



NOAA
FISHERIES

Pacific Islands Regional Office Federal Programs Office 2016 Annual Report



A Message from the Regional Administrator

We are pleased to announce that in fiscal year 2016 (FY16), the Federal Programs Office of the NOAA Fisheries Pacific Islands Regional Office (PIRO) processed 59 individual funding actions, resulting in 50 projects totaling \$7,632,135 in grants, cooperative agreements, and financial assistance to constituents in support of the NOAA Fisheries mission. We issued these awards through competitive and noncompetitive financial-assistance programs. Recipients of the federal awards included 27 US and international agencies and organizations from Hawai'i, the Commonwealth of the Northern Mariana Islands (CNMI), Guam, American Samoa, and the greater Pacific.



Michael D. Tosatto

PIRO manages programs that support both domestic and international conservation and management of living marine resources within the Pacific Islands Region (PIR), which is comprised of American Samoa, Guam, Hawai'i, the CNMI, and other U.S. Pacific Islands. Our vision is to achieve healthy marine ecosystems that provide: stability for fishery resources; recovery of threatened and endangered species; and enhanced opportunities for commercial, recreational, and cultural activities in the marine environment.

PIRO is responsible for assisting the Western Pacific Fishery Management Council (WPFMC) in developing fishery management plans and amendments. In addition to PIRO and the WPFMC, the NOAA Pacific Islands Fisheries Science Center (PIFSC) and the NOAA Office of Law Enforcement (OLE) also collaboratively support the conservation and management of marine fisheries, protected species, and marine habitat. Working together, these offices are committed to employing regional expertise to provide improved customer service and stewardship of living marine resources within this expansive geographic region.

Our efforts will continue to focus on capacity building, grant writing, and proposal-development training for Hawai'i and the territories, and working with communities to develop innovative projects that help NOAA Fisheries provide stewardship of living marine resources through science-based conservation and management in our region.

A handwritten signature in black ink, appearing to read "M. D. Tosatto".



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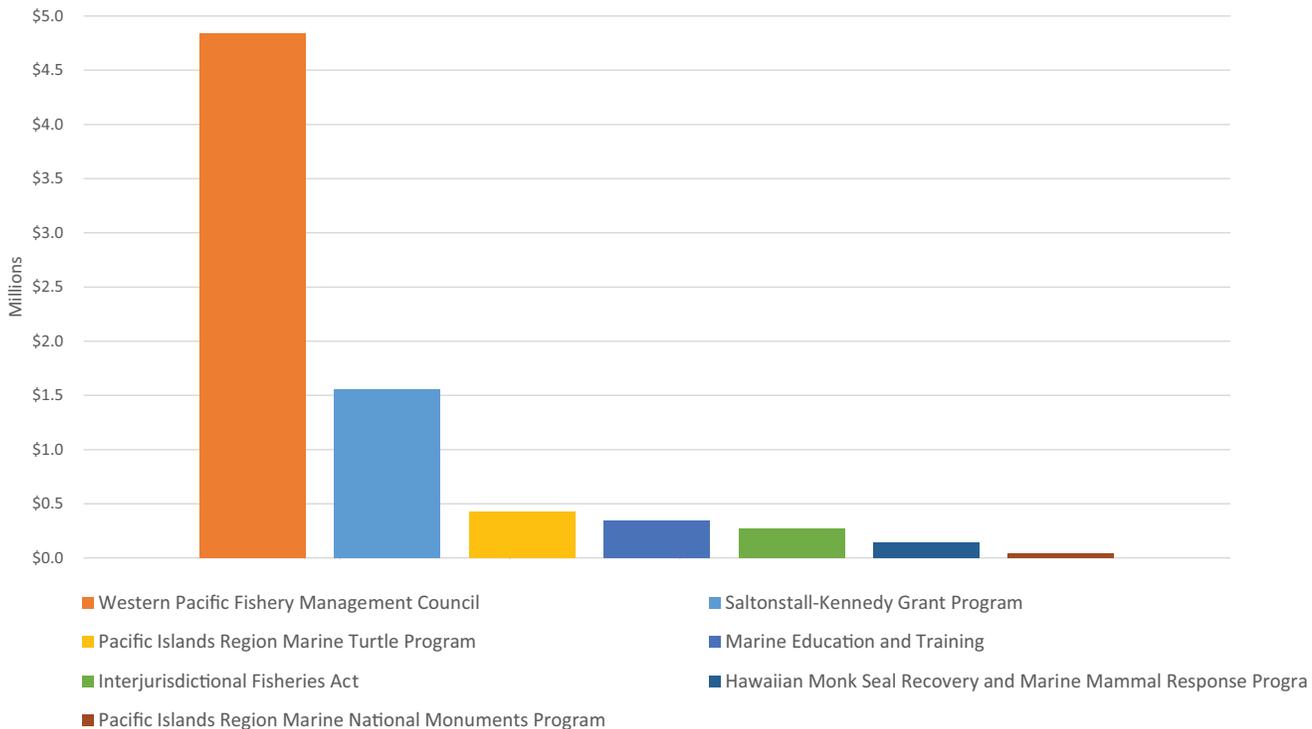
*Bigeyes (Priacanthus sp.) at Kwajalein Atoll, US Army base.
Photo credit: NMFS Robert E. Schroeder*

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Highlights of PIRO's Federal Programs Office Activities

- Expanded partnerships and collaborative efforts with public and private partners in the PIR to further NOAA's mission through federal financial assistance
- Awarded \$7,632,135 in grants and cooperative agreements

Summary of Fiscal Year 2016 Funding



Federal Programs Office

The Federal Programs Office is located at PIRO in Honolulu, Hawai'i. With technical assistance from PIRO and PIFSC staff, Federal Program Officers (FPOs) administer grants and cooperative agreements throughout the award period, from the initial solicitation through post-award management. FPOs also work closely with the NOAA Grants Management Division, technical monitors, and grant recipients throughout the award period to facilitate the successful completion of each grant's project objectives.

The Federal Programs Office supports the NOAA Fisheries mission through competitive and noncompetitive grants and cooperative agreements. PIRO funded the following grant programs during FY16:

- Western Pacific Fishery Management Council
- Marine Education and Training Program
- Pacific Islands Region Marine Turtle Program
- Hawaiian Monk Seal Recovery and Marine Mammal Response Program
- Pacific Islands Region Marine National Monuments Program
- Interjurisdictional Fisheries Act of 1986
- Saltonstall-Kennedy Grants Program
- Miscellaneous projects that meet criteria published under the 2015–2016 Broad Agency Announcement (BAA)

The BAA is a NOAA-wide solicitation of proposals for special projects associated with the NOAA strategic plan and mission goals. It's a mechanism to encourage research, education and outreach, innovative projects, and sponsorships that are not addressed through NOAA's active competitive programs.

Western Pacific Fishery Management Council

The WPFMC prepares, monitors, and revises fishery-management plans for domestic and foreign fishing within the 200-mile U.S. Exclusive Economic Zone (EEZ) in the western and central Pacific Ocean. PIRO is in charge of implementing the management measures created by WPFMC and NOAA OLE, and the U.S. Coast Guard 14th District and local enforcement agencies enforce the measures.

In FY16, PIRO funded the second year of a 5-year cooperative agreement to support the WPFMC base administration and operations and WPFMC's protected species conservation and management program. In addition, the WPFMC received funding support via the Western Pacific Sustainable Fisheries Fund as identified in the MSRA §204. In all, the WPFMC received \$4,834,802 for the following activities:

1. **Base Administration and Operations (\$2,819,015)**
2. **Annual Catch Limits Implementation (\$197,528)**
3. **Scientific and Statistical Committee (\$55,764)**
4. **Regulatory Streamlining Program (\$94,562)**
5. **National Environmental Policy Act (NEPA) (\$88,998)**
6. **Council Peer Review (\$142,075)**
7. **Council Education Committee Scholarships (\$50,000)**
8. **Council Education Committee Internships (\$50,000)**
9. **Territorial Science Initiative (\$175,000)**
10. **International Fisheries Division Support for the Western & Central Pacific Fisheries Commission (\$59,500)**
11. **Western Pacific Sustainable Fisheries Fund — Administration Report (\$20,000)**
12. **Marine Recreational Information Program (\$245,000)**
13. **Fisheries Information System (EM/ER) (\$284,360)**
14. **Sustainable Fisheries Division Support for Fishing Communities (\$30,000)**
15. **Protected Species Conservation and Management Program (\$200,000)**
16. **Western Pacific Sustainable Fisheries Fund VI (\$200,000)**
17. **Western Pacific Sustainable Fisheries Fund VII (\$123,000)**

The WPFMC Protected Species Conservation and Management Program aims to address fisheries interactions with protected species, and has significantly reduced sea turtle and seabird interactions in the Hawai'i-based longline fishery through the adoption of various mitigation technologies. The WPFMC management program also supports conservation projects at nesting beaches and foraging grounds for North Pacific loggerhead turtles and Western Pacific leatherback turtles, both of which are high priority subpopulations due to historically high interactions with Hawai'i-based fisheries.

The Western Pacific Sustainable Fisheries Fund VI will support the extension of the Hagåtña Fishing Platform in Paseo de Susanna Park in Guam. Within the park is a popular local recreational fishing area which has shoreline access to deeper waters. The shoreline consists of a wave absorber — a rock rip-rap structure owned and operated by the U.S. Army of Corps of Engineers to protect the shoreline from erosional forces. The uneven surface of the wave absorber and irregular placement of the rocks spawn several safety concerns for fishermen who scramble over the structure to cast their lines. The extension of the Hagåtña Fishing Platform will improve the safety of recreational fishing activities and the accessibility for all fishers including those with disabilities.

The Western Pacific Sustainable Fisheries Fund VII will support the CNMI government to improve the Garapan Fishing Base. This base has a rich history of supporting commercial tuna fishing dating back to the early 1920s and post-World War II period. Under this cooperative agreement, the Council will work closely with the CNMI Department of Land and Natural Resources (DLNR) to complete the necessary environmental analyses and engineering designs to improve the area, including building a shoreline revetment and floating dock system, widening an existing boat ramp, and maintenance dredging of the area to aid in navigation, economic growth and local food production; and outreach and educational projects.



A typical small scale tilapia farm in American Samoa, that struggles to survive the exorbitant cost of importing quality feeds. Photo credit: Aquafeed.com, LCC

Saltonstall-Kennedy Grant Program

The Saltonstall-Kennedy (S-K) Grant Program is a national competitive program administered by NOAA Fisheries. The program provides financial assistance (grants and/or cooperative agreements) for research and development projects that benefit the U.S. fishing industry. The program's statutory authority is the S-K Act, as amended (15 U.S.C. 713c-3). The S-K Act established a fund for the Secretary of Commerce to provide funding support for projects addressing aspects of U.S. fisheries, including, but not limited to, harvesting, processing, marketing, and associated infrastructures. In 2016, PIRO awarded \$1,556,775 in federal funds via the S-K Grant Program.

Bishop Museum, American Samoa — Jungle Histology (\$201,611)

“Jungle Histology” is a rapid, low-cost, on-site, histology-based reproductive analysis method that requires minimal research infrastructure. The purpose of this project is to train American Samoa natural-resource professionals to use this method of determining reproductive parameters for Pacific coral reef fish species to support the effective management and conservation of Pacific coral reef fishes. Participants in the American Samoa Department of Marine and Wildlife Resources-hosted workshop will learn and apply Jungle Histology to generate and disseminate novel reproductive information for up to six commonly exploited Pacific reef fish species in American Samoa.

University of Hawai'i — Assessing and Building Adaptive Capacity to Address Climate Change Impacts on Fishing Communities and Fisheries Resources in Micronesia (\$299,828)

Fishing communities and fisheries resources in Guam and the Federated States of Micronesia are already impacted by climate change, natural hazards, and human stressors. The recent El Niño Southern Oscillation provides an unprecedented opportunity to assess how fishing communities are challenged by and cope with climate risks as a way of better informing future climate adaptation and fisheries management efforts. This project will collect and integrate data on the social adaptive capacity of fishing communities with existing fisheries, ecological, and climate data. This project will be one of the first examples of how to integrate social and ecological data to support the resilience of fisheries and fishing communities in Micronesia.

Kampachi Farms, LLC, Herbivorous Marine Finfish Culture — The Compelling Case for Kyphosids (\$127,865)

Kampachi Farms, LLC will develop and test feeds on kyphosids, a native herbivorous marine fish and a highly esteemed food fish within the local cultures of the greater Pacific. The testing feeds will include commercial fish feed and feed formulated from three common invasive marine seaweeds. This project will test the performance of kyphosid growth and evaluate fish taste and quality. There are two components of this project and they will occur in two separate locations. The grow-out feed trial of kyphosids fed commercially available fish feed will be conducted at the existing Kampachi Farms research facility in the State of Hawai'i's Natural Energy Laboratory of Hawaii complex in Kona, Hawai'i. The grow-out feed trial of kyphosids fed invasive algae will occur at He'eia fishpond on O'ahu and be conducted by the fishpond's nonprofit stewards, Paepae o He'eia.

Conservation International Foundation — Ho‘okahua, Building a Strong Foundation for a Statewide Fisheries Licensing System in Hawai‘i \$242,326

Hawai‘i is the only coastal state in the United States without a recreational marine fishing license and Hawai‘i’s DLNR commercial licensing system is outdated; for example, it uses a single permit that applies to all commercial fishing activities. Without a well-designed fisheries licensing system, there are gaps in data that limit effective management, missed opportunities for fisher engagement and buy-in regarding fisheries management plans, and missed opportunities to help fund DNLR to better manage fishery resources. This project will develop and gather several analyses and decision documents, and key in motivating stakeholder groups, including Hawai‘i legislators, policy-makers, natural resource agency managers, and fishers, to consider redesigning a statewide licensing system.

Aquafeed.com, LLC — Development of a Supplemental Feed and Fertilizer from Fish Processing Waste for Island Farmers and Small Businesses for Sustainable Aquaculture and Agriculture (\$250,000)

The exceptionally high cost of feed for aquaculture is the biggest economic barrier to commercially viable aquaculture in the region. This project will support the development of sustainable fish farming in Hawai‘i and the Pacific Islands by using wet fishery processing waste to make a water stable supplemental fish feed high in protein and quality. Additionally, a liquid fish fertilizer will be developed from lower grade fish processing waste for aquaculture, aquaponics, hydroponics, horticulture, and agriculture. Project outcomes will help to sustain and create aquaculture in the Hawaiian and Pacific Islands, benefit jobs in the retail seafood industry, and effectively recycle and utilize fish processing waste to create a more sustainable ecosystem-based management for the fisheries industry.

Government of Guam Department of Administration — Development of Fish Import and Export Data Collection and Monitoring System in the Mariana Islands (\$245,195)

Fishery data in Guam and CNMI is very limited and in various formats. Fish dealers collect data on fish product sales, but do not differentiate between locally harvested and imported fish. The Guam Customs and Quarantine Agency and CNMI Division of Customs Service regulate movement of all imports and exports through bills of lading and other import/export forms. Fisheries and marine import information, however, is collected only through manual and paper-intensive processes. This project will improve the quality and quantity of fishery information from U.S. territories that can be used for establishing, enhancing, and monitoring Annual Catch Limits and ecosystem-based information for Federal fisheries management in Guam and the CNMI.

Mariana Islands Nature Alliance — Expanding Fisheries and Economic Opportunities for Pohnpei, Micronesia Coral Reef Fishers (\$189,950)

Pohnpei has around 35,000 inhabitants and approximately 7,000 recreational, subsistence, and commercial fishers. The commercial fishery accounts for an estimated 68% of total catch, with more than 70% of that from nighttime spearfishing and only 25% from hook-and-line fishing. As a whole, the fishery is comprised of an overabundance of immature fish. Ironically, even as finfish populations are diminishing from overharvest, fished volumes remain static, apparently to maintain earnings among fishers. As a result, biocapacity is being exceeded and changes are needed to reduce demand while simultaneously maintaining or improving fisher incomes. Given the known and perceived finfish overharvesting in Pohnpei, this project will focus on changing the manner in which marine resources are caught and marketed by promoting sustainable fishing, while simultaneously expanding marketing opportunities.



Fish Processing Waste can be transformed from a costly disposal problem to a profit stream for fish processors and a valuable protein source for aquaculture, Photo credit: Aquafeed.com, LLC

Marine Education and Training

In 2007, the Magnuson-Stevens Reauthorization Act was amended to include §305 (j), which provides guidance on the development of a marine education and training program. Public Law 109-479 states: “the Secretary shall, in cooperation with the Western Pacific Fishery Management Council, establish programs that will improve communication, education, and training on marine resource issues throughout the region and increase scientific education for marine-related professions among coastal community residents, including indigenous Pacific Islanders, Native Hawaiians, and other underrepresented groups in the region.” The Pacific Islands Region Marine Education and Training Program was established to meet Congressional intent. In 2016, PIRO funded nine marine education and training projects in the amount of \$345,224.

Keolohilani Lopes — Snorkeling Assessments and New Discoveries (SAND) (\$15,000)

High school students from various schools in the Hawaiian Islands will participate in a 10-day program designed to fuel the passion of young adults for the ocean and promote environmental stewardship and marine science careers. Accompanied with a hands-on introduction to current scientific sampling techniques of fish, invertebrates, and algae, the educational curriculum will be held at the Ka'ūpūlehu Interpretive Center in Kalaemanō, Hawai'i. Students will gain a deeper understanding of the environment, anthropogenic influences, and traditional Hawaiian approaches to resource management while learning that careers in marine science can be rewarding, exciting, and fun.

University of Hawai'i Systems — UH Mānoa Marine Option Program (MOP) Support (\$160,746)

To provide experiential opportunities for students with ocean-related interests, MOP offers marine-education programs and activities for undergraduates across more than 40 disciplines. MOP will continue to provide career counseling, help students identify and implement hands-on internships and research projects to meet their MOP certificate requirements, liaise with project mentors, and monitor student progress. The program will facilitate scientific diving opportunities and assist in teaching aspects of hands-on underwater-surveying practices and principles courses. Funding support comes from PIRO, Papahānaumokuākea Marine National Monument, and the Office for Coastal Management.

University of Hawai'i Mānowai o Hanakahi — Mānowai o Hanakahi Marine Conservation and Training Project (\$14,924)

Our planet's health — and especially that of marine systems — faces complex challenges. To overcome these adversities we must prepare our current and future workforce. To increase our environmental workforce needs, the University of Hawai'i at Hilo's Pacific Islands Programs for Exploring Science (PIPES) proposes a three-phased school-year, marine conservation, and career-awareness project. This program will increase participants' understanding of marine ecology and conservation issues, experience and skills in marine science research, and awareness and interest in marine science careers; and provide participants the opportunity to implement research or community impact projects and share their experiences via community outreach and peer events.

Hawai'i Fishermen's Alliance for Conservation and Tradition, Inc. — Development and Distribution of a Code of Conduct for Fishing around Pantropical Spotted Dolphins (\$14,580)

This project will focus on educating fishermen on the proper protocols of fishing in the vicinity of dolphins to minimize potential for incidental interactions, through the development of foundational materials and a voluntary code of conduct. Educating fishermen is expected to reduce the likelihood of potential fishery interactions, offer a proactive approach to preventing interactions from occurring in the future, and ultimately alleviate concerns regarding incidental interactions.



2016 Hawaii State Science Fair NOAA winners with National Weather Service Director, Ray Tanabe. Photo credit: NMFS Joseph Bennington-Castro

Hawai'i Academy of Science — Hawai'i State Science and Engineering Fair (\$80,000)

To build capacity of Hawai'i students interested in marine and natural science, this project proposes to provide every student in Hawai'i with an opportunity to participate in a science fair activity, regardless of their island of residence. The goals of the science fair are to produce students who can use the scientific method to investigate questions and solve problems in the real world; create the opportunity for the high school students to interact with the leading scientists in Hawai'i and conduct in-depth and comprehensive science investigations; and increase the number of students in Hawai'i pursuing advanced degrees in areas of study related to STEM (Science, Technology, Engineering, and Math). This project supports the administration and execution of the Hawai'i State Science and Engineering Fair, as well as connecting students, scientists, and teachers; leveraging partners and donors; and providing scholarships and awards to fair winners.



UH Mānoa Marine Option Program. Photo credit: Jeff Kuwabara

The Kohala Center — Youth Leadership for Reef Protection (\$14,974)

The Kahalu‘u Bay Education Center (KBEC) will train 60 middle and high school students from the Kahalu‘u Bay area of Hawai‘i County to become stewards of their local beach park and bay, specifically by instructing them on ReefTeach (reef etiquette) and Citizen Science water quality testing programs. During the October 2016 school break, students will attend a four-hour ReefTeach instructional session taught at the Kahalu‘u Beach Park main pavilion. KBEC’s Citizen Science water quality monitoring instruction program will be held on Saturdays or during school holidays. Each youth will volunteer at least 12 hours at KBEC to introduce visitors to the park with proper reef safety and etiquette and/or conduct Citizen Science water quality testing.

Pacific Islands Fisheries Group (PIFG) — Tag it – Near-Shore Reef Fish Tagging Project (\$15,000)

To provide fishery scientists with life history information that can be used to inform future stock assessments for near shore reef fish species in Hawai‘i, PIFG will launch a statewide tag and recapture program. Using conventional tagging methodology, this project will be a community-based capture, tag, and release program for social, economic, and culturally important fish including jacks, bonefish, threadfin, and barracuda. Establishing this coastal tagging program is important for two key reasons. First, the collection of biological information from important reef fish species helps to improve scientific understanding. Second, this project directly responds to local fishermen’s long interest and requests to establish a statewide cooperative tagging project that is built on fishery research conducted by fishermen. Informed and engaged fishermen participate more effectively in the management and conservation fishery resources statewide.

University of Hawai‘i — Continuing to Build Pacific Islander Capacity Through Training in Underwater Surveying Techniques (\$15,000)

The objective of this project is to continue to build capacity of Pacific Islanders in fisheries science, marine biology, and other related careers through participation in an underwater surveying training course. The hands-on training course to be offered is a modified (snorkeling) version of the Quantitative Underwater Ecological Surveying Techniques (QUEST) course conducted by MOP. Undergraduates at American Samoa Community College will gain hands-on experience, new technical skills, and knowledge of marine resources that will enhance their academic portfolio, increase their job competitiveness, and strengthen their desire to pursue a career in marine science or related fields.

University of Hawai‘i — Mālama Kanaloa Marine Resource Management (MKMRM) (\$15,000)

Little of the educational curriculum in Hawai‘i’s public schools focuses on marine science or marine resource management of Hawai‘i’s unique marine ecosystems, leaving a gap in the educational knowledge of young adults entering the workforce. MKMRM is a year-long engagement and education program for Hawai‘i students to learn about their marine and coastal resources and prepare them for a job or future school relating to marine resource management. Actively involving students in the process of marine resource management at each level, from community management of a fishpond to federal management of a marine sanctuary, will give them a better idea of how agencies and stakeholders are involved in protecting Hawai‘i’s marine environment.



*Green sea turtle resting at French Frigate Shoals.
Photo credit: NMFS John Peschon*

Pacific Islands Region Marine Turtle Program

The Pacific Islands region Marine Turtle Program supports specific programmatic activities for the conservation, protection, and management of listed sea turtle species in the PIR. These species may occur within the PIR or have documented linkages to the PIR, such as turtles that originate from areas outside of U.S. jurisdiction but migrate through or forage within the PIR, or interact with PIR fisheries managed by NOAA Fisheries. In 2016, PIRO issued eight federal assistance awards totaling \$427,779.

Mālama Na Honu — Mālama Na Honu Educational Outreach and Volunteer Support (\$18,000)

By the late 1970s, the honu (Hawaiian green sea turtle) population was almost decimated, but their numbers have increased significantly since State and Federal protections were enacted in the 1970s. The result is that many more honu are now coming ashore to bask in the main Hawaiian Islands, increasing interactions between honu and people. These interactions, in turn, have caused some inadvertent harassment of the honu. Mālama Na Honu volunteers will continue to provide sea turtle education for visitors to the famous Laniākea Beach on O'ahu's north shore and monitor and record daily sea turtle behaviors for the NOAA Fisheries Marine Turtle Research Program. Mālama Na Honu volunteers provide public education that reduces sea turtle-human interactions and promotes respectful wildlife viewing.

Ocean Discovery Institute — Proposal to Test Sensory-Based Methods to Reduce Bycatch of Sea Turtles, Elasmobranchs and Finfish in Small-Scale Commercial Gillnet Fisheries (\$49,348)

Bycatch (unintended and unwanted catch) in fisheries has resulted in population declines, ecosystem impacts, and economic loss. In response, multiple strategies to reduce bycatch have been developed for pelagic longline fisheries. In contrast, few bycatch reduction strategies exist for gillnet fisheries, which are prevalent throughout most coastlines. Identifying strategies to increase selectivity in gillnet fisheries and reduce bycatch is a global fisheries management priority. Increasing catch selectivity in gillnet fisheries reduces bycatch of sea turtles. The Ocean Discovery Institute will test the effects of orange light-emitting diodes (LEDs) affixed to gillnets and how they may impact green sea turtle behavior. Additional research will test the effects of auditory deterrents on green sea turtle bycatch rates and will survey fishermen for their feedback regarding this research.

World Turtle Trust — Hawai'i Island Hawksbill Turtle Recovery Project (\$67,610)

The goal of the Hawai'i Island Hawksbill Turtle Recovery Project (HIHTRP) is to manage and protect hawksbill sea turtles and their nesting habitats along the southern coast of Hawai'i Island. To understand population trends and spatial and temporal nest distribution on the island, this project will continue nightly monitoring, nesting-habitat management, and onsite education activities at hawksbill-nesting habitats and throughout the community on the Island of Hawai'i. HIHTRP staff will continue to survey potential nesting sites for signs of activity and control non-native mammalian predators and vegetation. In addition to hawksbills, threatened green sea turtles, endangered Hawaiian monk seals, endangered nesting sea birds, and other marine life benefit from the HIHTRP's protection and management of coastal habitat and educational outreach efforts.

Hawai'i Wildlife Fund — The Research, Protection, and Monitoring of Maui Nui's Nesting and Foraging Hawksbill Populations (2015-2019) (\$34,970)

The hawksbill sea turtle (*Eretmochelys imbricata*) is critically endangered in Hawai'i, yet its population and ecology are not well understood. The Hawai'i Wildlife Fund's Hawksbill Recovery Project will monitor and protect Hawaiian hawksbill turtles to increase their survivorship and aid in the recovery of the endangered species. Conservation efforts will identify both nesting and in-water hawksbills and their associated habitats, improve the quality of these habitats, and promote survival by reducing numerous threats. Three primary objectives of this project are: continue and expand ongoing monitoring research and protection efforts of sea turtles within Maui Nui (Maui, Lana'i, and Moloka'i); involve and educate the community about the plight of the Hawaiian hawksbill; and collate existing and new data (1991–2016) so that informative management decisions can be based on the most up-to-date information.

Pro Delphinus — Advancing Leatherback Conservation in the Southeast Pacific Through Bycatch Mitigation and Community-Based Conservation: A Three-Year Project (\$55,100)

To promote long-term population stability of leatherback sea turtles in the Pacific, this three-year project will assist by reducing and mitigating interactions with sea turtles in small-scale gillnet fisheries in Ecuador and Chile. This goal will be accomplished through multiple objectives, including: raising awareness within the gillnet fishery, as well as among local and regional government officials and partners in Ecuador and Chile, regarding the conservation of leatherback turtles and mitigation options; conducting sea turtle-bycatch mitigation trials, such as net-illumination, net-patrolling, and net-bycatch-alert activities; and monitoring bycatch-vessel systems and the barriers to mitigation through socio-economic studies and at-sea testing.

American Samoa Department of Marine and Wildlife Resources — Investigations Into the Status of Marine Turtles of American Samoa: An Intensive Monitoring of Green and Hawksbill Turtle Nesting Beaches in Ofu Island and a Stranding Response Programme in Tutuila Island (\$50,470)

The American Samoa Department of Marine and Wildlife Resources (DMWR) will continue its American Samoa Marine Turtle Conservation Program. DMWR has had significant success in establishing a nesting beach monitoring program in Ofu and Olosgea and an emergency stranding response program in Tutuila. These programs have generated quality data sets and their continuation is critical for informing managers in marine turtle conservation for the territory and beyond. Staff will continue to monitor beaches for green and hawksbill nesting turtles, map and identify harmful lighting on the nesting beaches of Tutuila, continue satellite tracking of sea turtles in the islands, expand genetic studies, and respond to emergency strandings of turtles. In addition, this program will increase education and outreach activities to enhance public awareness and support turtle conservation in the Territory.



Green sea turtle hatchlings. Photo credit: NMFS Aaron Dietrich

Commonwealth of the Northern Mariana Islands (CNMI) Department of Lands and Natural Resources — Stewardship of Northern Mariana Islands Sea Turtles through Conservation and Management (\$124,281)

Green and hawksbill sea turtles are listed as an endangered distinct population segment in the Central West Pacific. Poaching, increased recreational use of beaches, increased fishing pressures on coral reef and seagrass habitats, human population growth, coastal development, and poorly funded conservation education and public awareness efforts continue to threaten the population of these sea turtles on Saipan. To provide a strong foundation for science-based conservation and management practices, the CNMI DLNR will continue a near-shore capture and tagging program coupled with a program to monitor nesting beaches to determine hatch and emergence success and to collect tissue biopsies for genetic research.

Guam Department of Agriculture, Division of Aquatic & Wildlife Resources (DAWR) — Guam Sea Turtle Recovery Program (\$28,000)

Limited information is available regarding the nesting habitats and population dynamics of sea turtles in Guam. Existing data have been gathered infrequently and usually incidentally to other projects. To improve the management of these species, DAWR will collect sea turtle data by responding to sea turtle strandings and illegal harvests documenting animal characteristics and obtaining genetic tissue samples. To collect nesting data, the sea turtle volunteer program will continue to conduct nest excavations to record information on clutch size and emergence rate. DAWR will work with NOAA to standardize nesting beach monitoring activities and continue in-water capture for tagging purposes.

Hawaiian Monk Seal Recovery and Marine Mammal Response Program

The Hawaiian Monk Seal Recovery and Marine Mammal Response Program supports specific programmatic activities related to promoting the recovery of endangered Hawaiian monk seals and supporting responses to marine mammal strandings in the main Hawaiian Islands and U.S. Territories. This program supports community-based and community-integrated projects with an educational component designed to elevate public awareness and build capacity from the community for Hawaiian monk seal recovery and marine mammal response. In 2016, PIRO issued federal assistance awards in the amount of \$146,439.

Marine Mammal Center — Hawaiian Monk Seal Stranding Response Program, Hawai'i Island, East (\$10,951) and Hawaiian Monk Seal Stranding Response Program, Hawai'i Island, West (\$40,000)

The Marine Mammal Center (TMMC) will strengthen Hawaiian monk seal response and community outreach through two separate projects on the east and west side of Hawai'i Island. With a volunteer response network in each location and coordinated community efforts and partnerships, this project will improve local resident understanding of and participation in activities that promote Hawaiian monk seal recovery. These goals align closely with NOAA Fisheries 2016 Monk Seal Management Plan and the priorities outlined in the Species in the Spotlight 2016–2020 action plan. TMMC will deepen relationships with residents and coastal communities; increase volunteer numbers; improve signage and outreach collateral so that more visitors and residents are aware of and use the response hotline number; and strengthen management of hotline responsibilities.

Hawai'i Pacific University — A Retrospective Surveillance for Toxoplasmosis in Hawaiian Spinner Dolphins and Other Stranded Cetaceans (\$15,500)

Toxoplasmosis, caused by the parasite *Toxoplasma gondii*, was first described as a cause of spinner dolphin mortality 25 years ago and has recently been identified as responsible for the death of a Hawaiian spinner dolphin in 2015. Despite the threat that *T. gondii* may pose to cetaceans, laboratory analysis to test for the presence of *T. gondii* has historically been minimal. This program aims to better understand this threat by characterizing the Hawaiian spinner dolphin genotype from the infected tissues from the fall 2015 fatality; conducting a retrospective polymerase chain reaction (PCR) analysis of tissues from 22 previously collected dead spinner dolphins; conducting a retrospective PCR analysis of tissues from 30 individual stranded cetaceans representing 16 different species to determine *T. gondii* exposure and impact, and to define the reach of this parasite in Hawai'i's marine environment.



Monk seal resting at French Frigate Shoals. Photo credit: NMFS Suzanne Canja

Hawai'i Marine Mammal Alliance Inc. (HMMA) — Hawaiian Monk Seal Recovery and Marine Mammal Response (\$79,988)

To protect and assist in the recovery of Hawaiian monk seals, HMMA will operate a Hotline Team to field calls and website reports and manage field response teams on O'ahu and Moloka'i. Field response teams will patrol beaches known for seal activity, respond to sightings of seals reported to the Hotline, and engage with the public to answer questions and educate them about the Hawaiian monk seal. In consultation with NOAA, HMMA will also develop a Stranding Team to validate and assess Hawaiian monk seal condition, assist NOAA staff with disease vaccination, behavioral modification techniques and protocols, and recovery and transport of dead marine mammals. An Education Team will also be developed to educate students about marine mammals, how to protect these animals, appropriate viewing behavior, sustainable fishery interaction tactics and the ocean environment.



Coral reef inside the Marine National Monument Pacific Remote Islands, Palmyra. Photo Credit: Open Boat Films/NOAA

Pacific Islands Region Marine National Monuments Program

In 2009, a Presidential Proclamation designated three new Marine National Monuments (MNM) in PIR (adding to the existing Papahānaumokuākea MNM), thereby protecting these relatively undisturbed marine ecosystems, which are flourishing with healthy coral reefs, large numbers of apex predators, significant fish biomass, and healthy seabird populations. PIRO supports the management objectives of these MNMs — the Marianas Trench MNM, Rose Atoll MNM and Pacific Remote Islands MNM — and is developing management plans for them, which will guide managers in the preservation and protection of the resources in these isolated locations. NOAA annually solicits proposals for projects to fulfill the objectives of the Proclamation and MNM management goals. For FY16, PIRO issued a federal assistance award totaling \$46,218 through the NOAA Broad Agency Announcement competition.

Underwater Earth, LTD — Palmyra 360 Content Collection, Post Production, and Outreach (\$46,218)

Underwater Earth developed and launched the XL Catlin Seaview Survey (XLCSS) in response to the global coral reef crisis. Harnessing the incredible power of 360-degree imagery, the project has not only delivered revolutionary science at a critical time, but it has also delivered impressive outreach through positive public relations, social media, exhibitions, and associated partner programs. The team behind the XLCSS will employ innovative technologies to reveal Palmyra with the use of 360 degree/Virtual Reality. This project will align with NOAA's Long Term Mission Goals (namely Climate Adaptation and Mitigation, and Healthy Oceans).

Interjurisdictional Fisheries Act of 1986

The Interjurisdictional Fisheries Act of 1986 assists states in managing interjurisdictional fisheries resources. Apportionment to states is based on the average value and volume of raw fish that domestic commercial fishermen land. The data obtained is the principle source of information and analysis for the fisheries activities and management options that are used to address federal requirements for fisheries management plans under the jurisdiction of NOAA Fisheries. In 2016, PIRO allocated \$274,898 to this program.

American Samoa Department of Marine and Wildlife Resources — American Samoa Fisheries Stock Assessment and Monitoring Program (\$162,375)

This project provides both technical and financial support to the Department of Marine & Wildlife Resources of the American Samoa Government to assess and monitor the status of interjurisdictional fish species caught within American Samoa's EEZ. The data obtained through this project will be the main source of information that will be utilized to address local and federal requirements for Fishery Ecosystem Report under the jurisdiction of the Department of Marine & Wildlife Resources and NOAA Fisheries through WPFMC. Through the cooperative efforts between federal and local agencies, the overall goal of this proposed project is to provide fisheries information in a timely fashion to develop, implement, and evaluate Fisheries Ecosystem Report for the territory of American Samoa and WPFMC.



Participants of the 32nd Annual Saipan (CNMI) International Fishing Derby at Smiling Cover Marina, CNMI. Photo credit: Rufin Inos, Jr.

State of Hawai'i, Department of Land and Natural Resources, Division of Aquatic Resources (DAR) — Maintain Online Commercial Fisheries Reporting System Applications for the State of Hawai'i (\$85,461)

Since 1948, licensed commercial fishers have been required to submit monthly fishing reports to Hawai'i's Department of Aquatic Resources (DAR). These reports are an important collection of a series of fishery dependent data. Both federal and state fisheries agencies use this "best available" data to assess the status of marine resources and to establish fishery regulations in State and U.S. EEZ waters. Annually, approximately 3,000 licensed commercial fishers are required to submit a total of 35,000 monthly fishing and Deep 7 bottomfish fishing trip reports to DLNR-DAR; and 250 primary commercial marine dealers submit 3,000 monthly purchase reports. The goal of this project is to continue to maintain the two websites that manage these fishing reports, issue and renew commercial fisheries licenses and permits, and track fish dealer report logs.

Commonwealth of the Northern Mariana Islands, Division of Fish and Wildlife — Data Collection and Entry in the Management of CNMI's Interjurisdictional Fishery Resources (\$13,531)

This project provides financial support to the CNMI Division of Fish and Wildlife to collect, process, and share important fisheries monitoring data during fishing tournaments that will be used in federal and local fisheries management programs for the CNMI. The data obtained through this project will be the principal source of information and analysis of fisheries activities and management options of pelagic landings during tournaments that may be used to address federal requirements for Fisheries Management Plans (FMPs) under the jurisdiction of NOAA Fisheries through WPFMC. The overall goal of this project is to provide fisheries data to develop, implement, evaluate, and amend FMPs for the Western Pacific Region.

Guam Bureau of Statistics and Plans — Data Collection and Data Entry in the Management of Guam's Interjurisdictional Fishery Resources (\$13,531)

Guam presently serves as a major trans-shipment and port-of-call for large scale fishing fleets operating in the Western Pacific. Two primary types of fishing vessels — purse seiners and longliners — make up Guam's large scale fisheries. The project will continue to support the coordination of data collection and entry activities under the Pacific Fisheries Data Program with reference to transshipped species offloaded by foreign longliners at Guam's commercial port. The project is designed to help address the information requirements needed by both state and federal governments to develop and implement policies conducive to the maintenance and expansion of Guam's fishing industry, and develop sound management and conservation plans for Guam's interjurisdictional fishery within its Territorial waters and EEZ.

Pacific Regional Grants Cooperative

The NOAA Pacific Region Grants Cooperative (PRGC) is a group of grant administration staff representing the various NOAA line offices within the Pacific Islands Region. The PRGC formed to leverage both experience and resources to further NOAA's mission and goals. The creation of this group has formalized a venue for sharing best management practices and precious resources to successfully administer NOAA grants.

Federal Assistance Proposal Development Workshops

As a resource and tool for applicants, PRGC facilitated a series of federal proposal development workshops throughout Hawai'i and the Pacific. These workshops allow applicants to enhance their project goals and objectives and improve their project narrative. The PRGC-developed grant writing manual is available for all applicants on the NOAA PIRO website.

2016 Unfunded Federal Programs

The following programs were not funded in FY16 due to budgetary constraints:

Western Pacific Demonstration Projects: Public Law 104-297 (16 U.S.C. 1855) authorizes grants for Western Pacific Demonstration Projects that foster and promote the involvement of communities in the western Pacific.

Hawai'i Seafood Program: The Hawai'i Seafood Program is an effort to help strengthen the economic viability of Hawai'i's fishing and seafood industry through activities that promote Hawai'i fisheries as high-quality and safe domestic seafood produced by a responsible and well-managed fishery.

Native Fishery Observer Program: The NOAA Fisheries Observer program is responsible for providing long-line observers, who obtain data on incidental sea turtle takings and collect fishing effort data. The observers document interactions of all protected species, tally fish that are kept and discarded, and process selected specimens for life history. The Native Fishery Observer Program targets Native Hawaiian, American Samoan, and other Pacific Islander residents for employment as fishery observers in the Hawai'i and American Samoa fisheries.

*Site of future boat trailer parking improvements to fishing base, Garapan, Saipan, CNMI.
Photo credit: NMFS*





NOAA FISHERIES

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