GUAM DEPARTMENT OF AGRICULTURE
192nd WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL MEETING ISLAND REPORT

SHORE-BASED FISHERIES
Report Period: April 1, 2022 through June 30, 2022.

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

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

The top 7 shore-based species harvested between April 1, 2022 and June 30, 2022 in terms of total weight are shown in Table 2; The top species caught by weight was *Balistoides viridescens*- Pulonon with 1,027 kg., followed by *Mulloidichthys sp*.- Ti'ao, *Gymnosarda unicolor*- Dogtooth Tuna, *Selar crumenophthalmus*. – atulai, *Caranx papuensis*- Tarakito, *Caranx melampygus*- Tarakito, and *Sepioteuthis lessoniana*- Reef squid. Commonly encountered methods include hook and line with 172 fishermen and 206 gear, talaya with 79 fishers and 81 gear, gill net with 7 fishermen and 5 gear, and snorkel spearfishing with 11 fishermen and 11 gear (see Table 3). The total number of fishermen and gear observed was 269 and 303, respectively. The CPUE and landings for each of the top shore-based methods are shown in Table 4.

Species	Total weight (kg)
Balistoides viridescens- Pulonon	1,027 kg.
Mulloidichthys sp.- Ti'ao	950 kg.
Gymnosarda unicolor- Dogtooth Tuna	906 kg.
Selar crumenophthalmus. - atulai	391 kg.
Caranx papuensis- Tarakito	364 kg.
Caranx melampygus- Tarakito	364 kg.
Sepioteuthis lessoniana- Reef squid	304 kg.

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

Method	Number of Gear	Number of Fishers
Hook and Line	206	172
Cast Net	81	79
Gill Net	5	7
Snorkel Spear	11	11
SCUBA Spear*	0	0
Hooks and Gaffs	0	0
Surround Net	0	0
Other Methods	0	0
Totals	303	269

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	.1230	3,881 kg.
Throw Net	.0860	1,203 kg.
Gill Net	0	0
Snorkel Spear	.0761	103 kg.
Hooks and Gaffs	0	0
Surround Net	0	0
Other Methods	0	0

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

BOAT-BASED FISHERIES

Report Period: April 1, 2022 through June 30, 2022.

The number of boat based surveys conducted during the 2nd quarter of 2022 followed the regular scheduling of surveys. There are 8 creel surveys and 2 participations scheduled each month for a total of 30 boat-based surveys scheduled for the quarter. All were completed and all datasheets for this quarter have been reviewed and entered into DAWR's data computer (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 during the time period.

Skipjack tuna continues to be the most common fish landed due to commercial trolling activity. Pacific blue marlin, mahimahi, yellow fin tuna were also harvested, but in low numbers. Skipjack tuna made up 91% of the troll catch and 76% of the total boat based catch. Trolling and bottom fishing made up 83% and 8% respectively of the total boat based catch.

Deepwater bottom fishing continues to be a significant boat-based method, with landings of ehu, onaga, and yellowtail kalikali in the top ten species landed. Shallow bottom species did not make the top ten list. Onaga made up 29% of the bottom catch, with the three deep-water species making up 51% of the bottomfish catch. (Table 6).

Species	Total Expanded Landings (metric tons)
Katsuwonus pelamis (skipjack tuna)	49.7
Naso unicornis (blue-spine unicornfish)	2.2
Makaira mazara (Pacific blue marlin)	1.9
Etelis coruscans (ehu)	1.6
Thunnus albacares (yellowfin tuna)	1.2
Sphyraena qenie (blackfin barracuda)	0.8
Coryphaena hippurus (mahimahi)	0.7
Pristipomoides auricilla (yellow tail kalikali)	0.7
Selar crumenopthalmus (mackeral scad)	0.7
Etelis carbunculus (onaga)	0.5

Table 6: Top ten (10) species caught by boats 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 make up over 80% of the landings. Deep bottom fishing trips continue to be a significant boat based method, with these fishers targeting and landing fish caught in the deep bottom strata. All other methods such as shallow bottom fishing, spearing, gillnetting, atulai night-jigging, castnet, spincasting, and scoop nets, and jigging were also encountered, but were smaller components of the boat based fishery.

Boat-Based Method	Landings (metric tons)	Trips	Hours	Persons	# Interviews
Trolling	54.2	2,488	11,398	6,121	148
Bottom fishing	5.3	757	3,285	1,693	38
Snorkel spear	2.1	264	899	1,1453	8
Atulai night jigging	0.7	37	246	74	3
Gillnet	2.0	78	250	235	

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 being able to survey catch to the species level. For the quarter, gillnet, castnet, and jigging had the highest CPUE values this quarter, but these values may not accurately the fisheries due to a lack of interviews in the quarter for these methods. The CPUE values may be derived from interviews outside of the quarter, with a single interview of either high catch or no catch determining the CPUE. Trolling had a CPUE of 2.13 kg/gr-hr, bottomfish had a CPUE 0.69 kg/gr-hr, and spearing had a CPUE of 0.61 kg/gr-hr. (see Table 8).

Boat-Based Method	CPUE (kg/gear-hr)
Trolling	2.13
Bottom fishing	0.69
Snorkel spear	0.61
Atulai night jigging	1.23
Jigging	5.66

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

BOATING ACCESS PROGRAM:

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), notating 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. PAG is currently in the procurement phase, with the bid package posted on the Port's website March 18th. The closing date was May 5, 2022.

Update: A ground breaking ceremony was held on July 11, 2022 at Agat Marina for the construction of Dock B. The upgrade to the dock will use no-rot recycled plastic composite material, marine-grade aluminum frames and stringers, stainless steel components, connections, and accessories. For this project, $500,000 of Sport Fish funding will be used for Dock B. The total cost of the project is $1,494,750 with the Port Authority of Guam paying the difference. AIC International Inc. won the bid for the construction of Dock B.

Figure 1. Dock B Ground Breaking Signage.

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.
- The bid submittal and opening for the Harbor of Refuge was scheduled on Friday, February 18, 2022 at 14:00 / 2:00 P.M.
- DAWR, Port, and Federal Aid staff discussed the project in April 2022. The current high cost of the project and a lack of a larger pool of bid applicants due to current military and other projects make it necessary to change the original scope of work. Port is currently

finalizing a scaled down scope of work to fit the current available BIG funds. Agriculture received approximately $800,000 for the project.

Update: A notice to proceed was issued to ART Constructors, LLC on August 2, 2022, They have 180 days from August 8, 2022 to complete the Harbor of Refuge Project.

Figure 2: 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. With the required MOU in place, a Scope of Work was submitted to the Department of Public Works.

- For the repair work, DAWR staff conducted a preliminary site visit, then a site visit with prospective contractors on June 7th. Bids were submitted June 16th.
- For the Pier assessment, DPW is submitting a RFP for prospective companies to bid on.
- Ramp Replacement - The ramp at Merizo is 25 years old, with areas of the ramp worn smooth. This project will replace the worn ramp with a new identical ramp. The project scope of work is currently being finalized by DAWR.

Update:

- Two vendors provided quotes for the bid.
- DOAG DAWR provided a requisition to DPW per their request.
- Because of the new procurement law, DPW is obtaining additional quotes to meet the 6-vendor requirement.
- DPW will process a purchase order to a vendor after it reviews all the quotes.
- The work at Merizo Pier involves:
    - replacement of missing ladders
    - repair of damaged lights
    - repair and replacement of damaged decking planks
    - removal and replacement of damaged bordering planks
    - fasten loose bumpers

Figure 3. Merizo pier with missing 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.

Update: The Port awarded ProPacific Builder Corporation the contract to repair the Agat Northern Walkway, with a pre-construction meeting held April 6, 2022. SFR is funding $40,000 towards the $80,000 project. The Contractor is actively working on the permitting process (review, comments, approval) with Guam Department of Public Works Building Permits. Permits are taking longer than expected.

Figure 4: Fisheries staff water blasting the back ramp at the Agana Boat Basin.

Regulations

Table 9. Law Enforcement Arrests Information from June 2022 to August 2022.

Case No:	Sex	Ethnicity	Violation	Location
22-5751	1 Male	Chuukese	Illegal Fishing (spear) in MPA`	Tumon, MPA
22-6247	1 Female	Palauan	Illegal Fishing (rod & reel) in MPA	Tumon MPA
22-6312	1 Male	Filipino	Illegal Fishing (spear) in MPA	Tumon MPA
22-8381	2 Males	Chuukese	Illegal Fishing (spear) in MPA	Tumon MPA
22-8449	3 Males	Filipino	Illegal Fishing (gill net & spear) in MPA	Piti MPA
22-9702	2 Males	Filipino	Illegal Fishing (gill net) in MPA	Achang MPA
Totals	**9 Males / 1 Female**			

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 needs to meet to discuss moving forward with the licenses. The actual purchase order was just received.

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.

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.

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. The data workshop identifies current baseline conditions and provide management options for the species using FishPath tool.

DOAG DAWR in partnership with NOAA and TNC hosted a hybrid workshop on June 1-2 & 7-9 from 9:00 a.m. to 11:00 a.m. using an online decision-support tool – FishPath. Various stakeholder participated in the process to help identify locally appropriate management options for Guam.

DOAG DAWR will meet to discuss how to move forward with the results and inputs from the workshop.

DOAG DAWR is also planning a future workshop to discuss the non-fisheries portion of the plan since Guam's FMP will include an ecosystem approach to fisheries management.

Update: Next Steps – Funding Dependent

- DAWR will coordinate with UOG Marine Laboratory (ML) to facilitate a working group to include DAWR, UOG ML, and others to go through a decision tree assessment for ~20 priority species with sufficient data.
- Facilitate a follow up meeting(s) where we take the results from all species combined, and come up with logical scenarios to be considered for the FMP that can be passed around to stakeholders.
- UOG ML will create and submit a technical report to be submitted to DAWR summarizing the process and outcomes that can help justify any decisions for the FMP.
- UOG ML will work directly with the DAWR to include this content in the appropriate format for the FMP.
- DOAG is coordinating with the Bureau of Statistics and Plans (BSAP) on partial funding for this analysis.

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.

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) successfully redeployed FAD #3 and Old NOAA on November 24, 2021. FAD #3 was coupled with a small echo-sounder 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

All information gathered will be posted on various media outlets such as Facebook and whatspp 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 #3 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. Additional FAD systems will be purchased in FY22 as well as a deployment contract.

The contract and grant award to purchase additional FAD systems was extended to 150 to 180 days due to delays in shipping. One regular FAD system arrived. Contract packets 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.

Update: The contract and grant award to purchase additional FAD systems was extended to 150 to 180 days due to delays in shipping. Currently, the 2 "New Designs" FAD systems are still pending shipment.

Plans to replace FAD #3 echo sensor as well as additional sensors to be attached to other FAD buoys are still pending USFW services approval.

Figure 5. Old NOAA FAD.

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 where 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:** DAWR submitted the Request for Quotations (RFQs) to GSA and is currently waiting for vendors to respond and a purchase order to deploy the SWMs. 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.

Sea Turtle

Stranding Information

No sea turtles were reported stranded between May 23, 2022 and August 29, 2022.

Marine Mammals

No marine mammals were reported between May 2022 – August 2022.

Box Jellyfish and Man-o-Wars

There were no sightings of man-o-wars between May 2022 and August 2022. Box jellyfishes were reported in June 2022, July 2022, and August 2022. DAWR did not hear of any sting incidents.

Cultural Signs - September 2022 – November 2022

Figure 6. Fisheries Staff (Jun Ducusin) posing next to sign prior to conducting survey, inspection, and maintenance at Tanguisson location.

Figure. 7 Tagachang Sign Grass trim

Figure. 8. Ipan Sign post maintenance

- 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 Nimitz beach-Agat, Asan beach, Adelup-Hagatna, Ipan-Beach, Tagachang-Yona, and Tanguisson-Dededo signs were grass trimmed by staff (Martin, Ducusin, and Sasamoto) as needed.
- Litter and debris were removed at the following locations (Tanguisson, Adelup, and Asan).
- Request For Quotes were sent to vendors for Signs decals 11/15 & 17/2022
- Work Request to Fabricate and reinstall sign frames (Specifically for Talofofo bay, Ipan, and Tagachang) was submitted for review Friday10/28/2022
- Last survey, maintenance, and inspection (Martin, and Ducusin) for the signs, Friday 11/18/2022.

Clam Project "*Na'boka*: Battling Hunger Through Community-Driven Aquaculture Projects"

- DOAG was awarded $113K in federal funds by the Pacific States Marine Fisheries Commission (PSMFC) to import 1,000 giant clams for the purposes of creating village-owned clam farms. DAWR will develop the sites, teach the public how to grow them, and then hand them over to the people. Youth 'Hima Ambassadors' will be recruited from each village to lead these charges.

- **Update:** DAWR received an amended contract from PSMFC following an approved 2-year grant extension. The account is currently being re-established. DAWR has completed most of the NEPA process, and the Pre-Construction Notice application for the NationWide Permit (NWP) is currently for final review by the US Army Corps of Engineers (USACOE). Once the NWP is obtained, the remaining funds ($53,000) for the construction of clam enclosures, will be released to DAWR and construction will begin.

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