

GUAM DEPARTMENT OF AGRICULTURE
191st WESTERN PACIFIC REGIONAL FISHERY
MANAGEMENT COUNCIL MEETING ISLAND REPORT

SHORE-BASED FISHERIES

Report Period: October 1, 2021 through December 31, 2021.

Shore-based Survey	Number Scheduled	Number Completed
Creel Survey	18	18
Participation Survey	6	6
Aerial Surveys	6	0
Total number of shore-based Surveys	30	24

Table 1. Number of inshore surveys scheduled and conducted for the time period.

The top 7 shore-based species harvested between October 1, 2021 and December 31, 2021 in terms of total weight are shown in Table 2; *Kyphosus vaigiensis*- Guili, with 408 kg. caught, was the top species, followed by *Ellechelon vaigiensis*- Laiguan agaga', *Caranx sp.* - i'e, *Mulloidichthys sp.* - ti'ao, *Lethrinus harak*- Mafute, *Siganu spinus*- Sesyon, and *Lethrinus olivaceus*- Lillilok. Commonly encountered methods include hook and line with 153 fishermen and 186 gear, talaya with 26 fishers and 25 gear, gill net with 7 fishermen and 3 gear, and snorkel spearfishing with 10 fishermen and 10 gear (see Table 3). The total number of fishermen and gear observed was 197 and 225, respectively. The CPUE and landings for each of the top shore-based methods are shown in Table 4.

Species	Total weight (kg)
<i>Kyphosus vaigiensis</i> - Guili	408 kg.
<i>Ellechelon vaigiensis</i> - Laiguan agaga'	215 kg.
<i>Caranx sp.</i> - i'e	118 kg.
<i>Mulloidichthys sp.</i> - ti'ao	109 kg.
<i>Lethrinus harak</i> - Mafute	34 kg.
<i>Siganu spinus</i> - Sesyon	32 kg.
<i>Lethrinus olivaceus</i> - Lillilok	30 kg.

Table 2. Shore-based top 7 species caught by weight for time period.

Method	Number of Gear	Number of Fishers
Hook and Line	141	126
Cast Net	44	46
Gill Net	2	3
Snorkel Spear	22	22
SCUBA Spear*	0	0
Hooks and Gaffs	0	0
Surround Net	1	2
Other Methods	2	2
Totals	212	201

Table 3. Top Shore-based fishing methods for the time period. *SCUBA fishing was made illegal in March 2020.

Method	CPUE (kg./gear hour)	Total kg.
Hook and Line	.0490	277 kg.
Throw Net	.3905	880 kg.
Gill Net	.0040	1 kg.
Snorkel Spear	.0507	42 kg.
Hooks and Gaffs	0	0
Surround Net	1.2844	83 kg.
Other Methods	.0992	13 kg.

Table 4. Shore-based CPUE and total catch by method for the time period.

BOAT-BASED FISHERIES

Report Period: October 1, 2021 through December 30, 2021.

The number of boat-based surveys conducted during the last quarter of 2021 followed the regular scheduling of boat-based surveys. There are 8 creel surveys and 2 participation surveys scheduled each month, for a total of 30 surveys completed for the time period (see Table 5).

Boat-based Survey	Number scheduled	Number completed
Boat-based creel surveys	24	24
Participation surveys (VT Counts)	6	6
Total Number of Boat-based surveys	30	30

Table 5. Number of boat-based surveys scheduled and conducted for the time period.

Due to the prevalence of commercial trollers, skipjack tuna continues to be the most commonly caught fish. These fishers target surface skipjack schools, fish nearly every day, and number as many as 20 boats. Deepwater bottom fish species and spearing make up the remaining top species caught.

Species	Total Expanded Landings (metric tons)
<i>Katsuwonus pelamis</i> (skipjack tuna)	20.6
<i>Coryphaena hippurus</i> (mahimahi)	6.0
<i>Acanthocybium solandri</i> (wahoo)	5.1
<i>Thunnus albacares</i> (yellowfin tuna)	3.4
Assorted reef fish	2.8
<i>Makaira mazara</i> (Pacific blue marlin)	2.7
<i>Tied: Pristipomoides auricilla</i>	1.5

(yellowtail kalikali) <i>Etelis coruscans</i> (onaga)	1.5
---	-----

Table 6: Boat-based top seven (7) species caught by weight for time period.

Boat-based participation, effort, and landings (see Table 7) are dependent on the availability of fish stocks and weather conditions. Trolling continues to be the most common boat-based method, making up 80% of the landings, due to commercial trolling activity that occurs daily. Deep bottom fishing continues to make up a significant portion of overall bottom fishing landings, with these fishers targeting and landing predominantly yellowtail kalikali (*Pristipomoides auricilla*) and onaga (*Etelis coruscans*) (see Table 6). The “Assorted Reef Fish” category is given to the catch of spear fishers when surveying the catch to the species level is not possible. Spearing trips continue to be challenging to survey due to either the fish being packed in ice and time constraints imposed by the fishers.

Boat-Based Method	Landings (metric tons)	Trips	Hours	Persons
Trolling	38.2	2,332	10,590	5,545
Bottom fishing	5.5	840	3,544	2,159
Snorkel spear	3.1	368	1,003	1,786
Gillnet	1.1	42	104	83
Atulai night jigging	0.7	73	438	155

Table 7: Expanded Landings, Participation, and Effort values for the top boat-based fishing methods for time period.

CPUE values and species breakdown are dependent on intercepting fishers and surveying their catch to the species level. Boat-based gillnetting had the highest CPUE for the time period (see Table 8). However, this value may not accurately describe boat-based gillnetting since only two (2) intercepts were obtained for the time period. Trolling had the next highest CPUE for the time period (1.29 kg/gear-hour), followed by spearing (1.04 kg/gear-hr) then bottomfishing (0.52 kg/gear-hr). Seasonality trends of the pelagics were observed during the time period, Skipjack tuna and yellowfin tuna continues to be harvested year-round, with Pacific blue marlin normally increasing during the third quarter. During periods of calm weather, fishing activity significantly increases, especially bottom fishing and spearing.

Boat-Based Method	CPUE (kg/gear-hr)
Trolling	1.29
Bottom fishing	0.52
Snorkel spear	1.04
Gillnet	10.9
Atulai night jigging	0.6

Table 8: Boat-based CPUE for the top five (5) boat-based methods for time period.

BOATING ACCESS PROGRAM:

Talofofo Boat Ramp

The Guam Economic Development Authority (GEDA) received \$260,000 through an Interior grant to complete a feasibility study for Talofofo Bay (see Figure 1) as a potential boat ramp site on the east side of the island. Several meetings involving stakeholders including mayors of Inarajan and Talofofo were held, and DAWR provided recommendations to GEDA regarding the boat ramp design for the feasibility study. GEDA completed the feasibility study in 2020 and is working on a Design-Build Request for Proposal (RFQ) Package for the proposed boat ramp at Talofofo Bay.

After a meeting was held on August 24, 2021 with GEDA hired a contractor to complete the Design-Build Request for Proposal (RFQ) Package for the proposed ramp at Talofofo Bay and is about 30% completed and is estimated to cost about 1.5 million.

Update: GEDA is still working on completing the Design-Build Request for Proposal (RFQ) Package for the proposed ramp at Talofofo Bay. Once finalized, funding will have to be allocated for the project.



Figure 1. Talofofo Boat Ramp proposed shoreline site

Construction of Agat Marina's Dock B. Three of the four docks at the Agat marina were replaced by the Port Authority of Guam (PAG), with Dock B not repaired due to funding challenges with the Port. Agriculture has funded phase 1, the demolition and removal of the damaged Dock B components and will be contributing \$500K towards the construction phase. As a result, the Port Authority has agreed to set aside Dock B solely for recreational boaters. This will increase the number of available berths for local recreational boaters at the Agat Marina.

- The MOU for the Dock B replacement project was signed by the Governor of Guam on September 6, 2021.
- On September 16, 2021, a Conditional Notice to Proceed (NTP) for the project was granted by US Fish and Wildlife Service (USFWS), noting that PAG may proceed with all the steps leading to, but not including actual construction activities for the replacement of Agat Marina's Dock B and Public Boat Ramp Repairs.
- Per USFWS, a final NTP for the construction and repairs will be issued upon submission of the requisite environmental compliance and permits to USFWS.
- PAG is currently in the process of developing the Scope of Work (SOW) for the projects.

Update: The bid packet got Agat Marina Dock B is currently being reviewed by PAG Procurement, PAG Legal Counsel, and AG's Office. Once bid packet is in order, the Procurement Division will issue and advertise the project. Hoping to issue bid within the next two weeks.



Figure 2. Site of Dock B with damaged decking removed.

Harbor of Refuge. Agriculture is assisting the Port Authority of Guam (PAG) with the repair of the Harbor of Refuge. The facility currently does not meet Coast Guard standards, with the moorings and concrete anchors needing replacement. Agriculture is using its Boating Infrastructure Grant Tier 1 funding to fund 75% of the repair work and provide a pumpout station for transient boaters. To qualify for BIG funding, 75% of the Harbor of Refuge's moorings will be set aside for transient vessels to use. DAWR received five (5) BIG awards, with most of the funding to be subawarded to the Port. The total amount of all the BIG Tier 1 awards is \$900,000.

The MOU for the project was signed on February 22, 2021, with a "Notice to Proceed" issued by the Port in April 2021.

- On August 24, 2021, the draft Invitation for Bid (IFB) packet was submitted and received by Port Procurement.
- On August 31, 2021, a Procurement Planning Meeting was held with stakeholders. In attendance was Procurement, Legal Counsel, Engineering Manager, and Planning.
- The Guam Attorney General (AG) reviewed and approved documents because procurement was over \$500,000

- Port Procurement and Legal Counsel reviewed and finalized IFB Package for compliance.
- The Project Coordinator entered the Harbor of Refuge requisition, which is being routed for review and signature. Once approved, the next step is to issue the IFB during the first quarter of FY22 to renovate the moorings and construct a pump out facility.

Update: The bid submittal and opening for the Harbor of Refuge was scheduled on Friday, February 18, 2022 at 14:00 / 2:00 P.M.



Figure 3: Harbor of Refuge site

Merizo Pier and Boat Ramp Facility. Contractual work is being proposed to repair damage at the Merizo pier and boat ramp facility and to assess the pier for structural integrity (see Figure 4). With the required MOU in place, a Scope of Work was submitted to the Department of Public Works.

Update: The two (2) projects are currently at the Department of Public Works for bidding. Agriculture will be requesting for additional funding to replace the worn-out sections of the Merizo boat ramp. The scopes of work have been revised, and DPW should be moving forward with the projects. The pier's repair work includes replacement of the solar lights, two of which were stolen during the time period. The repair and assessment projects are expected to be completed in FY2022.



Figure 4. Merizo pier, with recent vandalism to the solar lights.

Ramp Maintenance. The ramp maintenance grant is composed of two types of activity: the water blasting of the ramps at the Agana boat basin, the Agat marina, and the Merizo boat ramp facility once a month, and the repair of any small ramp-related structure. This project immediately benefits boaters by reducing the risk of slipping onto the concrete boat ramp, reducing tire wear for boaters that utilize the ramp facilities due to algae being removed, and preventing vehicles from slipping and submerging in the marinas.

The repair of the ramps' walkway bumpers at the Agat marina is currently ongoing. With the Amended MOU approved by the AG mid-August and a conditional NTP given by WSFR mid-September, PAG is in the process of finalizing their statement of work and issuing an Invitation to Bid.



Figure 5: Fisheries staff water blasting the back ramp at the Agana Boat Basin.

Regulations

Date	Case No:	Sex	Ethnicity	Violation	Location
11/6/21	KY 21-24136	1 Male	Chamorro	Illegal Fishing (spear) in MPA	Pati Point MPA
12-3-2021	21-30128	2 Males	Chuukese	Illegal Fishing (spear) in MPA	Piti Bomb Hole MPA
12-17-2021	21-31522	1 Male	Chamorro	1.Taking of Crabs and/or MPA Spiny Lobster other than Coconut Crab. (c) Gear 2.Illegal Fishing (Spear) in MPA 3.Illegal Possession of Control Substance	Tumon MPA
1-19-2022	KY 21-24136	1Males	Chamorro	Illegal Fishing [Spear) in MPA	Pati Point MPA

Table 9. Law Enforcement Arrests Information from September 2021 to November 10, 2021.

Guam Fishing Licenses

- DAWR met with the Department of Agriculture (DOAG) Director and Deputy Director and reviewed and partially revised the proposed fishing licenses in February 2020. On May 18, 2020, DOAG reviewed and revised the proposed fishing license regulations after receiving initial comments from Council staff. The proposed license was provided to the Council's Advisory Panel for review and comments and shared with the Senator that oversees DOAG.
- The regulations were discussed by the Advisory Panel (AP) with mixed support. Those individuals that supported the licenses felt that it is the only way to improve commercial licenses participation while others felt that it is an impediment.

Update: DOAG DAWR is in the process of obtaining a purchase order for advertisements to be used to announce a public hearing when DOAG DAWR moves forward with the licensing.

Special permits still continue to be issued for the seasonal take of:

- Atulai (Big Eye Scads),
- *l'e'* (Juvenile Jacks)

- Ti'ao (Juvenile Goat Fish)
- Manahak (Juvenile Rabbitfish)

CARES Act Funding

- Guam will be receiving 1 million dollars in fisheries assistance funding provided by Sec. 12005 of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) for fishery participants negatively affected by COVID-19.
- A proposed plan for the distribution of CARES Act funds for Guam's Fisheries was drafted that includes fishers registering with DOAG, cross checking all registered fishers, and establishing 3 tiers of fishers for direct payments. Video/teleconferences were held with DOAG, council staff, and fishers on May 13, 2020 and May 14, 2020 to discuss the proposed plan. A fisher registration form was created to be distributed to identify all fishers and fishing activity in Guam. Furthermore, a meeting was held with the Guam Fishermens Cooperative on May 28, 2020 about the proposed plan.
- Data collected from fisher registration forms determined 3 categories of fishers established by fisheries staff to allocate funds. Criteria for each category as follows:
 - Tier 1 Commercial Business
 - a. Must demonstrate revenue loss greater than 35% compared to the last five years' average
 - b. Businesses operating for more than one year but less than five years, the reference period for each year will be used to calculate the average for each year of operation
 - c. Must use the months of January 1 to June 30 as the average reference period across the five years
 - d. Must provide signed affidavit
 - e. Must provide documentation as needed
 - Tier 2 Commercial Fisher
 - a. Must provide signed affidavit
 - b. Must have at least one receipt indicating fish sales within the past five years
 - c. Must provide documentation as needed
 - Subsistence Fisherman
 - a. Must provide affidavit demonstrating fishing loss due to COVID-19
- Findings and distribution for Guam as follows: 811 total fishers registered with 27 total Tier 1 and Tier 2 commercial fishers and 784 sustenance fishers. Tier 1 fishers are divided into fishers with five-year documentary evidence for average revenue during the reference period and greater than 35% revenue loss in 2020 (Revenue lost totals \$162,442.57), and fishers with more than one year but less than five-year documentary evidence for average revenue during the reference period and greater than 35% revenue loss in 2020 (Revenue lost totals \$64,270.89). Tier 2 fishers will be paid out at \$1200.00 each for a total of \$14,400.00. 784 sustenance fishers will receive \$953.68 each for a total of \$747,685.12.
- Director submitted Guam's Proposed Spending Plan for distribution of funds, to NOAA on August 5th, 12th, and 13th. Subsequent submissions on 12th and 13th due to revisions in spending plan.

- NOAA approved Guam's Spending Plan for distribution of funds and a press release was issued on 29 October 2020 for registered fishermen to continue with the final step of the application process. Only fishermen who registered during the first step of the application process are eligible to apply. Press release and application packet are available via hard-copy and digital (at DAWR office and DOAG website), Deadline: 30 November 2020. Spending plan may be adjusted if numbers change due to applications inadvertently left-out, or registered fishers who do not meet the deadline. Currently, only 112 registered fishers have completed the final step of the process and submitted applications to obtain funds through the CARES Act.
- The deadline to submit applications was extended to May 31, 2021. DAWR presented at the Mayor's Counsel of Guam on May 5, 2021 to seek the assistance of village mayors to reach out to their community to complete applications. Two outreach events at the Agat Marina and Hagatna Boat Basin were announced and scheduled on May 8 and 15. Flyers announcing these events were distributed at the Mayor's Counsel meeting. These same flyers were also placed at 14 different locations on island that fishers frequent. These locations included fish shops, fish supply shots, dive shops, and local fish stores that were near popular fishing areas. Attempts were made via telephone calls and emails to contact fishermen that needed to complete their application.
- 467/785 applications were completed and submitted to the Pacific States Marine Fisheries Commission (PSMFC). Registered fishers had until Monday, May 31, 2021 to email their applications to the DAWR office. DOAG had a week to submit the applications to PSMFC.
- \$675,196.96 out of \$988,803 will be distributed to the 467 applicants based on the funding allocation in Guam's spend plan.
- The remaining amount of \$313,606.04 or about \$672 will be equally divided between the 467 applicants.

CARES Act 2 Funding

- Guam will be receiving \$783,727.85 in fisheries assistance funding provided by Sec. 12005 of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) for fishery participants negatively affected by COVID-19.
- The proposed spend plan was submitted on July 07, 2021 to PSMFC for approval. The spend plan was set to be reviewed on August 14, 2021, and still pending approval.
- The methodology in the following Detailed Spend Plan, once reviewed and approved by NOAA, may be used for any future funds appropriated by Congress for the same purpose.
- **Definitions:**
 - Tier 1 Commercial Fishing Business: an individual or an entity who fishes and sells his/her fish catch commercially and has been in commercial fishing business for at least one year within the past five years (2015-2019). This includes charter/for-hire fishing business, which is a recognized business entity hired for charter that provides a vessel for fishing activities and has a business license with the Department of Revenue and Taxation. Tier 1 businesses must be able to provide verifiable revenue data, such as income tax documents or Gross Receipts Tax (GRT) documents, for each year the business has been in operation and

demonstrate greater than 35% economic revenue loss as compared to the prior 5-year average revenue.

- Revenue loss: loss of income or sales within the period of eligibility compared to previous years up to five years. The period of eligibility being at least one year but up to five years between 2015- 2019. Period of eligibility: the period of time used to determine revenue loss due to COVID 19. The two reference periods for determining the greater than 35% loss during this relief funding are (1) July 1, 2020 – December 31, 2020 and (2) January 1, 2021 - June 30, 2021.
- Tier 2 Subsistence with Sales Fisher: an individual who fishes and sells a portion of his/her fish catch commercially to a licensed place of business (a restaurant, hotel, fish market, or cooperative) and has verifiable sales documentation, such as sales receipts or invoices, occurring at least one month within the past five years. Tier 2 subsistence with sales fishers do not hold a business license with the Department of Revenue and Taxation.
- Subsistence fishermen: any individual who fishes primarily for noncommercial purposes to feed their immediate family and extended relatives. On occasion subsistence fishers barter, trade, or sell his/her catch to pay for fuel, lures, baits, or to buy other food items to feed their family or relatives. Subsistence fishers are not considered commercial fishers and do not hold a commercial fishing business license.
- Data collected from fisher registration forms determined 3 categories of fishers established by fisheries staff to allocate funds. **Criteria** for each category as follows:
 - Tier 1 Commercial Business
 - Must demonstrate revenue loss greater than 35% for either one or both available reference periods during this relief funding, as compared to the last five years' average i. (1) July 1, 2020 – December 31, 2020 ii. (2) January 1, 2021 - June 30, 2021
 - Businesses operating for more than one year but less than five years, the reference period for each year will be used to calculate the average for each year of operation
 - Must use the dates of July 1 to December 31 and January 1 to June 30 of the Guam CARES Act Fisheries Spend Plan consecutive year as the average reference period across the five years
 - Must provide signed affidavit 5. Must provide documentation as needed
 - Tier 2 Subsistence with Sales Fisher
 - Must provide signed affidavit
 - Must have at least one receipt indicating fish sales within the past five years
 - Must provide documentation as needed
 - Tier 3 Subsistence Fisher
 - Must provide affidavit certifying fishing loss due to COVID-19 f. Application packet 1. All applicants must submit a complete application packet and required documents
 - No applications will be accepted after the established published deadline
 - This application is for one payment request only

- Each applicant may only apply for one tier and identify losses specific to that area.
- **Funding Allocation**
 - All eligible and approved Tier 1 Commercial applicants' funding allocation will be based on the demonstrated economic revenue loss that must be greater than 35% compared to their prior years' average annual revenue as indicated in the criteria above; using the methodology below.
 - All eligible and approved Tier 2 Subsistence with Sales applicants' funding allocation will be based on a set amount at \$1500.00
 - All eligible and approved Tier 3 Subsistence fisher applications' funding allocation will be derived from the remaining funds after the allocations are distributed to Tier 1 Commercial and Tier 2 Subsistence with Sales applicants. The remaining funds will be evenly divided among all eligible and approved Tier 3 subsistence fishers.
 - All inquiries and grievances will be handled by the Department of Agriculture Division of Aquatic and Wildlife Resources. An applicant will have three business days to submit their complaint via email or hard copy in the DAWR drop box. The complaint will be reviewed and addressed within five business days. The applicant will be notified of a decision within ten business days of the date in which the complaint was received.

04 November 2021

- CARES Round 1 Payments
 - All payments for 465 fishers from round 1 have been received (03 November 2021) and delivered to Hagåtña Post Office as of 04 November 2021
- Applicant data as of 04 November 2021 for CARES 2.0
 - 665 Total complete applications
 - (6) Commercial Fishers
 - (27) Subsistence with sales
 - (632) Subsistence Fishers
 - Deadline has Passed. PSMFC reviewing applications for Round 2.

Update: 11 February 2022

- All 665 checks for CARES 2.0 received in the mail from PSMFC, November 2021.
- (6) Commercial Fishers: **\$351,678.44**
- (27) Subsistence with sales: **\$40,500**
- (632) Subsistence Fishers: **\$391,549.72**
- Total Funding Amount: **\$783,727.72**
- CARES 2.0 Checks Received from PSMFC and delivered to Hagatna Post Office December 11, 2021.
- All check typos (11) have been resolved, however, must request to re-issue corresponding to W2 forms.
- 23 Checks were returned to sender (Oregon) and mailed back to DAWR to be distributed by Frank Roberto.

- Returned checks are still being received by PSMFC and mailed to DAWR. Will be distributed as received by Frank Roberto

Fisheries Management Plan

DOAG is taking steps to develop a Fisheries Management Plan for Guam, recognizing the need to define a path that puts Guam's fisheries on a positive track and guide the community on the use, restoration, conservation, development, and managements of Guam's fisheries. The purpose of the FMP is to provide a comprehensive approach to better manage fisheries habitat and fish stocks on Guam. The FMP working group had its initial meeting on January 27, 2021 to address these and the strategic needs and plans of a Guam FMP.

From the initial January 27, 2021 meeting, it was decided to establish the 5 sub-groups below and that DAWR Fisheries staff will mainly lead the sub-groups:

1. **Data-science:**
 - a. Fisheries Data
 - b. Habitat Resources
2. **Economy/Business:**
3. **Enforcement/Regulatory/Policy:**
4. **Community:**
5. **Education/Outreach:**

The 5 sub-groups had initial meetings mainly with DAWR Fisheries staff to discuss their approach prior to meeting with a larger group. The sub-groups then opened up the meeting to a larger group consisting of other local and federal agencies, non-profit organizations, and fishers to obtain recommendations and comments on moving forward with the plan and what to incorporate into the plan. The leaders (Fisheries staff) of the 5 sub-groups have also been meeting with the DOAG Director to provide updates on their sub-group meetings and recommendations from the DOAG Director on moving forward.

The Bureau of Statistics and Plans Guam Coastal Management Program (GCMP) will work with DOAG by providing contractual support to obtain services from a planning agency to facilitate and draft the FMP. GCMP staff will provide contract service monitoring and general planning technical assistance. This framework that will help guide and keep the initiative together as it moves through the various stages of the FMP development.

On August 11, 2021, the second Fisheries Management Plan (FMP) large group meeting was held. The different subgroups provided updates to the larger group. These updates included many recommendations including but not limited to license requirements, bag limits, size limits, urban development regulations, and enforcement. The next step will be to consolidate all of the recommendations of the subgroups into one in order to draft the plan. NOAA is providing technical assistance to DOAG such as assisting with a cluster analysis of DOAG's creel data and having the local NOAA Coordinator assist with consolidating information for DOAG.

On October 24, 2021, DOAG met with the local NOAA coordinator who will be providing support to map and record the process of the plan's development to ensure DAWR keeps on track

with accomplishing developing the plan. DOAG and NOAA discussed that the next steps of the plan would be to develop vision, goals, objectives, and targets.

On November 4, 2021, a community FMP meeting was held at the Santa Rita Mayor's Office. A total of four members from the southern fishing community showed up to put forth their input and ideas, and shared issues that they have been encountering in our fishing community and on the water. Community comments included deploying the FADs, additional boat ramps, support for licensing, concerns about enforcement and monitoring, support for bag & size limits, mandatory catch data reporting, and more informational/educational signs.

On November 10, 2021, an FMP meeting was held with Fisheries staff to discuss the vision, goals, objectives, and targets. Staff developed the vision statement and goals below, and each subgroup is to develop its own objectives and targets.

Vision: "An adaptive, responsive, and consultative approach to fisheries management ensures fishing is a low risk to Guam's aquatic resources and used in a way that optimizes benefits to the residents of Guam."

Goals: 1.) Rebuild fish populations and improve ecosystem health to support long-term sustainable use of the resources and;

2.) Ensure that the residents of Guam have access to the resources they need and benefit directly from long-term stewardship

Objectives - Each subgroup to create objectives, goals, milestones etc.*****

Targets or Milestones

Activities - Limits, reporting, enforcement, etc.

On November 23, 2021, another central community FMP meeting was held at the Department of Agriculture DAWR.

Update: DOAG DAWR decided on a list of 12 priority species for the FMP. The species selected are based on composition of total landings, consistent top species identified in landing reports, and cultural significance. DOAG DAWR is working on the identifying the targets for management.

1. *Acanthurus lineatus*
2. *Naso lituratus*
3. *Caranx melampygus*
4. *Kyphosus cinerascens*
5. *Lutjanus fulvus*
6. *Chlorurus frontalis*
7. *Epinephelus merra*
8. *Lethrinus olivaceus*
9. *Scarus schlegeli*
10. *Monotaxis grandoculis*
11. *Bolbometopon muricatum*
12. *Cheilinus undulatus*

NOAA PIFSC will assist with data analysis based on the list of species. Two workshops are tentatively scheduled for the FMP. A 5-day data support workshop in May 2022 and a 2-week workshop to write a draft FMP for Guam in August 2022. The data workshop identify current baseline condition and provide management options for the species using FishPath tool.

FADs

Currently, 5 FADs are confirmed online: Agat, Facpi 1, Umatac, #2 and Cocos (Single report Cocos offline) (Table 10). #5 and #6 are unconfirmed. #2 was deployed in October 2019. The Memorandum of Agreement with the Guam Department of Public Works Agency (DPW) was signed by the Governor on July 13, 2019, and DPW signed the work request for the construction of the concrete anchors on July 24, 2020. Purchase orders for new FAD components and deployment will be obtained this new fiscal year.

Update: An updated work request and scope of work to construct FAD Anchors was signed by DPW on January 6, 2021. DOAG forwarded the work requests to BBMR and the Department of Administration (DOA) on January 8, 2021 and provided the signed documents to DPW to construct the anchors. Currently, 10 anchors have been constructed and was completed in August 2021. The contract to deploy 3 FAD Systems was awarded. Two buoys were prepared and deployed on November 24, 2021 - (#3 and Old NOAA). Unfortunately, the third FAD was not available for deployment. The Nature Conservancy (TNC) and DAWR attached a small echosounder buoy FAD #3 buoy that will regularly transmit information regarding the location of the FAD and targeted species aggregating underneath it. DAWR and TNC are working to develop a system which will allow the public to access the transmitted information through a system called Smart-aFADs. Information transmitted include:

- Real-time information of how much tuna of different species is underneath each FAD
- Hourly fish biomass estimates at different depths
- Images from SatLink

Unfortunately this sensor detached from FAD # 3 on February 25 2022. Plans to replace FAD #3 sensor as well as additional sensors to be attached to other FAD buoys are pending USFW services approval.

All information gathered will be posted on various media outlets such as Facebook and whatsapp and will assist in better management of FADs and improve their lifespan and recovery rates. Fishers are asked to be mindful of the sensor that extends 30 feet from the FAD's and are cautioned not to remove them. Removal will be considered damage to government property. The contract and grant award to purchase additional FAD systems was extended to 150 to 180 days due to delays in shipping. 1 regular FAD system has arrived with an additional 2 "new design" FAD systems pending shipment. Contract packets that have been submitted to deploy 8 FAD systems and purchase 9 FAD systems in FY22. The possibility of the USCG assisting DAWR in FAD deployments are being worked on.



Figure 6. Deployment of FAD #3 November 24, 2021

ONLINE:	GPS Coordinates
Number 5 (Unconfirmed)	13°44.7N/144°48.4E
Number 6 (Unconfirmed) (Pati)	13°42.6N/144°01.6E
Facpi	13° 20.4 N/144°36.5E
Umatac	13°17.0N/144°37.0E
Cocos	13°12.0N/144°41.7E
Agat	13° 23.3 N/144° 33.9E
Number 2 (Haputo)	13° 35.6 N/144° 45.6E
Number 3 (Urunao)	13°39.9N/144°46.1E
Old NOAA	13° 43.5 N/144° 40.8E
OFFLINE:	GPS Coordinates
Number 1 (Adelup)	13°32.2N/144°43.1E
Number 4	13°43.3N/144°43.3E
Ledge	13°35.8N/144°40.4E
Facpi 2	13°19.6N/144°33.3E
9 Mile	13° 15.1N/144° 28.7E

Table 10. Current status of FADS online and offline.

SWMs

SWM Systems – Plans to procure an additional 15 SWM components are in the progress.

SWM Deployments:

- 10 SWMS were redeployed in December of 2018. Out of 34 sites (Figure 8) only 31 are deployable with intact eyebolt anchors. Plans to secure a contract to perform the installation of new eyebolts for the 3 areas (14. Blue Hole: Anchor failure, 33. Gabgab # 1: Anchor unable to locate, and 34. Gabgab # 2: Anchor unable to locate) that do not have intact eyebolts will be done in FY20 as well as the remaining 14 deployable sites. Currently, 17 SWMS are online (Table 11).
- **Update:** The requisition to replace 15 SWMs by DAWR did not go through and DAWR will be resubmitted in FY22. DAWR already has the components needed for the SWM replacements.

No.	Site Name		Coordinates	Depth (ft)
1.	Double Reef #1		13'36.219N / 144'50.105E	33
2.	Double Reef #2		13'35.713N / 144'49.988E	39
3.	Hilaan	x	13'33.763N / 144'48.985E	45
4.	Gun Beach	x	13'31.470N / 144'48.068E	20
5.	Tumon #1		13'31.032N / 144'47.162E	30
6.	Tumon #2		13'30.641N / 144'47.162E	45
7.	Alupat Island		13'21.608N / 144'46.026E	47
8.	East Agana	x	13'29.337N / 144'45.873E	35
9.	West Agana	x	13'29.046N / 144'44.008E	48
10.	Asan		13'28.646N / 144'42.780E	49
11.	Piti		13'28.602N / 144'41.833E	49
12.	Amphitheater		13'27.914N / 144'40.549E	57
13.	Luminao Reef		13'28.070N / 144'39.366E	45
14.	Blue Hole	x	13'26.177N / 144'37.589E	50
15.	Sharks Pit	x	13'25.260N / 144'38.372E	56
16.	Rizal		13'24.666N / 144'38.953E	46
17.	Haps Reef		13'23.678N / 144'39.196E	50
18.	Alutom Island	x	13'23.072N / 144'38.763E	53
19.	Bangi Piont	x	13'22.373N / 144'38.528E	50
20.	Anae Island		13'21.380N / 144'38.240E	20
21.	Pete's Reef	x	13'20.652N / 144'38.265E	55
22.	Sella Bay	x	13'19.361N / 144'39.100E	16
23.	Cetti Bay		13'18.932N / 144'39.188E	35
24.	Tuguan Bay	x	13'17.003N / 144'39.665E	37
25.	Bile Bay		13'16.600N / 144'39.700E	48
26.	Cocos #1	x	13'15.900N / 144'39.258E	46
27.	Cocos #2	x	13'15.061N / 144'38.715E	36
28.	Navy Channel		13'14.485N / 144'38.375E	37
29.	Cocos Wall		13'14.250N / 144'39.552E	45
30.	Cocos #3	x	13'14.249N / 144'40.019E	55
31.	Jade Shoals		13'27.189N / 144'39.720E	45
32.	Western Shoals	x	13'27.020N / 144'29.230E	20
33.	Gabgab #1	x	13'26.694N / 144'38.729E	20
34.	Gabgab #2	x	13'26.706N / 144'38.655E	60

Table 11. Current status of SWMs online and offline.

Paseo (Hagatna), Ylig, Togcha 1, and Togcha 2 Fishing Platforms

A new grant was submitted to include the installation of solar lights to help enhance fishing opportunities at the fishing platforms. The U.S. Fish and Wildlife Service is reviewing the biological assessment needed for the solar lights, which is required prior to moving forward with the project.

No update: The biologist coordinating the fishing platform transferred to a federal position. DAWR will be assigning another individual to coordinate the project.

Fisherman Code of Conduct Signs

No update: The biologist coordinating the fishing platform transferred to a federal position. DAWR will be assigning another individual to coordinate the project.



Figure 7. Fisherman Code of Conduct Signs

Sea Turtle

Stranding Information

A total of four turtles were reported stranded between November 5, 2021 and February 14, 2022.

November 12

On November 12th, DAWR received an email from USFWS Tammy Summers who recovered an abandoned gill net in the Achang MPA. Bones and scute fragments from a juvenile green turtle were found in the net among other carcasses (Figure 8). The bones were properly disposed.

January 3

On January 3rd, Navy Base Guam (NBG) reported a stranded turtle washed up on San Luis Beach (Figure 9). DAWR retrieved the hawksbill turtle that day. Based on observations, there were no obvious external signs of cause of death resulting in a necropsy conducted later that day. The result of the necropsy found foreign matter in the gastrointestinal tract (Figure 10).

January 8

On January 8th at approximately 1200, while fishing on personal time in a personal vessel, DAWR Fisheries Technician Robert Koss located a floating lifeless green turtle outside the Agat Marina channel. The turtle was brought aboard the vessel while DAWR Biologist CJ Cayanan and DOAG Conservation Officers (COs) were contacted. The turtle appeared to have sustained an injury to the head, possibly from a spear (Figure 11). Cayanan, CO Jared Taisipic, and CO Shian Aricheta met Koss in Piti around 1430 to collect the turtle and bring it to the DOAG compound (Figure 12). Photos were taken and the turtle was stored in the DAWR lab until biometric measurements could be taken.

January 22

During a hike on January 22nd, DAWR Biologist Brent Tibbatts found a green turtle carcass washed up on a beach in Malojloj. Photos were taken (Figure 13) and the carcass left to naturally decompose.



Figure 8. Juvenile green turtle carcass in an abandoned gill net found in the Achang MPA on Nov 12.



Figure 9. Stranded hawksbill turtle on San Luis Beach, NBG on Jan. 3.



Figure 10. Foreign matter found in the GI tract of the hawksbill found on Jan. 3.



Figure 11. Head wound to the green turtle found on Jan. 8.



Figure 12. CO Taisipic retrieving the green turtle found on Jan. 8.



Figure 13. Green turtle carcass observed in Malojloj on January 22.

Marine Mammals

A young melon headed whale was found floating nearshore in Ipan, Talofoto, on October 8, 2021. The carcass was brought to the DAWR offices. A necropsy was performed on Saturday, October 9. The whale was found to have two projectile wounds passing completely through the torso, the path of one passing through the liver. Tissue samples were taken, and will be sent to Hawaii.

Box jellyfish and man-o-wars- There were no sightings of box jellyfish during the reporting period. There were no sightings of man-o-wars during the reporting period. This is surprising, as wind and water conditions were consistent with sightings, and this was the first final quarter without any sightings since record keeping began in 2012.

Cultural Signs



Figure 12. (Top) Fisheries Staff grass trimming



Figure 13. (Before) Tanguisson Sign

Figure 14. (After)

- There are a total of 10 cultural signs.
 1. Tanguisson beach, NCS-Dededo
 2. Paseo, Hagatna
 3. Adelup, Hagatna
 4. Asan beach park
 5. Nimitz beach, Agat
 6. Merizo Pier
 7. Ge'f Pago, Inarajan
 8. Talofofo bay, Inarajan (Off station, replacement pending)
 9. Ipan beach
 10. Tagachang beach
- Surrounding areas of Ge'f Pago, Tagachang, and Tanguisson signs were grass trimmed by staff as needed for ease of access.
- Litter and debris were removed for the following signs (Tanguisson, Ge'f Pago, and Tagachang) as needed.
- Talofofo Bay Off station, replacement pending, Ipan Beach, and Tagachang have severe rust buildup, require complete replacement.
- Request For Quote RFQ's were submitted to purchase Leaf Blower, and Grass Trimmer 1/13/2022.
- Last survey, maintenance, and inspection for the signs was on Wednesday 4/27/2022.

~~~~~