MBA request permission for a 5-year permit to collect substrate (i.e., granite, shale, sand, etc.) within the MBNMS. The collection of this material is for public educational activities and scientific research.

**Latest Event:**
- 10/05/2012 Amendment request received