

National Marine Fisheries Service

Pacific Islands Regional Office



REPORT TO THE 170TH WESTERN PACIFIC FISHERY MANAGEMENT COUNCIL MEETING

The National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Pacific Islands Regional Office (PIRO) is responsible for assisting the Western Pacific Fishery Management Council (Council) in the development of fishery management plans and amendments, initiating Federal fishing regulations, issuing Federal fishing permits, and monitoring fisheries through the Observer Program. Other major responsibilities include the conservation and recovery of protected species, conservation and restoration of marine habitats, including the Pacific marine national monuments, and coordination with international organizations to implement fishery agreements and treaties. The following information is provided to update the Council on NMFS and PIRO activities since the 169th Council meeting.

RULEMAKING

On April 21, 2017, PIRO published the final 2016 annual catch limits (ACL) and accountability measures (AM) for Pacific Island bottomfish, crustacean, precious coral, and coral reef ecosystem fisheries. The fishing year for each fishery begins on January 1 and ends on December 31, except for precious coral fisheries, which begin July 1 and end on June 30 the following year. Although the 2016 fishing year has ended for most stocks, PIRO will evaluate 2016 catches against these final ACLs when data become available in mid-2017. The ACL and AM specifications support the long-term sustainability of fishery resources of the U.S. Pacific Islands. This rule was effective on May 22, 2017.

PROGRAM ACTIVITIES

Sustainable Fisheries

On April 13, 2016, PIRO reinitiated consultation under Section 7 of the Endangered Species Act (ESA) for the Hawaii pelagic deep-set longline fishery for exceeding the 2014 incidental take statement for green sea turtles and for the six newly listed distinct population segments (DPS) of green sea turtle. PIRO also reinitiated consultation for the North Pacific DPS of loggerhead sea turtle and the olive ridley sea turtle because the fishery also exceeded the 2014 incidental take statements for these two species. PIRO issued a supplement to the 2014 Biological Opinion on March 24, 2017.

In September 2016, PIRO issued a contract to Linker Technologies to assist the agency in preparing a programmatic environmental impact statement (PEIS) for Pacific Island deep-set longline fisheries. The most recent environmental impact statement (EIS) for deep-set longline

fisheries is over a decade old, and the management regime governing the fishery has undergone numerous changes (implementation of domestic and international catch limits for bigeye tuna, additional measures to minimize interactions with protected species, and no-take Marine Protected Areas (MPAs) in large areas of the U.S. Exclusive Economic Zone (EEZ)). The PEIS will evaluate the potential impacts of the continued operation of deep-set longline fisheries in the Pacific under the current regulatory regime, and consolidate the effects analyses in a single comprehensive document. PIRO published the Notice of Intent to prepare a PEIS and scoping meeting schedule in the *Federal Register* on February 13, 2017. PIRO held public scoping meetings in Hawaii the week of February 20, 2017, in Saipan and Guam the week of March 6, 2017, and in American Samoa the week of March 27, 2017. The public comment and scoping period closed on April 14, 2017. PIRO will present the scoping report at the 170th Council Meeting.

PIRO hosted a two-day Pacific Island Region (PIR) Recreational and Non-commercial Fisheries Roundtable on May 4-5, 2017, at the Pier 38 Honolulu Service Center. The meeting provided a meaningful face-to-face exchange of ideas and perspectives among participants, and promoted solutions-oriented discussion about enhancing relationships, communications, and collaboration among fishery constituents and fishery managers. Stakeholders also discussed the status of the National Saltwater Recreational Fisheries Policy, and objectives and projects listed in the 2016-17 Pacific Islands Regional Implementation Plan. Participants included recreational and non-commercial fishery constituents from American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), Guam, and Hawaii, and representatives from local government fishery agencies, PIRO, the NMFS Pacific Islands Fisheries Science Center (PIFSC), and the Council. NMFS National Policy Advisor for Recreational Fishing, Russell Dunn, also participated in the roundtable along, with several other NMFS Headquarters support staff.

PIRO continues to make progress on three 2016-2017 PIR Recreational and Non-commercial Fisheries Implementation Plan projects funded by Magnuson-Stevens Act Implementation Funds. One project is a contract to identify and assess the condition of recreational and non-commercial fishing infrastructure and shoreline access in the region. Agency representatives from American Samoa, CNMI, and Guam received supplies and equipment to move the project forward. Data collection began in mid- to late-May 2017. The second project is a Council-administered contract to study community concerns, attitudes, and socio-economic impacts of MPAs and other federal, state and territory actions on fishing communities in the region. A third project is to identify sociocultural impacts of Papahānaumokuākea Marine National Monument designation and expansion on recreational fishing communities.

PIRO received NMFS National Seabird Program funding to support an illustrated guide with systematic procedures for safe handling and release of hooked or entangled seabirds. The illustrated guide should be easily understood by non-English speakers. PIRO will include the guide in seabird handling kits for longline fishing vessel owners and captains, and will use it when training NMFS observers.

PIRO participated in the annual Bycatch Reduction Engineering Program (BREP) meeting May 2-4, 2017. Participants reviewed proposals submitted for funding bycatch reduction projects,

ensuring projects selected for funding meet the priorities for the BREP program and for the regions. Award announcements are scheduled for early August 2017.

PIRO continues to provide Protected Species Workshop (PSW) training to the longline fishing communities. Vessel owners and captains must complete a NMFS-conducted PSW training annually. Since February 9, 2017, PIRO has provided 126 American Samoa- and Hawaii-based longline vessel owners, captains, and other interested individuals the PSW training.

PIRO continues to update information on fish catch limits in Pacific Island fisheries at www.fpir.noaa.gov/SFD/SFD_regs_3.html and at the Pier 38 TV.

PIRO continues management of Federal fisheries in consideration of status changes and incidental take events of protected species. Up-to-date information about interactions between the Hawaii shallow-set longline fishery and sea turtles is at www.fpir.noaa.gov/SFD/SFD_turtleint.html.

PIRO has renewed 144 Hawaii longline permits since January 2017. This year, 51% of applicants renewed online, a 70% increase in use of the online National Permit System over last year. Starting in 2018, PIRO will begin charging a lower permit application fee to those who use the online National Permit System. Paper applications will cost more. This applies to the Hawaii longline permit renewals, but should soon be expanded to include Western and Central Pacific Fisheries Commission (WCPFC) Area Endorsements. Anyone needing help using the National Permit System may visit the Pier 38 Honolulu Service Center, call 808-725-5190, or email piro-permits@noaa.gov.

Number of permits as of May 15, 2017. Current permit status, applications, and other information are available at www.fpir.noaa.gov/SFD/SFD_permits_index.html.)

| <i>Permit</i> | <i>Number</i> |
|---|------------------------|
| <i>Pelagic</i> | |
| Hawaii longline (limited entry) | 144 (of 164 available) |
| American Samoa longline (limited entry) | 44 (of 60 available) |
| Western Pacific general longline | 0 |
| Receiving vessel | 9 |
| Pacific Remote Island Areas troll & handline | 3 |
| Pelagic squid jig | 0 |
| <i>Hawaii</i> | |
| Main Hawaiian Islands non-commercial bottomfish | 0 |
| Special coral reef ecosystem | 1 |
| Precious coral | 1 |
| Crustaceans | 2 lobster, 5 shrimp |
| <i>American Samoa</i> | |
| Special coral reef ecosystem | 0 |
| Precious coral | 0 |
| Crustaceans | 0 lobster, 0 shrimp |
| <i>Mariana Islands</i> | |
| Guam large vessel bottomfish | 1 |
| Northern Mariana Islands bottomfish | 15 |
| Special coral reef ecosystem | 0 |
| Precious coral | 0 |
| Crustaceans | 0 |
| <i>Pacific Remote Island Areas</i> | |
| Bottomfish | 1 |
| Special coral reef ecosystem | 0 |
| Precious corals | 0 |
| Crustaceans | 0 lobster, 0 shrimp |
| <i>Monuments</i> | |
| Non-commercial and recreational charter | 0 |

Protected Resources

Corals (ESA)

Of the 15 Indo-Pacific coral species listed as threatened under the ESA, six are confirmed to be present in American Samoa, three each in Guam and the Pacific Remote Islands Area (PRIA), and two in CNMI. For more information, see the PIRO ESA Corals webpage and linked species descriptions at http://www.fpir.noaa.gov/PRD/prd_coral.html. NMFS is engaged in the next steps associated with the listing of these species, including consideration of protective regulations pursuant to ESA Section 4(d), development of proposed critical habitat, recovery planning, and ESA Section 7 consultations. With regard to critical habitat, NMFS is considering

areas within the waters of American Samoa, Guam, CNMI, and PRIA for proposed coral critical habitat, and has initiated analyses needed to support issuance of a proposed critical habitat rule in 2017.

Green Turtle Critical Habitat (ESA)

On April 6, 2016, U.S. Fish and Wildlife Service (USFWS) announced that critical habitat for the green sea turtle (*Chelonia mydas*) was not determinable at that time but would be proposed in a future rulemaking. The critical habitat determination process is ongoing. In January 2017, NMFS convened a workshop to coordinate regions on implementation of critical habitat. Upon completion of the economic analysis and other biological analyses, NMFS will issue a proposed rule for green turtle critical habitat in 2017. For more information about critical habitat generally, see <http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>.

North Pacific Loggerhead Sea Turtle 5-Year Review and Recovery Plan (ESA)

On October 12, 2016, NMFS and USFWS published a notice in the *Federal Register* initiating the five-year status review for the North Pacific loggerhead sea turtle DPS and at the same time initiating the process to draft the Recovery Plan. Several public comments were received. NMFS anticipates releasing the draft five-year review for public comment in early 2018, and the draft Recovery Plan will likely be released for public comment at the upcoming 38th International Sea Turtle Symposium in Kobe, Japan in February 2018. The next meeting of the recovery team, which is made up of members from Mexico, Japan and the United States, will be held August 21-25, 2017 in Washington, D.C.

Humpback whale approach rule (MMPA)

On September 8, 2016, the listing of humpback whales under the ESA was revised, with some DPSs remaining listed under the ESA and others, such as the Hawaii humpback whale DPS, no longer listed (81 FR 62260). Because the original humpback whale approach regulations in Hawaii were issued under authority of the ESA, they would no longer apply to the Hawaii DPS. However, NMFS determined that approach regulations are still warranted and, on September 8, 2016, published an interim final rule under MMPA authority that is similar to the ESA regulations. Humpback whale approach regulations in the Hawaiian Humpback Whale National Marine Sanctuary remain in place within Sanctuary waters. A handful of public comments were received, and a draft final rule is in internal review.

Oceanic Whitetip Shark Petition to List (ESA)

On December 29, 2016, NMFS published a proposed rule to list the oceanic whitetip shark (*Carcharhinus longimanus*) as a threatened species under the ESA (81 FR 96304). After completing a comprehensive status review for the species, and after taking into account efforts being made to protect the species, NMFS concluded that the oceanic whitetip shark is likely to become endangered throughout all or a significant portion of its range within the foreseeable future. Therefore, NMFS proposed to list the oceanic whitetip shark as a threatened species. A 90-day public comment period was open until March 29, 2017. NMFS will consider public comments and new information before making a final listing decision, which is expected by December 29, 2017. This follows a January 12, 2016, positive 90-day finding (81 FR 1376) on a petition to list the species under the ESA. NMFS received a petition on September 21, 2015 from Defenders of Wildlife to list the oceanic whitetip shark as threatened or endangered under

the ESA. The petitioners also requested that NMFS designate critical habitat concurrent with any final listing. The species is bycaught in all three longline fisheries in the PIR.

Manta Rays Status Review (ESA)

On January 12, 2017, NMFS published a proposed rule to list the giant manta ray (*Manta birostris*) as threatened under the ESA (82 FR 3694). NMFS also announced a 12-month "not warranted" finding on the petition to list the reef manta ray (*Manta alfredi*) as endangered or threatened under the ESA (82 FR 3694). A 60-day public comment period was open until March 13, 2017. This follows a June 28, 2016, negative 90-day finding on a petition to list the Maui and Kona reef manta ray under the ESA (81 FR 41956), which followed an April 26, 2016, petition to list the Maui and Kona reef manta ray populations as threatened DPSs under the ESA. At that time, NMFS also made a negative 90-day finding that substantial information was not presented to indicate that the Caribbean manta ray (*Manta c.f. birostris*) is a taxonomically valid species or subspecies for listing, and, therefore does not warrant listing. These actions are in response to a November 10, 2015, petition from Defenders of Wildlife to list the giant manta ray, reef manta ray, and the Caribbean manta ray as threatened or endangered under the ESA. The petitioners also requested that NMFS designate critical habitat concurrent with any final listing. The giant and reef manta rays' range include Hawaii and in the U.S. Pacific territories.

Chambered Nautilus Petition to List (ESA)

On August 26, 2016, NMFS published a positive 90-day finding (81 FR 58895) on the chambered nautilus (*Nautilus pompilius*). The species is now considered a candidate species for listing and a status review is underway to inform the 12-month finding. This is in response to a May 31, 2016, petition from Center for Biological Diversity to list the chambered nautilus as endangered or threatened under the ESA. The species' range includes American Samoa.

Pacific Bluefin Tuna Status review (ESA)

On October 11, 2016, NMFS published a positive 90-day finding on the Pacific Bluefin tuna (*Thunnus orientalis*). The species is now considered a candidate species for listing and a status review is underway to inform the 12-month finding, which is due June 20, 2017. This is in response to a June 20, 2016, petition from Center for Biological Diversity *et al.* to list the Pacific bluefin tuna as endangered or threatened under the ESA, and designate critical habitat concurrent with its listing. The species' range includes the PIR as it is caught, albeit rarely, in PIR fisheries.

Giant Clam Petition to List (ESA)

On August 8, 2016, NMFS received a petition to list ten species of *Tridacninae* giant clams (excluding *Tridacna rosewateri*) as threatened or endangered species under the ESA, and designate critical habitat concurrent with their listing. There are two genera covered by the petition: *Tridacna* with eight species (*T. costata*, *T. crocea*, *T. derasa*, *T. gigas*, *T. maxima*, *T. noae*, *T. squamosa*, and *T. tevoroa*) and *Hippopus* with two species (*H. hippopus* and *H. porcellanus*). The U.S. Pacific territories and possessions are in the range of (or historically contained) at least *H. hippopus*, *T. derasa*, *T. gigas*, *T. maxima*, and *T. squamosa*. A 90-day finding was due November 8, 2016 and is under development.

Main Hawaiian Islands Insular False Killer Whale Critical Habitat (ESA)

NMFS is in the early stages of developing a proposed rule to designate critical habitat for the Main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*) DPS. Information from an October 2016 recovery planning workshop (see description below) and information gathered since the listing of this DPS will assist in the development of the biological report and critical habitat proposed rule, which is anticipated to be published in fall 2017.

Main Hawaiian Islands Insular False Killer Whale Recovery Plan (ESA)

On February 27, 2017, a workshop summary was finalized, posted to the web, and distributed to participants who attended an October 2016 recovery planning workshop on the Main Hawaiian Islands insular false killer whale (*Pseudorca crassidens*) DPS. The workshop gathered information from a range of experts to inform recovery planning for the species as well as critical habitat designation. The workshop was open to the public and was publicly noticed in the *Federal Register* on October 4, 2016 (81 FR 68405). In July 2016, NMFS finalized a recovery outline to inform development of a recovery plan. NMFS is using the recovery outline and information gathered from the workshop to draft the three components of a recovery plan to recover the DPS. These components include the Species Status Assessment (which updates the 2010 Status Review Report for the species), Recovery Plan, and Implementation Strategy. NMFS is not forming a Recovery Team but rather is writing the plan in-house. NMFS anticipates sending the recovery planning components out for peer review and public comment in 2017.

Sea Turtle Recovery Program (ESA)

The Sea Turtle Management and Conservation Program continues to provide oversight and support to multiple projects which implement priority activities of the U.S. Sea Turtle Recovery Plans. Sea turtle recovery-based projects are ongoing in Hawaii, the Territories, and other parts of the Pacific with turtle populations that have linkages to the PIR. In general, funded projects include fishery bycatch mitigation, sea turtle monitoring and conservation, and community educational outreach and public management. PIRO's sea turtle recovery coordinator undertook site visits to Guam and CNMI between May 13-20, 2017 to visit with program staff of both local government sea turtle programs that receive funding from PIRO to review programmatic successes, challenges, and future programmatic goals.

The federal funding solicitation for fiscal year FY17 closed February 15, 2017 and review panels were convened in March 2017 to review eight submitted proposals. Three Hawaii-based education and management projects and two internationally-based research and conservation projects have been recommended for full or partial funding. Efforts are currently underway to clear necessary National Environmental Policy Act (NEPA) and other regulatory processes required for implementation. PIRO also continues to execute the "Fishing around Sea Turtles" program via the multi-agency steering committee comprised of key staff from NOAA, the State of Hawaii, USFWS, the Council, and Hawaii Fishermen's Alliance for Conservation and Tradition. The program provides mitigation options to Hawaii recreational hook-and-line fishers through practical fishing tips, increased awareness, and best practice suggestions to reduce injury to sea turtles following an accidental interaction. For additional information, visit: http://www.fpir.noaa.gov/PRD/prd_fishing_around_sea_turtles.html. As a program partner, the Council is welcome to assist in the dissemination of products and messaging.

Hawaiian Monk Seal Recovery Program (ESA)

In 2007, NMFS released the revised Recovery Plan for the Hawaiian Monk Seal, initiating 10 years of high quality science and cutting edge conservation and rescue efforts for Hawaii's native seal. During those 10 years, NMFS rescued hundreds of animals, built a monk seal hospital, discovered the underwater world of monk seals using seal-mounted cameras, educated the public, and strongly valued the relationships with our partners, who play an important role in monk seal conservation. This work has culminated in a very exciting announcement: after decades of decline, the 2016 population increased to about 1,400 animals, averaging ~3% growth per year since 2013. Particularly notable is that this increase primarily is due to growth and stability of the Northwestern Hawaiian Islands populations, while Main Hawaiian Islands population growth rate appears to have stalled or even slowed. NMFS is declaring 2017 the Year of the Monk Seal and will undertake focused events, activities, and outreach to garner attention for monk seals.

List of Fisheries (MMPA)

The 2017 List of Fisheries final rule published on January 12, 2017 (82 FR 3655). The effective date is March 21, 2017. Proposed changes to Pacific Islands fisheries are based on the draft 2016 marine mammal stock assessment reports, and include revisions to the list of species injured or killed in the Hawaii deep-set and shallow-set longline fisheries and updates to the number of participants in numerous fisheries. The rule and draft fishery fact sheets are available at: <http://www.nmfs.noaa.gov/pr/interactions/fisheries/lof.html>

Hawaii False Killer Whale Take Reduction (MMPA)

The False Killer Whale Take Reduction Team did not convene an in-person or webinar meeting in 2016, a webinar is planned for June 2017. Eight false killer whale interactions were observed in 2016; all eight occurred in the deep-set fishery, with seven on the high seas and one within the EEZ that did count towards the trigger to close the Southern Exclusion Zone (SEZ). In accordance with the 2012 False Killer Whale Take Reduction Plan final rule (77 FR 71260; November 29, 2012), the SEZ was *not* closed to deep-set longline fishing in 2016, because there were fewer than two observed false killer whale serious injuries or mortalities in the fishery inside the EEZ around Hawaii in 2016. Closure of the SEZ was not triggered in 2013, 2014, or 2015. NMFS convened a False Killer Whale Take Reduction Team teleconference on December 15, 2016 to discuss the false killer whale interaction that occurred within the EEZ. To date, there have been three false killer whale interactions in 2017, all outside the EEZ.

Habitat Conservation Division

Essential Fish Habitat Program

PIRO continues to conduct essential fish habitat (EFH) consultations for Hawaii, Guam, CNMI and American Samoa. Consultations occurred with the Department of Defense (DOD), U.S. Army Corps of Engineering (USACE), Federal Emergency Management Agency, U.S. Coast Guard, USFWS, U.S. Department of Transportation, and NOAA on a range of actions and impacts to EFH either undertaken, funded, or permitted by the entities.

Federal actions consulted on include (but are not limited to): pier reconstruction in Honolulu Harbor; Pearl Harbor maintenance dredging; shoreline stabilization in Midway; and the Guam Integrated Natural Resource Management Plan. PIRO continues to develop programmatic EFH consultations for USACE activities with minimal adverse effects, and for PIFSC activities. EFH coordinators from all NMFS Regions teleconference monthly to follow up on action items and discuss ongoing projects and EFH-related matters.

PIRO continues participating as a member of the Council Coordinating Committee Habitat Working Group, to coordinate among PIRO, Council, and NMFS Headquarters staff on important habitat issues, initiatives, strategies, and requirements.

Coral Reef Conservation Program PIRO field staff, supported by NOAA's Coral Reef Conservation Program (CRCP) continue to implement local projects and efforts to promote conservation of coral reefs and other valuable habitats in the Western Pacific Region.

American Samoa:

PIRO continues to work with local and federal resource partners in planning and coordinating activities for the Fisheries Local Action Strategy (LAS), Land-based Sources of Pollution LAS, and Climate Change LAS. As a member of the American Samoa Ocean Planning Team, PIRO continues to work with the team to develop listening sessions to enhance community engagement and awareness. PIRO also reviewed and provided comments through consultations with Federal partners and local applicants on development projects that may impact EFH. PIRO continues to coordinate with the Coral Reef Advisory Group (CRAG), including planning and implementation of activities to mark the 100-year anniversary of the Aua reef transect, in May 2017. PIRO also coordinated education and outreach activities with local village leaders and church groups for the Aua transect commemoration. PIRO is currently conducting an MPA checklist review for Vatia for the reassessment of CRCP priority sites. In addition, PIRO provided two cultural briefings for the NOAA vessel *Okeanos Explorer* operations crew about American Samoa. Finally, PIRO continues to coordinate with the local regulatory resource groups, and provided a presentation on EFH consultation to local resource partners and project applicants.

CNMI:

Results from several important habitat mapping efforts in CNMI are now available. Draft habitat maps generated by USFWS and PIRO staff for Rota and Tinian harbors have been shared with USACE, which is currently using them in planning for harbor improvements. The joint report documenting this project from USFWS and NOAA is expected by summer 2017. New habitat maps for Saipan lagoon, generated by NOAA National Center for Coastal Ocean Service (NCCOS) Biogeography team with support from PIRO staff, are now available on BIOMapper (St. John Biogeography Integrated Online Mapper) at <https://maps.coastalscience.noaa.gov/biomapper/biomapper.html?id=saipan>. The final NOAA Tech Memo for this effort is in review.

The draft report for the Rota Creel Pilot Project is available from PIRO and the supporting data is available from PIFSC.

PIRO staff supported a successful application for NOAA Marine Debris funds that will be joined with the expected *Paul Russ* grounding settlement agreement to remove the *Lady Carolina*, which is still grounded on the reef as a result of typhoon Soudelor.

PIRO has been able to meet with the Environmental Protection Agency (EPA) regarding improved coordination for EFH within National Pollutant Discharge Elimination System (NPDES) permit renewals and with USFWS regarding Dingell Johnson (DJ) funded programs to overcome EFH and Endangered Species Act (ESA) concerns that had been limiting local agencies.

Guam:

PIRO continues to implement conservation projects in the Manell-Geus Habitat Focus Area (HFA) site. The project is moving to the implementation phase and several events have been held to update the community on the project and gather feedback from community members. Baseline socioeconomic and biophysical data and draft project outcomes were shared with the community at the “Nihi ya ta Abiba i Tasi” event, held in February 2017, in Merizo. To reach additional residents, the project team conducted outreach during all three days of the Malesso Gupot Chamorro/ Crab Festival in March 2017. The team continues to hold regular outreach events including ridge to reef tours and a recent kayak tour along the mangrove forests. Feedback from community participants at these events and from discussions with the Mayor’s office was incorporated into HFA management planning along with biophysical and socioeconomic datasets. The draft HFA implementation plan is currently under review.

PIRO continues to work with Guam EPA, U.S. Coast Guard, and other agencies to address contaminants concerns in the lagoon in response to concerns raised in the Malesso Community Management Plan. The team has also continued to conduct training and data collection through the Guam Community Coral Reef Monitoring Program and has worked with fishers in Merizo to monitor the *Chaetomorpha* algal bloom in the lagoon. Removal of the algae has been prevented due to issues with transport and disposal of the algae once removed. Watershed restoration efforts are also continuing and contractors are currently evaluating restoration sites and propagating plants for this year’s planting efforts in the Manell Watershed.

PIRO Guam staff participated in PIFSC’s Mariana Archipelago Reef Assessment and Monitoring Program (MARAMP) cruise, conducting quantitative reef fish surveys throughout the Southern Marianas. PIRO will continue to partner with the CRCP-funded Guam Long Term Monitoring Program to collect additional data at sites in Guam over the next few months. In addition, staff continue to conduct trainings and data collection events for the citizen science programs Guam Community Coral Reef Monitoring Program and Eyes of the Reef Marianas. Guam is currently under a Bleaching Watch for potential coral bleaching and will use the citizen scientists trained by these programs to monitor conditions. Staff received a citizen report of reef damage at Western Shoals in Apra Harbor in early May and conducted an assessment to document the damage and work with the responsible party and local agencies to develop potential restoration options.

Guam staff have also worked cooperatively with partner agencies to avoid and minimize impacts to EFH from a number of large projects in Guam including new telecommunications cables,

upgrades at a sewage treatment plant, and proposed dredging in Inner Apra Harbor. NMFS recommendations have led to reduced project footprints, improved best management practices, and offsets for unavoidable impacts.

Hawaii:

PIRO has been collaborating with the Hawaii Division of Conservation and Resource Enforcement (DOCARE) on a project to address illegal fishing on Maui. Through the Fisheries LAS, Cooperative Agreement funds have been secured for: 1) a Legal Fellow for DOCARE, and 2) State-wide Community-based Makai Watch Program Coordination and Implementation.

Pacific Islands Marine Protected Areas Community (PIMPAC) continues to provide capacity building opportunities for the U.S. Flag Islands and Freely Associated States for management planning, socio-economic monitoring, and biological monitoring, fisheries management, compliance and enforcement, and climate change adaptation. PIMPAC is in the process of updating its current strategic plan.

PIRO hired Keith Kamikawa as the new Fisheries Extension Agent to replace Matt Ramsey. His start date was May 22, 2017.

West Hawaii Habitat Focus Area:

As noted in the PIRO 169th Council Report, the PIFSC Coral Reef Ecosystem Program (CREP) completed the West Hawaii benthic habitat mapping project in summer/fall of 2016 (maps are free and available to the public: <http://www.soest.hawaii.edu/pibhmc/cms/data-by-location/main-hawaiian-islands/hawaii-big-island/>). In addition, PIFSC CREP has now completed and released a NOAA Technical Memorandum for this project titled *Acoustic Characterization of Mesophotic Coral Reef Ecosystems of West Hawaii*. The Technical Memorandum is not yet available for download, but a full citation is available to the public here: https://www.pifsc.noaa.gov/library/tech_date_2000s.php.

U.S. Army Kwajalein Atoll (USAKA) Program

PIRO continues to work under the USAKA Environmental Standards, completing environmental reviews as well as coral consultations.

National Marine Monuments Program

Papahānaumokuākea Marine National Monument

On April 13, 2017, an event to celebrate the removal of 100,000 pounds of marine debris from the Papahānaumokuākea Marine National Monument was held at the NOAA Inouye Regional Center on Ford Island. This marine debris removal represented a collaborative partnership between USFWS, the State of Hawaii, and NOAA.

Marianas Trench Marine National Monument

The draft Marianas Trench Marine National Monument Management Plan is expected to be available for public review in the winter of 2017. Monument managers plan to hold public meetings in Saipan, Tinian, Rota, and Guam for the community to provide their input.

The NOAA Pacific Marine Environmental Laboratory and Schmidt Ocean Institute scientists released the 2015 and 2016 Mariana back-arc expeditions report conducted from the R/V *Falkor* in April 2016. In the 2016 expedition, the collaborating scientists were the first to use the new SOI remotely operated vehicle, *SuBastian*. This is an interactive report that captures the vents and seafloor habitats looking through the lens of *SuBastian* via YouTube. Findings, images, and footage of the hydrothermal vents and fascinating biological communities are available for these expeditions, the Ring of Fire expedition, and NW Rota-1 expeditions from 2003 to the present at: https://www.pmel.noaa.gov/eoi/marianas_site.html.

Rose Atoll Marine National Monument

The 2017 season of the Campaign to Address the Pacific monument Science, Technology, and Ocean Needs (CAPSTONE) cruise began with expeditions in American Samoa. The NOAA vessel *Okeanos Explorer* completed two cruises in the waters around American Samoa. The first cruise, EX-17-02, took place from February 16-March 2, 2017 and focused on priority sites around the National Marine Sanctuary of American Samoa (NMSAS), the Rose Atoll Marine National Monument (RAMNM), the National Park of American Samoa, and seamounts within American Samoa waters. During this leg of the cruise, a total of 12,000 square kilometers of seafloor was mapped and a total of 11 remotely operated vehicle (ROV) dives were made ranging from depths of 250 to 3,900 meters. The second cruise, EX-17-04, was a mapping cruise focusing on unmapped areas of the NMSAS and RAMNM, and took place from April 4-21, 2017.

Pacific Remote Islands Marine National Monument

The NOAA vessel *Okeanos Explorer* completed CAPSTONE cruise EX-17-03 during March 7-29, 2017. This cruise focused on the waters around Howland and Baker Atolls in the Pacific Remote Islands Marine National Monument and portions of the Phoenix Islands Protected Area (PIPA). During the cruise, a total of 30,100 square kilometers of seafloor was mapped (8,400 square kilometers in U.S. waters). Also conducted during this cruise were 19 ROV dives – 7 around Howland and Baker, 8 dives in the PIPA, 2 dives at Tokelau, and 1 dive at Swains Atoll in American Samoa. The CAPSTONE research effort EX-17-05 began on April 27, 2017 from Pago Pago, American Samoa and was scheduled to explore the waters of Kingman Reef, Palmyra Atoll and Jarvis Island. The final CAPSTONE expedition will be in Johnston Atoll and the Musicians Seamounts, north of Hawaii, in July 2017.

International Fisheries

PIRO staff participated in a Pacific bluefin tuna stakeholders meeting hosted by the International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC), April 25-27, 2017, in Tokyo, Japan. The meeting discussion focused on the development of a second rebuilding target, which the Western and Central Pacific Fisheries Commission agreed to adopt later this year.

Observer Program

Observer Coverage

The Observer Program maintains 20% coverage on the Hawaii pelagic longline deep-set fishery, 100% on Hawaii pelagic longline shallow-set fishery, and 20% on the American Samoa longline fishery. With the addition of four new staff to the Program, data editing and analysis is now complete for calendar years 2014, 2015, and 2016. The Program completed the first training class of 2017. Eleven observers, including 3 prior observers and 8 new observers, successfully completed the course.

The Observer Program in American Samoa is undertaking a review of the American Samoa Field Station (ASFS) catch sampling program. The objective is to review current activities at the ASFS and make recommendations to align ASFS sampling with wider agency and regional sampling efforts. The review addresses all aspects of the program, including: sampling protocols (size and species composition); observer placement; data collection, input, and quality control; and partnering arrangements with other regional organizations, such as the Forum Fisheries Agency (FFA), Secretariat of the Pacific Community (SPC), and proximal Pacific Island countries including the Cook Islands and Independent Samoa.

The program sent two staff to attend and participate in the Regional Observer Coordinators Workshop meeting in Nadi, Fiji in February 2017.

eReporting Program

The Observer Program is developing an e-reporting platform to enhance the efficiency, accuracy, and effectiveness of data collection and processing. The platform, Thorium Application for Observer Data Collection (Thorium), is developed and maintained by CLS America. The development of Thorium began in 2014 in response to the Pacific Islands Region Observer Program's goals to 1) to develop a mobile application to augment observer data collection 2) improve the timeliness and accuracy of observer data 3) reduce program expenses through the successful implementation of goals 1 and 2.

In the Thorium system, data is sent, via Bluetooth, from an Android mobile device to an onboard satellite transmitter (LEO beacon). Data is transmitted using the Iridium satellite network. The process reduces or eliminates the need for paper files and makes data available in real time vs. waiting until the observer arrives back in port.

Thorium is currently in the Beta testing stage. One preliminary Beta test is complete and informed major revisions to the platform. The second Beta test will involve a minimum of 36 trips over the course of the testing timeline (May 2017 to May 2018), in the Hawaii deep-set and shallow-set longline fishery. Testing will be broken into three cycles with feedback collection and development throughout each cycle. The feedback collected by observers will be provided to developers and program staff for the improved quality of the application. All of the electronic forms (eForms) and features associated with the project are tracked at various stages throughout testing to ensure readiness for implementation.

Shark Tagging Program

The Hawaii and American Samoa shark bycatch post-release survival tagging programs began in January 2016. This funding cycle was two years, ending on December 31, 2017. The objectives of this project were to assess survivorship and identify best handling/discard methods for blue, bigeye thresher, oceanic whitetip and silky sharks incidentally captured in the tuna longline fisheries. Twenty-eight survivorship satellite tags (SPAT) were allocated for each of the four species and observers were trained to tag sharks during regular commercial operations. The timeline for this project has been extended due to tag manufacturer recalls (2), low silky and oceanic whitetip interaction rates, high observer attrition rates, and a very busy swordfish season. Additionally, funds were also secured in 2016 to assess survivorship in blue sharks that were in compromised conditions and the long-term survival rates of blue sharks that are released with trailing gear. A proposal is also currently under review to compare long-term survivorship of oceanic whitetip sharks that are released with trailing gear in both AS and Hawaii tuna fisheries. To date, 28 observers have been trained in shark tagging and 78 out of 142 tags have been deployed with 15 more tags are at sea with observers.