GFNMS Permit Report

August 2017

Sanctuary Advisory Council Meeting

Permit Type	Permit Status	Applicant Name	Affiliation	Project
Research	Issued	Ben Rubinoff	UC Davis	Examine how invasive fouling community composition changes spatially along an estuarine gradient and temporally across seasons under the influence of climate change. The permit was issued to allow the deployment of settlement plates at three sites along the western shore of Tomales Bay, CA in order to quantify community shifts.
Research	Issued	Kate DuBois	Bodega Marine Laboratory	Conduct research to compare the thermal tolerance of six eelgrass populations distributed along the length of Tomales Bay. Experiments in the field will be followed by lab-based experiments at the Bodega Marine Laboratory. The goal of the research is to learn how eelgrass meadows within Tomales Bay could be locally adapted or acclimated to gradients in temperature regimes under the influence of climate change.
Education	Issued	Jane Reifert, Greg Barron	IA Worldwide Inc., aka Incredible Adventures	Attract white sharks at the Farallon Islands for the purposes of conducting educational tours. IA Worldwide Inc. appealed the permit issued to them in 2016 and once again requested permission to use chum and scent attractants during their tours. The Assistant Administrator of NOAA's National Ocean Service denied the appeal and upheld GFNMS' decision to allow only the use of decoys. This amendment was issued per the instructions of the Assistant Administrator's final disposition. The amendment incorporates a change to the company's name (now IA Worldwide, Inc.), a revised project title (now "Adventures in White Shark Education: Dispelling the Myths"), and extends the expiration date to 11/30/18.
Research	Issued	Stephen Keith, Tracee Geernaert	International Pacific Halibut Commission	Deploy bottom long lines in order to collect data on Pacific halibut. The IPHC setline survey is coordinated to support NOAA Fisheries stock assessments each year and feed into the Pacific halibut stock assessment. Data from the survey are used to monitor changes in abundance, growth, and mortality in the adult population. Survey data are used to determine Pacific halibut range, local depletion, and fleet distribution effects on the resource.

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Research	Issued	Courtney Opshaug	Blue Ocean Gear LLC	Deploy and test a smart trap that helps crab fishermen determine the most fuel-efficient way to retrieve and set traps, improving their catch per unit of fuel while reducing the potential for bycatch. Real-time data of how much catch is in the trap is transmitted to the fisherman onshore which allows them to determine the optimal route for trap retrieval, where the target species are abundant, and whether the smaller bycatch species are escaping as designed. This permit is being issued to allow the trap to be deployed during the months that fall outside the legal crab fishing season. This project was orginally permitted under MBNMS-2017-026, issued on January 26, 2017. This MULTI permit is being issued to allow the permittee to deploy the smart trap at two additional sites: one near Half Moon Bay in MBNMS and one near Bodega Bay in GFNMS.
Research	Issued	Andrew Chang	Smithsonian Environmental Research Center	Deploy PVC panels on the sea bed to collect invasive species at three sites in Tomales Bay. Two buoys will be deployed at each site to mark the locations of the plates; each buoy will be anchored by a 50-lb concrete anchor. SERC will be working with California Department of Fish and Wildlife (CDFW) and the Moss Landing Marine Laboratories (MLML) as part of this state-mandated survey of California waters for non-native species. The project will survey benthic communities to assess the prevalence of fouling organisms; all taxa will be identified by expert taxonomists and sequenced and added to MLML's invertebrate sequence library.
	Under review	Dr. Richard Starr	Moss Landing Marine Labs	Deploy a video lander on the sea floor, which is an underwater camera system designed to assess the relative abundance of fishes and invertebrates in marine areas without conducting extractive sampling. Data collected from each survey would include geographic coordinates, starting and ending times, fish counts, and species observed. This project would be conducted in collaboration with the Nature Conservancy and NOAA National Marine Fisheries Service.

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	Under review	Graham Groneman	Marin County Fire Department	Use motorized personal watercraft (MPWC) for life-safety and search and rescue training within the sanctuary. The exact areas and seasonal windows in which trainings would be conducted are still being determined.
	Under review	James Moskito, Lawrence Groth	Great White Adventures	Attract white sharks for educational tours.
	Under review	Barbara Block, Sal Jorgensen	Stanford University, Monterey Bay Aquarium	Deploy moorings and receivers on the sea floor to track acoustically tagged White sharks and to attract White sharks for tagging, biopsy sampling and photo identification purposes. This work is a continuation of the Tagging of Pelagic Predators (TOPP) program's long-term research program to evaluate and monitor population trends, population biology, migrations, and behaviors of the Northeastern Pacific population of White sharks in both coastal and offshore waters.
	Under review	Bob Brodsky		Conduct low overflights using an unmanned aerial system (UAS) to complete a bathymetric survey of eelgrass beds; the survey would measure existing and future density, health, and growth patterns of eelgrass. Surveys would be conducted in collaboration with CDFW and Bodega Marine Lab. The goal of the project is to accurately map eelgrass habitat in order to establish appropriate buffer distances for aquaculture activities in the northeast corner of Tomales Bay.