

DEPARTMENT OF MARINE & WILDLIFE RESOURCES



PULAALI'I NIKOLAO PULA Governor

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DMWR Fisheries Division Second Quarter Report FY25 (Jan to March 2025)

1. <u>Shore-based creel program:</u>

The Shore-based Creel Survey conducted a total of 84 survey runs and completed 37 sampled survey days over 64 weekdays and 13 weekends/holidays in the second quarter. The monitoring team recorded 19 participation counts and collected data from 12 interviews, including opportunistic interviews, to estimate catch and effort data from January to March 2025. This data collection generates crucial expansion totals that effectively represent the estimated fish catch landings by gear type in the near shore fishery.

Participation data from Manu'a is not included in this report, as fishing activities there are more extensive than those on the main island of Tutuila. The results from this quarter indicate an increase compared to the previous quarter: the total expanded catch; is estimated at 8,408 pounds; the total expansion for gear per hour is 4,191 pounds; and the expanded total for catch per gear hour (CPUE) is 2.01.

The expanded catch/ effort summary by gear methods this quarter:

Fiscal year	Rod and	Spear-
2025	Reel	Snorkel
January to March	502lbs	7,906lbs

The summary also provides a list of species composition in total expanded catch landings. The five dominant species for this quarter are listed below.

1.	Striped surgeonfish / Acanthurus lineats/ Alogo	4,499lbs
2.	Bluespine unicornfish / Naso unicormis / Ume	785lbs
3.	Brown surgeonfish / Acanthurus nigrofuscus / Pone	619lbs
4.	Spiny lobster/ Panulirus penicillatus / Ula sami	410lbs
5.	Giant trevally / <i>Caranx ignobilis</i> / Sapoanae	340lbs

The Shore-based program is currently collaborating with the Western Pacific Fisheries Information Network (WPacFIN) to implement essential updates and upgrades to the fisheries database, enhancing data accuracy and accessibility. The project lead has effectively guided the new Data entry manager and Boat-based manager, through the detailed procedures of the Visual FoxPro Amsamdatasyst Creel data entry system. This guidance includes in-depth training on data validation queries critical for maintaining the integrity of the database.

2. Key Reef Species Program:

An integrated monitoring team of CRAG and Fisheries divers was put together to share resources and skills. The teams were in training sessions to calibrate survey methods and data collections techniques. Fish census calibration surveys as well as benthic photo quadrant surveys were reviewed amongst the surveyors. Fisheries staff assisted with 2 reef slope coral reef monitoring surveys at Aasu and Fagamalo. Fisheries divers are pending DAN insurance to perform diving.

Monitoring team conducted 5 reef flat surveys in Sailele, Auto, Faganeanea, Alofau and Faga'alu. The surveys included fish data collection runs for some of the fishery's staff. Data sheets are encoded into their database and monitoring will continue. Project staff also participated in ASCC Quest training program. Staff participated in survey collection methods, coral, fish and invertebrate species ID.

Staff assisted with at Sea Seabird monitoring survey in Manu'a Islands. Staff assisted with boat assistance for Ta'u and Ofu Island wide surveys. Staff also assisted with FAD visual inspections and FAD B buoy retrieval after it broke off and drifted. Staff successful retrieved the Catamaran buoy and secured it at the marina.

3. Sportfish Life History Program:

Staff continue to coordinate with the partner molecular laboratory, the Australian Genome Research Facility (AGRF), which is generating microsatellite population genetic data from the samples collected from Savaii, Upolu and Tutuila (for the bottomfish *Lutjanus gibbus, Lutjanus kasmira, Lethrinus rubrioperculatus,* and for the reef fish *Acanthurus lineatus*). Staff is currently conducting analyses of population genetic structure for *Myripristis berndti, Acanthurus lineatus* and *Scarus oviceps* using microsatellite data.

4. Fish Aggregation Device Program:

The overall goal of this program is to provide fishermen access to pelagic tuna fisheries through the deployment of Fish Aggregating Device (FAD). The main objective of this program is to maintain 5 deep-water FADs and conduct regular survey of their status and survey fishermen's who use these FADs. There are 5 FAD sites: FAD A off Aunuu, FAD B off the Pago harbor, FAD C off Vaitogi, FAD D off Tapu-tapu and FAD E off Fagasa. The program currently uses two FAD buoys: the catamaran buoy and the Indian Ocean design. Only FADs A and B are of catamaran buoy design. Staff conducted visual inspections of FADs in the last quarter and collected data from sportfishermen. At present, all 5 FADs are in place in accordance with program objectives.

FAD B buoy drifted last March 22 towards the South Bank. Staff successfully recovered buoy last March 27.



5. Boat-Based Creel Survey Program:

From January 1 to March 31, 2025, seven fishing vessels participated in spearfishing, bottom fishing, and trolling. During this quarter, they collectively landed 2,385.3 lbs. of catch. Creel surveys are conducted randomly for three shifts (0500-1330, 1300-2130, 2100-0530) and two weekends per month. Throughout this quarter, a total of 35 interviews were recorded from these seven fishing vessels, and they brought in a total by method: bottomfishing: 868.56 lbs., Spearfishing: 715.51 lbs. Trolling: 801.23 lbs.

The market sales of landings from nearshore, bottomfish, and pelagic are documented in a Commercial Invoice Database. 76 registered vendors contribute to this database are from local businesses that purchase local fresh fish and/or local frozen fish. Under the A.S.A.C. 24.0905, Dealers Record needs to document this information on invoices provided by the department. Vendors are required to make their submission before or on the 16th of every month. The department sends a team monthly for a courtesy visit to ensure data quality and control. All 76 registered vendors were visited throughout this reporting period.

1. BOAT-BASED CREEL:

This program aims to monitor catches of highly migrated species harvested within the American Samoa EEZ through port sampling of commercial fishing vessels and marketing sale documentations.

Species	Bottomfish	Species	Spearfish	Species	Troll
Ambon emperor	166.1	Spiny lobster	133.46	Skipjack	633.32
Humpback	139.92	Redlip parrotfish	91.39	Yellowfin	128.21
snapper					
Gray jobfish	122.49	Blue banded surgeon 75.11		Dogtooth	23.65
Redgill emperor	117.92	Darkcapped parrotfish	73.47	Bluefin trevally	9.03
Blue-lined snapper	62.39	Redtail parrotfish	58.79	Rainbow runner	5.45
Giant trevally	40.2	Steephead parrotfish	55.74	Bigeye barracuda	1.57
Saber squirrelfish	38.37	Bluespine unicornfish	46.43		
BOTTOM TOTAL:	BOTTOM TOTAL: 687.39 lbs SPEAR TOTAL: 534.39 lbs TROLL TOTAL: 801.23 lbs.				

Table 1. The following tables show the most dominant species by method landed this quarter.

SOURCE: WPacFIN/DMWR Creel Database

A total of 2,385.3 lbs. of all species was documented on WPacFin/DMWR Creel Database.

2. Commercial Landing Monitoring:

To ensure data quality, a full census of local fish purchases and resale transactions from local fishermen/vendor import resale (frozen). All 76 registered vendors were visited throughout this reporting period, and vendor performance assessment was conducted on-site to improve data quality.

SPECIES (LOCAL)	METHOD	WEIGHT	SPECIES (LOCAL)	METHOD	WEIGHT
BLUE-BANDED SURGEON	SPEARFISHING	768.94	SKIPJACK	TROLL	268
PARROTFISHES	SPEARFISHING	275.76	WAHOO	TROLL	21
SPINY LOBSTERS	SPEARFISHING	12.16			
SURGEON FISH/TANG	SPEARFISHING	37			
SQUIRRELFISH	SPEARFISHING	19			
SHALLOW GROUPER	SPEARFISHING	3			

Table 2. The following table reflects commercial landing by method. (Spearfishing/Troll)

OTHER REEF	SPEARFISHING	89		
FISH(UNKOWN)				

TOTAL: 1,204.86 lbs.

TOTAL:289 lbs.

6,687.14 lbs.

SOURCE: WPacFIN/DMWR Creel Database

Seven commercial fishing vessels contributed to the above table with a recorded market sale of \$5,857.75

Table 3. The following table shows the dominant resale species on the Commercial Landing System.

SPECIES	PURCHASE TYPE	WEIGHT
POMPANO	RESALE	3,200
TILAPIA	RESALE	1,753.06
SWAI	RESALE	1,191
SALMON	RESALE	105.65
PARROTFISHES	RESALE	418.73
SPINY LOBSTERS	RESALE	18.7

SOURCE: WPacFIN/DMWR Creel Database

Market sales of resale species total \$65,520.43, according to the Commercial Landing system.

Table 4. The table reflects pelagic resale transactions.

SPECIES	PURCHASE TYPE	WEIGHT
BLACK MARLIN	RESALE	4,939.11
МАНІМАНІ	RESALE	394.4
SWORDFISH	RESALE	3,172.2
YELLOWFIN TUNA	RESALE	786
WAHOO	RESALE	1,191
BLUE MARLIN	RESALE	300
		TOTAL: 10,782.71 lbs.

SOURCE: WPacFIN/DMWR Creel Database

The Commercial Invoice database has documented a market sale amounting to \$39,400.54 designated for resale, as indicated in the above table.

3. Fund Enforcement activities related to Interjurisdictional fish species.

a. On March 17, 2025, a new fishing license process was implemented, requiring applicants to complete regulation testing following their DPS clearance. One applicant has successfully navigated through this process and was issued a fishing license. Throughout this reporting period, 10 local fishermen applied for a new or renewed commercial fishing license, and only 9 were able to complete all necessary steps in the license application process.

TOTAL:

b. Two computers/regulation brochures were purchased for the Enforcement Division to strengthen enforcement of regulations to effectively monitor and protect migratory species in American Samoa's fisheries resources.

4. Dissemination information on the American Samoa Fisheries and Data Collection efforts:

- a. No workshop was conducted during this reporting period.
- b. Constant communication between NOAA and DMWR team on trial phase of the Sell it Log It/Metabase application. The program team continues training entering commercial invoices and validating data; efforts are underway to identify and implement methodologies to enhance the new web-page application to develop comprehensive reports.

6. Community-Based Fisheries Management Program:

HIGHLIGHTS OF ACTIVITIES:

CFMP staff Dimary Ulberg, along with four other program staff of the Department, participated in the Basic and

Advanced Grants Management Course in Saipan, Commonwealth of the Northen Mariana Islands from the 27th January 2025- 31st January 2025, hosted by the US Fish and Wildlife Service. The comprehensive training provided valuable insights into the full grant's lifecycle, including application process, financial and programmatic reporting, compliance requirements and best practices for managing federal funds. The CFMP program of DMWR is funded by the Office of Conservation Investment under the US Fish and

Wildlife Service, Department of Interior. As highlighted in the table below, ongoing monitoring of the giant clam nursery in Faga'alu continued this quarter to ensure optimum growth, disease prevention and reducing predatory activities on the giant clams. The cage structure was cleaned and rebars were tightly secured again to ensure better sturdiness and stability underwater. From the last count included in last quarter's report, 4 giant clams died this quarter and there are currently 528 live giant clams remaining in the cage. The stable conditions at Faga'alu offer a sheltered and ideal habitat for the giant clams with ample sunlight for food



production and nutrient growth for filter feeding. All clams were measured and average size is now recorded at 16 centimeters; still at the sub-adult stage with reproductive maturity expected to be at 20-25 centimeters in shell length growth. More information on clam growth rate and reef site outplant plan is available with CFMP Fisheries Division.

Date	Activity	Staff
January 15 th	Clean cage and check for any	Warren Seva'aetasi
2025	dead clams	Fuamai Tago
		Dimary Ulberg
January 22 nd	Clean cage and check for any	Warren Seva'aetasi
2025	dead clams	Dimary Ulberg
January 28 th	Clean cage and check for any	Fuamai Tago
2025	dead clams	Warren Seva'aetasi
February 28 th	Clean cage and check for any	Fuamai Tago
2025	dead clams	Warren Seva'aetasi
		Dimary Ulberg
		Ekueta Schuster
March 7 th	Space out and measure clams	Fuamai Tago
2025		Ekueta Schuster
		Warren Seva'aetasi

	Dimary Ulberg
Space out and measure clams	Fuamai Tago
	Ekueta Schuster
	Warren Seva'aetasi
	Dimary Ulberg
	Alphina Liusamoa
Check cage	Fuamai Tago
	Warren Seva'aetasi
	Sean Felise
	Pemerika Mahuka
	Space out and measure clams Check cage



CFMP staff and CRAG Invasive Species Coordinator Ms. Casidhe Mahuka held a meeting with representatives of Faga'alu village council on the 24th February 2025 at NOAA conference room. The meeting, led by Ms. Mahuka served as the first consultation for the rain garden project in the village. The purpose and benefits of the rain garden were explained and the representatives were invited to share observations about local runoff issues with technical advice and assistance from the staff for the success of the project. The rain garden adds to local efforts of stormwater control and management of land-based sources of pollution in the village's Marine Protected Area and is funded under the US Department of Interior. The completion of this work is scheduled for the final quarter of this fiscal year as resources are procured. The Marine Protected Area sign for the village of Fagasa under the CFMP program, was installed on the 5th March 2025. The sign raises awareness of the protected area and restricted fishing zone in the Fagasa Bay and to address issues of illegal fishing and unsustainable practices in the area. The village of Fagasa

remains an active champion of marine environment stewardship under the CFMP program. The 4ft x 6ft aluminum post sign was installed by *All-Star Designs and Graphics* business from Tafuna.



CFMP staff joined other certified divers in Fisheries division and

CRAG for the dive tank visual inspection training delivered by Dr. Erik Brown of the National Park Service of American Samoa on the 6th and 17th of March 2025. The training focused on proper techniques and safety procedures for inspecting dive tanks. Participants learned how to assess tanks for damage, corrosion and other potential issues

ensuring dive safety standards are met. The course provided practical knowledge on maintaining dive equipment to prevent accidents and ensure save dive operations.





CFMP staff participated in the check-out dive in Faga'alu on the 17th March 2025, led by CRAG Monitoring Technician/Dive Safety Officer Matt Macdonald. The training was to assess the diving skills and readiness for fieldwork. The dive allowed staff to demonstrate and refine essential skills such as buoyancy control, air transfer, use of equipment, underwater navigation, sign language and communication and overall ability to work together with dive buddies.

Advancing skills and comfort underwater (both in shallow and deep dives) ensures smooth and effective monitoring surveys by all staff involved, minimizing unfortunate accidents and events during underwater field work.

DMWR and CRAG staff are currently working together to combine their respective biological monitoring efforts in key reef sites around the island, focusing on fish

census and benthic surveys to assess the health of marine ecosystems, track the status of fish populations and monitor coral reef conditions. With the assistance of Ms. Alice Lawrence from March 19th-31st 2025 (PhD student at Bangor University, United Kingdom; contract with CRAG for data analysis and management), CFMP staff joined all meetings that were conducted to look at current issues and challenges with monitoring the reef flats and reef slopes around the island.

Several key reef monitoring surveys were conducted in reef flat areas during this period; including Faga'alu village MPA as one of the sites under the program, on the 31st March 2025. Please refer to Key Reef Program+ CRAG report for all other monitoring sites in this period. Data management and reporting are one of the priorities in this period as joint monitoring process and related coordination efforts iron out again and become more streamlined. Identifying concerns with staff certifications/trainings/logistics with dive gears/equipment maintenance and service/insurance etc. was also an integral part of the discussion; what is needed to improve the monitoring program and taking necessary management actions etc. Brief data input and training was done on Coral Net software database for benthic analysis, as well as exploring and familiarizing with use of the Pacific reef monitoring online portal for data output reports.



Other Developments:

- The Chief of Fisheries had a meeting (Jan 27, 2025) with Kydd Pollock, the manager of the Palmyra Island FAD Watch. FAD Watch Palymra is the longest-running program conducting retrieval of drifting FADs. The meeting was conducted to develop a similar proposal for American Samoa. It is estimated that around 20-50 drifting FADs enter American Samoa EEZ every year.
- 2. The Chief of Fisheries had a meeting (Jan. 31, 2025) with engineering staff of Horsley-Witten concerning their Storm water management project in Nuuli and the DMWR project on evaluating watershed in Manua to enhance survivorship of ESA-listed coral. A workshop in July is in the planning stages for both projects.
- 3. The Chief of Fisheries had a series of meetings of Lauren O'Brien (Marine Resource Education Program, Gulf of Maine Research Institute) who is organizing a similar program in the Western Pacific Region. The initiative intends to organize a steering committee for the region and a workshop in March 2025. his program was founded in New England in 2001 and has spread, with great success, across all 7 other council regions and now to the Western Pacific. The ultimate goal is for participants to leave the workshop with critical knowledge, skills, and relationships that empower them to have a voice within the federal fisheries science and management processes.
- 4. The Chief of Fisheries attended the 155th Meeting (March 11 to 13) of the Scientific and Statistical Committee of the Western Pacific Fisheries Management Council. The SSC is the scientific advisory body for the Council. The committee discussed: (1) Setting Acceptable Biological Catch (ABC) for the Main Hawaiian Islands (MHI) for Uku (Aprion virescens); (2) CNMI Bottomfish Stock Assessment Update WPSAR Terms of Reference; (3) Electronic Monitoring Status Update (Update on EM Program Implementation, EM Sampling Strategy and Planning, Socioeconomic Impacts Analysis for Council Action); (4) Endangered Species Act and Marine Mammal Protection Act Updates (Final 2023 False Killer Whale Stock Assessment Report, Status of ESA and MMPA Actions (Listings, Critical habitat, Take Reduction Plan).
- The Chief of Fisheries attended virtually the 202nd Council Meeting (March 25 to 27) and presented the DMWR Report to Council and the Status Update of the Territorial Bottomfish Management Plan.

- 6. The Chief of Fisheries discussed with SFR grant manager the annual reports and her comments and modified and submitted the final FY24 annual performance reports.
- 7. The Chief of Fisheries had a virtual meeting with the fisheries economist and one of the tuna fisheries scientists in the Pacific Community to discuss the American Samoa Tuna Policy project and discussed a possible meeting in the Territory with the longline fishery operators and the cannery management.

The Chief of Fisheries reviewed the following research permit applications:

- TITLE OF PROPOSED STUDY: Trophic levels and abundance of the endemic Nautilus samoaensis off Pago Pago NAME OF APPLICANT: Peter Ward ADDRESS OF APPLICANT: Department Biology University of Washington Seattle, WA 98195
- TITLE OF STUDY: Pacific ESA-Listed Coral Recovery In the Face of Climate Change Threats NAME OF APPLICANT: Thomas Oliver ADDRESS: NOAA Inouye Regional Center Attn: NMFS / PIFSC / ESD / Thomas Oliver 1845 Wasp Blvd, Building 176 Honolulu, Hawai'i 96818, USA
- TITLE OF STUDY: Assessment of coral thermal resilience and trade-offs across the reefs of American Sāmoa NAME OF APPLICANT: Daniel Barshis, including Barshis Lab staff Jason Toy, Katherine Parker, Emma Vlcek, and Ponchanok Weeriyanun ADDRESS: Old Dominion University Mills Godwin Building 308, Norfolk, VA 23529
- TITLE OF STUDY: Evolution of sequestration for metabolism and defense in marine invertebrates with an inventory of sea slugs and anemones from American Sāmoa.
 NAME OF APPLICANT: Estefania Rodriguez INSTITUTIONAL AFFILIATION: American Museum of Natural History (AMNH) INSTITUTIONAL ADDRESS: 200 Central Park West, New York, NY 10024