

GUAM DEPARTMENT OF AGRICULTURE
187th WESTERN PACIFIC REGIONAL FISHERY
MANAGEMENT COUNCIL MEETING ISLAND REPORT

SHORE-BASED FISHERIES

Report Period: January 1, 2021 through June 30, 2021.

Guam government responses to COVID-19 impacted DAWR's ability to conduct creel surveys and collect fishery data for the first three weeks of January 2021. DAWR staff were able to complete participation surveys during January, but creel surveys were only completed in part of January. Since this time, and for the rest of the first 6 months of 2021, surveys have proceeded at the normal schedule (see Table 1). Due to COVID protocols, there are currently no vendors in Guam that can provide aerial surveys.

Shore-based Survey	Number Scheduled	Number Completed
Creel Survey	34	32
Participation Survey	18	18
Total number of shore-based Surveys	52	50

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

The top 7 shore based species harvested between January 1, 2021 and June 30, 2021 in terms of total expanded weight are shown in Table 2; I'e, (Juvenile *Caranx*. spp.), with 389 kg caught, was the top species, followed by juvenile goatfish (*Mulloidichthys ti'ao*), kichu, (*Acanthurus triostegus*), Sesyon (*Siganus spinus*), tarakito (*Caranx melampygus*), hiyok (*Acanthurus lineatus*), and mafute (*Lethrinus harak*). Commonly encountered methods include hook and line with 467 fishermen and 554 gear, talaya with 80 fishers and 81 gear, gill net with 28 fishermen and 18 gear, and snorkel spearfishing with 58 fishermen and 57 gear (see Table 3). The total number of fishermen and gear observed was 644 and 720, respectively. The CPUE and landings for each of the top shore-based methods are shown in Table 4.

Species	Total expanded weight (kg)
<i>Caranx sp. i'e</i> (Juvenile jack)	389 kg.
<i>Mulloidichthys sp. ti'ao</i> (Juvenile goatfish)	299 kg.
<i>Acanthurus triostegus</i> (Convict tang)	277 kg.
<i>Siganus spinus</i> (Scribbled rabbitfish)	252 kg.
<i>Caranx melampygus</i> (Bluefin trevally)	171 kg.
<i>Acanthurus lineatus</i> (Blueline surgeonfish)	139 kg.
<i>Lethrinus harak</i> (Blackspot emperor)	125 kg.

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

Method	Number of Gear	Number of Fishers
Hook and Line	554	467
Cast Net	81	80
Gill Net	18	28
Snorkel Spear	57	58
SCUBA Spear*	0	0
Hooks and Gaffs	5	5
Surround Net	1	2
Other Methods	4	4
Totals	720	644

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	.0492	1,076
Throw Net	.1405	583
Gill Net	.0079	5
Snorkel Spear	.6038	991
Hooks and Gaffs	.2631	34
Surround Net	1.3072	74
Other Methods	.0688	13

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

BOAT-BASED FISHERIES

Report Period: January 1, 2021 through June 30, 2021.

The number of boat based surveys conducted during the six (6) month period did not follow the regular number of surveys scheduled per month due to in-person surveys not allowed due to COVID restrictions that were in place for the first three weeks of January. Only two (2) of the eight (8) scheduled boat-based surveys were conducted in January, decreasing the number of boat-based surveys for the six (6) month period from 48 to 42. The number of participation surveys, however, were increased from two (2) to eight (8) participation surveys for January for a total of 18 participation surveys per month. The boat-based scheduling returned to the normal scheduled eight (8) boat based creels surveys per month and two (2) participation per month beginning in February (see Table 5).

Boat-based Survey	Number scheduled	Number completed
Boat-based creel surveys	48	42
Participation surveys (VT Counts)	18	18
Total Number of Boat-based surveys	66	60

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

Boat-based fishing was one activity that did not appear to have decreased during the COVID restriction period. Therefore “replacement” boat logs were constructed for each cancelled survey by using a boat log with its activity determined by calculating the average boat-based fishing methods from the three (3) previous years prior to COVID. These “replacement” boat logs were entered into the expansion program to provide a “best estimate” of the boat-based fishing activity that occurred when in-person interviews were not allowed. Interviews, however, were not provided for the “replacement” boat logs. It was determined that using the “replacement” boat logs with the average of fishing activity from the previous three years would be the best method to estimate fishing activity during the COVID restriction period. Staff did regularly monitor the number of trailered vehicles at the marinas, and it was observed that fishing activity did not appear to differ significantly from the previous three (3) years.

There was a total of 156 intercepts for the time period, with 137, or 88%, from trolling. Most interviews are from the boats that make up the Micronesian trolling commercial fleet. With a

large Micronesian population in Guam that regularly purchases whole tuna, this fleet has grown to over two dozen boat that fish almost every day.

For the time period, pelagic species made up six of the top seven species harvested by boat-based fishers (see Table 6). The top two species, skipjack tuna and yellowfin tuna, was primarily due to trolling activity from the Micronesian commercial trollers. As a result of trolling dominating the boat-based fishery, six (6) of the top seven (7) fish species landed were pelagic species, with onaga being the only non-pelagic fish in the top seven (7). The top species landed was skipjack tuna, which made up 79% of all trolling landings and 72% of all boat-based landings.

Species	Total Expanded Landings (metric tons)
<i>Katsuwonus pelamis</i> (Skipjack tuna)	205.5
<i>Thunnus albacares</i> (Yellowfin tuna)	34.5
<i>Coryphaena hippurus</i> (Mahi mahi)	9.3
<i>Etelis coruscans</i> (Onaga)	6.8
<i>Makaira mazara</i> (Blue marlin)	1.7
<i>Sphraena qenie</i> (Blackfin barracuda)	3.7
<i>Acanthocybium solandri</i> (Wahoo)	2.9

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

Approximately 286.7 metric tons of fish was harvested by boat-based fishers (see Table 7). The most common method was trolling, which harvested 258.3 metric tons, or 90% of all boat-based landings. Most of the trolling participation, effort, and landings come from the Micronesian trolling commercial fleet. Charter trolling activity continues to be low due to the low numbers of visitors from Asia, but this sector has been slowly increasing in activity due to military and local resident customers. The other boat-based fishing methods observed are bottom fishing, spearing, spin casting, jigging, and boat-based gillnetting. Activity at the Agat Marina and the Agana Boat Basin were normal, with fishing activity increasing during the weekend and periods of calm weather. Boat-based fishing from the Malesso pier and boat ramp facility continues to be low. Boaters that use the Malesso boat ramp have indicated that high fuel costs and low reef and shallow bottom fish catches have resulted in decreased boat-based fishing at Malesso.

Boat-based participation, effort, and landings (see Table 7) are dependent on the availability of fish stocks and weather conditions. Trolling made up 90% of landings, 70% of all trips, 71% of all boat-based hours fishing, and 68% of all persons participating in the fishery. Deep bottom fishing trips appear to have been increasing, with these fishers targeting and landing the deep bottom strata and landing predominantly onaga (*Etelis coruscans*), which made onaga the only non-pelagic species in the top seven boat-based species list (see Table 6).

Boat-Based	Landings	Trips	Hours	Persons
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Method	(metric tons)			
Trolling	258.3	5,864	32,865	15,213
Bottom fishing	18.8	1,633	8,791	3,937
Snorkel spear	7.9	680	2,513	2,872
Spin casting	0.3	63	1,861	196
Jigging	0.7	67	187	233
Other methods	0.7	64	74	71
Total Landings	286.7	8,371	46,291	22,522

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. Trolling had the highest CPUE for the time period (3.0 kg/gear-hour) probably due to the large tuna catches of the Micronesian commercial trolling fleet that make up most interviews (see Table 8). Seasonality trends of the pelagics were observed during the time period. Skipjack tuna and yellowfin tuna continues to be harvested year round, with mahi mahi normally decreasing during the time period. Pacific blue marlin, which normally is caught during the third quarter, began to be harvested during the time period. During periods of calm weather, fishing activity significantly increases, especially bottom fishing and spearing.

Boat-Based Method	CPUE (kg/gear-hr)
Trolling	3.0
Bottom fishing	0.8
Snorkel spear	1.1
Jigging	1.6
Spin casting	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.

Update: A meeting was held on August 24, 2021 with the Lt. Governor, the Department of Public Works, the Guam Economic Development Authority (GEDA), and the Department of Agriculture to discuss the Talofofo Bay boat ramp. 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. Once finalized, the RFQ will be sent to the Lt. Governor's office to obtain the necessary funds needed and to bid out the RFQ.



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.

Update: The MOU for the Dock B replacement project was signed by the Department of Agriculture (DOAG), the Port Authority of Guam (PAG), the Bureau of Budget and Management Research (BBMR), and the Guam Attorney General's office (AG). The MOU is currently pending the Governor of Guam's signature. Once the document is signed and returned to Agriculture, Agriculture will provide the Port Authority with a Notice To Proceed so that the Port can begin their procurement process.



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.

Update: 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) to review and approve documents because procurement is over \$500,000 - Proposed Timeline - September 2021
- Port Procurement and Legal Counsel to review and finalize IFB Package for compliance - Timeline - September 2021
- Issuance of IFB Timeline - October 2021
- Estimated Project Timeline: 9 months



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 for bidding. Agriculture will be requesting for additional funding to replace the worn out sections of the Merizo boat ramp.



Figure 4. Merizo Pier decking, ladders, and light posts.



Figure 5. Worn out areas of the boat ramp at Merizo.

Ramp Maintenance. Agriculture staff have been waterblasting the ramps at the Agana boat basin, the Agat marina, and the Merizo boat ramp facility. This project removed accumulated algae from the ramp, which has improved a boater's ability to launch and retrieve their boats without slipping or wearing out their tires (see Figure 6). This project is well-received by boaters. In addition, the walkway at the Agat marina is currently damaged and will be repaired on the same contract as the Agat Marina Dock B project.



Figure 6: Comparison of the boat ramp after water blasting removed accumulated algae.

Regulations

Case No:	Sex	Ethnicity	Violation	Location
21-09468	5 Males	Chuukese	Illegal Fishing (spear) in MPA, Illegal harvest of Tridacna	Achang MPA
21-14250	2 Males	Chuukese	Illegal Fishing (spear) in MPA	Piti MPA
21-19525	2 Males	Chamorro	Illegal Fishing (cast net) in MPA	Tumon MPA
Totals	9 Males			

Table 9. Law Enforcement Arrests Information from April 2021 to September 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.
- Update: The regulations are going to be reviewed at the next Advisory Panel (AP) meeting.

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.

Update:

- 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.

- **Applicant Data as of 30 August 2021:**
 - 495 Complete applications
 - (5) Tier 1 Commercial Fishers
 - (28) Subsistence with sales Fishers
 - (462) Subsistence Fishers
- Deadline for Applications is August 30, 2021 with no extension.

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)

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.

Update: 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.

FADs

Currently, 5 FADs are confirmed online: Agat, Facpi 1, Umatac, #2 and Cocos (Single report Cocos offline) (Table 8). #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 bid amount to deploy 3 FADS was increased, and DOAG is currently waiting for the purchase order. The contract and grant award to purchase additional FAD systems was extended to 150 to 180 days due to delays in shipping.

Department of Agriculture
Division of Aquatic and Wildlife
163 Dairy Road, Mangilao, Guam
96913

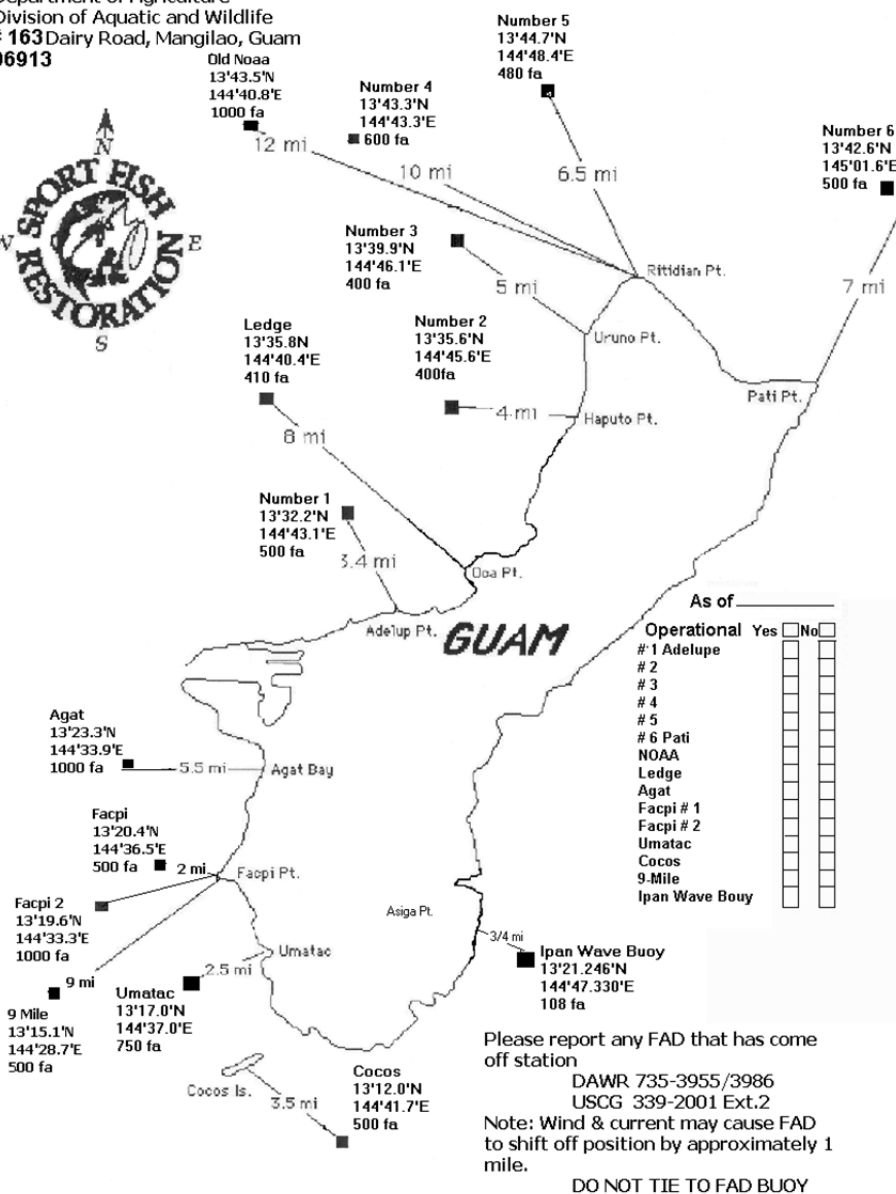


Figure 7. Guam FAD locations

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
OFFLINE:	GPS Coordinates
Number 1 (Adelup)	13°32.2N/144°43.1E
Number 3 (Urunao)	13°39.9N/144°46.1E
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
Old NOAA	13° 43.5 N/144° 40.8E

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 9).
- **Update:** DAWR submitted a requisition to the General Services Agency (GSA) to replace 15 SWMs and is waiting for GSA approval to send out the Request for Quotations (RFQ). DAWR already has the components needed for the SWM's replacements.

Government of Guam Department of Agriculture
 Division of Aquatic & Wildlife Resources (DAWR)
 192 Dairy Road
 Mangilao, Guam 96923
 Ph: 735-3986 Fax: 734-8570

Vicinity Map of DAWR Shallow Water Mooring Sites



Figure 8. Guam SWM locations

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.

Update: Ylig, Togcha 1, and Togcha 2 fishing platforms – Trash and marine debris were removed from the platforms monthly. The types of trash collected included monofilament lines, fishing hooks, drink/food cans, tarps, ropes, miscellaneous plastic products (bottles, tupperwares, etc.), and clothes. The major maintenance and repairs of these platforms was awarded to New M.W. Corporation under Purchase Order (PO) P216A03488. The contractor repainted these platforms with a safe, marine grade fiberglass paint in July 2021. They repainted the railings, rod holders, ladders, bench, and deck on the platforms. They applied anti-skid additives into the paint for the ladders to prevent users from slipping as they climb the platforms. Their overall assessment for the platforms' structural integrity was satisfactory. Refer to Figures 9 and 10 for updates on repairs to these platforms.



Figures 9 and 10. Ylig and Togcha platform

Hagatna fishing platform - Trash and marine debris was removed from this platform monthly. The types of trash collected included monofilament lines, fishing hooks, drink/food cans, tarps, ropes, miscellaneous plastic products (bottles, tupperwares, etc.), and clothes. The major maintenance and repairs of this platform was awarded to New M.W. Corporation under Purchase Order (PO) P216A03488. The contractor repainted the platform railings with a safe, marine grade fiberglass paint, fabricated and replaced broken vertical bars for the railings, and tightened and replaced any loose screws found on the platform. Despite the repairs, vandals destroyed a section of the repaired railing. This may potentially be due to disgruntled fishermen who want to access the wave absorber/rip rap with ease from the platform. DOAG submitted an amendment to the PO to install a gate that can be placed on the platform to allow fishermen to access the wave absorber/rip rap much easier. Also, a request to increase the award amount by \$1,000 has been submitted to repair a broken hand railing. Refer to Figures 11 and 12 for updates on repairs to the platform.



Figure 11. Hagatna fishing platform after repairs.



Figure 12. Hagatna fishing platform railings damaged from vandalism after repairs.

Fisherman Code of Conduct Signs

Quotes from vendors have been submitted to the General Service Agency (GSA) and DOAG is waiting for GSA to award a vendor and begin production. DOAG requested for eight (8) Fisherman Code of Conduct signs. Four (4) signs will be installed at each fishing platform, while the remaining four (4) will serve as replacements.



Figure 13. Fisherman Code of Conduct Signs

Sea Turtle

DOAG DAWR received a grant award from NOAA in August 2021 entitled “Guam Fibropapillomatosis (FP) Sea Turtle Assessment”. The objective of the grant is to begin assessment and management of FP sea turtles in Guam’s waters. The most pressing research questions DAWR seeks to answer with this grant are: 1) To what degree of severity is the Piti Bomb Holes MPA sea turtle population affected by FP? and 2) Is FP contained to one area of Guam or is it present throughout Guam’s coastal waters?

Cultural Signs



Figure 14. Staff grass trimming from Tanguisson sign.



Figure 15. Rust stain and graffiti removal Tagachang sign.

- 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
 9. Ipan beach
 10. Tagachang beach
- The Talofofo Bay sign (Off station), Ipan beach, and Tagachang needs complete replacing due to major rust buildup.
- Staff manually removed rust stains and dirt buildup on Nimitz, Tagachang, Ipan, and Paseo signs.

- Surrounding areas of the Tagachang, Asan, and Tanguisson signs were grass trimmed by staff as needed for ease of access.
- The Merizo Pier sign's middle panel was secured with new stainless nuts and bolts.
- Litter and debris were removed for the following signs (Tanguisson, Paseo, Asan, and Tagachang) as needed.
- Last survey, maintenance, and inspection for the signs was on Tuesday 8/3/2021.

