MOTU RIPOTI FOR 180TH COUNCIL MEETING DEPARTMENT OF MARINE AND WILDLIFE RESOURCES

This report briefly describes the activities undertaken by the Fisheries Division of DMWR from June to Sept. 2019

AMERICAN SAMOA SPORTFISH INVESTIGATION AND CONSERVATION PROJECTS

(Funding source: U.S. Fish and Wildlife Service)

<u>Marine Protected Area Program</u>: Restore a viable sportfish stock through village-based fishery management and monitoring;

Staff in coordination with DMWR Education and Outreach Division conducted a meeting with various village mayors to get feedback on the CFMP. The workshop discussed strengths, weakness, opportunities and threats to the program from the mayors' perspectives.

<u>Inshore Fishery Documentations Program</u>: Determine the performance of the near shore sport fish fishery;

Total expanded catch for this quarter is estimated at 2630 lbs; the total expansion for Gear/Hr amounts to 1314 hrs; and as a final point the expansion total for Catch/ Gear-Hr is 2.00lbs. The catch summary also provides numbers for species composition in total landings with no pooling. The six dominant species for this third quarter is listed below.

1.	Fringelip Mullet/ Crenimugil crenilabris/ fuafua	850 lbs
2.	Whitespotted surgeonfish/ Acanthurus guttatus/ maogo	494 lbs
3.	Greater Amberjack/ Seriola dumerili/ malauli	461 lbs
4.	Unicornfishes assorted/ Naso spp./ Ume	273 lbs
5.	Blue-banded surgeonfish/ Acanthurus lineatus/ alogo	253 lbs
6.	Convict tang/ Acanthurus triostegus/ Manini	155 lbs

Key Reef Species Program: Evaluate the status of sportfish;

Staff in coordination with The Nature Conservancy (TNC) is collecting of fish life history data for 3 species (*Naso lituratus*, *Chlorurus japanensis* and *Lethrinus rubrioperculatus*).

Staff is continuing fish sample collection and data analyses for the population genetics of three fish species in the Samoan Archipelago.

<u>Fish Aggregating Device Program</u>: Provide an alternative resource access by enhancing sportfishing through fish aggregating devices;

Staff continued to collect survey forms from sportsfishers and encoded data for sportsfish trolling especially around FADs in Tutuila. Staff has been meeting with interested fishermen who wanted to deploy experimental FAD with biodegradable materials. Program has acquired satellite buoys to track FADs.

MONITORING FISH STOCKS

Funding source: NOAA-NMFS

The pelagic fisheries report for longline vessels and purse seine are covered by the Pelagic Fisheries Ecosystem Report by the Western Pacific Fisheries Management Council and the Pacific Islands Fisheries Science Center. The pelagic fisheries by sportsfishing is reported under the Fish and Wildlife Restoration Grant. The pelagic fisheries reported here are from alia longline, bottomfishing, trolling, mix bottomfishing/trolling and spearfishing operations in American Samoa.

There were 12 active alias that have contributed to the landings from longline, bottomfishing, trolling, mix bottomfishing/trolling and spearfishing activities from April 2019 to June 2019. Throughout this quarter, these vessels have landed a total of 17,200 expanded pounds of fish. Surveys were conducted randomly throughout the month for at least 3 weekdays a week and 2 weekends per month. Throughout this quarter, there were 207 fishing trips with fishing effort recorded from 40 interviews.

The objectives of the project and corresponding activities for this reporting period are:

1. Monitor catches of highly migratory, species harvested within American Samoa's EEZ by means of port sampling of commercial vessels and continue documentation of market sales.

There were seven active fishing vessels caught an estimate of 10,613 pounds of pelagic fish species this quarter which includes longline fishing activities. Only one vessel continues to longline throughout the year and the specific catch is not reflected in the table below. Most pelagic species were caught by and trolling with Skipjack tuna (*Katsuwonus pelamis*) being the dominant species caught. Table 1. Lists the pelagic species caught from alia boats this quarter.

Table 1. Pelagic catches from alia boats throughout April 2019 to June 2019:

Species	Bottomfish	BTM/TRL	Troll	Total (lbs)
Barracudas	311.80	-	2.90	314.70
Dogtooth tuna	198.50	-	128.40	326.90
Kawakawa	-	-	87.00	87.00
Mahimahi	-	6.30	123.30	129.60
Wahoo	-	60.90	66.50	127.40
Rainbow runner	41.00	-	1	41.00
Sailfish	-	-	111.60	111.60
Skipjack tuna	-	164.80	2,563.20	2,728.00
Yellowfin tuna	-	18.90	966.50	985.40
Total (lbs)	551.3	250.9	4049.4	4,851.60

2. Monitor catches of Bottomfish species harvested within American Samoa's EEZ by means of documenting market sales and port sampling.

There were six alias that contributed to the total landings of 4,317 expanded pounds of bottomfish species this quarter. Humpback snapper (*Lutjanus gibbus*) was the dominant species caught this reporting period with an estimated 944 pounds which accounts for 22% of the bottomfish species caught. The following table lists the nine most common species caught this quarter which accounts for 83% of the total bottomfish species landings.

Table 2. Total bottomfish landings by species/group from April 2019 to June 2019

Common Name	Samoan Name	Scientific Name	Total (lbs)
Humpback snapper	Filoa	Lutjanus gibbus	943.8
Gray jobfish	Asoama	Aprion virescens	856
Redgill emperor	Filoa ulutele	Lethrinus rubrioperculatus	624.3
Blue lined snapper	Savane	Lutjanus kasmira	293.2
Black jack	Tafauli	Caranx lugubris	265.7
Longtail snapper	Palu loa	Etelis coruscans	246.6
Red snapper	Mu	Lutjanus bohar	136.1
Bigeye trevally	Malauli matalapo'a	Caranx sexfasciatus	118.4
Longnose emperor	Filoa va'a	Lethrinus elongatus	103.7
		Others	729.2
		Total (lbs)	4317

3. Monitor catches of Spearfishing activities within American Samoa's EEZ by means of documenting market sales and port sampling.

There were three alias actively spearfishing this quarter with a recorded catch of 2,270 expanded pounds of nearshore marine species. Normally, there would be one boat a day leaving for spearfishing activities, there are spearfishing activities 4 days a week. Due to bad weather this quarter, there have been less spearfishing activity. There were 54 trips recorded with 7 interviews collected this quarter. Parrotfish makes up the majority of fish caught by spearfishing activities with *Scarus rubroviolaceus* accounting for 27% of spearfish species landed. The following table lists the nine common species caught this quarter.

Table 3. Total of nearshore fish species landed by boat-based spearfishing activities.

Common Name	Samoan Name	Scientific Name	Total (lbs)
Redlip Parrotfish	Fuga/Laea	Scarus rubroviolaceus	605.9
Redtail Parrotfish	Fuga/Laea	Chlorurus japanensis	330.2
Steephead Parrotfish	Fuga/Laea	Chlorurus microrhinos	326.9
Bluespine unicornfish	Ume	Naso unicornis	173.2
Blue-banded surgeonfish	Alogo	Acanthurus lineatus	149.9
Orangespine unicornfish	Ili'ilia	Naso literatus	122.1
Bridled Parrotfish	Fuga/Laea	Scarus frenatus	101.8
Violet-lined Parrotfish	Fuga/Laea	Scarus globiceps	17.7
Dark-capped Parrotfish	Fuga/Laea	Scarus oviceps	93.2
		Others	348.7
		Total (lbs)	2269.6

4. Disseminate information of American Samoa's Fisheries and Data Collection efforts

a. The Aunu'u data collection will not occur unless the team gets permission and the blessing of the Aunu'u Village Council. As of now, they haven't granted access to our data collection team to collect fisheries data from their alia fishing activities.

b. Program brochures are currently being printed in both English and Samoan. These brochures include: Boat-based Creel Survey, Shore-based Creel Survey, Commercial Fishing Licenses and Commercial Invoice Collection.

5. Fund Enforcement activities related to interjurisdictional fish species.

- a. The department issued 10 commercial fishing licenses for local fishermen this quarter. Seven of them were license renewals and there were three new fishing licenses issued.
- b. The project team collects invoices on or before the 16th day of every month and have been collecting from 57 fish dealers. Thirty-three of the vendors have submitted invoices this reporting period. Other vendors have old fish or were closed during our scheduled

invoice collection dates. Before the monthly Commercial Invoice Collection, the team conducts a Vendor Pre-Visit. The Vendor Pre-visit allows the team to remind vendors of scheduled dates for invoice collection, review invoice logs and assist vendor representatives on how to properly fill out invoices. In addition, the team has been working with Enforcement Division and vendors on compliance issues including timely invoice submission and involunatarily excluding information on commercial receipts.

c. The Enforcement Division conducts random checks on local commercial vendors to see if they are selling fresh and/or frozen local fish. Any new vendors are referred back to the survey team for registration. The survey team enrolls the dealers into the commercial invoice system and then conducts training for the vendor representative(s) on filling out vendor invoices. Representatives are informed of any regulations regarding commercial invoices and the scheduled pick up of commercial receipts.

LEONE RESTORATION GRANT

Funding source: U.S. Fish and Wildlife Service

The DMWR-Leone staff continued the beach and pala clean-ups in Leone. They also continued coordinating with the foialas and the village chiefs in the clean-up of the pala. The staff also continued coordinating with the agencies who committed to the project: University of Hawaii (Dept. of Urban and Regional Planning, ASCC Marine Science Program, ASCC Community & Natural Resources, USDA Natural Resources Conservation Service, Leone Village Council and the Coastal Zone Management Section of AS-DOC DMWR. A no-cost extension has been requested and granted until the end of Feb. 2019.

DATA PORTAL FOR CLIMATE CHANGE VARIABLES IN AMERICAN SAMOA

Funding source: U.S. Fish and Wildlife Service

The Chief Fisheries Biologist continued analyses of collated data from NOAA databases and scientist collaborating on this project on sealevel, rainfall, wave energy, sea surface temperatures (SST), ocean chlorophyll a, El Nino/La Nina Index and Pacific Decadal Oscillation Index (PDO). For this quarter, the analyses expanded to the use of different statistical models (Generalized Additive Model, Boosted Regression and Classification Trees).

WILDLIFE DIVISION

Funding source: U.S. Fish and Wildlife Service

Turtle project has satellite-tracked turtle movement from American Samoa to Fiji, Australia and French Polynesia.

Marine mammal staff involved with the annual humpback whale project.

AQUATIC EDUCATION

Funding source: U.S. Fish and Wildlife Service

Pathway to Conservation

Conducted 15 educational presentations and 12 hands-on outdoors activities for 500 students in order to provide students with skills and knowledge in actual conservation work.