



Republic of the Philippines  
Department of Environment and Natural Resources  
MIMAROPA Region  
**PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE**

JUN 26 2023

**MEMORANDUM**

**FOR** : The Regional Executive Director  
DENR MIMAROPA Region  
1515 DENR By the Bay Building, Roxas Boulevard,  
Barangay 668, Ermita, Manila

**THRU** : The ARD for Technical Services

**FROM** : The OIC, PENR Officer

**SUBJECT** : **SUBMISSION OF THE 2<sup>ND</sup> QUARTER  
ACCOMPLISHMENT REPORT FOR MAINTENANCE  
AND PROTECTION OF COASTAL AND MARINE  
ECOSYSTEM OF APO REEF NATURAL PARK**

Forwarded is the memorandum dated June 20, 2023 of CENRO Sablayan regarding submission of the 2<sup>nd</sup> Quarter Accomplishment Report for the Maintenance and Protection of Coastal and Marine Ecosystems of Apo Reef Natural Park an activity under the Coastal and Marine Ecosystem Management Program (CMEMP). Accomplishment report includes surveillance of threats and damages, repair and maintenance of equipment and conduct of direct activities.

Attached is the narrative report with its annexes.

For information and record.

  
**ERNESTO E. TAÑADA**

TSD-CDS6/26/2023

Copy furnished:

1. Planning Section
2. File



**Department of Environment and Natural Resources**  
**MIMAROPA Region**  
**COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE**

June 20, 2023

**MEMORANDUM**

**FOR** : Regional Executive Director  
DENR MIMAROPA Region  
1515 DENR By the Bay, Roxas Blvd.  
Brgy. 668, Ermita, Manila

**THRU** : The PENR Officer  
Mamburao, Occidental Mindoro

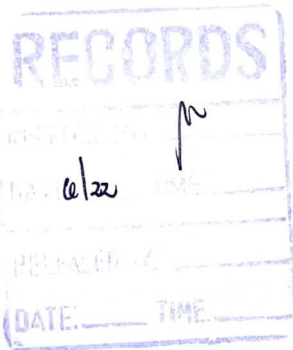
**FROM** : The CENR Officer

**SUBJECT** : **SUBMISSION OF THE 2<sup>ND</sup> QUARTER ACCOMPLISHMENT  
REPORT FOR MAINTENANCE AND PROTECTION OF  
COASTAL AND MARINE ECOSYSTEMS OF APO REEF  
NATURAL PARK**

Respectfully submitted is the 2<sup>nd</sup> Quarter Accomplishment Report of Apo Reef Natural Park for *Maintenance and Protection. Maintenance and Protection*, an activity under the Coastal and Marine Ecosystem Management Program (CMEMP)

For your information and record.

  
FOR. ANASTACIO A. SANTOS, MPA





**Department of Environment and Natural Resources**  
**MIMAROPA Region**  
**APO REEF NATURAL PARK**  
**Protected Area Management Office**

June 20, 2023

**MEMORANDUM**

**FOR** : Regional Executive Director  
DENR MIMAROPA Region  
1515 DENR By the Bay, Roxas Blvd.  
Brgy. 668, Ermita, Manila

**THRU** : The PENR Officer  
Mamburao, Occidental Mindoro

The CENR Officer  
Sablayan, Occidental Mindoro

**FROM** : The Protected Area Superintendent

**SUBJECT** : **SUBMISSION OF THE 2<sup>ND</sup> QUARTER ACCOMPLISHMENT  
REPORT FOR MAINTENANCE AND PROTECTION OF  
COASTAL AND MARINE ECOSYSTEMS OF APO REEF  
NATURAL PARK**

Respectfully submitted is the 2<sup>nd</sup> Quarter Accomplishment Report of Apo Reef Natural Park for *Maintenance and Protection*, an activity under the Coastal and Marine Ecosystem Management Program (CMEMP). Accomplishments for habitat surveillance of threats and damages, repair and maintenance of equipment, and conduct of direct activities are included in the report. Attached herewith is the narrative report with its annexes.

For your information and record.

  
**KRYSTAL DAYNE T. VILLANADA**



## **I. Introduction**

Apo Reef Natural Park (ARNP) is a 15,799-hectare offshore Marine Protected Area (MPA) approximately 30 kilometers away from the coast of the Municipality of Sablayan in Occidental Mindoro. The MPA covers two adjacent oceanic atolls, a fringing reef, and three limestone islands (Apo Island, Binangaan, and Tinangkapan). ARNP hosts a diverse range of flora and fauna, and it is both recognized as a Key Biodiversity Area and an Important Bird Area. To date, the ARNP is known to host at least 481 fish species, 63 hard coral genera, and 109 bird species.

The efficient day-to-day management and operations of ARNP are ensured by the Apo Reef Natural Park - Protected Area Management Office (ARNP-PAMO), headed by the Protected Area Superintendent (PASu). This report contains the accomplishments of the Office under *Maintenance and Protection*, an activity under the Coastal and Marine Ecosystem Management Program (CMEMP), from April 1 to June 15, 2023, with corresponding means of verification (MOVs).

## **II. Accomplishments**

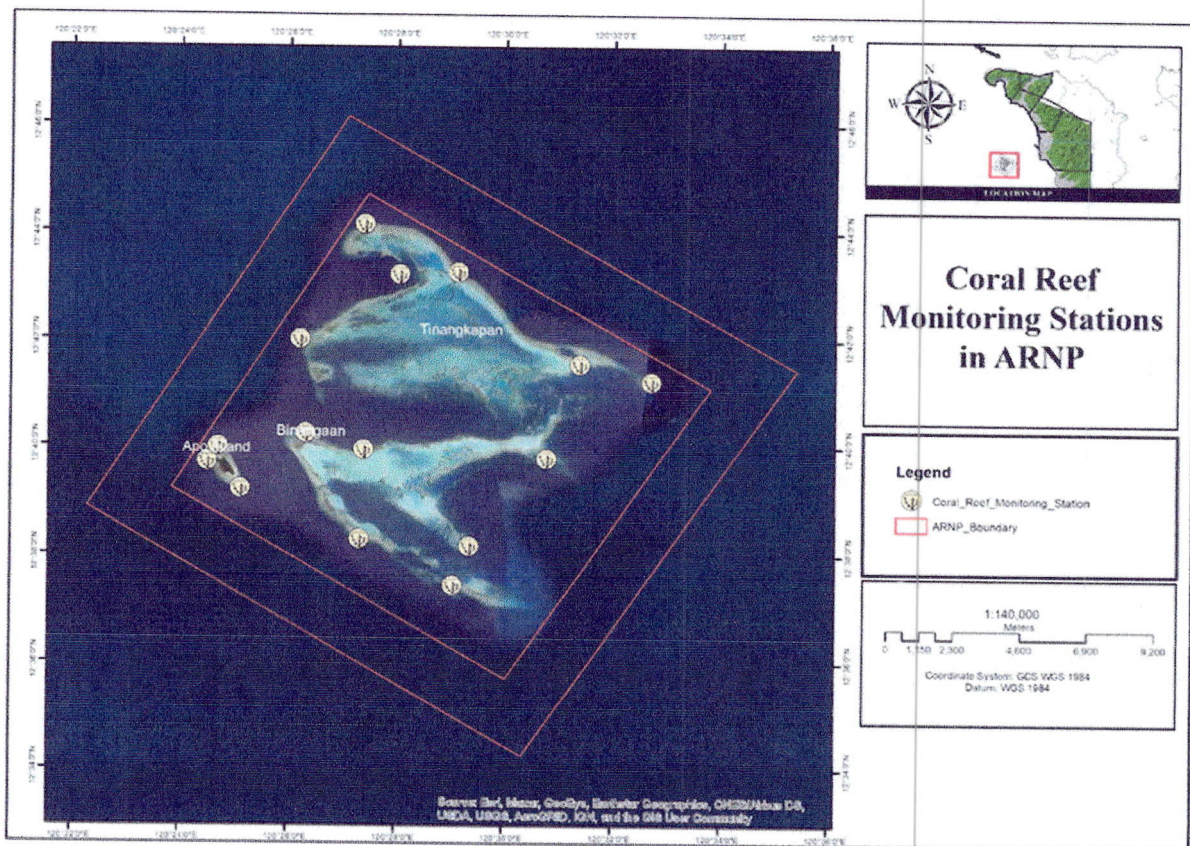
### **A. MPA Management, Strengthening, and Networking**

#### **a. Monitoring of corals, mangroves, and seagrass**

##### *Corals*

Fifteen stations were established by the WWF-Philippines for the survey of corals, fish, and mobile benthic invertebrates (Fig. 1) and were distributed across the MPA to capture differential exposure to prevailing winds (southwest and northeast monsoon). These stations were monitored in partnership with a team of researchers from the University of the Philippines Los Baños from May 19-21, 2023, and March 25-26, 2023. One station was subjected to the substrate rehabilitation conducted on May 22-23, 2023, as well as ground control points for remote sensing from the southern stations of the natural park.



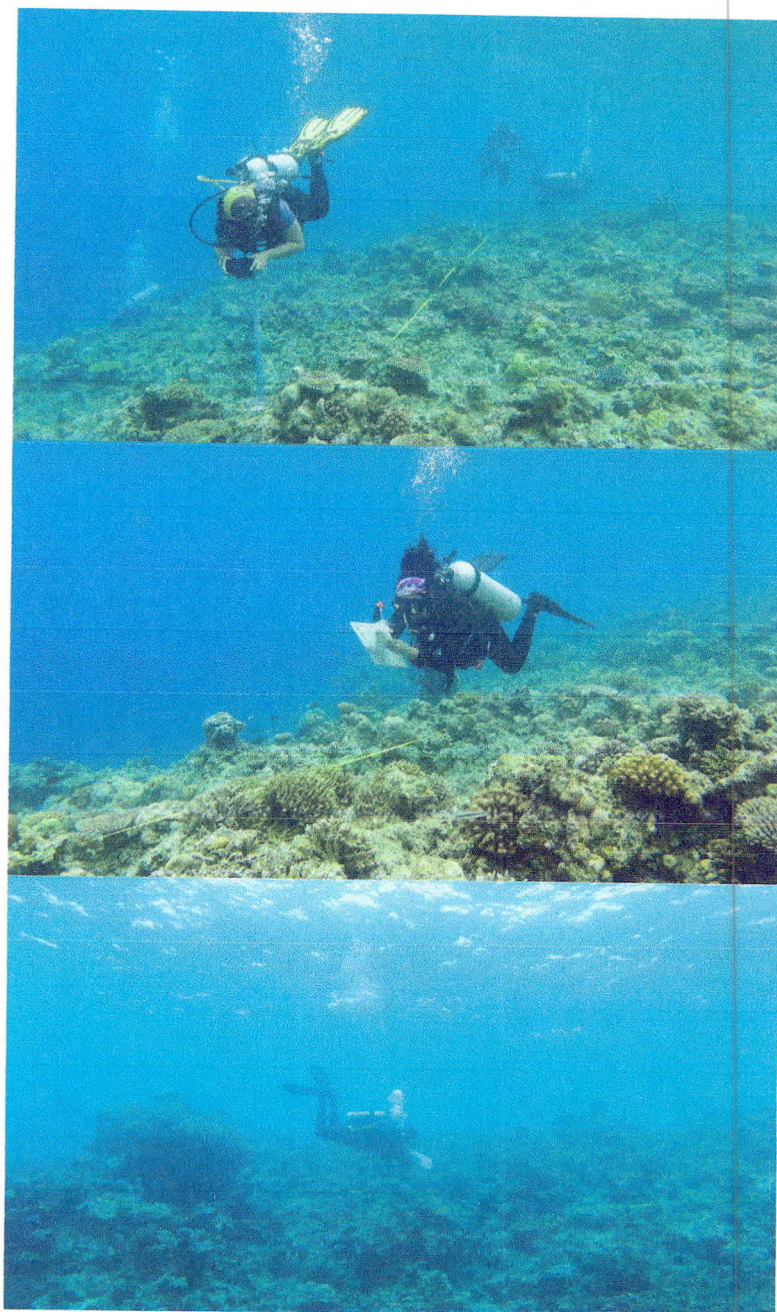


**Figure 1.** Fifteen coral reef monitoring stations established by WWF Philippines.

During the field surveys, five 50-m transects with an area of 75 x 25 m were laid on each station and parallel to the contour of the reef based on the protocol of van Woesik et al (2009). The base transect, reaching 75 m, was laid in parallel with the contour of the reef. The four subsequent transects were randomly placed within the length of 25 m towards the shallower section of the reef slope. The photographs of corals were taken every 1-m interval starting from the zero-mark using a housed digital camera (Canon G15 with Recsea underwater housing) mounted on an aluminium monopod. The coral photographs will be post-processed in Adobe Lightroom Classic and subsequently analysed using Coral Point Count with Excel extensions (CPCe v.4.1). Ten points will be randomly placed in the images and the benthos intercepted by each point will be identified.

Fish visual census and benthic marine invertebrates were done simultaneously with the coral phototranssect survey (Fig. xx), following the methods of English et al. (1997), where three out of the five transects were analysed. Fishes encountered within 2.5 meters on each side along these three 50-m transects were counted and identified to species level. The total length of the individuals was recorded for the computation of biomass. Moreover, the macrobenthic invertebrates observed along the 2 m width on each side were counted and identified to the genus level.





**Figure 2.** Methodologies done during the coral assessment; coral photoquadrat (top), macrobenthic invertebrate survey (middle), and fish visual census (bottom).

Table 1 presents the participants of the activity. They include personnel from Apo Reef Natural Park – Protected Area Management Office (ARNP-PAMO) and UPLB. The analysis of data and submission of the final report will be conducted in the succeeding quarters of this year.

**Table 1.** Participants of the coral reef monitoring for CY 2023 from ARNP-PAMO and UPLB.

Name	Position	Task
Victor S. Ticzon	Volunteer	Coral photoquadrats/Laying of transects
Kristyl Ckaye E. Pardo	Volunteer	Coral photoquadrats
Marion Michael Bacabac	Volunteer	Invertebrate survey
Clarisse Anne Pereira	Volunteer	Invertebrate survey
Jesus Gabriel Fetil	Volunteer	Coral photoquadrats/Invertebrate survey
Kent Elson Sorgon	Volunteer	Fish survey
Kexya Gustilo	Volunteer	Fish survey
Krystal Dayne T. Villanada	Protected Area Superintendent	Invertebrate survey
Roberto P. Beringuela	Park Maintenance Foreman	Laying and reeling of transects
Efraim Z. Pagador	Forest Ranger	Fish survey
Jane Frances T. Senosa	CMEMP Extension Officer	Coral photoquadrats
Romel M. Pacaul	Boat Captain	Operation of outrigger boat and hi-speed watercraft (26-footer)
Jaysrael Urieta	Park Ranger	Operation of speed boat
Mark Dennis M. Barretto	Boat Captain	Operation of outrigger boat
Sherwin R. Benoza	Park Ranger	Filling of SCUBA tanks
Ludygario D. Matira	Park Ranger	Assembly and disassembly of diving equipment
Kelvin John U. Zubiri	Park Ranger	



Temart E. Rebito	Park Ranger	Maintenance of diving equipment
Federico A. de Jesus	Park Ranger	
Billy Calabio	Park Ranger	
Jun G. Serquiña	Park Ranger	
Raymart Dangeros	Park Ranger	
Ricky M. Dantayana	Support Staff	

Refer to Annex A for the photo-documentation of the coral reef assessment conducted on 19-26 May, 2023.

#### **b. Maintenance and Protection of Coastal and Marine Ecosystems**

##### *Response plan*

Oil spill response planning was done last 06 June 2023. The Philippine Coast Guard discussed the basic knowledge and responses on oil spills and to creat a response team in case of oil spill in the vicinity of ARNP. % PASu



**Figure 3.** Participants from various government agencies present for the oil spill contingency plan.

Refer to Annex B for the photo-documentation of oil spill contingency plan conducted on 6 June, 2023.

#### *Habitat surveillance of threats and damages*

Illegal activities within the core and buffer zones of ARNP, including fishing, are combatted and prevented by an inter-agency task force known as Task Force Marine and Apo Reef Law Enforcement (TF-MARLEN). TF-MARLEN was established in 2004 and it is primarily composed of the following: DENR, LGU Sablayan, Philippine Army, Philippine National Police, Philippine Coast Guard, and WWF-Philippines (Tabaranza et al., 2014).

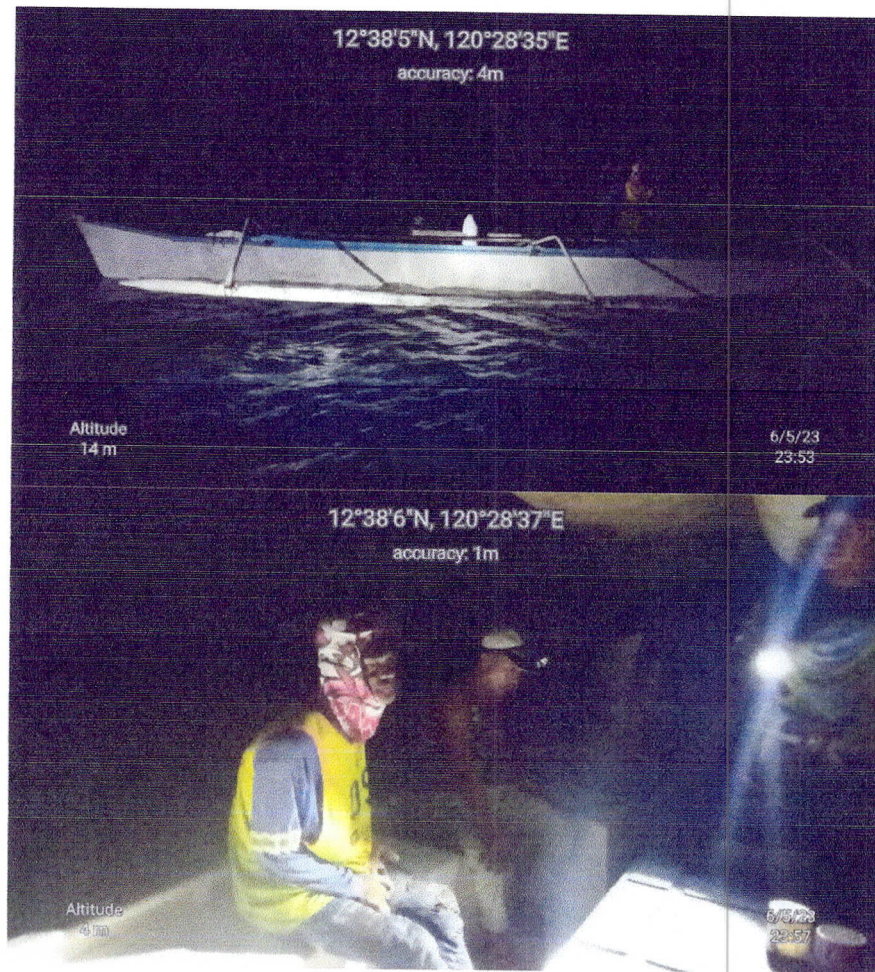
The park rangers of ARNP-PAMO and MENRO Sablayan (including boat captains and crew members) play an integral role in the multi-sectoral task force. Among others, they regularly patrol the core and buffer zones of ARNP with or without assistance from the military and uniformed personnel. As of June 15, 2023, they have logged at least an estimate of 24.42 seaborne patrol hours and traveled 706.98 nautical miles around the reef complex. Park rangers also patrolled Apo Island on foot to monitor tourist activities and conducted surveillance from the lighthouse.

During one of these patrol operations, fishermen from Calintaan were apprehended for illegally operating within the Protected Area (Fig. 4). These fisherfolks were aboard an unnamed motorized outrigger boat last 5 June 2023.

Late last year, criminal charges were also filed by ARNP-PAMO against Robert Latumbo, Ambrocio Agustin, and Roquito Dioso. These fisherfolks were apprehended last December 16, 2022, at Bahura 7, ARNP. They pleaded guilty for the violation of paragraphs (b) and (g) of Section 18, Republic Act 11038 as charged in Criminal Cases Nos. 6597 and 6598, respectively. This was attended by Park Ranger Temart Rebito and PASu Krystal Dayne Villanada last February 16, 2023.

During this quarter, ARNP-PAMO filed criminal charges against Nomber Bingala, Jesus Cantor, Narciso Alvaro, and Jomar Malunes. They are facing criminal charges for the violation of Republic Act No. 11038 (Expanded National Integrated Protected Areas System Act of 2018) with criminal cases nos. 6602, 6603, and 6604. The trial was done last April 20, 2023, where PASu Krystal Dayne Villanada and Park Ranger Ludygario Matira made appearances. Park Ranger Ludygario Matira testified on direct, cross, and redirected examinations. Pros. Roberto Evangelista moved for continuance for presenting another witness at the next meeting. Ongoing trial against the nine fisherfolks was held on 15 June 2023 but was moved to 7 July 2023 due to surprise visit of new judge of Branch 46 RTC San Jose.





**Figure 4.** Apprehension of fishermen with unnamed fishing boat within the Protected Area on June 5, 2023.

Aside from apprehension of illegal fishers, the Park Rangers also inspect the catch of some fishers as part of their day and night operations. Fig. 5 has shown the inspection of Team Barracuda on M/Bca King Fisher.





**Figure 5.** Inspection and investigation of M/Bca King Fisher. Coordination with the fishermen (top) and inspection of fish caught (bottom) on 6 June 2023.

Refer to Annex C for the photo-documentation of seaborne patrols conducted from April 1 to June 15, 2023.

#### *Repair and maintenance of equipment*

Two of the four watercraft of ARNP-PAMO are nonfunctioning: the 24-footer hi-speed watercraft and outrigger boat (M/Bca Jerlyn) (Table 2). However, the latter has been undergoing repair since the last quarter of last year and it is expected to be fully functional by April of this year. Several parts have been repaired since the start of the year including the prow, sternpost, and outriggers. The boat hull was also laminated with putty and painted. The



remaining repair activities are the construction of the motor mount and the installation of the constructed boat seats and ladder.

**Table 2.** Parts of the watercraft that were repaired from April 1 to June 15, 2023.

Watercraft	Parts Repaired	Current Status
MBca Jerlyn	Prow/bow, sternpost/stern, keel, boat hull (encapsulation, lamination, and painting of outer part), outriggers	For repair (construction of motor mount, installation of boat seats and ladder)
26-footer Hi-speed Watercraft	None	For repair (replacement of steering cable, repainting of boat hull, and repair of engine)
30-footer Hi-speed Watercraft	None	Serviceable
Spotter Boat	None	Serviceable

The other items being maintained are mostly in good condition (Table 3). However, most diving gears are for replacement. Although these gears are still functional, they should be replaced to ensure the safety of divers.

**Table 3.** Status of other equipment of ARNP-PAMO as of 15 June 2023.

Equipment	Quantity	Status
Kenwood TM-271A Base Radio	1	Good condition
Kenwood TM-281A Base Radio	1	Good condition
Diving Tanks	30	Good condition
Dive Gears	10	5 in good working condition; 5 functional but needs replacement

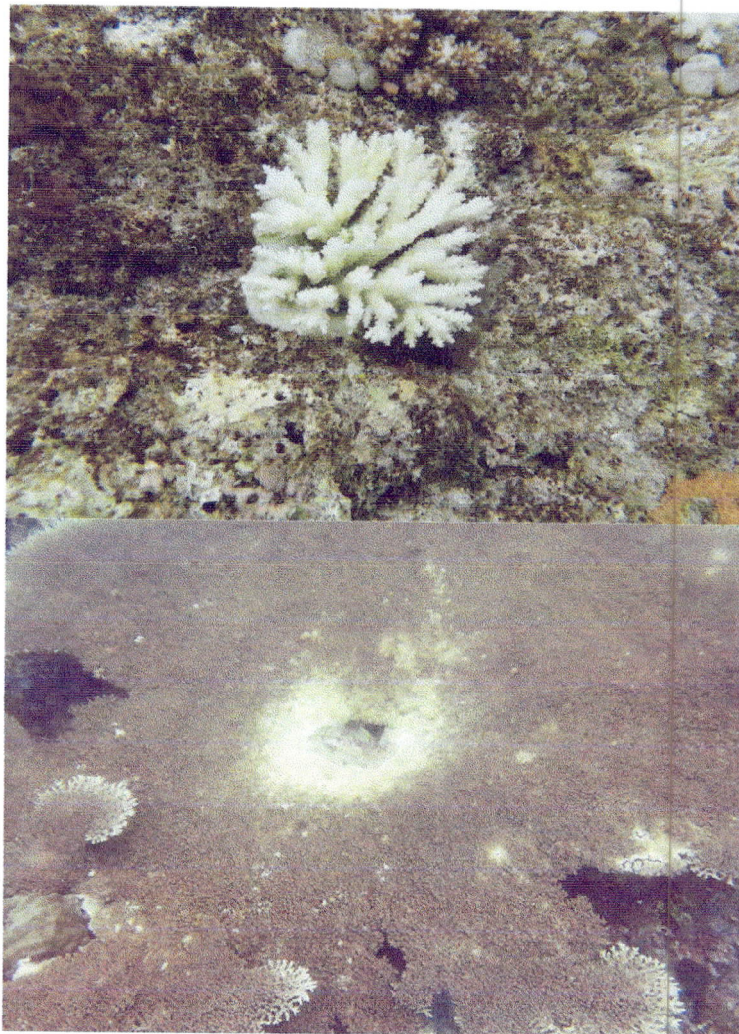
Refer to Annexes D for the photo-documentation of the maintenance activities conducted from April 1 to June 15 2023.

## *Conduct of Direct Activities*

### *Coral Bleaching Monitoring*

Coral bleaching is the process in which corals expel symbionts from their tissues in response to stress and turn white. Under the rapidly changing climate, corals are more prone to bleaching due to increased ocean temperature. Detecting and monitoring coral bleaching events allows for better management of coral reefs.

The monitoring was done last 19-26 May 2023 along with the coral assessment. Among the 15 stations monitored, there were at least few stations with bleached corals present. However, this might be due to the predation of microbenthic invertebrates such as *Drupella* sp. and *Culcita* sp. rather than a bleaching event (Fig. 6).



**Figure 6.** Bleached corals possible to predation of invertebrates (top) and fishes (bottom).

It is recommended that the NOAA Coral Reef Watch and its associated sites be visited regularly, and survey effort be increased especially in coral reef monitoring stations with relatively higher coral cover if the stress level is raised to Alert Level 1 or higher. Furthermore,

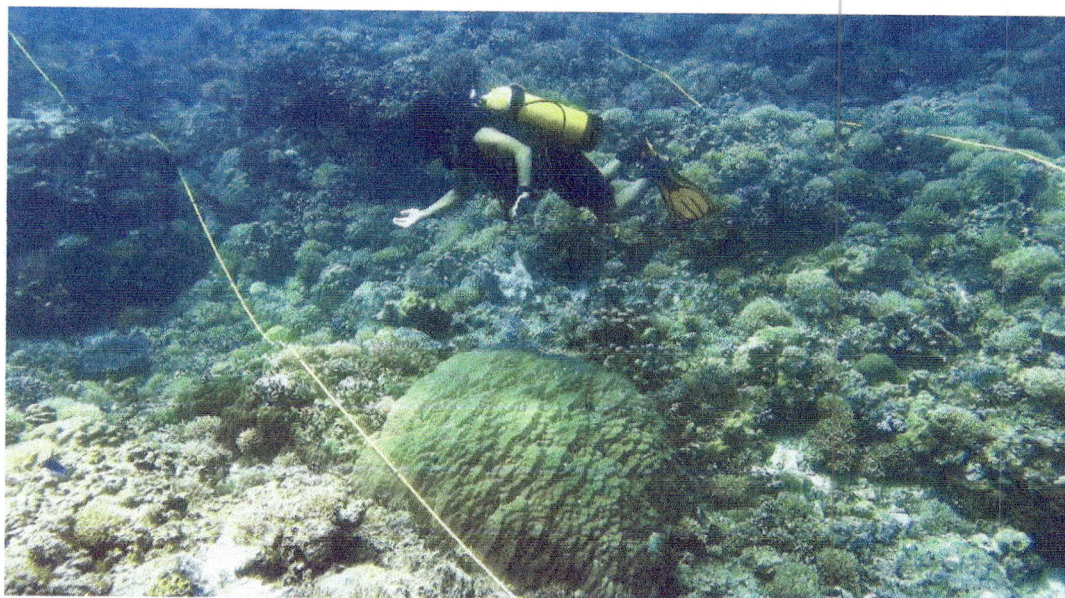


it was recorded at Allen Coral Atlas (2022) that the status of ARNP for bleaching alert is *Watch* on the duration of the survey.

#### *Crown-of-Thorns Starfish Surveillance and Control*

Crown-of-thorns starfish (CoTS; *Acanthaster* sp.) is a corallivorous starfish with venomous spines. It has four known species and an individual can have up to 23 arms and grow to over half a meter in diameter. CoTS naturally occur in coral reefs in low densities but populations of this organism can reach very high densities and cause significant damage to reefs. Large CoTS outbreaks in ARNP occurred in 2018 and 2019 with 2,099 and 10,680 individuals culled, respectively.

Fifteen sites were surveyed for the presence of CoTS based on the site established by WWF Philippines last May 19-26, 2023. No CoTS was observed both by the ARNP-PAMO and UPLB team (Fig. 7).



**Figure 7.** Boat Captain Mark Dennis Barretto searching for CoTS in along the transect of Station 9.

#### *ARMS Monitoring*

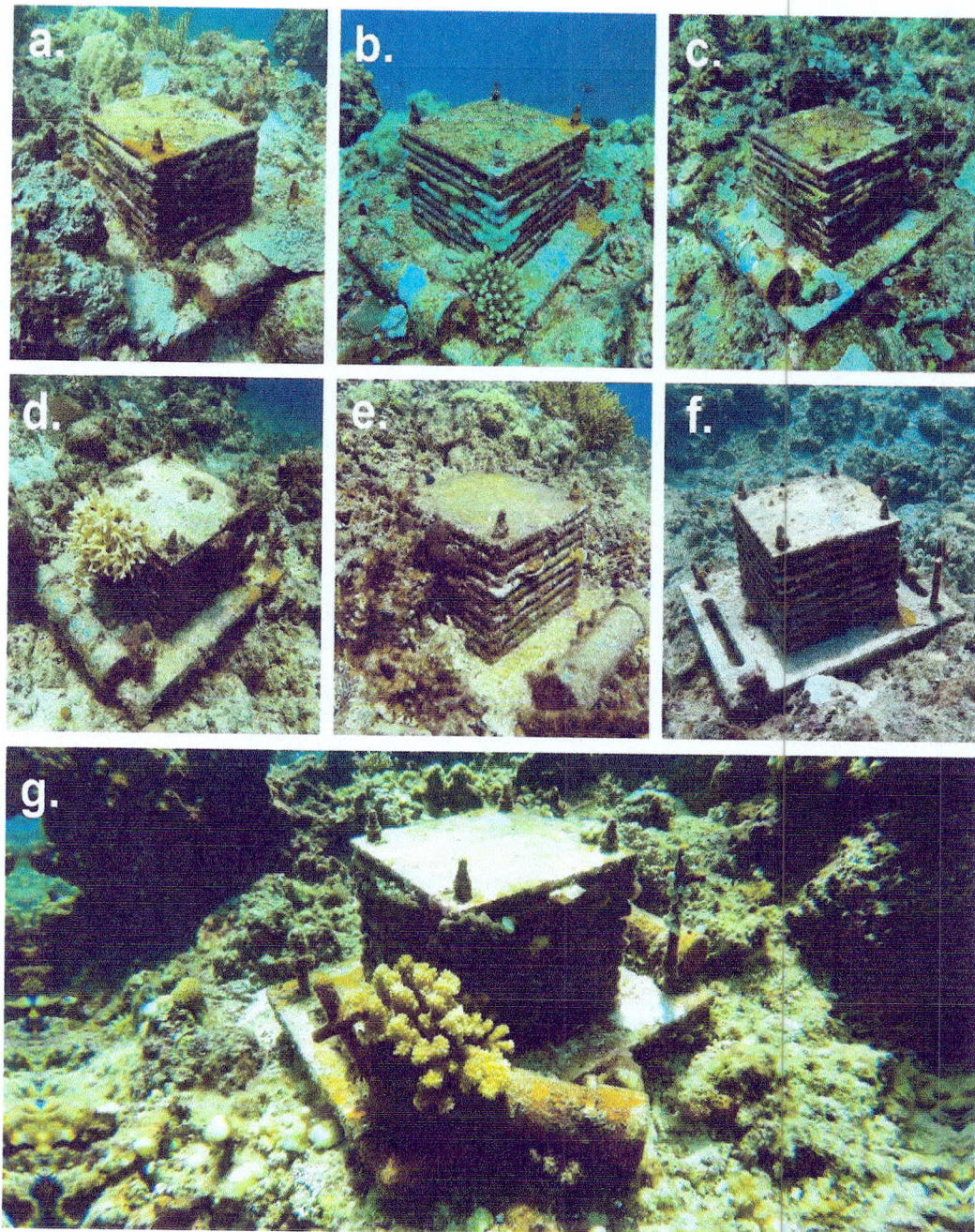
Nine units of Autonomous Reef Monitoring Structures (ARMS) were deployed in Apo Reef Natural Park in 2017. The deployment was a part of the research collaboration between the DENR-BMB and Smithsonian Institution which aims to utilize ARMS in assessing reef cryptobenthic diversity in the Philippines across different geographical and anthropogenic impact gradients.

The ARNP-PAMO has been monitoring these structures every quarter since its deployment. For this quarter, the ARNP-PAMO conducted the monitoring activity on 19-26



May 2023. During the monitoring activity, seven units of ARMS were found to be intact in their original locations: Ego Wall (n=1) and Binanggaan (n=6) (Figure 6). One of the three ARMS units that were deployed in Ego Wall has been lost, likely due to strong wave action in the area. Meanwhile, the other one has been dislodged in previous years and it was re-installed in front of the Ranger's Kiosk.

Additionally, the University of the Philippines Los Baños and Marine Science Institute of the University of the Philippines Diliman were tapped for help for the assessment of cryptobiota found on ARMS.



**Figure 7.** Seven intact ARMS in Binanggaan (a-f) and Ego Wall (g).

Refer to Annex E for the monitoring of coral bleaching, CoTS, and ARMS.



### *Coastal Clean-up Activities*

Marine litters are regularly collected from the shoreline of Apo Island, ARNP. From April 1 to June 15, 2023, 20 sacks of mixed marine litter were collected (Table 4). These were all transported back to mainland Sablayan for proper disposal. The ARNP-PAMO also attended the "Month of the Ocean" coastal clean-up conducted in Sitio Tabuk, Buenavista, Sablayan, Occidental Mindoro on May 25, 2023.

**Table 4.** Sacks of marine litter collected within Apo Island from April 1 to June 15, 2023.

Month	Type	Quantity
April	Mixed	12 sacks
May	Mixed	18 sacks
June	Mixed	20 sacks
	Total	50 sacks

Around this quarter, the park rangers started using the Clean Swell app, a trash collection mobile application programmed by The Ocean Conservancy (Fig. 8). This has improved accuracy of the quantification of wastes collected and has allowed us to contribute to the global database on marine litter. For future recommendations, the type of trash item will be described based on the results from the software.



## Thank you for cleaning up with **Clean Swell**

Here's a summary of your recent cleanup:

Date	2023-05-23
Duration	0 seconds
Number of People	1
Weight of Trash Picked Up	527.706 lbs
Group Name	team patting
Distance Covered	0 Miles

### Trash items picked up:

0-pack holders	0
Appliances	2
Balloons	0
Beverage bottles (glass)	12
Bottles (plastic)	220
Beverage cans	2
Beverage sachets/pouches	1
Bottle caps (metal)	0
Bottle caps (plastic)	3
Cigarette butts	0
Clothing	1
Condoms	0
Construction materials	0
Cotton bud sticks (swabs)	0
Cups, Plates (foam)	0
Cups, Plates (paper)	2
Cups, Plates (plastic)	0
Diapers	0
E-cigarettes	0
Electronic waste (phones, batteries)	0
Foam dock pieces	141
Foam packaging	0
Food containers (foam)	0
Food containers (plastic)	0
Food wrappers	0
Footwear (shoes/slippers)	1
Gloves & masks (PPE)	1
Grocery bag (plastic)	20
Lids (plastic)	0
Lines, nets, traps, ropes, etc.	11
Other bags (plastic)	1
Other plastic bottles (oil, bleach, etc.)	0
Other plastic waste	0
Other waste (metal, paper, etc.)	0
Paper bags	0
Plastic/foam pieces	0
Strapping bands	0
Straws/stirrers (plastic)	2
Syringes	0
Tampons & applicators	0
Tires	0
Tobacco products (lighters, cigar tips, wrap)	2
Toys	0
Utensils (plastic)	0

**Figure 8.** The overview of the marine litter gathered by the Park Rangers on 23 May 2023.

Refer to Annex F for the photo-documentation of the coastal clean-up activities conducted from April 1 to June 15, 2023.

Prepared by:

  
**JANE FRANCES T. SENOSA**  
CMEMP Extension Officer

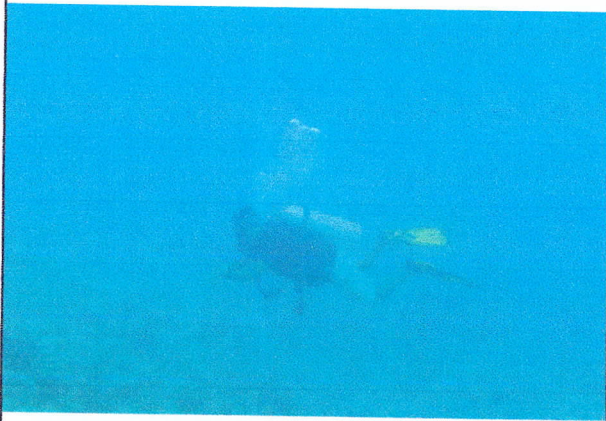



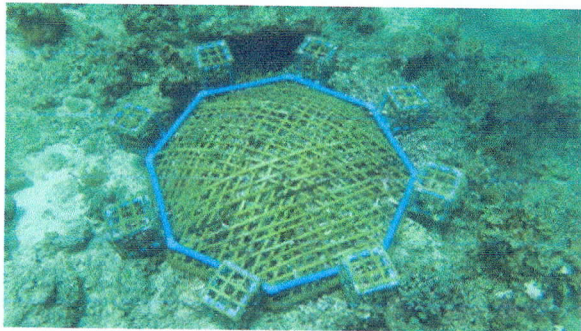

Reviewed and submitted by:

  
**KRYSTAL DAYNE T. VILLANADA**  
Protected Area Superintendent



### III. Annexes

#### Annex A. Photo-documentation of the coral reel assessment conducted 19-26 May 2023.

	
Park Maintenance Foreman Roberto P. Beringuela searching cement blocks at Station 1 on May 19, 2023.	Forest Ranger Efraim Z. Pagador preparing for the dive at Station 8 on May 20, 2023.
	
Boat Crew Jaysrael Urieta and Park Ranger Sherwin R. Benzoza loading diesel on the speedboat on May 22, 2023.	Live coral substrate recorded at the depth of 1.5 m during the athering of ground control points on May 22, 2023.
	
Installation of substrate stabilization set-up at Station 7 on May 23, 2023.	Park rangers putting coral rubbles required for the set-up at Station 7 on May 23, 2023.

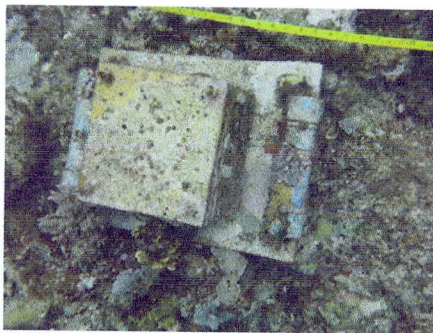




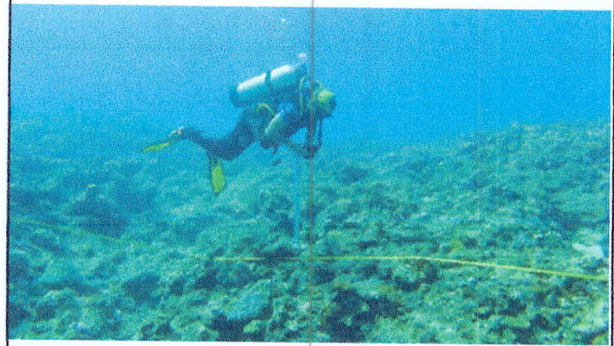
Park Ranger Sherwin R. Benozza and Forest Ranger Efraim Z. Pagador filling up the diving tanks for the scheduled field survey on May 25, 2023.



Park Rangers transferring diving tanks to the boat on May 21, 2023.



Block of Autonomous Reef Monitoring Structure (ARMS) recorded within the transect at Station 10 on May 25, 2023.



CMEMP Extension Officer Jane Frances T. Senosa performing phototranssect at Station 6 on May 26, 2023.



CMEMP Extension Officer Jane Frances T. Senosa recording the coordinates and description for the ground control points around the southern stations on May 22, 2023.



Participants of the coral reef assessment in Apo Reef Natural Park for the duration of May 19-26, 2023.

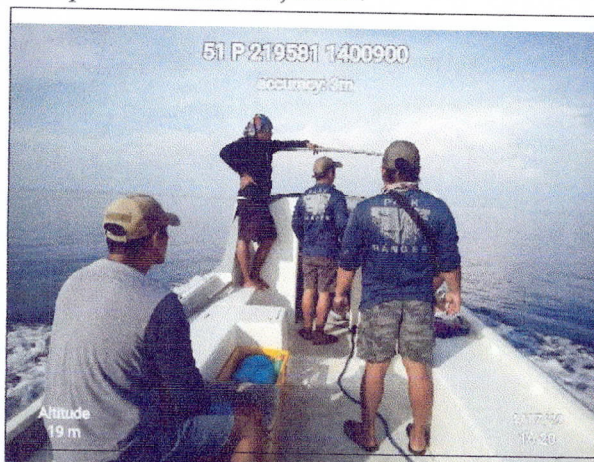


**Annex B.** Photo-documentation of the oil contingency response plan conducted last 6 June, 2023.

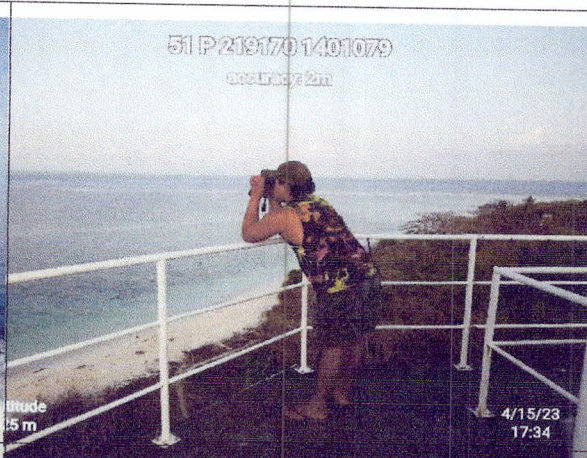
	
<p>Attendance of the participants</p>	<p>Introduction of the program to the participants</p>
	
<p>Mapping of the top priorities in case of oil spill around the Protected Area.</p>	<p>Result of the mapping.</p>
	
<p>QGIS map produced after the consultation with the stakeholders.</p>	<p>Participants from various government agencies attended the response plan.</p>



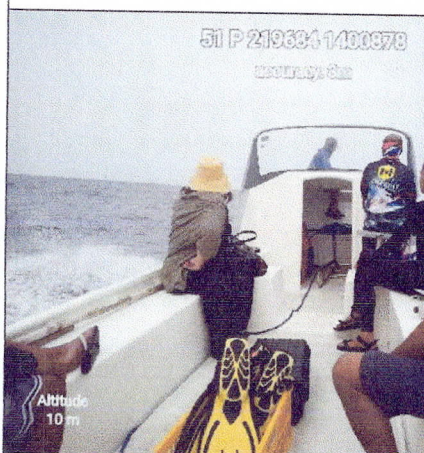
**Annex C. Photo-documentation of the seaborne patrol and inspection operations conducted from April 1 to June 15, 2023.**



Team Bull Shark patrolling the sea on 17 April 2023.



Park Ranger Temart Rebito surveying the area atop the lighthouse for possible illegal fishers on 15 April 2023.



PASu Krystal Dayne Villanada (left) along with the Park Rangers patrolling the sea on 11 April 2023.



Park Rangers in preparation for the night patrol on 5 June 2023.



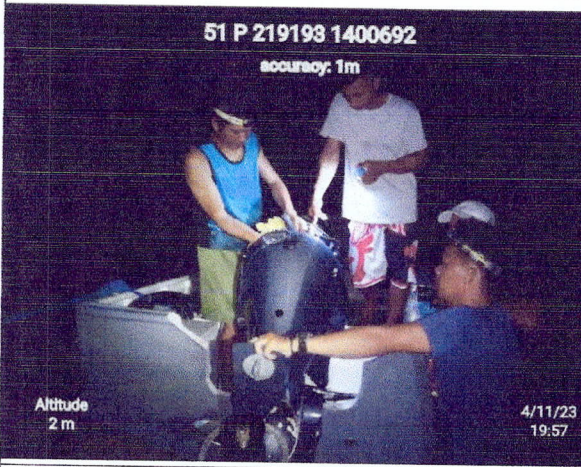





Inspection of M/Bca King Fisher on 6 June 2023.



Inspection on fishermen aboard M/Bca King Fisher on 6 June 2023.



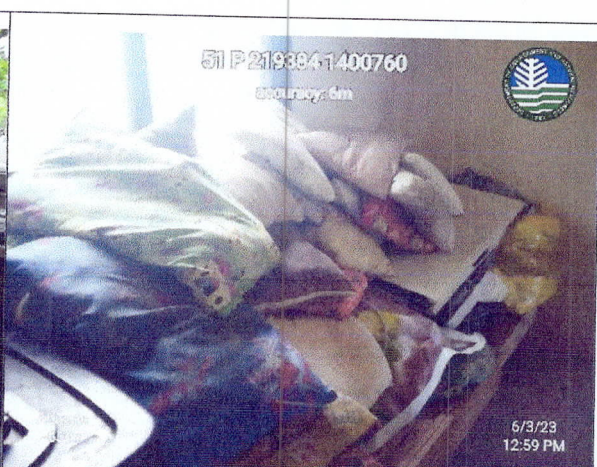
**Annex D.** Photo-documentation of the maintenance activities conducted from January 1 to March 15, 2023.

 <p>51 P 219193 1400692 accuracy: 1m Altitude 2 m 4/11/23 19:57</p>	 <p>51 P 257471 1419886 accuracy: 5m Altitude 47 m 4/20/23 10:05 AM</p>
<p>Park Rangers changing the oil of speed boat/patrol boat on 11 April 2023.</p>	<p>Park Ranger painting the outrigger of M/Bca Jerlyn on 20 April 2023.</p>
 <p>51 P 219334 1400806 accuracy: 3m Altitude 87 m 4/17/23 4:16 PM</p>	 <p>GPS connecting... 51 P 257471 1419886 accuracy: 5m Altitude 34 m 6/10/23 7:04 AM</p>
<p>Park Rangers inspecting the utilities on 17 April 2023.</p>	<p>Park Ranger inspecting the remaining diesel on 10 June 2023.</p>
 <p>12°39'32"N, 120°24'59"E accuracy: 8m Altitude 54 m 6/12/23 7:33 AM</p>	 <p>51 P 257471 1419886 accuracy: 5m Altitude 25 m 4/20/23 3:46 PM</p>
<p>Newly painted M/Bca Jerlyn on 12 June 2023.</p>	<p>Maintenance of M/Bca Jerlyn by the Park Rangers on 20 April 2023.</p>





Park Rangers repairing the cover of the speed boat on 3 June 2023.



Inspection of the stored pillows at the Ranger Station on 3 June 2023.



Inspection of the dive gears on 5 June 2023.



Park Ranger cleaning the hull of M/Bca Jerlyn on 4 April 2023.





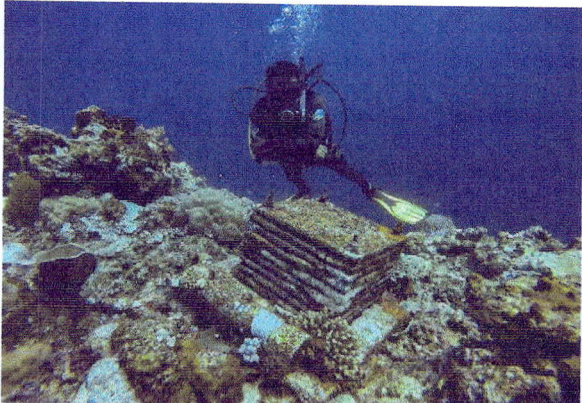
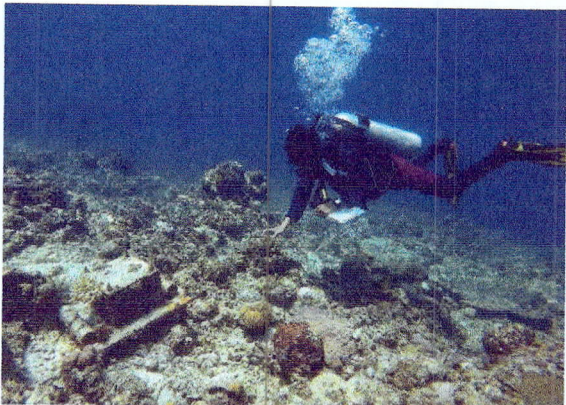
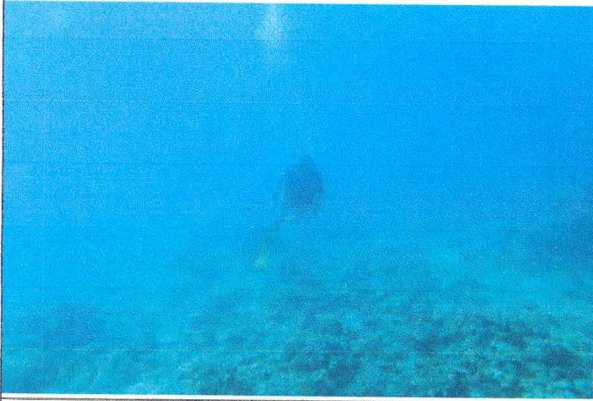
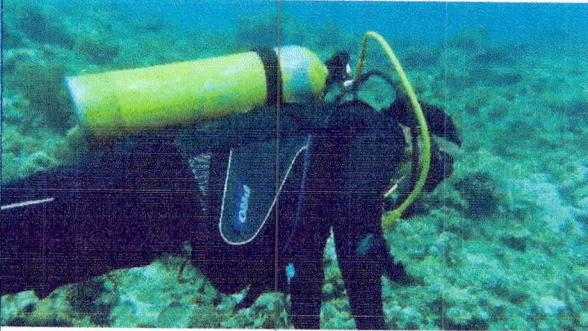
Park Ranger scrubbing the speed boat on 13 June 2023



Park Rangers on inspection and maintenance on 14 April 2023.




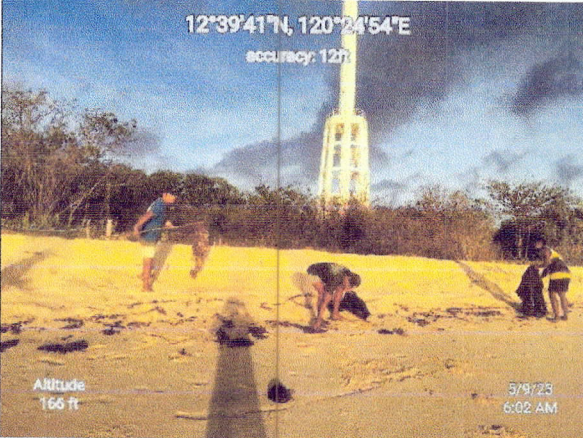




**Annex E.** Photo-documentation of the ARMS and CoTS monitoring activity conducted on 19-26 May 2023.

	
<p>Boat Crew Jaysrael Urieta (right) operating the speedboat during the CoTS surveillance and ARMS monitoring activity</p>	<p>CMEMP Extension Officer Jane Frances Senosa documenting the area for possible CoTS and bleaching event in Station 8 on 20 May 2023.</p>
	
<p>Park Maintenance Foreman Roberto Beringuela inspecting one of the ARMS in Binanggaan</p>	<p>Boat Captain Mark Dennis Barretto near another ARMS unit in Binanggaan</p>
	
<p>Park Maintenance Foreman Roberto Beringuela searching for CoTS and bleached corals along the transect line at Station 1 on 19 May 2023.</p>	<p>Park Ranger Efraim Pagador checking for possible CoTS and bleached corals in the vicinity of Station 8 on 20 May 2023.</p>



**Annex F. Photo-documentation of coastal clean-up activities conducted from January to March 2023.**

 <p>12°39'02"N, 120°25'0"E accuracy: 1m Altitude 49 m 6/9/23 10:10 AM</p>	 <p>12°39'32"N, 120°25'0"E accuracy: 3m 6/11/23 9:46 AM</p>
<p>Clean up of Apo Menor by Team Bull Shark on 9 May 2023.</p>	<p>Park Rangers sweeping off garbage around the Ranger Station on 11 June 2023.</p>
 <p>12°40'6"N, 120°26'23"E accuracy: 2m Altitude 45 m</p>	 <p>12°39'41"N, 120°24'54"E accuracy: 12m Altitude 166 ft 5/9/23 6:02 AM</p>
<p>Park Rangers removing entangled ropes at Apo Menor on 9 June 2023.</p>	<p>Park Rangers from cleaning the front of the lighthouse on 9 May 2023.</p>
 <p>51 P 219387, 1400822 accuracy: 2m Altitude 1 m 6/12/23 09:35</p>	 <p>12°40'25"N, 120°23'24"E accuracy: 2m Altitude 4 m 6/9/23 9:15 AM</p>
<p>Park Rangers sorting trash on 12 June 2023.</p>	<p>Team Bull Shark with their collected trash around Apo Menor on 9 June 2023.</p>





<b>Capacity Building</b>									
a. Attendance to Enhancement Trainings on NIPAS MPA Capacity Building Program	no. of participants that completed the scheduled annual training								
<b>Apo Reef Natural Park (ARNP)</b>									
<b>Technical Assistance on ICM</b>									
a. Mainstreaming of ICM to the CLUPs of the LGUs within the major watershed (river systems) contributing to the NIPAS MPAs	no. of LGUs provided with technical assistance towards mainstreaming of ICM to their existing CLUPs	Occidental Mindoro	1	Q2-Q3	NIMCAP Building Program for Sustainable Tourism Report submitted on May 30, 2023	100%	100%	60	33,364
b. TA to LGUs on coastal and marine related concerns	no. of LGUs/NGOs/Stakeholders assisted	Occidental Mindoro	1	Q2-Q3					
c. TA on MPA Networking of LGU managed MPAs	no. of MPAN member LGUs assisted on MPAN Network in different levels of networking	Saca MPAN (Sablayan and Calintaan, Occidental Mindoro)	2	Q1-Q4					
<b>Social Marketing and Mobilization/Communication, Education and Public Awareness (CEPA)</b>									
a. Conduct of Midterm KAP	no. of Pas conducted with Midterm KAP Assessment								
<b>Apo Reef Natural Park (ARNP)</b>									
b. Conduct of regular special events related to coastal and marine protection, conservation and management	no. of special events conducted with report submitted	Sablayan, OccMin (CENRO Sablayan)	1	Q3					
<b>Program Support and Management</b>									
a. Hiring of CMEMP Extension Officers	no. of Coastal Extension Officers hired to include database encoder	Occidental Mindoro	4	Q2-Q3					
<b>Apo Reef Natural Park (ARNP)</b>									
b. Hiring of Boat Captain and/or Crew	no. of boat captain and/or crew hired	Sablayan, OccMin (CENRO Sablayan)	1	Q1-Q4	Accomplished per MOV/Memo dated 1 June 2023 transmitted by PENRO to Regional office on 6 June 2023. Summary: CMEMP Extension Officer for the duration of May 2 - June 30, 2023. Subject for renewal for Q3-Q4. Brief Hired one (1)	100%	100%	324	118,345
<b>Apo Reef Natural Park (ARNP)</b>									
		Sablayan, OccMin (CENRO Sablayan)	2	Q1-Q4	Accomplished per MOV/Memo dated 1 June 2023 transmitted by PENRO to Regional office on 6 June 2023. Summary: CMEMP Extension Officer for the duration of May 2 - June 30, 2023. Subject for renewal for Q3-Q4. Brief Hired one (1)	200%	100%	600	221,59
									36.93%

Prepared by

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Reviewed and

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PASU, ARNP