



Federal Programs Office 2022 Annual Report



A Message from the Regional Administrator

We are pleased to announce that in fiscal year 2022 (FY22), the Federal Programs Office of the NOAA Fisheries Pacific Islands Regional Office (PIRO) funded 33 project activities totaling \$8,294,694 in grants and cooperative agreements to constituents in support of the NOAA Fisheries mission. We issued the awards through competitive and non-competitive financial assistance programs. Recipients of the federal awards included 22 U.S. and international agencies and organizations from American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), Guam, Hawai'i, and the greater Pacific.



Sarah Malloy

PIRO manages programs that support both domestic and international conservation and management of living marine resources within the Pacific Islands region (PIR), which comprises American Samoa, the CNMI, Guam, Hawai'i, 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
- Enhanced opportunities for commercial, recreational, and cultural activities in the marine environment

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

Going forward, our efforts will continue to focus on capacity building and proposal-development training for Hawai'i and the territories. We will also work 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 that reads "Sarah Malloy". The signature is fluid and cursive.

*Acting Regional Administrator
NOAA Fisheries, Pacific Islands
Regional Office*

Front cover: Chef Mark "Gooch" Noguchi, co-founder and Executive Chef at Pili Group, and U.S. National Spearfishing Champion Kimi Werner show off their ta'ape catch. In 2022, Conservation International Hawai'i wrapped up their Saltonstall-Kennedy grant to increase production and market demand for local and sustainable fish in Hawai'i, like the invasive ta'ape. Credit: © Justin Turkowski

Back cover: A school of invasive reef species ta'ape (bluestripe snapper), now a sustainable seafood option thanks to a NOAA-supported project focused on successful market-based strategies. Credit: © Brian Greene



Students in a Kupu program learn pono fishing practices at Kapapahu Point, O'ahu. Credit: Kupu

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Federal Programs Office

The Federal Programs Office is located at the NOAA Inouye Regional Center in Honolulu, Hawai'i. With technical assistance from PIRO and PIFSC staff, Federal Program Officers administer financial assistance agreements throughout the award period, from the initial solicitation through post-award management.

They also work closely with the NOAA Grants Management Division, technical monitors, and grant recipients throughout the award period. This helps to facilitate the successful completion of each grant's project objectives.

The Federal Programs Office supports the NOAA Fisheries mission through competitive and non-competitive grants, and cooperative agreements. PIRO funded the following grant programs during FY22:

- Western Pacific Fishery Management Council
- Saltonstall-Kennedy Program
- Hawai'i Marine Wildlife Response, Outreach, and Population Monitoring Program
- Pacific Islands Region Marine Turtle Management and Conservation Program
- Interjurisdictional Fisheries Act of 1986
- Marine Education and Training Program
- Congressionally Directed Community Projects

PIRO Federal Program Officers



Scott Bloom



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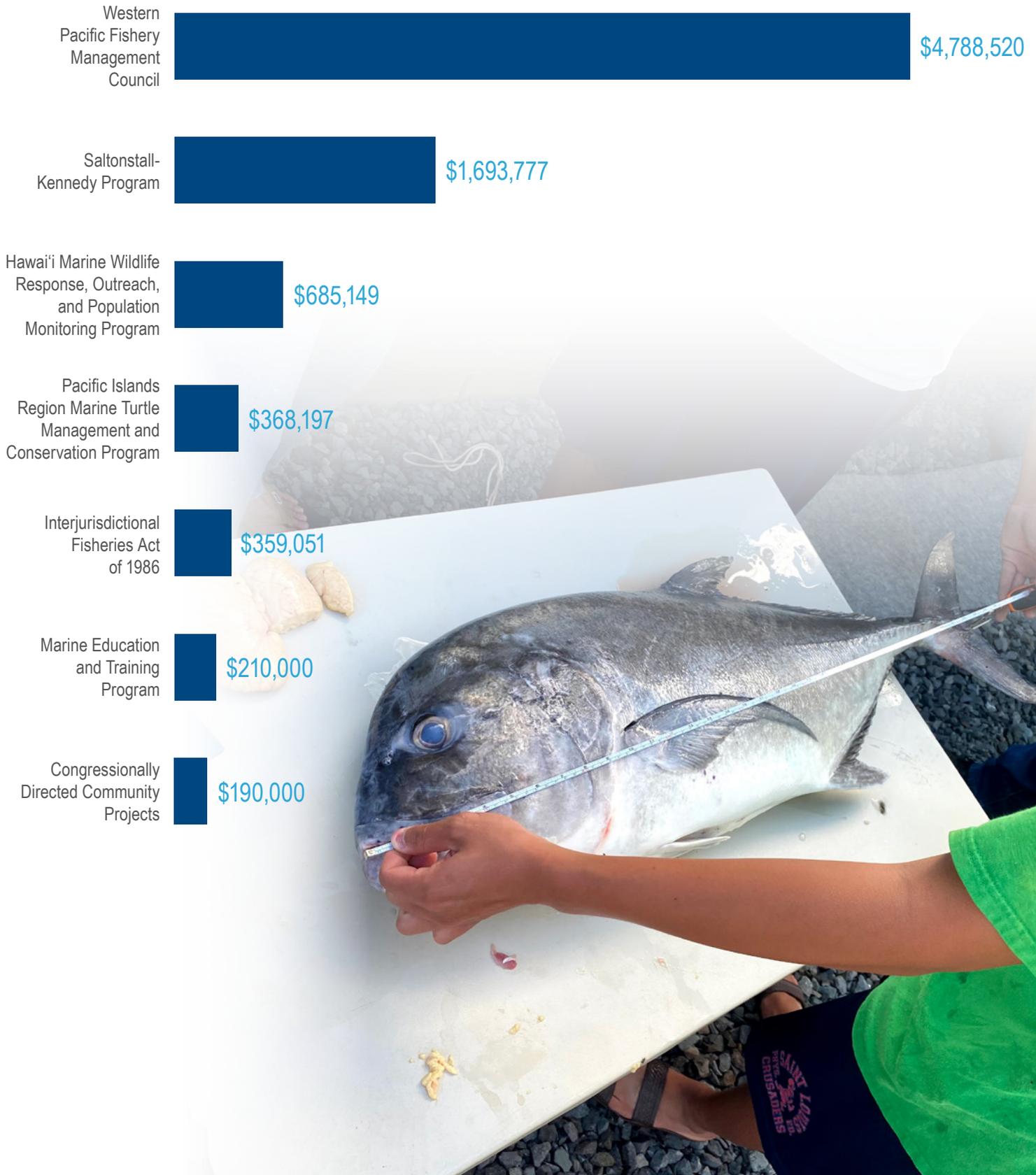


To view available funding opportunities, go to: <https://www.fisheries.noaa.gov/funding-opportunities>



The NOAA research ship, Hi'ialakai, docked outside of the NOAA Inouye Regional Center on Ford Island, O'ahu. Credit: NOAA Fisheries

Summary of Fiscal Year 2022 Funding



Western Pacific Fishery Management Council

The Western Pacific Fishery Management Council (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; the U.S. Coast Guard 14th District and local enforcement agencies enforce the measures.

Western Pacific Fishery Management Council Cooperative Agreement (\$4,227,829)

In FY22, PIRO funded the third year of a 5-year cooperative agreement to support the WPFMC base administration and operations. The WPFMC received \$4,227,829 for the following 12 activities under this 5-year cooperative agreement:

1. Council Base Administration and Operations (\$3,308,417)
2. Annual Catch Limits Implementation (\$197,528)
3. Fisheries Information Network (\$163,000)
4. Council Peer Review (\$142,075)
5. Magnuson-Stevens Act Implementation (\$89,235)
6. National Environmental Policy Act (NEPA) (\$88,998)
7. Shallow-Set Tori Line Trials (\$63,200)
8. Scientific and Statistical Committee Stipends (\$55,764)
9. Council Education Committee Scholarship/ Internship Program (\$50,000)
10. SAFE Report Coordinator (\$30,000)
11. Fishing App Augmentation (\$24,612)
12. Vietnamese Translation Support for Tori Line Project (\$15,000)



These bird-scaring lines, also called tori lines, can be effective at reducing seabird bycatch, according to preliminary results from WPFMC and Hawai'i deep-set longline fishery field trials. Credit: WPFMC/Holly Naholowaa.

Western Pacific Sustainable Fisheries Fund (\$560,691)

The Magnuson-Stevens Fishery Conservation and Management Act, when reauthorized in 1996 and 2006, included authorities in Section 204(e) to permit foreign fishing within the EEZ in the Pacific Islands region. Before permitting foreign fishing under a Pacific Insular Area fishery agreement, the WPFMC must develop a 3-year Marine Conservation Plan (MCP) that describes the uses for any funds collected by the Secretary of Commerce (Secretary). The CNMI and the Territories of Guam and American Samoa must develop similar MCPs.

Funding for the Western Pacific Sustainable Fisheries Fund is authorized under the Magnuson-Stevens Conservation and Management Act (Section 204(e) (7)(A)). Funds are derived from Specified Fishing Agreements between U.S. Participating Territories of American Samoa and CNMI and vessels permitted under the Council's Fishery Ecosystem Plan for Pacific Pelagic Fisheries of the Western Pacific Region. Regulations covering Specified Fishing Agreements

and associated deposits into the Western Pacific Sustainable Fisheries Fund can be found at 50 CFR 665.819.

The Sustainable Fisheries Fund serves as a repository for:

- Permit payments the Secretary receives for foreign fishing in the EEZ around Johnston Atoll; Kingman Reef; Palmyra Atoll; and Jarvis, Howland, Baker, and Wake Islands
- Fines and penalties the Secretary receives, in the case of violations by foreign vessels occurring in the EEZ around these Pacific Islands
- Funds or contributions received in support of conservation and management objectives under an MCP, as well as payments made pursuant to specified fishing agreements with the Territories

In FY22, PIRO awarded three awards for the Western Pacific Sustainable Fisheries Fund in the amount of \$560,691 to support the following nine activities described in CNMI, American Samoa, and the Pacific Remote Island Areas (PRIA).

THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS (\$372,544)

Palapala Open Market (\$149,000)

This project will build a series of 12 steel pavilion structures, or palapala, at the Garapan Fishing Base in Saipan, CNMI. The palapala will provide local fish vendors a central, shaded, and convenient area to market their fresh, locally caught fish. It will also provide vendors with an area to actively monitor and receive fish from fishermen returning to Garapan Fishing Base. The stands will be co-located with the central public market that will support fisheries development and marketing on the island of Saipan. For the project, a contractor will complete a feasibility study with local agencies; vet the purpose through community stakeholders; review and gather existing information; and support collection of relevant historical, social, and environmental information that will be required to complete the local and federal construction-related permits. The public will be able to access the palapala via Beach Road, with parking available at the fishing base.



U.S. Pacific Territories Fishery Capacity-Building Scholarship recipient Leilani Sablan (Guam) conducts an independent creel survey to track changes in target reef fish. Students return home after graduation to work for their local fishery management agency, building capacity in the region. Credit: Leilani Sablan

North Island Mooring Project (\$67,544)

This project will look into the possibility of installing vessel mooring site locations off the coast of the island of Pagan in the Northern Island chain. The CNMI Department of Lands and Natural Resources will conduct site surveys within the Pagan lagoons to identify suitable locations that could support a vessel mooring system. The project will also use contracted services to launch in-water surveys to collect information about the environment through real-time video, photos, and measurements. This information will support environmental reviews, other assessments and analyses, and permitting required to deploy a mooring system in the Pagan lagoon area. The review will take into consideration protected resources, such as Endangered Species Act-listed species, critical habitat, and other sensitive species.

Marine Conservation Plan Coordinator (\$58,000)

The CNMI will hire a half-time MCP Coordinator to oversee projects funded under the Sustainable Fisheries Fund for 2 years. This Coordinator will report directly to the Secretary of the CNMI Department of Land and Natural Resources, who in turn will prioritize and manage the Coordinator's workload and determine the day-to-day scope and duties of the position. In addition to administering this grant and related projects, the individual will facilitate updates and revisions deemed necessary for the overarching

CNMI MCP. This position is key to successfully promoting responsible domestic fisheries development to provide long-term economic growth and stability, grow local food production, and meet grant deliverables and related administrative requirements.

U.S. Pacific Territories Fishery Capacity-Building Scholarship Program (\$50,000)

In the Western Pacific region, the understanding of and engagement in fisheries stewardship and management is low due to limited resources and expertise in the island areas. This project will support one student from the CNMI to participate in the Council's Capacity Building Scholarship/Fellowship program for 1 year (two semesters and one summer internship). The selected student will be transitioning from a community college to a 4-year college or university in Hawai'i or Guam to complete their junior or senior year toward earning a fishery-related bachelor's degree. Alternatively, the student will already have a Bachelor of Science degree and be working to complete a master's degree. The participating student, upon graduation, will be required to work for their local fishery-related agency for 1 year for each year the scholarship was received. The scholarship program provides support for the recipient's

travel-related expenses to attend the university, as well as to participate in the internship and subsequent employment with a fishery-management agency. It also provides financial support for tuition, books, and fees; internship compensation; housing/dormitory accommodations; and other related expenses.

The U.S. Pacific Territories Fisheries Capacity Building Memorandum of Understanding (MOU) was finalized in 2014. It was signed by federal and territorial agencies with fisheries management responsibilities in the U.S. Pacific Islands Territories, as well as six higher education institutions based in Hawai'i, American Samoa, Guam, and the CNMI. In the ensuing 5 years, representatives from these agencies/institutions participated in the Education Committee of the Western Pacific Fishery Management Council to reach goals set out in the MOU. Through the 2014 MOU, the U.S. Pacific Territories Fishery Capacity Building Scholarship was developed and has been running with financial support from the Council, PIRO and PIFSC.

Rota and Tinian Data Support (\$48,000)

This project will hire one data collector for each island area of Tinian and Rota. The data collectors will train in survey protocol and implementation, strictly follow survey protocol to collect the fishery-dependent data, and transmit the collected data to the CNMI Division of Fish and Wildlife (DFW) main office. This project will also: promote the use of the Catchit Logit application suite to comply with the mandatory license and reporting regulation; recruit and train local fishermen on the use of Catchit Logit; and review the submitted data and accept if the data is accurate. Data collectors work to improve fisheries data collection and reporting. They conduct resource assessment, monitoring, and research to gain a better understanding of marine resources and fisheries.

AMERICAN SAMOA (\$100,000)

U.S. Pacific Territories Fishery Capacity-Building Scholarship Program (\$50,000)

This project will support one student from American Samoa for two semesters and one summer internship. The selected student will be transitioning from a community college to a 4-year college or university in Hawai'i or Guam to complete their junior or senior year toward earning a fishery-related bachelor's degree. Alternatively, the student will already have a Bachelor of Science degree and be working to complete



WPFMC staff and contractors encouraged CNMI fishermen to register and use the Catchit Logit fishery data electronic reporting app at tournaments. The app was developed to improve fishery data collection and stock assessments. Credit: Lino Tenorio

a master's degree. The participating student, upon graduation, will be required to work for their local fishery-related agency for 1 year for each year the scholarship was received. The scholarship program provides support for recipient travel-related expenses to attend the university, as well as to participate in the internship and subsequent employment with a fishery-management agency. It also provides financial support for tuition, books, and fees; internship compensation; housing/dormitory accommodations; and other related expenses.

Marine Conservation Plan Coordinator (\$50,000)

This project will hire a 2-year half-time MCP Coordinator to oversee projects funded through the Sustainable Fisheries Fund in support of the American Samoa MCP. This Coordinator will report directly to the Director of the American Samoa Department of Marine and Wildlife Resources, who in turn will prioritize and manage the Coordinator's workload and determine the day-to-day scope and duties of the position. In addition to administering this grant and related projects, the individual will facilitate updates and revisions deemed necessary for the overarching American Samoa MCP.

PACIFIC REMOTE ISLAND AREAS (\$88,147)

U.S. Pacific Territories Fishery Capacity-Building Scholarship Program (\$47,500)

In the Western Pacific region, the capacity of individuals and local communities to understand and become engaged in fisheries stewardship and management is low due to limited resources and expertise in the island areas. This project proposes to support one student from the Pacific Remote Island Areas to participate in the Council's Capacity Building Scholarship/Fellowship program for 1 year (2 semesters and one summer internship). The student will be transitioning from a community college to a 4-year college/university in Hawai'i or Guam to complete their junior or senior year toward earning a fishery-related bachelor's degree. Alternatively, the student will already have a Bachelor of Science degree and be working to complete a master's degree. The participating student, upon graduation, will be required to work for their local fishery-related agency for 1 year for each year the scholarship was received. The scholarship program provides support for recipient travel-related expenses to



U.S. Pacific Territories Fishery Capacity-Building Scholarship recipient Alphaina Liusamoa (American Samoa) learns valuable laboratory skills during her summer internship. Scholarship recipients return home after graduation to work for their local fishery-related agency for at least one year. Credit: Fuamai Tago

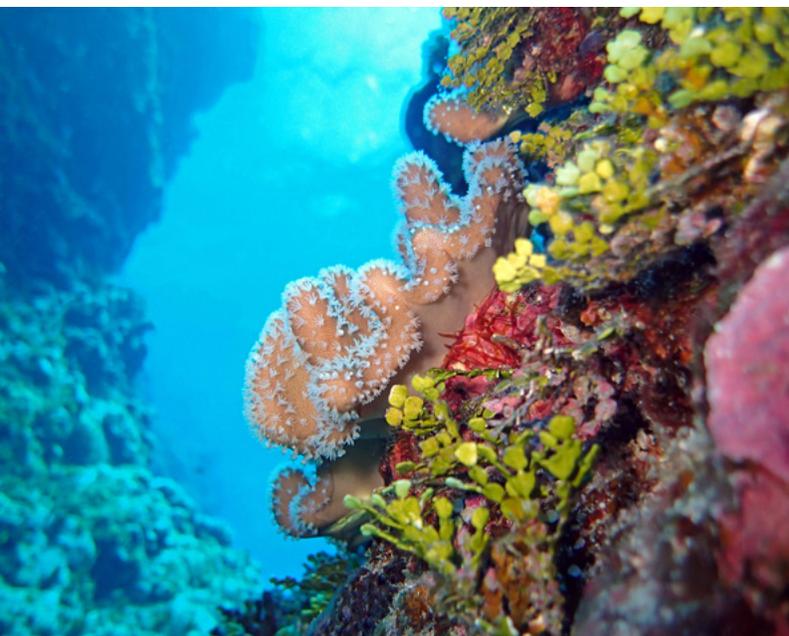
attend the university, as well as to participate in the internship and subsequent employment with a fishery-management agency. It also provides financial support for tuition, books and fees, internship compensation, housing/dormitory accommodations, board and other related expenses.

Community Engagement (\$40,647)

This project will support community engagement and dialogue around fisheries management issues and the implementation of activities listed in the Pacific Remote Island Areas MCP. The Council will host meetings to re-engage underserved fishing communities to define their needs. The meetings will also allow communities to identify any proposed changes to process, policy, or regulations that the Council can advance to increase equity in the fisheries management realm. For example, as part of the WPFMC's Equity and Environmental Justice Assessment held in 2021 and 2022, fishing communities identified several mechanisms and regulations in the Magnuson-Stevens Fishery Conservation and Management Act that could better serve the community. The meetings will be held in a location and venue convenient for community members, to encourage maximum participation. Subject matter experts may be invited to participate in meetings to provide varied perspectives and additional context for discussions.

Saltonstall-Kennedy Program

The Saltonstall-Kennedy (S-K) Program is a nationally competitive program administered by NOAA Fisheries. The program provides financial assistance through grants and 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 FY22, PIRO allocated \$1,693,777 for eight projects.



Soft corals at Aguijan Island. Credit: NOAA Fisheries

Ocean Era, Inc. — Most Likely To Succeed: Demonstrating Commercial Viability of Hawaiian Snapper (\$299,890)

This project will determine if the Hawaiian snapper *Aprion virescens* meet the five requirements for the commercial culture of a new marine species in offshore mariculture. The fish must: 1) provide abundant and predictable spawns from captive broodstock, either naturally or induced by hormone introduction; 2) be capable of large-scale larval rearing in a hatchery; 3) grow to market size efficiently, on diets that are nutritious and affordable (i.e. feed costs and time-to-market are in line with product quality and price); 4) be able to be cultured in offshore pens or high-density

land-based systems; and 5) have broad market acceptability and be able to command a price-point that reflects the costs and risks involved in production. To determine the viability of this species for commercial culture, this project will determine the spawning potential of *A. virescens* in captive conditions, either by way of spontaneous and natural spawns or hormonal induction. The project will also conduct larval-rearing trials to understand what to expect from larvae grown in the hatchery, and perform grow-out trials of juvenile *A. virescens* to understand the fish's growth when fed on selected commercial diets in selected fish densities.

University of Hawai'i — Collaborative Fishing Community Assessment for Sustainable Management of the Coral Reef Fishery in the Commonwealth of the Northern Mariana Islands (\$269,329)

University of Hawai'i (UH) will work with the CNMI fishing community and the CNMI Division of Fish and Wildlife (DFW) to use the FishPath tool to guide the development of data-limited stock assessments. Ultimately, the project will determine a community-focused fishery management strategy for the five most caught fish species and/or most vulnerable fish species in the CNMI coral reef fishery. Coral reef fisheries in the Pacific Islands region are a critical resource for the livelihoods and food security of island fishing communities. In the CNMI, the coral reef fishery has commercial and non-commercial sectors that target multiple species. Unfortunately, many of the targeted species lack reliable catch and effort data or sufficient life history information including age, growth, maturity, and reproduction. This data deficiency, coupled with a lack of local institutional capacity to perform stock assessments, calls into question the fishery sustainability in the region and emphasizes the need for better scientific information to manage these fisheries. This project will lead community-based meetings to: enhance decision-making; develop institutional assessment and management capacity among the local fishing community and fishery agency; and generate stock assessments and fishery-harvest advice for these data-limited species. For species that lack life history information, the project will collect data to supplement existing information.

University of Hawai'i — Mitigating Shark Depredation in Guam Fisheries (\$251,799)

This project seeks to build local capacity in Guam to understand shark interactions with the local fisheries and identify strategies to reduce catch loss. UH will train and equip the local fishing community with new, easy-to-use tools to gather data on shark depredation. This is when a shark tries to “steal” a fish caught on the line. The project will also collect DNA swab samples from depredated catches, deploy underwater cameras to document depredation events, identify species involved, and quantify shark behavior during interactions. In addition, the project will develop simple guidelines for avoiding shark interactions and reducing catch loss by first identifying and understanding how sharks are using fishing areas. This will improve fishermen’s profit margins and

fishery sustainability. UH will disseminate project information and results through education and outreach efforts.

Pacific Islands Fisheries Group — Development of Mariana Islands Ika and Monchong Fishery (\$229,702)

Monchong, a highly regarded and valuable seafood product in Japan, is commonly available in Hawai'i, Guam, and the CNMI, but it is not targeted as a directed and local fishery. The Pacific Islands Fisheries Group (PIFG) completed a 2-year project that identified the potential to develop a monchong fishery, specifically for the sickle pomfret, for export to international markets as a high-value fresh seafood product. This project furthers fishery development in the region by shipping and test marketing fresh monchong to



Project Update

Starting in 2020, nonprofit Conservation International Hawai'i (CI Hawai'i) received a 2-year NOAA Saltonstall-Kennedy grant to team up with O'ahu-based Chef Hui and other chefs, fishermen, and seafood businesses. The task: flip the script and show that invasive ta'ape (bluestripe snapper, *Lutjanus kasmira*) can be tasty. The goal: increase demand for ta'ape to boost local food security, support local fishermen, and decrease pressure on native species.

The movement to promote ta'ape as a sustainable seafood option started with a series of online cooking demos, free recipes, an augmented reality experience and Instagram game, and innovative value-added products. In 2021, CI Hawai'i and Chef Hui teamed up with chefs from five local restaurants to host a Hawai'i Seafood Month campaign dinner series and a 3-month virtual statewide fishing and cooking challenge. The “Virtual Ta'ape Throw Down” challenge awarded prizes to residents who submitted dishes made with ta'ape.

The project's market-based strategies and methods demonstrated the widespread benefits of increased collaboration between our fishing, culinary, conservation, and private sector communities. This includes measurable conservation results and impacts that benefit the environment, economy, and livelihoods.

View The Ta'ape Project video series:



*Kimi Werner brings her ta'ape harvest to the surface.
Credit: © Justin Turkowski*

Asian seafood markets. The fishing community of Guam and the CNMI's small boat fishermen, seafood distributors/producers, and tackle suppliers will benefit by receiving practical information needed to participate in an unexploited fishery. Tackle shops will be able to carry new fishing tackle to support the developing fishery, fishermen, and seafood dealers. The local economy will have a new locally produced and high-value exportable seafood product. The local and visitor communities will have access to fresh high-value seafood products that align with current efforts to eat local and support Guam and CNMI's diversified economy. The project will also produce informational materials to support these activities, and it will work with project participants to evaluate activities and outcomes.

Oceanic Institute of Hawai'i Pacific University — Development of an Integrated Multi-Trophic Aquaculture System To Restore Hawai'i's Vulnerable Limu (Seaweed) Populations (\$187,669)

This project will develop an integrated multi-trophic aquaculture (IMTA) system for the culture of native seaweeds, known locally in Hawai'i as limu. The system will use nutrients supplied by effluent from "fed" aquaculture systems and an "unfed" Hawaiian fishpond. Results from this project will provide aqua

farmers in Hawai'i a tool to offset negative impacts of nutrient-rich effluent while creating a consistent source of limu for communities involved in limu restoration. The Oceanic Institute (OI) will evaluate biofiltration efficiency of three limu species belonging to the genera *Gracilaria*, *Grateloupia*, and *Ulva*, selected for their potential ecosystem service and cultural value in Hawai'i. OI will evaluate biofiltration efficiency using effluent from two different fed aquaculture systems (one for marine shrimp culture and one for carnivorous marine fish culture), and one unfed Hawaiian fishpond used for the culture of herbivorous striped mullet. Each fed system will receive a species-specific diet varying in biochemical composition, and limu culture systems will receive effluent from these systems. In addition, the limu culture systems will receive effluent from an unfed mullet pond. The project will then monitor nutrient concentrations entering and exiting the limu systems to assess how well the systems remove dissolved nitrogen and phosphorus (biofiltration). Understanding the relationships between effluent quality and limu biofiltration efficiency will help inform aqua farmers on how to manage nutrient-rich effluent using local limu as a biofilter. Limu can also serve as a secondary cash crop for aqua farmers, providing additional revenue.

Pacific Islands Fisheries Group — Development, Promotion, and Marketing of Locally Caught Alfonsin in Hawai'i's Seafood Market and Restaurants (\$163,156)

This project will benefit the Hawai'i fishing community by broadening opportunities for fishermen to commercially target a new high-value species aimed at supporting local seafood markets and consumers. Project principals will work with local fishermen to deliver alfonsin to seafood distributors to test market the local species in restaurants currently using imported alfonsin, also known as kinmedai in Japan. The development and test marketing of locally produced, value-added alfonsin products will expand local business opportunities. This project will assess the potential for fishery development and distribution through surveys and evaluation forms shared with fishermen, seafood distributors, and consumers. Development of an alfonsin fishery can provide restaurants with a sustainable local product and promote U.S. commercial fisheries, while also reducing the reliance on foreign imports.



Sea Grapes (Caulerpa racemosa), a type of Limu.
Credit: NOAA Fisheries.

Mariana Islands Nature Alliance — Optimizing Economic Benefits for Fishing Communities Across the Pacific by Enhancing Artisanal Pelagic Fishing Through Smart-aFAD Networks (\$161,000)

The Mariana Islands Nature Alliance (MINA) will directly address challenges that are hampering the development of local pelagic (open-ocean) fishing fleets and local production. This project will pilot a complete Smart anchored Fish Aggregating Device (aFAD) network in Guam by enhancing the existing aFAD network with echosounder buoys. This will allow for live, daily, and long-term measurements of fish biomass and species composition. The data associated with each Smart-aFAD will be available to managers and fishermen. MINA will also develop a replicable web-based data-sharing platform that provides fishermen and managers live feeds regarding stock dynamics around aFADs and other capabilities. This will include: live and summary fish biomass (by species and depth) at each aFAD; live aFAD locations; live aFAD detachment and vandalizing alarms; fishing success predictions based on modeling; and useful fishing information, such as weather reports. MINA will assess the stock dynamics of pelagic species across Guam's Smart-aFAD network, and then provide guidance for how to improve the design of the aFAD networks to maximize aggregation potential and fisheries productivity. In addition, MINA will conduct a fisheries assessment and associated training based on fishermen's self-monitoring data. It will also conduct fishing experiments to build models that predict fishing success based on live aFAD biomass information streams, and provide additional guidance to fishermen to maximize productivity and profitability. Finally, this project will implement a local awareness campaign aimed at increasing both artisanal pelagic fishing participation and demand for pelagic fish.

Kua'āina Ulu 'Auamo — Collective Grassroots Pathways Toward Restorative Aquaculture: Removing Invasives and Bringing Back Native Species (\$131,232)

This project will support cross-consultation and training among kia'i loko to accelerate and amplify the development of nursery systems for pua'ama (juvenile mullet) and other hatchery-raised native finfish. Kua'āina Ulu 'Auamo (KUA) will conduct a 3-day



A diver retrieves an acoustic receiver from a fish aggregating device, or FAD. Credit: WPFMC/Melanie Hutchinson

workshop for kia'i loko from up to 25 fishponds on 6 different islands. These workshops will have hands-on opportunities to learn about the nursery system setup, including plumbing and solar integration, and techniques to acclimate fingerlings to specific fishpond conditions (e.g., water quality, predator evasion) to increase survival of finfish transferred from hatchery facilities. The project will provide lessons learned and updates from the existing nursery site through coordinated communication efforts. It will also develop new and collaborative distribution models for loko i'a (Hawaiian fishpond) products in the community, to include island-based co-ops, inter-island collaborative sales, and indigenous aquaculture branding. To accomplish this, it will hold two annual gatherings of the statewide network of loko i'a to have focused and facilitated discussions about socioeconomic pathways for fishpond sustainability, including sales and marketing techniques for various fishpond species. As a pilot case study of network collaboration for one particular invasive species, KUA will hold a public educational and outreach event about the negative impacts and wide availability of invasive kanda (Marquesan mullet). It will share techniques among kia'i loko to catch and sort kanda, which mix with the native 'ama'ama (Hawaiian striped mullet).

Hawai'i Marine Wildlife Response, Outreach, and Population Monitoring Program

In FY22, the Hawaiian Monk Seal Recovery and Marine Mammal Response Program, Pacific Islands Region Marine Turtle Management and Conservation Program, and the Promoting Responsible Wildlife Viewing Program funding were combined under a single competition called the Hawai'i Marine Wildlife Response, Outreach, and Population Monitoring Program.

This program supports priorities related to in-field response, educational outreach, management, recovery, population monitoring, conservation, and habitat use for Hawaiian monk seals, sea turtles, and spinner dolphins in the state of Hawai'i. Projects in this program promote the recovery of endangered Hawaiian monk seals, support responses to marine mammal strandings in the main Hawaiian Islands, and develop community-based and integrated projects designed to elevate public awareness and build capacity in the community. Projects in this program also implement recovery plans by supporting programmatic activities for Endangered Species Act (ESA) listed sea turtle species either residing in or migrating through the Pacific Islands region. In FY22, PIRO allocated a total of \$685,149 to 10 projects.



Trained response volunteers from The Marine Mammal Center's Hawaiian monk seal hospital and visitor center, Ke Kai Ola, release a seal that was treated for an ingested fishing hook. Credit: The Marine Mammal Center/Carmelita Villalobos

Hawaii Marine Mammal Alliance doing business as Hawaii Marine Animal Response — Hawaiian Monk Seal and Sea Turtle Management Support, Field Response, and Outreach on O'ahu (\$230,277)

Hawaiian monk seals and sea turtles are some of the most iconic and beloved marine protected species in Hawai'i. However, they are vulnerable to key threats that are challenging their recovery. In this project, Hawaii Marine Animal Response (HMAR) will provide capacity to support field response, escalated and directed surveys/responses, and interventions and strandings for Hawaiian monk seals and sea turtles on O'ahu. They will also support effective community outreach and collaboration, maintain staff and volunteer capacity, provide training programs and operational procedures, and build effective communications and reporting protocols.

The Honu Project — Population Monitoring and Conservation of Hawaiian Hawksbill Sea Turtles on Hawai'i Island (\$97,501)

Hawksbill sea turtles (*Eretmochelys imbricata*) are among the rarest sea turtles in the Pacific Ocean. They are classified as endangered under the U.S. Endangered Species Act, and as Critically Endangered by the International Union for Conservation of Nature. The overall goal of the Hawai'i Island Hawksbill Project is to support the management, conservation, protection, and enhancement of hawksbill sea turtle populations and their nesting habitats in Hawai'i. To achieve this, the program carries out research and conservation activities at the most important nesting habitats along the southern coast of Hawai'i Island. Efforts in this project include monitoring nesting beaches to identify and count nesting females and nests; determining hatching success and hatchling production; protecting nests to maximize the number of hatchlings that safely reach the ocean; controlling non-native species on nesting beaches to reduce predation on nests, eggs, and hatchlings; improving nesting habitat through habitat restoration activities; measuring nest temperature during the incubation period in different zones on the beach to assess the impact of

climate change; and promoting public stewardship of hawksbills and coastal marine ecosystems through educational outreach.

The Marine Mammal Center — Strengthening Hawaiian Monk Seal Response and Community Engagement on Hawai‘i Island (\$81,443)

The last surviving species in its genus, Hawaiian monk seals (*Neomonachus schauinslandi*) are one of the most endangered seal species in the world. The Marine Mammal Center’s (“The Center”) Ke Kai Ola facility is a hospital designed solely to provide long-term medical care and rehabilitation to sick, injured, and orphaned Hawaiian monk seals from anywhere in the archipelago. Ke Kai Ola also provides significant education and outreach aimed at inspiring and empowering visitors and residents alike to care for the Hawaiian monk seal. In this project, the Center will continue strengthening its Hawaiian monk seal response and community engagement on Hawai‘i Island, in addition to providing volunteer training and increased communications. This project will also fill a capacity need for sea turtle response in west Hawai‘i Island.

Hawaii Marine Mammal Alliance doing business as Hawaii Marine Animal Response — Hawaiian Monk Seal Management Support, Field Response, and Outreach on Moloka‘i (\$78,715)

Hawaiian monk seals face many threats, including inappropriate interactions with and disturbances from people due to lack of public understanding and support. HMAR will provide support for field response, escalated and directed surveys/response, and interventions and strandings of Hawaiian monk seals on Moloka‘i. This project will conduct field-based community outreach, public engagement, and hotline response; triage; dispatch; multi-agency coordination; and information collection, transfer, and reporting.

The Marine Mammal Center — Building Hawaiian Monk Seal Response and Community Engagement on Maui (\$71,958)

Ke Kai Ola, The Marine Mammal Center’s Hawaiian monk seal hospital, provides long-term care and rehabilitation to monk seals and significant education

and outreach about the seals to visitors and residents. With just over 1,500 individuals remaining, conservation efforts to protect and increase the population are critical to this species’ survival. In this project, The Center will continue strengthening its Hawaiian monk seal response and community engagement on Maui, in addition to providing volunteer training and increased communications.



*Two Hawaiian monk seals battle it out at the water’s edge.
Credit: NOAA Fisheries*

Did You Know?

Male Hawaiian monk seals sometimes “cruise” beaches and get into scuffles with one another—and it all has to do with mating. If a male seal comes upon an adult male-female pair on the beach, he may approach the wave wash and then roll back into the water. Or he may come onto the beach to challenge the male to a duel for mating rights to the female—the combatants attempt to assert dominance through bites and body slams. Males appear to recognize each other and establish dominance hierarchies, and the most successful males (those who most often get to mate) usually go unchallenged. On the other hand, some males appear to never cruise beaches for females, possibly because they’ve given up competing. Learn more about this interesting facet of male monk seal behavior: <https://www.fisheries.noaa.gov/science-blog/monk-seal-behavior-spotlight-male-dominance-displays>

Maui Ocean Center Marine Institute — Sea Turtle Management Support, Field Response, and Outreach on Maui (\$40,000)

The Maui Ocean Center Marine Institute (MOCMI) provides a comprehensive sea turtle conservation program on the island of Maui. Through support from this funding opportunity, MOCMI will respond to reports of sick, injured, distressed, or otherwise compromised sea turtles. Using the data obtained through stranding response, MOCMI aims to improve understanding of the issue within the community and reduce threats impacting sea turtles by establishing easily adaptable conservation initiatives and accessible environmental education. This project will allow MOCMI to increase sea turtle stranding response capabilities and expand community education and outreach efforts.



The public views green sea turtles from a responsible and respectful viewing distance at Ho'okipa beach park on Maui. Credit: NOAA Fisheries

The Ocean Foundation — Improving Hawksbill Turtle Research at the Most Important Hawksbill Nest Beach in Hawai'i; A 3-year Proposal for Halawa, Moloka'i (\$39,941)

Hawaiian hawksbill turtles represent one of the world's most endangered sea turtle populations. A recent study indicated that an average of only 14 nesting females and 48 nests are documented across the Hawaiian archipelago each year. The study was largely dependent on data collected from Hawai'i

Island, but recent monitoring carried out in 2018 and 2021 at Halawa Beach Park on Moloka'i Island suggests the site might be the single-most important hawksbill nesting beach in Hawai'i. This 3-year proposal seeks to improve research activities at Halawa during the 2022–2025 nesting seasons, with a focus on solidifying the project's initial successes. The project will also initiate new, high-priority research activities. These activities will include night monitoring to identify and count nesting females and post-hatching nest excavations to confirm nests, calculate hatching success, and maximize hatchling survival. Combined, these activities will generate urgently needed demographic information on this data-deficient population that is critical to informing population assessments and identifying conservation actions to support population recovery.

Hawai'i Wildlife Fund — Ho'okipa Honu Watch: Outreach, Education, and Monitoring of Maui's Most Significant Basking Turtle Site (\$20,174)

Ho'okipa Beach Park is one of the most important beach parks on Maui's north shore, both for human usage and for the threatened green sea turtle (*Chelonia mydas*). This project seeks to increase the survival of the Hawaiian green sea turtles, or honu, that bask and nest at Maui's Ho'okipa Beach Park by protecting them from human disturbance, while simultaneously educating the public about how they can help with this effort.

Mālama i nā Honu — Mālama i nā Honu Sea Turtle Management and Outreach Project (\$18,000)

The Mālama i nā Honu project focuses on conducting public outreach and education to promote responsible viewing of green turtles at Laniākea Beach, O'ahu. The structured and maintained program provides a viable orientation, on-site training, and monitoring instruction for volunteers. This cadre of trained volunteers then conducts daily outreach and education with an ever-increasing number of visitors at the location. Volunteers teach about the species life cycle, foraging habits, migration, and nesting behavior to schools, clubs, service groups, and tourist venues. The project strives to bring awareness and implementation of strategies to mitigate turtle boat strikes. It collects and analyzes data on basking turtles at Laniākea and makes it available on Mālama i nā Honu's website.

Hawai'i Preparatory Academy — Hawai'i Marine Wildlife Response and Educational Outreach (\$7,140)

The Hawai'i Preparatory Academy (HPA) will support the conservation and recovery of sea turtles in Hawai'i by operating a stranding program that covers the coast from 'Upolu Point to Honokōhau Harbor on Hawai'i

Island. HPA will receive, vet, and document public reports and respond as appropriate to mediate the problem of sea turtle strandings. HPA will facilitate and deliver rapid and effective response to reported turtle strandings, injuries, and other situations. It will also provide education and advocacy for sea turtles with local organizations, visitors, and residents alike.

Pacific Islands Region Marine Turtle Management and Conservation Program

The PIR Marine Turtle Management and Conservation Program (MTMCP) implements the recovery plans for the U.S. Pacific sea turtle populations by supporting programmatic activities for Endangered Species Act (ESA) listed sea turtle species. These species may occur entirely within the PIR or have documented linkages to the region. This includes sea turtles that originate from areas outside of U.S. jurisdiction but migrate through or forage within the PIR, and sea turtles that are impacted by PIR federally-managed activities and therefore relevant to NOAA Fisheries management and recovery obligations. Projects supported by the MTMCP aim to implement regional management priorities and species-specific monitoring, protection, or conservation needs as outlined in the recovery plans. They also complement ongoing federal, state, or international activities and align with current agency initiatives. In FY22, PIRO allocated \$368,197 to four federal assistance awards to help progress and complement multi-agency domestic and international sea turtle recovery efforts.

World Wildlife Fund, Inc. — Implementing a Strategy to Address the Direct Take of Leatherbacks (*Dermochelys coriacea*) in the Kei Islands, Indonesia (\$101,501)

The Western Pacific leatherback turtle subpopulation has decreased by more than 80 percent and is projected to decline by 96 percent by 2040. In the Kei Islands of Maluku Province, Indonesia, nine villages hunt and consume turtles that gather to forage on large groups of jellyfish. The World Wildlife Fund (WWF) has worked to develop a multi-layer strategy to reduce the ongoing leatherback hunt. It has formed a robust regional monitoring program and engaged in

broad outreach efforts that have reduced leatherback take from a high of 103 turtles in 2017 to 5 in 2019. Through close collaborations with government agencies and civilian sectors, early conservation gains are promising. The continued support for these activities will be instrumental in achieving a more permanent solution.

The Nature Conservancy — Effective Co-Management of Leatherback Turtle Nesting Beaches in Solomon Islands (\$96,786)

Under this project, The Nature Conservancy (TNC) supports community efforts to protect and monitor leatherback turtle nesting beaches in the Solomon Islands and the Isabel Provincial Government (IPG). Activities raise local awareness of the plight of the



A community-based ranger for World Wildlife Fund Indonesia measures a nesting leatherback sea turtle at Buru Island, Indonesia. Credit: © Yayasan WWF Indonesia/Idham Farsha



Newly appointed rangers attend the Sasakolo Monitoring Protocol Rangers' training. It includes presentations on the importance of gender equity and social inclusion in conservation. Credit: The Nature Conservancy

leatherback turtles. The project will encourage and strengthen communities in Haevo, Sosoilo, and Sasakolo in conservation competency to effectively protect and monitor leatherback nesting beaches during peak nesting seasons. It will also increase capacity to further develop turtle conservation in the IPG by establishing and monitoring a position for a turtle conservation officer. The TNC project increases understanding of leatherback turtle conservation by supporting a local women's group, KAWAKI. To conduct community outreach, KAWAKI is producing a short film on leatherback conservation at Sasakolo.

World Wildlife Fund, Inc. — An Analysis of the Status of Sea Turtles in the Philippines (\$88,625)

By increasing and improving the data available to governments, conservationists, and fisheries, this project seeks to reduce the removal of marine turtles in the Philippines. Through research and knowledge sharing, the project will address the two main means of turtle removal: fishery bycatch and illegal wildlife trade. Staff will conduct a series of rapid bycatch assessments to measure the level of interaction and bycatch of marine turtles in both small-scale fisheries and small commercial fisheries. Using these results, the project identifies and implements bycatch

mitigation strategies with the buy-in of stakeholders and local communities, all the while continuing to support Filipino authorities tasked with combating illegal wildlife trafficking.

World Wildlife Fund, Inc. — Leatherback Sea Turtle Nesting Dynamics in the Maluku Region (\$81,285)

WWF closely monitors the critical habitat for the surviving population of leatherback sea turtle nesting sites on Buru Island. The Indonesian archipelago is a critical habitat for the surviving population, but their numbers have dramatically declined due in part to egg harvesting and direct take from nesting beaches and foraging grounds. The protection of adult females and nests made Buru Island turtles the first substantial nesting population discovered outside of Papua in the last decade. For continued conservation, WWF works to expand nest characterization, monitoring, and satellite tag deployment for further research. Striving to improve and extend the community and government outreach, WWF will ultimately transition conservation responsibility over to capable and enthusiastic local, provincial, and regional governments.

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 principal source of information and analysis for fisheries activities and management options that are used to address federal requirements for fisheries management plans under NOAA Fisheries' jurisdiction. In FY22, PIRO allocated \$359,051 to four projects.

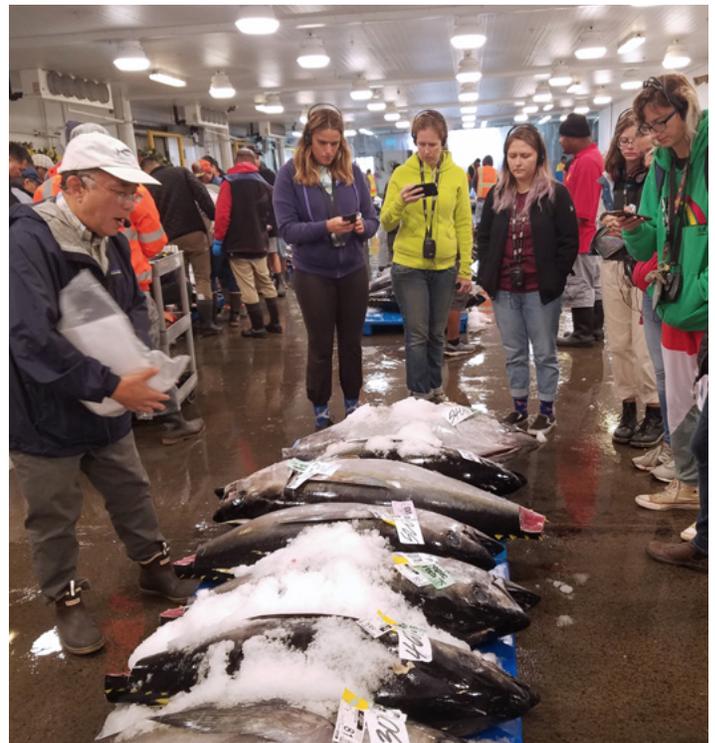
American Samoa Government: Department of Marine and Wildlife Resources — American Samoa Interjurisdictional Fisheries Stock Assessment and Monitoring Program (\$220,909)

The Department of Marine and Wildlife Resources (DMWR) of the American Samoa Government assesses and monitors the status of interjurisdictional fish species caught within the American Samoa EEZ. The data obtained is the main source of information used to address local and federal requirements for a Fishery Ecosystem Report under the jurisdiction of the American Samoa DMWR and NOAA Fisheries through the WPFMC. Through the cooperative efforts between federal and local agencies, fisheries information provides a timely developed, implemented, and evaluated Fisheries Ecosystem Report for the territory of American Samoa and the WPFMC.

State of Hawai'i: Department of Land and Natural Resources, Division of Aquatic Resources — Fisheries Act Award Application - State of Hawai'i (\$101,324)

The Division of Aquatic Resources (DAR) is modernizing the commercial marine licensing and fisheries reporting systems (CMLS) for the State of Hawai'i. The agency has nearly 3,800 fishermen required to obtain commercial marine licenses to sell fish in the state. About 3,000 commercial fishermen submit monthly fishing reports. Per Hawai'i Revised Statute §189-10, DAR also collects transaction purchase reports from 255 active primary commercial marine dealers. Both federal and state fisheries agencies use this integrated best available data to assess the status of marine resources and to establish

fishery regulations in state and U.S. EEZ waters. It is essential, therefore, that timely and accurate fisheries data is available for fisheries agencies to make informed management decisions. This award will support the continued maintenance and support of an online reporting system for fisheries data. Funds will also support the modified online CMLS, which will allow the state to easily issue and renew licenses to both commercial fishermen and marine dealers.



Students from the University of Hawai'i Marine Option Program (MOP) attend the Honolulu Fish Auction to learn about seafood safety standards. Credit: UH MOP/ Jeff Kuwabara

Did You Know?

Located at Pier 38 of the Commercial Fishing Village, the Honolulu Fish Auction is the only fish auction between Tokyo and Maine. Independent fishermen sell their catch at the auction, encouraging fair pricing for a range of fish species and quality based on market conditions. Regulated fish auctions that support local fishermen and promote fresh, quality seafood are key to sustainable fisheries management in the Pacific Islands region.



Fishermen Connie Camacho (left) and Mars Taman (right) show their catch during a fishing instruction class with Lino S. Tenorio & Associates in CNMI. Credit: 500 Sails

Government of Guam: Department of Administration, Bureau of Statistics and Plans — Data Collection and Entry in the Management of Guam’s Interjurisdictional Fishery Resources (\$18,409)

Data collection of the interjurisdictional fisheries provides local and federal officials with vital information to effectively manage and sustain Guam’s fisheries. Guam has collected data of transshipped species offloaded by longline vessels at Guam’s commercial port. It has entered this data

into a computer-based data processing system, in coordination with the NOAA Fisheries Western Pacific Fishery Information Network program. While the tuna transshipment company closed on December 31, 2020, the Bureau of Statistics and Plans requests to maintain this program objective on the data collection and entry of transshipped species offloaded at Guam’s maritime port of entry, should operations resume. This project will also collect and computerize fisheries-dependent data from the domestic fisheries on Guam under the Commercial Landings Data Collection program.

Commonwealth of the Northern Mariana Islands: Division of Fish and Wildlife — Data Collection and Entry in Interjurisdictional Fishery Resources (\$18,409)

During fishing tournaments, the CNMI Division of Fish and Wildlife collects, processes, and shares important fisheries monitoring data. This principle source of information provides the CNMI with an analysis of fisheries activities and management options of pelagic landings during tournaments. Data further equips federal and local fisheries management programs in the CNMI and assists in addressing federal requirements for Fisheries Management Plans under the jurisdiction of NOAA Fisheries through WPFMC. A record of fisheries data guides in the development, implementation, evaluation, and amendment of fishery management plans in the Western Pacific region.

Marine Education and Training Program

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 FY22, PIRO allocated \$210,000 to two projects.

University of Hawai‘i: Department of Biology — Support of Marine Option Program (2020-2025) (\$150,000)

The Marine Option Program (MOP) provides experiential opportunities for students with ocean-related interests. It offers marine education programs and activities for undergraduates across more than 40 disciplines. MOP continues 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. MOP also provides scientific diving opportunities, which help to teach aspects of hands-on underwater-surveying practices and principles courses.

Hawai'i Academy of Science — Hawai'i State Science & Engineering Fair (\$60,000)

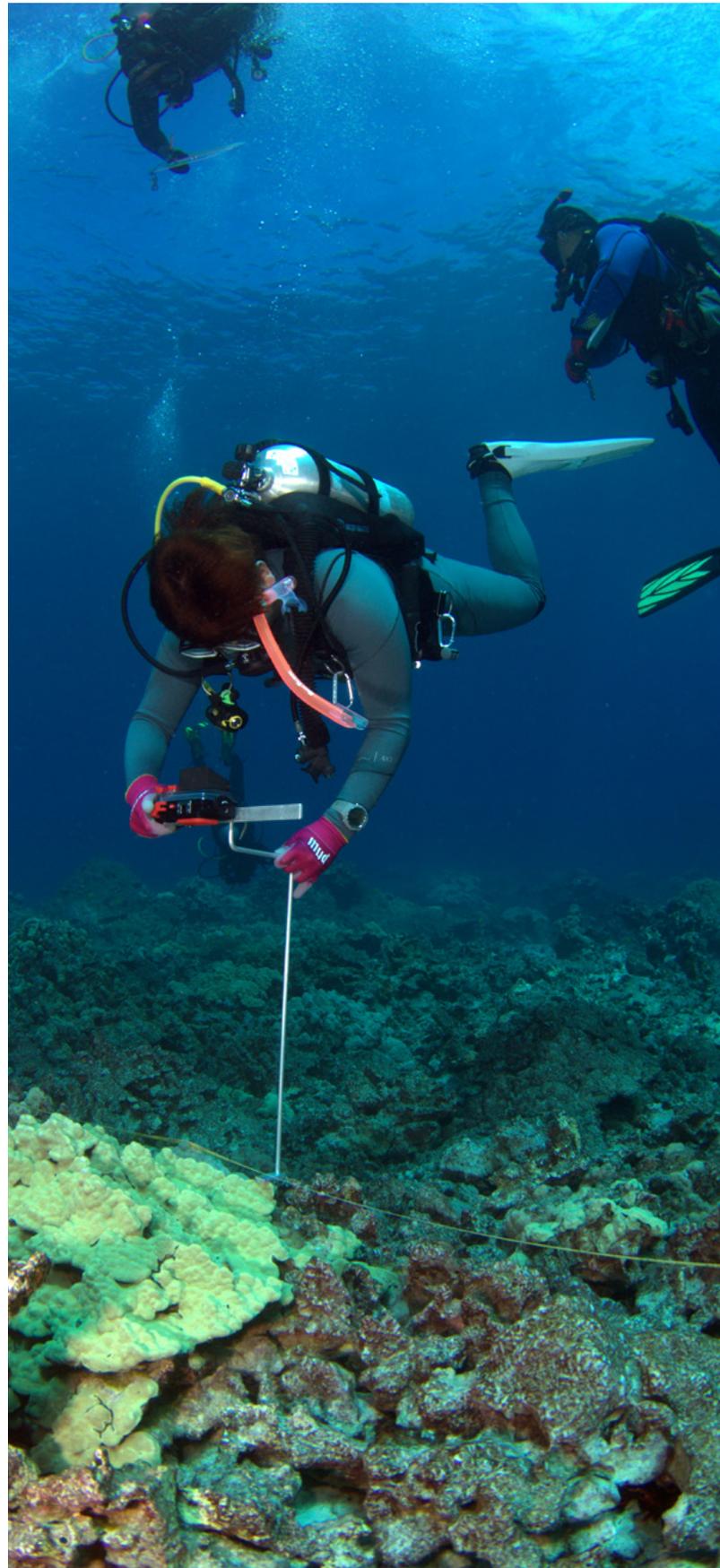
Every student in the State of Hawai'i has the opportunity to participate in a science fair activity, helping build interest in marine and natural sciences. The science fair provides a platform for students to use the scientific method to investigate questions and solve problems in the real world. High school students interact with leading scientists in Hawai'i to conduct in-depth and comprehensive science investigations. Exposure to science activities could provide a catalyst to increase the number of students in Hawai'i pursuing advanced degrees in areas of study related to STEM (Science, Technology, Engineering, and Math). The Hawai'i State Science and Engineering Fair connects students, scientists, and teachers by leveraging partners and donors and offering scholarships and awards to winners. The Hawai'i State Science and Engineering Fair has temporarily moved to a virtual format, requiring an innovative approach to this effort.



Master navigator and senior canoe builder Mario Benito (center right) discusses the model prototype with his canoe builders Lolobeyong Benito (far right) and Beouch Ngirchongor (center left), and volunteer Joshua Onopey (far left). Credit: 500 Sails

Project Update

500 Sails completed the final 3D fiberglass prototype that will be used to make a full-scale Carolinian fishing canoe. 500 Sails will provide the final canoe to the CNMI community for sustainable fishing programs led by prominent Carolinian traditional navigators and cultural leaders. 500 Sails is using this unique and novel approach to merge traditional and contemporary fishing conservation practices.



The University of Hawai'i MOP conducts coral disease surveys using an underwater camera during the Quantitative Underwater Surveying Techniques (QUEST) course. Credit: UH MOP/Jeff Kuwabara

Congressionally Directed Community Projects

In March of 2022, the FY22 Commerce Appropriations Law established appropriate funds for “NOAA Community Project Funding/NOAA Special Projects.” Public Law 117-103 states: “NOAA is directed to provide ... NOAA Community Project Funding/NOAA Special Projects consistent with NOAA’s existing authorities, jurisdictions, and procedures, as appropriate. NOAA shall perform the same level of oversight and due diligence regarding these projects as with any other external partners.” In FY22 PIRO allocated \$190,000 to one project.

Hawai‘i Department of Land and Natural Resources — Makai Watch Program Neighbor Island Coordinator Pilot (\$190,000)

The Hawai‘i DLNR’s Division of Conservation and Resources Enforcement’s (DOCARE) Makai Watch program engages community members in the protection of nearshore and coastal resources in their area by raising awareness of natural and cultural

resources rules and regulations. Since 2013, these community members have served as DOCARE’s “eyes and ears.” They work with resource managers and enforcement officers to watch over their area resources. In recent years, the program has expanded from training people in a designated community to providing training on a wider scale to educate any member of the public who would like to learn. Currently, there is only one Makai Watch coordinator based on the island of O‘ahu, despite community involvement on each of the neighboring islands. This project will establish two new island coordinators—one on Maui and one on Hawai‘i Island—to expand the capacity for training across each island and increase the number of trained citizens. Once established, it is expected that further long-term funding from alternative sources will be sought to continue the important and impactful work of the Makai Watch program.



Did You Know?

The Makai Watch program originally started as a community-led effort in the early 2000s. Since then, it has evolved into a collaborative, statewide program. It’s similar in concept to a neighborhood watch, but focuses more narrowly on marine resources. The program engages community members who use, deal with, or live closest to marine resources to help protect these resources for their long term health. These community “eyes and ears” work closely with resource managers and conservation enforcement officers to report what they’re seeing and protect marine resources. Makai Watch sites are currently found on four of the eight main Hawaiian Islands. And with the help of grant funding, DLNR is planning to increase the number of trained citizens across the state.

To learn more, visit: <https://dlnr.hawaii.gov/makaiwatch/>

Makai Watch volunteers overlooking marine recreational activities on the North Shore of O‘ahu. Credit: Mālama Pūpūkea-Waimea

2022 Unfunded Federal Programs

The following programs were not funded in FY22 due to budgetary constraints:

Sustainable Recreational and Non-Commercial Fishing Program: This program supports recreational and non-commercial fishing projects in the Pacific Islands region that improve sustainable fishing opportunities, maintain stability of fish stocks, and protect cultural fishing traditions.

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.

Native Fishery Observer Program: The NOAA Fisheries Observer Program is responsible for

providing longline 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.

Hawai'i Seafood Program: The Hawai'i Seafood Program strengthens the economic viability of the Hawai'i fishing and seafood industry through activities that promote Hawai'i fisheries as high-quality, safe domestic seafood produced by a responsible and well-managed fishery.

The Kapi'olani Community College Culinary Arts Department develops casual dining recipes to bring seafood from high-end restaurants to home kitchens. Credit: UH Systems/Kapi'olani Community College





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