

GENERAL MANAGEMENT PLAN OF

APO REEF NATURAL PARK

(2022 - 2031)

Sablayan, Occidental Mindoro

TABLE OF CONTENTS

	Page
Table of Contents	i
List of Tables	ii
List of Figures	iii
Acronyms	V
Executive Summary	1
Description of the Protected Area	3
A. Biophysical Profile	3
A.1. Physical Environment	3
A.2. Terrestrial Ecosystems	5
A.3. Marine Ecosystems	6
I. Socio-Cultural and Economic Profile	21
II. Current and Proposed Programs and Projects	26
III. Threats, Issues, and Concerns	29
Environmental	29
Economic	31
Institutional	33
Organizational	34
IV. Map Information	34
V. Situational Analysis	42
VI. Vision, Goals, Objectives	47
Vision	47
Goals	47
Objectives	48
VII. Management Strategies, Interventions, and Activities	48
A. Management Zoning	48
 Strict Protections Zone (SPZ) 	49
2. Multiple Use Zone (MUZ)	52
3. Buffer Zone (BZ)	53
VIII. Management Programs	54
IX. Human Resources and Institutional Framework	65
Organizational and Management Structure	65
X. Logical Framework	72
XI. Financial Plan	77
XII. Management Plan Implementation	92
XIII. Monitoring and Evaluation	130
References	132
Annexes	134

LIST OF TABLES

Page	
Table 1. Seagrass species in Apo Reef Natural Park (REECS, 2017)	
Table 2. Mangrove species in Apo Reef Natural Park (REECS, 2017) 18	
Table 3. Sablayan Population Projection by Barangay, 2015 -2042 (Source: PSA) 22	
Table 4. Stakeholder Matrix41	
Table 5. Area of the Management Zones of ARNP49	
Table 6. ARNP Management Strategies and Program56	
Table 7. Summary of Management Focus	
Table 8. Membership of the PAMB of ARNP66	
Table 9. Logical Framework72	
Table 10. Financial Plan of ARNP for 2022 to 2031	
Table 11. Summary per Line Item90)
Table 12. Management Plan Implementation (Schedule of Implementation)92	
Table 13. Implementing Plan with budget (According to BMB Technical Bulletin 2016- 08)	
Table 14. Projected Budget Allocation 2022-2031110	
Table 15. Sources of Fund	
Table 16. Estimated Expenses versus Available Funds	
Table 17. Identified Possible Financial Solution	

LIST OF FIGURES

l en la companya de	Page
Figure 1. Location map of Apo Reef Natural Park	3
Figure 2. Map of Apo Reef Natural Park	4
Figure 3. Estimated relative cover (%) of major life form categories at the 15 areas.	7
Figure 4. Estimated percentage cover (%) of hard corals at the 15 areas assessed/monitoring stations at the ARNP (REECS, 2017)	8
Figure 5. Estimated mean cover of other invertebrate fauna in the 15 monitoring star in ARNP (REECS, 2017).	
Figure 6. Estimated mean densities and distribution of macroinvertebrates in the 15 monitoring stations in ARNP (REECS, 2017)	
Figure 7. Estimated mean cover of algal lifeform in the 15 monitoring stations in ARN (REECS, 2017)	
Figure 8. Total estimated species richness of fish (species/1,250 m2) in the 15 monitoring stations of ARNP (REECS, 2017).	12
Figure 9. Mean species richness of fish (species/250 m2) and the composition of indicator, major and target species in the 15 monitoring stations of ARNP (REECS, 2017)	13
Figure 10. Mean estimated abundance of fish (individuals/250 m2) and the composi of indicator, major and target species in the 15 monitoring stations of ARNI (REECS, 2017)	Ρ
Figure 11. Size frequency distribution (individuals/1,250 m2) of target fish species in 15 monitoring stations of ARNP (REECS, 2017)	
Figure 12. Temporal changes in mean estimated fish species richness (species/250 at the ARNP (REECS, 2017	
Figure 13. Map showing reported dugong sightings	19
Figure 14. Map showing reported dolphin sightings	20
Figure 15. Map showing reported whale sighting	20
Figure 16. Map showing reported marine turtle sightings	21
Figure 17. Map showing biodiversity of ARNP.	36
Figure 18. Map showing biodiversity of the Apo Island	36

Figure 19. Trend in tourist arrivals in ARNP from 2016 – September 2019 (Source: PAMO, 2020)	. 37
Figure 20. Graph showing the tourists visitors to ARNP in 2019	. 38
Figure 21.Graph showing the number of male and female of local and foreign visitors	. 38
Figure 22. Graph of Income of ARNP from various fees in 2019	. 39
Figure 23. Gate receipts from different types of ARNP visitors	. 39
Figure 24. Vulnerability map of ARNP (Foresterei, 2018)	. 40
Figure 25. Map showing threats to Apo Reef Natural Park	. 41
Figure 26. Map showing threats to Apo Island.	. 41
Figure 27. Old ARNP Management Zones as Depicted in the 2015 -2020 Ecotourism Management Plan.	
Figure 28. Map showing Management Zones of ARNP	. 51
Figure 29. Map showing Management Zones of Apo Island	. 51
Figure 30. REECS and WWF assessment sites (Sites 1, 2, 6, 7, 9, 11 of REECS and 5B, 3A, and 3B of WWF have the highest percent coral cover)	
Figure 31. Map of Diving Sites of ARNP.	. 53
Figure 32. Map of Diving Sites near Apo Island	. 54
Figure 33. Current Organizational Structure of the PAMO	. 69
Figure 34. Proposed Organizational Structure of the PAMO	. 70
Figure 35. Organizational structure of TF MARLEN	. 71

ACRONYMS

AA Algal Assemblages
ARNP Apo Reef Natural Park

BDFE Biodiversity-Friendly Enterprise

BFAR Bureau of Fisheries and Aquatic Resources

BMB Biodiversity Management Bureau
BMS Biodiversity Monitoring Stations

CA Calcareous Algae

CBMS Community Based Monitoring System

CCC Climate Change Commission

CEPA Communication, Education and Public Awareness

CLUP Comprehensive Land Use Plan

COTS Crown of thorns

COVID Corona Virus Disease
CSO Civil Society Organization

DCA Dead Corals

DENR Department of Environment and Natural Resources
ENIPAS Expanded National Integrated Protected Area System

FGD Focus Group Discussion
GAA General Appropriations Act

GIZ German Agency for International Cooperation

GMP General Management Plan

HCC Hard Coral Cover
HR Human Resource
IAS Invasive Alien Species

IPAF Integrated Protected Area Fund IRA Internal Revenue Allocation

IRR Implementing Rules and Regulations

IUCN International Union for Conservation of Nature

LGBTQI Lesbian, Gay Bisexual, Transgender, Queer, and Intersex

LGU Local Government Unit

MA Macroalgae

MARLEN Marine and Apo Reef Law Enforcement for Nature MBCFI Mindoro Biodiversity Conservation Foundation Inc.

METT Management Effectiveness Tracking Tools MIMAROPA Mindoro, Marinduque, Romblon, Palawan

MPA Marine Protected Areas

NGO Non-Government Organization

NIPAS National Integrated Protected Area Systems

NSO National Statistics Office

ODA Official Development Assistance

OF Other Fauna
PA Protected Area

PAMB Protected Area Management Board
PAMO Protected Area Management Office
PAMP Protected Area Management Plan
PASu Protected Area Superintendent

PCG Philippine Coast Guard

PES Payment for Ecosystem Services

PNP Philippine National Police
PO People's Organization

PSA Philippine Statistics Authority

RA Republic Act

RED Regional Executive Director

REECS Resource, Environment and Economics Center for Studies

SCUBA Self-Contained Underwater Breathing Apparatus
SEAMS Socio-Economic Assessment and Monitoring System

SPZ Strict Protection Zone

SRPAO Survey and Registration of Protected Area Occupants

TF Task Force

TNA Training Needs Assessment

UNWTO United Nation World Tourism Organization

WWF World Wildlife Fund

EXECUTIVE SUMMARY

On September 6, 1996, Apo Reef Natural Park (ARNP) with three main islands, namely, Apo Island, Apo Menor (Binanggaan Island), and Cayos del Bajo, was declared as a protected area by Presidential Proclamation No. 868. It has a 34 km² coral atoll formation with an area of 27,469 hectares, 15,799.23 of which forms the core zone and 11,699.77 forms the buffer zone.

Its beach vegetation has a moderate species diversity value of 2.53 and serves as a habitat for endemic and migratory species of birds, including the near threatened Mantanani scops owl (*Otus mantananensis* Sharpe 1892) and Nicobar pigeon (*Caloenas nicobarica* Linnaeus 1758). Its coral reef areas are also diverse, despite the poor to fair status. A total of 45 hard coral genera classified under 14 families were recorded in 2017 by REECS (2017). Overall, *Acropora* and *Porites* remained as the major reef builders of ARNP and comprised more than half of the recorded corals during the 2017 assessment.

Being second largest contiguous coral reef in the world¹, Apo Reef Natural Park's source of income is attributed to the influx of tourists. However, despite its huge potential, it is also faced with threats, such as coral bleaching brought about by climate change, presence of invasive alien species, waste management concerns, and illegal entry of fishers despite its being a no-take zone.

Section 4 of ENIPAS (RA 11083)² amended Section 5 of the NIPAS Law (RA 7686) on the establishment and extent of the Protected Area System. Under "a.1" of Section 5, Apo Reef Natural Park, located in Occidental Mindoro, is one of the established Protected Areas with an area of 15,799.23 ha. RA No. 11083, likewise, amended Section 7 of RA No. 7586 mandating that "within one (1) year from the establishment of the protected there shall be a management plan formulated which shall serve as the basic long-term framework plan for the management of the protected area and guide in the preparation of its annual operations plan and budget. Furthermore, the "management plan shall, at the minimum, promote the adoption and implementation innovative management techniques including, when necessary, zoning, buffer zone management, habitat conservation and rehabilitation, diversity management, community organizing and development, socioeconomic and scientific researches, site-specific policy development, climate change adaptation and mitigation, disaster risk reduction and management, waste sewerage and septic management, and gender and development, among others".

This General Management Plan is guided by the vision that aims to establish a "Well

¹ Apo Reef Natural Park, Description. https://whc.unesco.org/en/tentativelists/5033/

² RA No. 11083. 2017. "An Act Declaring Protected Areas and Providing for Their Management, Amending for This Purpose Republic Act No. 7586, Otherwise known as the National Integrated Protected Areas System (NIPAS) Act of 1992". July 24, 2019.

maintained ecosystem by committed stakeholders for improved biodiversity towards a more sustainable marine protected area." The Plan aims to:

- (1) Provide a roadmap to maintain and protect the integrity and quality of habitats in the park.
- (2) Guide the PAMO in implementing and monitoring activities related to Park management.
- (3) Establish strong and effective linkages with the LGU Sablayan and other adjacent coastal LGUs, including local stakeholders concerned with coastal and marine resources protection and conservation; and
- (4) Empower women and men Park stakeholders through ensuring their participation in Park governance and implementation of alternative biodiversity-friendly enterprises.

Through an intensive review of existing reports and documents and conduct of a planning workshop, issues and strategies on major sectors/clusters are identified, namely: environmental, economic, social, legal, institutional and infrastructure.

This updated General Management Plan, as mandated in the ENIPAS Law, addresses the issues on biological pollution brought about by the presence of invasive alien species, waste management, research and capacity gaps, linkages with NGOs, POs, academe and relevant government agencies, climate change adaptation, insufficient biodiversity-friendly enterprises, institutional/organizational development of the Protected Area Management Office and the PAMB, and the need for sustainable financing mechanisms.

Through this General Management Plan, it is hoped that ARNP will continue to thrive and provide the ecosystem services for its surrounding communities.

I. DESCRIPTION OF THE PROTECTED AREA

Apo Reef Natural Park is located around 33 kilometers off the coast of Sablayan, Occidental Mindoro, and with reef areas that span more than 34 square kilometers, it is considered as the second largest contiguous coral reef in the world, next to the Great Barrier Reef.

In 1980, Apo Reef was designated as a Marine Park through Presidential Proclamation No. 1801. It was also declared as a tourist zone and marine reserve by the Sangguniang Bayan of Sablayan, Occidental Mindoro in 1983. By virtue of Republic Act 7586, ARNP was listed as an important component of the National Integrated Protected Areas System (NIPAS) in 1992. In 1996, it was officially proclaimed as a protected area under the natural park category by Presidential Proclamation No. 868. (ARNP Profile, 2011).

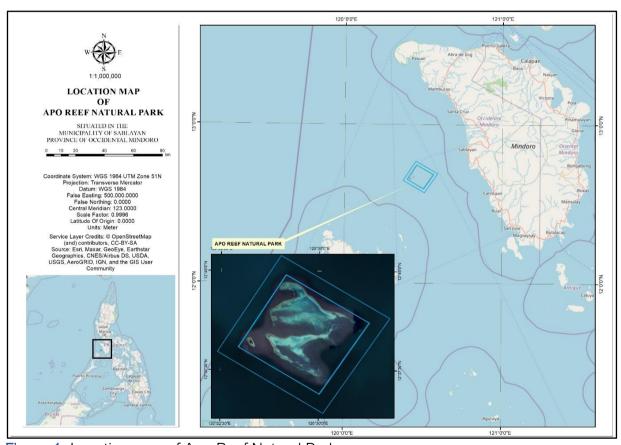


Figure 1. Location map of Apo Reef Natural Park

A. Biophysical Profile

A.1. Physical environment

Apo Reef is a 34 km² coral atoll formation with an area of 27, 469 hectares, 15,799.23 of which forms the core zone. The reef comprises two areas divided with a 30-meter-

deep channel. The reef area spans approximately 26 kilometers from north to south and about 20 kilometers from east to west. It has three main islands, namely, Apo Island, Apo Menor (Binanggaan Island), and Cayos del Bajo (Tinankapan) (Figure 2). Apo Island has a total area of 22.67 hectares and is the largest of the three islands, wherein a lighthouse constructed during the Spanish colonial period is located. Apo Menor, also known as Binangaan Island, covers a total of 2.63 hectares and is a rocky limestone island with few vegetation composed of mangrove and beach tree species. Cayos del Bajo is the smallest island which has a total area of 0.28 hectares and is composed of flat coralline rock formation with no vegetation (ARNP Profile, 2011).

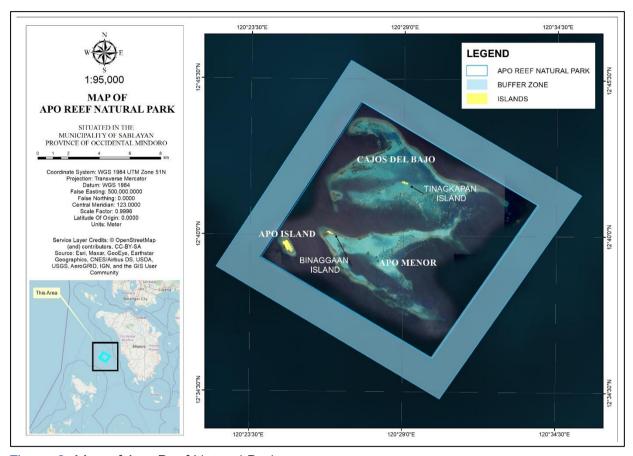


Figure 2. Map of Apo Reef Natural Park

The ARNP lagoons are bounded by narrow reef platforms. The sand bottom depth between corals of North Lagoon is 1 to 3 fathoms and the southern part is boat passage open to the channel by discontinuous mounds of coral growth. The south lagoon is deeper with multi-level sand bottom and isolated coral patches from 1/4 to 14 fathoms deep. A narrow channel opens to the southeast side of the reef that declines gradually from 1-45 fathoms extending to the boundary line of the ARNP.

A channel with a depth of 5-27 fathoms and measuring approximately 6 nautical miles long and 1 nautical mile wide separates the two lagoons. The channel is open to the West while the eastern side of the channel has numerous coral heads. It is

characterized by reef walls, drop- offs, reef flats, islands, shorelines, tidal pools, and rocky intertidal areas. (ARNP Profile, 2011)

The north lagoon is an enclosed triangular coral reef platform partly exposed during low tide. It is relatively shallow with depths of about 2-10 m. Coral mounds proliferate the sandy substrate of the lagoon especially at the southeast end. (ARNP Profile, 2011)

The south lagoon is an inverted triangular coral platform enclosed on two sides and is about 30 m in depth. Marking the west point where the two platforms meet is Apo Menor Island, a low coralline and mangrove islet. The southeast portion of the south lagoon is an "open back reef" which is sloping and has depths of 10–20 m. Steep-sided coral mounds with shallow flattop and bases with a diameter of 20-25 m proliferate here. Off the middle of the southwest coral platform, about 1/3 nautical mile due west is a steep mound called Bajora Cinco, about 1 km in diameter with a steep west side and a sloping east side with a uniform 10 m depth. (ARNP Profile, 2011)

The mangrove and beach forests surrounding the islands serve as sanctuaries for migratory birds and shorebirds feeding on the rich coastal and marine ecosystems of Apo Reef, which are inhabited by various species of fish, sharks, rays, and sea turtles. (ARNP Profile, 2011)

Due to its pristine ecosystems, ARNP is considered as a biodiversity hotspot and is currently an important tourist destination in the province and municipality and has brought revenues to the local government as well as to the local community. To ensure that the increasing tourist arrivals will not pose negative impacts to the natural environment, it was stipulated in the draft ARNP Ecotourism Management Plan (2015 – 2020) that the carrying capacity for the recreational zone is 104 and 129 persons per day in the terrestrial and marine areas, respectively.

The ARNP falls under the Type I climate according to the modified Corona's classification. It is characterized by two pronounced seasons - dry from November to April and wet during the rest of the year. Maximum rain period is from June to September. (PAGASA, 2010).

A.2. Terrestrial Ecosystems

The beach vegetation of Apo Reef Island is of the typical *pes-caprae* association mostly consisting of herbaceous plants and creepers on its seaward side and *Barringtonia* association on the landward areas.

In 2017, a total of 107 mature individuals were accounted for. *Ipomoea pes-caprae*

(L.) R, Br. along with *Heliotropium, Pandanus tectorius* Parkinson ex Du Roi, *Canavalia maritima* (Aubl.) Thouars, and *Crinum asiaticum* L. were found in the accreting shorelines of Apo Reef Island. On the other hand, mixed species could be found on the landward portions of the island. Species from the beach vegetation has an average diameter at breast height (dbh) of 14.12 cm and an average height of 4.5 meters. *Terminalia catappa* L. has the largest dbh among the species recorded at the sampled beach vegetation.

The diversity index revealed a value of 2.53, which suggests that the beach vegetation of the island has a moderate species diversity. *Pandanus tectorius* Parkinson ex Du Roi has the highest number of mature individuals (25) across the sampled plots dominating the seaward portion of the island. This was followed by *Talipariti tiliaceum* (L.) Fryxell, *Terminalia catappa* L., and *Premna serratifolia* L. with 16, 11, and 10 individuals, respectively.

In terms of avian species, a total of thirty species of birds belonging to 21 families were recorded in 2017 by REECS. Majority of the observed birds are migratory species. Among them, the Chestnut-cheeked Starling (*Agropsar philippinensis* Forster, JR, 1781) was the most abundant with 35 observed individuals. One near endemic and endemic species of birds were also observed, namely, the Mantanani Scops owl (*Otus mantanensis* Sharpe 1892) and the Philippine pied fantail (*Rhipidura nigritorquis* Vigors 1831), respectively. The Mantanani scops owl and Nicobar pigeon were both classified as near threatened species under the IUCN Red List.

Only one native terrestrial mammal species was reported from ARNP. The Common Rousette (*Rousettus amplexicaudatus* É. Geoffroy, 1810) was reported seasonally feeding on *Terminalia catappa* L. fruits on Apo Island. Two alien invasive rodents – Common Brown Rat (*Rattus norvegicus* Berkenhout 1769) and Oriental House Rat (*Rattus tanezumi* Temminck 1844) were reported on Apo Island possibly introduced accidentally as stow-aways on boats ferrying humans and supplies to the park (MBCFI, 2015).

A.3. Marine Ecosystems

a. Coral Reefs

The assessment conducted by REECS in 2017 showed that the overall mean hard coral cover in ARNP was estimated at 21.2%, which was higher than the 2011 estimate of 18.8%, but still falls under the POOR category. In general, branching, and massive corals dominate the areas assessed. As previously reported, the broad scale damage brought about by the series of disturbances started with the

Acanthaster outbreak and destruction of standing dead coralline structures by typhoon Caloy in 2006 resulted in the more or less homogenization of the reef scape of ARNP that year. The disturbance caused large scale loss of branching corals that resulted in the significant decline in the overall physical complexity of the reefs in the park. It is good to note, however, that branching forms showed recovery and has comprised a large percentage of hard coral community in the 8 areas assessed. (REECS, 2017). Figure 3 shows the estimated relative cover (%) of major life form categories at the 15 areas.

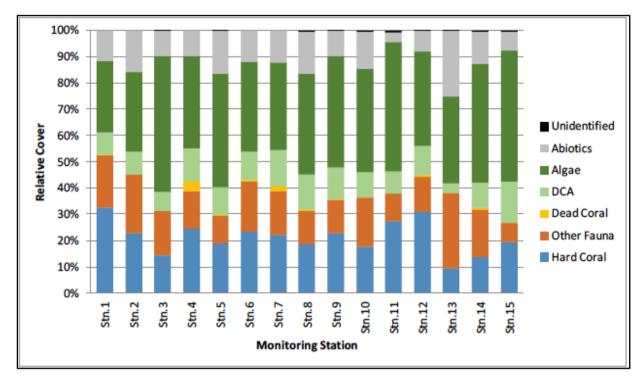


Figure 3. Estimated relative cover (%) of major life form categories at the 15 areas

Despite the poor to fair status of the reefs, hard corals in ARNP remained diverse. A total of 45 hard coral genera classified under 14 families were recorded in 2017 by REECS. Overall, *Acropora* and *Porites* remained as the major reef builders of ARNP and comprised more than half of the recorded corals during the 2017 assessment. Other important hard corals in ARNP were *Montipora* and *Favites*. These corals also yielded relatively high mean cover and were seen at all the stations surveyed. *Pocillopora* also had a relatively high mean cover but were recorded only in 13 of the 15 stations assessed. The remaining hard corals had low mean cover and were patchy in distribution. A summary of the percentage cover of hard corals in ARNP is seen in Figure 4.

In a similar assessment conducted by WWF in 2017 in five monitoring sites (near REECS' stations 3, 6, 7, 10, 14), it was found that the average hard coral cover was 17.4%, which has little difference between REECS' 18%.

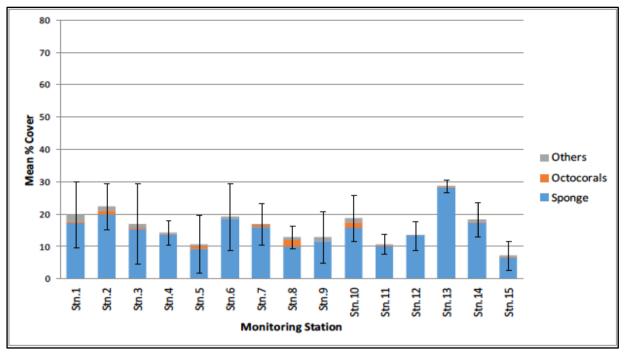


Figure 4. Estimated percentage cover (%) of hard corals at the 15 areas assessed/monitoring stations at the ARNP (REECS, 2017)

Excluding all hard corals, all other invertebrate fauna recorded were classified under the Other Fauna (OF) category. The mean cover of other invertebrate fauna was different across stations and ranged from 7.14% to 28.6%. The relative importance of this group hinged on the relatively high mean cover of sponges across monitoring stations. Sponges of different morphological features and sizes (*Xestospongia*, *Carterispongia*) were consistently recorded at different reef areas surveyed. Other important invertebrate fauna observed in the survey include forameniferans, hydroids, zoanthids, clams, sea stars, and tunicates. *Acanthaster planci* L. 1758 was observed in one of the stations. (See Figure 5).

Results of the detailed macroinvertebrate survey showed a diverse and relatively patchy distribution of macroinvertebrates within a station (Refer to Figure 6). Composition and distribution of macroinvertebrates varied within and between transects. In general, echinoderms comprised more than half of the macroinvertebrates in the areas assessed. In total, 36 macroinvertebrates classified under 30 families and 5 phyla were identified. The long- spined sea urchin (*Diadema*), feather star (*Comaster*), and Christmas tree worm (*Spirobranchus*) were consistently found in all areas.

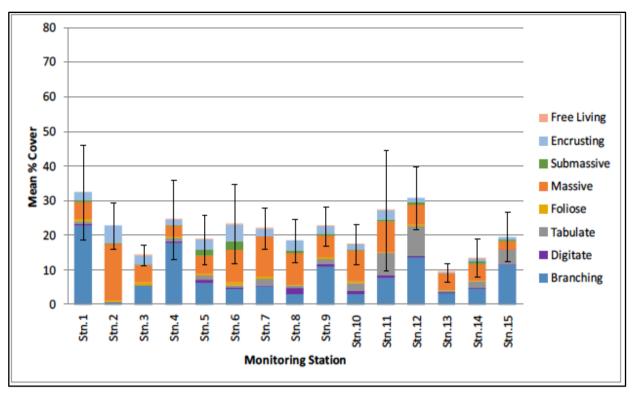


Figure 5. Estimated mean cover of other invertebrate fauna in the 15 monitoring stations in ARNP (REECS, 2017)

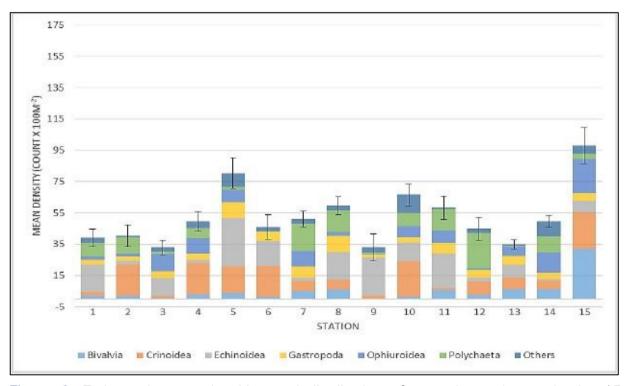


Figure 6. Estimated mean densities and distribution of macroinvertebrates in the 15 monitoring stations in ARNP (REECS, 2017)

Algal assemblages (AA), calcareous algae (CA), macroalgae (MA), and those growing on recently dead corals (DCA), were combined in under the Algae class. Algal growth in ARNP were mostly sparse (DCA) and low relief, dense algal growth forms (AA). The remaining algal types covered a relatively small section of the substrate across the reef areas assessed. Dense algal growths hinder coral recruitment, and in addition, their opportunistic nature and fast growth rates results in the smothering of hard coral recruits in the reef areas of the ARNP. When this occurs on a large scale, it may impact the overall resilience of the reef in the face of major perturbations Figure 7.

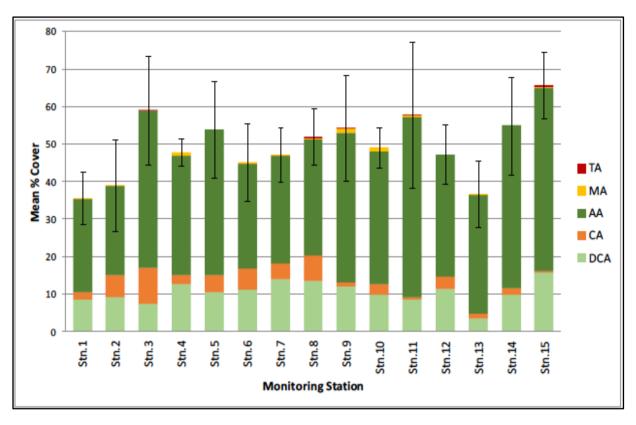


Figure 7. Estimated mean cover of algal lifeform in the 15 monitoring stations in ARNP (REECS, 2017)

The abiotic components of the monitoring stations were generally low and consistent across stations. The mean abiotic cover ranges from 3.88% to 24.94%. In general, loose abiotic such as rubble, sand, and silt comprised the abiotic recorded.

The benthic community of ARNP have shown signs of recovery from the devastating effects of the 2006 COTS outbreak and Typhoon Caloy, albeit slowly. In the last quarter of 2016 however, the reef was hit by warm sea surface temperature and corals were reported to have bleached greatly in certain parts of the reef. Nonetheless, the coral reef community, at least in the monitoring stations.

wherein coral cover decreased from 2011. Similar trends of improvement were also observed in the Northern and Southern sections of Apo Reef. It was observed that the eastern reef monitoring stations which are relatively closer to mainland Sablayan has poor coral cover. More than monsoonal patterns and other natural perturbations, management and protection efforts could have more influence on the current reef conditions. Since this eastern side is more difficult to monitor, illegal fishing activities in this area could pose great threats on the coral reefs. It is also noticeable that recovery is more prevalent in stations closer to the ranger station. The results highlight the importance of protection in the overall recovery and conservation of the coral reefs at ARNP.

The WWF assessment in 2017 validates the REECS findings on coral bleaching. Coral colonies had become overgrown with algae on their surfaces due to being partially or completely bleached in 2016 due to increased sea surface temperatures. Although bleaching appeared to be the main cause for low hard coral cover, the sites assessed had large amounts of coral rubble due to storm or wave damage. In addition to bleaching and storm damage, pollution (solid and liquid wastes), anchor damage, and predation (by COTS) lead to mortality. The presence of fish nets and anchor damage suggests that fishing is still rampant in ARNP despite management efforts. Despite these, however, some of the surveyed coral colonies still have tissue within their skeleton ad have not been overgrown with algae, which means that there is still possibility of recovery. (WWF, 2017)

b. Reef Fish Communities

A total of 313 species of reef fish distributed among 42 families were identified in the 15 monitoring stations. The total species richness estimates were high and ranged from 127 species/1250m² up to 168 species/1250 m² (station 2 to station 8) (Figure 8).

The 313 species listed were composed of 152 major or ecologically important species. The major fish category was largely represented by 49 species under Pomacentridae (damselfishes) and 41 species under Labridae (wrasses). Other notable families under the major fish category were Pomacanthidae (angelfishes, 8 species), Chaetodontidae (butterfly and bannefishes, 7 species), Balistidae (triggerfishes, 6 species), Blennidae (blennies, 6 species), Monacanthidae (filefishes, 6 species), and the sub-family Anthidae under Serranidae (groupers and basslets, 5 species). Other families with less than five major species included

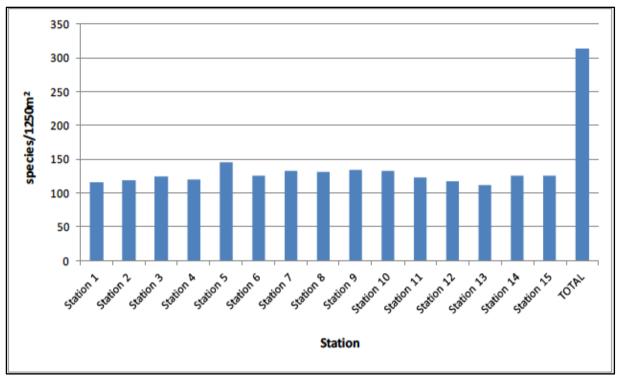


Figure 8. Total estimated species richness of fish (species/1,250 m2) in the 15 monitoring stations of ARNP (REECS, 2017)

Acanthuridae (surgeonfishes), Apogonidae (cardinal fishes), Aulostomidae (trumpetfishes), Cirrhitidae (hawk fishes), Diodontidae (porcupine fishes), Gobiidae (gobies), Ostraciidae (box fishes and cow fishes), Pinguipedidae (sandperches), Plotosidae (catfishes), Pseudochromidae (dottybacks), Ptereleotridae(dartfishes), Scorpaenidae (scorpion fishes), Tetraodontidae (puffer fishes), and Moorish idol (*Zancluscornutus*) under Zanclidae.

The diversity of reef-health indicator species in the assessed areas was remarkable, the 26 indicator species were made up of 23 Chaetodontidae and 3 Labridae. The overall mean fish species richness at Apo Reef was at 55 ± 11 species/ $250m^2$ (Figure 9). Nine of the 15 monitoring stations had mean species richness estimates below the overall mean of 55, while 6 stations had mean species richness higher than the mean total. Overall, the major fish species were slightly more diverse than target species. (REECS, 2017).

Spatial pattern in terms of species richness indicated that the monitoring stations located at the island and at the reef system south of the channel had higher species richness compared to those stations located at the reef system north of the channel and farther away from the island.

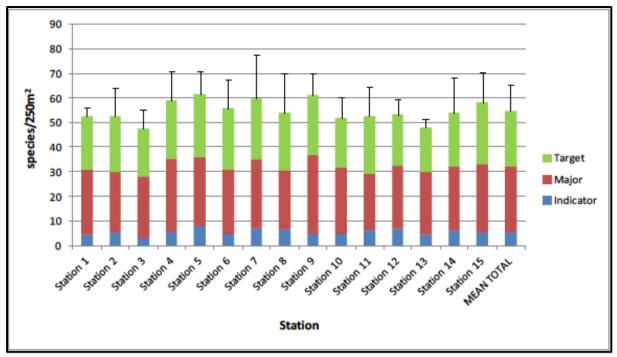


Figure 9. Mean species richness of fish (species/250 m2) and the composition of indicator, major and target species in the 15 monitoring stations of ARNP (REECS, 2017)

The mean total estimated fish abundance from the 15 monitoring stations was 352 (±150) individuals/250 m² (Figure 10). Fish abundance ranges from 225 to 505 individuals/250m².

Non-commercial major fish species were numerically dominant over target and indicator species. There was an estimated mean total of 197 individuals of major fish species per 250 m²of reef area surveyed, and 141 individuals of target species. In terms of their total accumulated abundance, the most important major fish species identified belonged to Pomacentridae. The top five dominant major species include the bicolor chromis, ternate chromis, princess damsel, Vanderbilt's chromis, and the scaly damsel. Altogether, these major species made up about 20% of the total fish count at Apo Reef.

Among the target species listed, the top 5 in terms of their total counts were the surgeon fishes together with the blustreak fusilier and the bullethead parrot fish, which comprised about 20% of the total fish count in the area. The most abundant among the indicator species were the butterfly fishes.

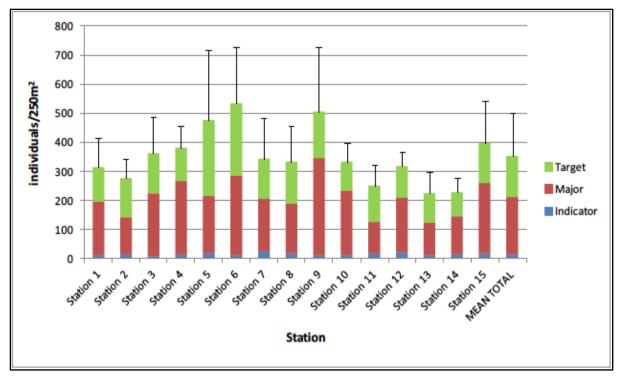


Figure 10. Mean estimated abundance of fish (individuals/250 m2) and the composition of indicator, major and target species in the 15 monitoring stations of ARNP (REECS, 2017)

The dominance of butterfly fish from the REECS assessment coincides with that of WWF assessment, which suggests good coral reef health and diversity, despite the poor hard coral cover. Invertebrates such as giant clams and lobsters are also present during assessment (WWF, 2017).

Fish biomass is a function of both the size and number of fish. Target fish contributed a mean total biomass of about 30 kg/250m². In terms of size classes, target fish between 11 and 20 cm in total length were the most abundant (Figure 11). Although major fish species are generally smaller in size relative to most target species, several major fish also had considerable contributions towards biomass.

Monitoring surveys of the fish communities at the 15 established monitoring sites have been carried out since 2003. Temporal data show that overall mean total species richness of fish at ARNP has remained fairly consistent since 2003 (Figure 12). Estimates of mean total fish species since 2003 has ranged from 79 to 53 species/250m². While the estimate in 2017 indicated a drop in mean species counts since 2011, it is within the range of estimates since 2003 and consistent with the estimate in 2006.

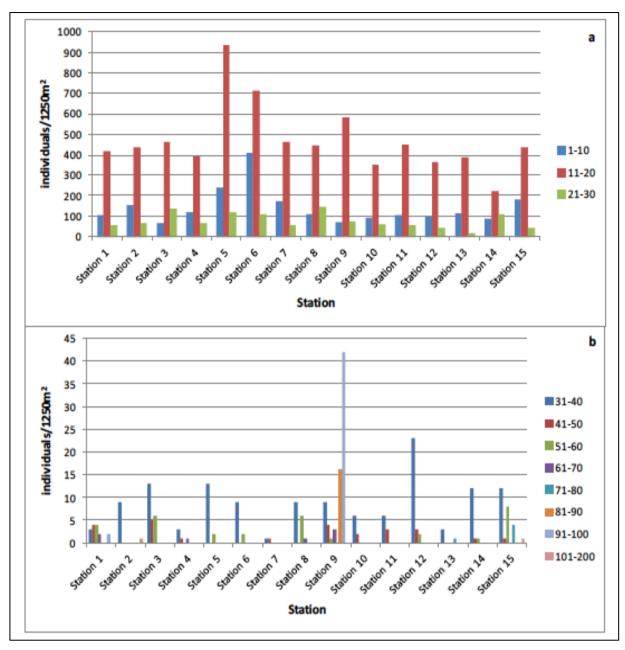


Figure 11. Size frequency distribution (individuals/1,250m²) of target fish species in the 15 monitoring stations of ARNP (REECS, 2017)

Spatial trends based on the 2017 estimates of fish species and abundance may indicate varying degrees of historical fishing pressure. Sites located farther from the island generally had lower species numbers and abundances. Due to their distance from the island, these sites are potentially more prone to poaching compared to sites closer to the island where the ranger station is based. Furthermore, prior to the closure of the entire Apo Reef complex to all forms of fishing in 2007, the reef areas located farther away from the island were open to fishing. Despite this, fish communities in Apo Reef demonstrated some degree of resilience to anthropogenic impacts and have only been largely impacted by phenomena such as typhoons, predation, and coral bleaching (REECS, 2017).

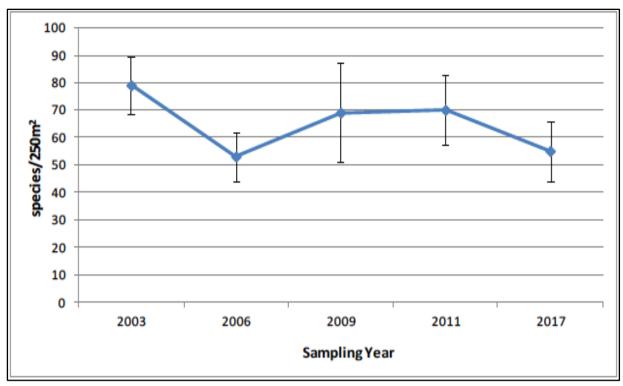


Figure 12. Temporal changes in mean estimated fish species richness (species/250 m2) at the ARNP (REECS, 2017)

c. Seagrass and Seaweed

In the assessment conducted in 2017, four seagrass species were observed, namely: *Enhalus acoroides* (L.f) Royle, *Halophila ovalis* (R. Br.) Hook.f., *Syringodium isoetifolium* (Asch.) Dandy 1939 and *Thalassia hemprichii* (Ehrenb. Ex Solms) Asch. Biota included hard corals, turf algae, *Holothuria* sp., *Halimeda* sp., and *Padin a*sp. (Refer to Table 1). While abiotic components include coral rubble, rock, and sand. Corals with turf algae dominated the sites.

Twenty-seven seaweed (macroalgae) species belonging to 17 families and 4 phyla were identified. Nineteen species belongs to green algae (Chlorophyta), 1 species to blue green algae (Cyanobacteria), two in brown algae phylum (Phaeophyta) and five in red algae phylum (Rhodophyta). Among the sites assessed, the dominant algae were turf algae that was mainly composed of *Lyngbya majuscule* Harvey ex Gomont. Seaweeds are anchored in different substrates such as hard coral, coral rubble, rock, and sand.

Table 1. Seagrass s	pecies in Apo Reef I	Natural Park (REECS, 20	17)
			,	,

Scientific name	Common name	Family	IUCN status	Site 1	Site 2	Site 3	Site 4
Enhalus	Broadblade	Hydrocharitaceae	Least	_	+	_	
acoroides*	seagrass	Trydrochantaceae	concern		'		
Halophila	Dugong	Hydrocharitaceae	Least	+	+	-	
ovalis	grass	Trydrochantaceae	concern	_	•		ı
Syringodium	Noodle	Cymodoceaceae	Least	+		_	
isoetifolium	grass	Cymodoceaceae	concern	•		1	ı
Thalassia	Turtle	Hydrocharitaceae	Least	+		+	+
hemprichii	grass	Пуспоспапіасеае	concern	•	_	•	1

^{*}Note: Apo Menor (Site 2) seagrasses were observed last November 2016 Enhalus acoroides was recorded during the November 2016 reconnaissance survey but not in March 2017 biodiversity assessment

d. Mangroves

The mangrove forest of Apo Reef exhibits the old growth type, having mature stands of mangrove species and mangrove associates with little to no regenerants on their understory.

In the 2017 assessment conducted by REECS, in the 6 sampling plots surveyed, 117 individual trees from 8 different species were accounted (Table 2). Most of these species are representatives from the family Rhizophoraceae and the rest consist of species from Lythraceae, Sonneratiaceae, and Meliaceae. Table 2 shows the summary of mangrove species recorded in the sampling plots.

Mature trees of *Rhizphora mucronata* Lam. and *Rhizophora apiculate* Blume dominated the mangrove forest with 45 and 39 mature individuals, respectively. On the other hand, scattered trees of *Sonneratia alba* Sm. *Bruguiera gymnorhiza* (L,) Lam., *Xylocarpus granatum* K. D. Koenig, *Pemphis acidula* J. R, Forst & G. Forst, and *Ceriops zippelina* Blume were also recorded in Apo Reef Island. The diversity index analyzed revealed a value of 1.52 which suggests that the mangrove vegetation has a very low species diversity. However, a low species diversity is common in every mangrove forest because its coastal to brackish environment limits a favorable condition to halophyte.

Table 2. Mangrove species in Apo Reef Natural Park (REECS, 2017)

Species	Count	Stems/ha	Relative Density	Relative Dominance	
R. apiculata	39	162.5	33.33	33.55	
R. mucronata	45	187.5	38.46	33.02	
S. alba	7	29.17	5.98	25.13	
B. gymnorhiza	12	50 10.26		4.63	
C. zippeliana	1	4.17	0.85	0.06	
X. granatum	2	8.33	1.71	0.8	
R. stylosa	2	8.33	1.71	0.54	
P. acidula	9	37.5	7.69	2.26	
Total	117	487.50	100	100	

e. Marine Mammals and Turtles

In a survey conducted among ARNP stakeholders in 2017, more than half of the respondents (54%) reportedly have seen dugongs on the coastal waters of Sablayan, specifically between the mainland and Apo Reef. The map below (Figure 13) shows the reported areas where dugongs are reportedly seen.

Aside from dugongs, dolphins were reportedly seen in ARNP (Figure 14). According to the respondents, dolphin sightings may range from everyday sightings (82%) to about twice a week (10%) while the rest have varied answers. Dolphins were commonly seen to be in groups of four to five individuals, such as in San Nicholas Coast. However, in some cases, there has been a report where about a hundred dolphins were seen in a group in the coastal waters between Pandan Island and mainland Sablayan.

Two BMS activities conducted in 2019 also show the abundance of bottlenose dolphins in the park waters.

Whale sightings were also reported in ARNP (Figure 15). There have been reports of whale sightings in as near as two kilometers from the coast of mainland Sablayan while some respondents said that there were whale sightings 5 to 20 kilometers from the boundary of Apo Reef. Based on the respondents' descriptions and cross referencing with photos, sperm whales (*Physeter macrocephalus* L.) and short-finned pilot whales (*Globicephala macrorhyncus* Gray 1846) are the most commonly seen species. There are also claims that pygmy killer whales (*Feresa attenuata* J. E, Gray 1874) and killer whales (*Orcinusorca*) were spotted. Majority of the respondents claimed that they have not seen whales in their areas before. However, for those who claimed to have seen whales, 21% reported at least 1 sighting per

month to about 2 to 4 times a year. They further claimed that whales are commonly seen in the morning and late afternoon.

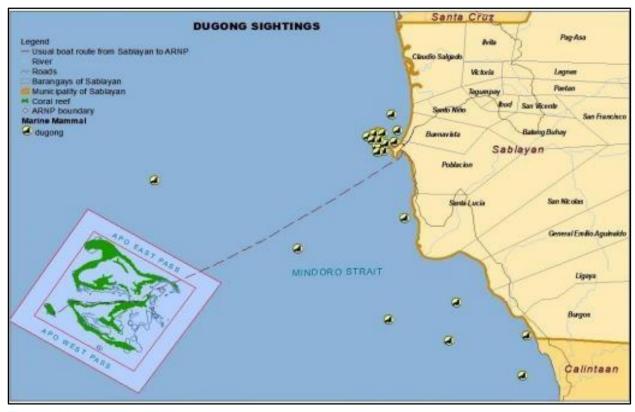


Figure 13. Map showing reported dugong sightings

Aside from cetaceans, there were also reported sightings of sea turtles. Based on the respondents' descriptions and photo referencing, they claimed to have seen Olive Ridley Sea turtles and hawksbill sea turtles. There are also evident nesting grounds in the Apo Island (off the coast of Sablayan). Swimming turtles were mostly seen along the coast of near-shore barangays or in between two neighboring islands such as Pandan Island and mainland Sablayan. Figure 15 shows the identified sites of respondents.

A news report that appeared last 8 September 2020 in the Philippine Daily Inquirer, stated that twenty-nine (29) sea turtles were sighted on the beach areas during the lockdowns imposed by the government which put a halt in the influx of tourists in the park. This is almost twice as much compared to fifteen (15) individuals seen in 2019. Twenty-one individuals had been observed to have already laid eggs in the Apo Island.

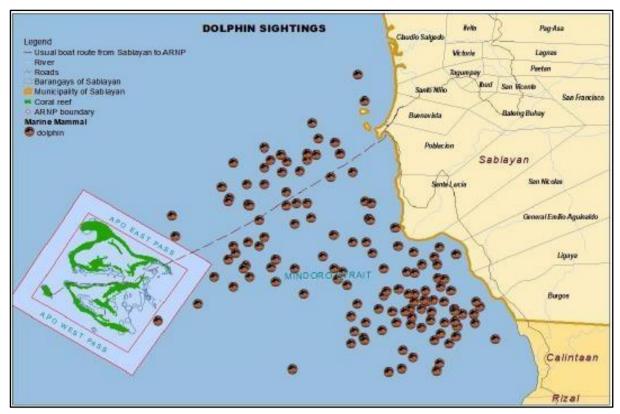


Figure 14. Map showing reported dolphin sightings

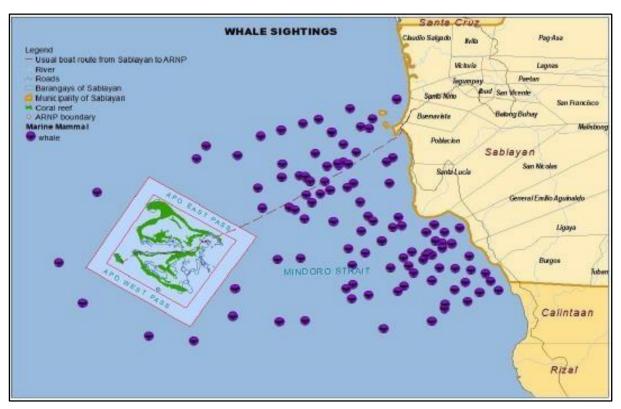


Figure 15. Map showing reported whale sighting

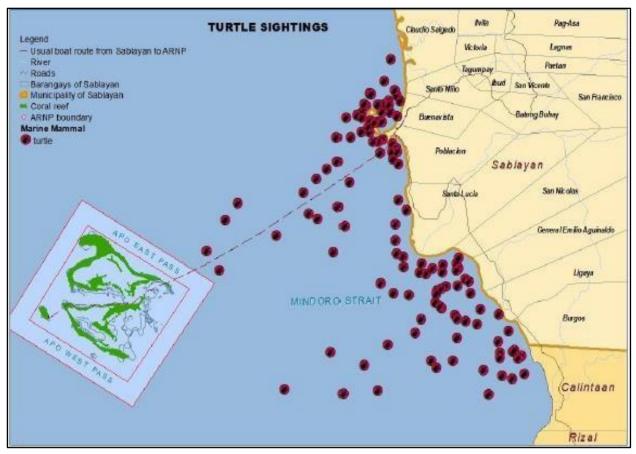


Figure 16. Map showing reported marine turtle sightings

II. SOCIO-CULTURAL AND ECONOMIC PROFILE

The islands comprising the ARNP are uninhabited, however, a total of 20 personnel were authorized to live temporarily on Apo Island in ten person-team weekly shifts. This team, which is composed of a DENR personnel, four Park rangers from PAMO, two Park rangers from the LGU, two members from the Philippine Army, and one boatman. is tasked to ensure the protection of ARNP and conservation of its biodiversity.

Sablayan, which has jurisdiction over the ARNP, has the second largest population share (approximately 20%) in the province of Occidental Mindoro. Based on 2010 NSO Census of Population and Housing, the total population of Sablayan is 76,153 while the total number of households is 16,284 with an average household size of 5 (Table 3). Meanwhile, the 2012 CBMS survey has recorded a total population of 80,152 with an average household size of 4.57. Males predominate the municipality's population posting 40,958 or 51.10% (MBCFI, 2015).

Table 3. Sablayan Population Projection by Barangay, 2015 -2042 (Source: PSA)

			POPULATION								
BARANGAY	2010 (Base Year)	2015	2016	2017	2018	2019	2020	2025	2030	2035	2042
	•			URBA	N AND RU	RAL					
Batong Buhay	4,044	4,601	4,721	4,844	4,969	5,099	5,231	5,948	6,762	7,688	9,201
Buenavista	8,758	9,965	10,224	10,490	10,762	11,042	11,329	12,881	14,644	16,650	19,927
Burgos	2,316	2,635	2,704	2,774	2,846	2,920	2,996	3,406	3,873	4,403	5,270
Claudio Salgado	3,899	4,436	4,552	4,670	4,791	4,916	5,044	5,734	6,520	7,412	8,871
General Emilio Aguinaldo	2,229	2,536	2,602	2,670	2,739	2,810	2,883	3,278	3,727	4,238	5,072
lbud	1,488	1,693	1,737	1,782	1,829	1,876	1,925	2,189	2,488	2,829	3,386
Ilvita	3,125	3,556	3,648	3,743	3,840	3,940	4,042	4,596	5,225	5,941	7,110
Lagnas	1,733	1,972	2,023	2,076	2,130	2,185	2,242	2,549	2,898	3,295	3,943
Ligaya	6,435	7,322	7,512	7,707	7,908	8,113	8,324	9,464	10,760	12,234	14,641
Malisbong	3,134	3,568	3,659	3,754	3,851	3,951	4,054	4,609	5,240	5,958	7,131
Poblacion	6,741	7,670	7,869	8,074	8,284	8,499	8,720	9,914	11,272	12,815	15,338

DADANGAY	2010		POPULATION								
BARANGAY	(Base Year)	2015	2016	2017	2018	2019	2020	2025	2030	2035	2042
Paetan	1,354	1,541	1,581	1,622	1,664	1,707	1,752	1,991	2,264	2,574	3,081
Pagasa	5,452	6,203	6,364	6,530	6,700	6,874	7,053	8,018	9,116	10,365	12,405
San Agustin	1,529	1,740	1,785	1,831	1,879	1,928	1,978	2,249	2,557	2,907	3,479
San Francisco	2,864	3,259	3,343	3,430	3,519	3,611	3,705	4,212	4,789	5,445	6,516
San Nicolas	1,624	1,848	1,896	1,945	1,996	2,048	2,101	2,388	2,716	3,087	3,695
San Vicente	4,250	4,836	4,961	5,090	5,223	5,358	5,498	6,251	7,107	8,080	9,670
Santa Lucia	4,528	5,152	5,286	5,423	5,564	5,709	5,857	6,659	7,571	8,608	10,303
Santo Nino	5,064	5,762	5,912	6,065	6,223	6,385	6,551	7,448	8,468	9,627	11,522
Tagumpay	1,618	1,841	1,889	1,938	1,988	2,040	2,093	2,380	2,705	3,076	3,681
Tuban	2,645	3,009	3,088	3,168	3,250	3,335	3,422	3,890	4,423	5,028	6,018
Victoria	1,323	1,505	1,544	1,585	1,626	1,668	1,711	1,946	2,212	2,515	3,010
Sub-Total	76,153	86,645	88,898	91,209	93,581	96,014	98,510	112,000	127,337	144,774	173,270

The population of Sablayan grows at 2.60% since year 2010. This is almost twice the 1.46% municipal annual growth rate during the immediately preceding census year. This annual growth rate is higher than that of the province and the region by a small fraction. This increase in population will eventually result to an increased demand for natural resources to serve as food and source of income.

Sablayan is a first-class municipality with a total land area of 2,188.80 km². It has twenty-two barangays, three (3) of which are classified as urban and nineteen (19) are rural barangays. Barangays Buenavista and Poblacion (Lumang Bayan) registered the greatest number of people residing in the municipality with 8,758 and 6,741 representing 11.50% and 8.85% of the municipality's total, respectively. Barangay Victoria has the least number of people residing with 1,323 representing 1.73% of the municipality's total (2010 NSO Census). In 2010, Sablayan recorded an aggregate urban population of 20,563. This is almost 30% of the total number of populations residing in the municipality. The rest are inhabiting the rural areas. Most number of people chooses to reside in the urban areas due to proximity to various services such as health, education, commerce, and trade (MBCFI, 2015).

Among the 22 barangays, ten (10) are located along the coastline and classified as coastal, namely: Burgos, Ligaya, San Nicolas, General Emilio Aguinaldo, Sta. Lucia, Poblacion, Buenavista, Sto. Niño, Ibud, and Claudio Salgado. These coastal barangays in the Sablayan are considered as major stakeholders and local marine resource users in ARNP. It is therefore imperative for the ARNP stakeholder communities to be part of the planning processes of ARNP to achieve effective protected area management and sustainable resource use (MBCFI, 2015).

Since it is a coastal community fishing is a way of life in Sablayan. As stipulated in the Sablayan Comprehensive Land Use Plan (2015 - 2042), Sablayan municipal waters cover approximately 75,300 hectares marine area; 10 hectares of inland resources; three hectares of swamp lands; two hectares of brackish water; and 7.08 hectares of lakes, reservoirs, and the Apo Reef Natural Park. The vastness of the municipal waters is haven for more than 4,000 fisherfolks in the municipality.

The fishing industry has three sub-sectors: (1) marine fisheries, (2) aquaculture, and (3) lakes. Of the three, marine fisheries, particularly the tuna industry seem most promising.

Fish catches from the municipal waters include yellow fin tuna, blue fin tuna, anchovy, lapu-lapu, bonito, spanish mackerel, flying fish, sapsap, talakitok, dalagang bukid, bisugo, maya-maya, squid (several varieties), mangagat, sagisi, kanuping, samaral, and galunggong. Volume of fish catches depends largely at the Apo Reef grounds where marine habitat is abundant.

The proliferation of informal settlements in Sablayan implies the influx of people migrating to the town. The population of these informal settlements is generally into fishing, which is their major source of income.

Types of structures are generally made of indigenous materials, and a number of which are not in good physical state. A less significant number of houses, on the other hand, are made of concrete or permanent materials. Moreover, it is noted that the informal settlement families, which are concentrated within the urban core barangays of Sablayan, with houses commonly made of light materials were built along the coastal and low-lying areas of Sitio Tabuk or at the mouth of Sabang rivers in Buenavista, and Sitio Katunggan and Pondohan in Poblacion (MBCFI, 2015).

Meanwhile, the coastal communities of Ligaya and Sta. Lucia were recorded to have the highest number of informal settlers among the rural barangays. The coastline of Sablayan is the most prevalent dwelling areas for informal settlement families because it is where they can find food and livelihood (i.e., fishing). Hence, rapid growth in population coupled by the increase in the number of informal settlement families in the coastal barangays indicates upsurge in demand and competition for food, employment, and the like. Thus, the presence of informal settlers is anticipated to intensify environmental challenges such as unregulated resource extraction and unsustainable resource utilization.

Difficulty in accessing safe and potable water is an issue to many residents as revealed by CBMS 2012 with 1,674 households without access to potable water. The Level III water supply is served to the three (3) urban barangays and 2 rural barangays, namely: San Vicente and Ligaya, while Level II water systems are established in Pag-asa and Burgos.

In terms of power supply, it is noted that the municipality has provided electricity, but its supply is unreliable. On the other hand, the municipality faces the problem of lack of roads connecting the remote areas, and poor condition of roads and bridges. (MBCFI, 2015).

Inland resources of swamp lands, fresh water and brackish and lakes and reservoirs are evidence of municipality's vastness of fishery resources. The municipality, being a coastal town, has high potential for fishery given the necessary support facilities, especially in marketing. The coastal areas of the municipality of Sablayan have considerable ecological and economic importance. The municipal waters, with their fish and other aquatic resources, are considered important elements in the livelihood and food security of the municipal population. The coral reefs especially those in the ARNP provide habitat and food for wide variety of sea organisms and contribute to a large extent to fish propagation. The Municipal Resolution No. 1108 declared a Tourist Zone and Marine

Reserve in 1983 in recognition of ARNP's importance to Sablayan.

On the other hand, the tourism sector remains to be one of the top contributors to the municipality's revenue. Based on statistical data from the Municipal Tourism Office, there is a 300% increase in tourist arrivals in 2011 and continued an upward trend from the previous year.

Apo Reef National Park remains to be the premier tourist destination in the municipality, being one of the top diving destinations of the country drawing around 2,349 visitors annually and contributing PhP 1,910,913.23 in the local revenues. Locals and foreigners visit the ARNP for SCUBA diving, snorkeling, research, photography, bird watching and other recreational activities.

From 2016 up to September of 2019, there has been a constant increase in the number of tourists wanting to experience ANRP, 75% of which were divers. February to April is considered as peak months, although in 2018, tourists flocked the Park as early as January. The chart (Figure 17) below shows the trend in tourist arrivals in ARNP from 2016 to September 2019.

This increase of tourist arrivals to ARNP translates to an increasing income for the park. From 2016 to September 2019, a total of Php 28,389,533.00 was generated from tourism.

ARNP's white beaches and the physical attributes of the islands offer tourists a wholesome place for rest and recreation. The islands are accessible by motorized banca. Most tourism establishments are found in Barangay Buenavista and Poblacion. At present, there are twelve (12) boats being operated for tourism, six (6) of which were former fishing boats.

It is clear that SCUBA diving or at least one segment of the activity, which is the live aboard diving program, has firmly established itself as a major tourism user of ARNP. This seemingly exclusive market segment that dominates the area is brought about by the isolation of ARNP from any mainland area which requires a minimum of two hours travel time from the nearest take off point, which is the Sablayan town proper. Other potential ecotourism activities are not keenly practiced in the area, such as birdwatching and recreational swimming. (MBCFI, 2015)

III. CURRENT AND PROPOSED PROGRAMS AND PROJECTS

As specified in the 2017 REECS assessment and validated during the planning workshop conducted with the ARNP stakeholders last 19 - 20 November 2019, these are the existing programs and projects being implemented in the park:

Continuous operations of PAMB

As stipulated in the Implementing Rules and Regulations of the ENIPAS Law, the PAMB is responsible for the overall management of the protected areas, including approval of management plans, policies, programs, proposals, and other documents and ensure the harmonization and integration of all plans. The PAMB is also required to monitor and assess the performance of the Protected Area Superintendent (PASu) and other protected area personnel. The PAMB regularly conducts meetings and participates in trainings and workshops.

• Continuous operation of PAMO

RA No. 11038 otherwise known as the Expanded National Integrated Protected Area System (ENIPAS) Law established the Protected Area Management Office (PAMO) to be headed by a Protected Area Superintendent (PASu) who is mandated to supervise the day-to-day management, protection, and administration of the protected area. The PASu is primarily accountable to the PAMB and the DENR for the management and operations of the protected area.

One of the major functions of the PAMO is to prepare a management plan, in consultation with the stakeholders, including the annual work and financial plans that integrate protected area management plans, programs, projects, and policies relevant national and LGUs' plans and programs; and ensure its implementation.

The PAMO may be augmented by deputized local environment and natural resources officers upon the recommendation of the PAMB and approval of the DENR.

• Continuous operations of Task Force MARLEN

Task Force MARLEN or Marine and Apo Reef Law Enforcement for Nature was initially organized in September 2004 and officially created on 26 July 2006 by virtue of Executive Order No. 02, series of 2006 for the conservation and protection of the marine resources of Sablayan. It is composed of representatives from the DENR, LGU Sablayan, Philippine Army, and the Philippine National Police. Its main task is to strengthen law enforcement in the park. Continuous strengthening of TF MARLEN is being done through regular meetings and provision of trainings on coastal and marine law enforcement and first aid.

• Communication, Education and Public Awareness (CEPA) Activities

The PAMO, PAMB, and LGU Sablayan have been active in the promotion of the park as an ecotourism destination through various IEC activities and establishment of a website. Printing and distribution of materials (Green FINS) are also continuous.

Capacity development

Continuous capacity development activities are being implemented for Park rangers, PAMO staff and snorkeling and diving instructors to ensure the protection of the park resources and security of the tourists. The trainings involve professional courses including emergency response, effective law enforcement, and basic interpretative courses for introduction of ARNP to visitor, among others. The PAMB are also conducting learning visits to other Parks to generate good practices in Park management and to share their experiences in ARNP.

Biodiversity conservation entails knowledge of the biodiversity resources found in the protected area. It is therefore incumbent on members of the PAMO and staff tasked to conduct resources monitoring to be capacitated on the methodologies and techniques used in the Biodiversity Monitoring System (BMS) and in the identification of common terrestrial and marine species.

Infrastructure development

At present, the PAMB and PAMO are maintaining the Park infrastructure and equipment through the purchase of new machines and equipment such as water tank, engine for the outrigger boat, and generator set. Maintenance of the office building, structures and other facilities including the north boardwalk, visitors' kiosk, floating raft, and mooring buoys are ongoing. In the Sablayan Comprehensive Land Use Plan (CLUP 2015 – 2042), there is a recommendation for improvement of the boardwalk for mangrove trekking, floating jetty and learning center.

• Conduct of research and studies.

ARNP is one of the most researched and studied protected area because of its high ecological value and at the same time, its vulnerability to adverse effects of climate change and increasing population. The PAMO and PAMB have been actively seeking for organizations and institutions that can assist the Park in conducting research and studies to serve as inputs for better management.

Regular patrolling and monitoring activities

Teams composed of members from the DENR, LGU, and Philippine Army are deployed in ARNP for continuous patrolling. Same with other PAs in the country, a biodiversity monitoring system has been put in place in ARNP. Monitoring in ARNP is done twice a year to identify biodiversity trends which would serve as a guide for management action. Field diaries, transect walks, and transect swims are utilized to

generate the needed information.

• Biodiversity-friendly enterprises start-up

At present, three fisherfolks' organizations are assisted in proposal development. They were given trainings on proposal preparation which would greatly help them mobilize and acquire resources to start-up their own biodiversity-friendly enterprises.

IV. THREATS, ISSUES AND CONCERNS

In the planning workshop conducted in November 2020 with ARNP stakeholders conducted by CELPA, Inc., threats, issues and concerns regarding the overall status and management of the park were identified and classified into four categories, namely: environmental, economic, institutional, and organizational. The outputs of the discussions served as validation of the existing issues and concerns stipulated in the available reports and documents.

ENVIRONMENTAL

1. Vulnerability of ARNP Personnel to armed violators

During the planning workshop, it was validated that there were 3 violations reported during the year 2020. Despite the presence of the Philippine Army in the monitoring team of the ARNP, violations still take place, and the monitoring team cannot be present all the time when these violations occur.

2. Lack of boundary markers

A basic percept in the protection of properties is that one should know the extent of the property by placing permanent monuments or markers. The lack of boundary markers of the ARNP exposes the protected area to violations in terms of illegal harvest of marine resources. Placement of markers increase security of the area.

3. No established response protocols

RA No. 7586 as amended by RA No. 11083 defines punishable acts committed in protected areas. However, how to respond to these violations are not clearly defined except seizure of illegally harvested resources and arrest of violators. This process overlooks the reasons for the illegal acts and therefore fails to identify actions to prevent the same acts in the future. A set of protocols to respond to these illegal acts must be established to define actions of the ARNP monitoring team must take. The

monitoring team should be made knowledgeable on these protocols.

4. Non-compliance to sustainable diving and snorkeling guidelines

Guidelines and rules are necessary for sustainable operations. In a tourism operation such as the ARNP two major activities are diving and snorkeling. It would be a good guide in actions to take if the specific guidelines that are not complied with are known. In any case, a major cause of non-compliance is how tight or how lax these guidelines are implemented. Any tourist who violates any guidelines should be immediately reminded of his transgression. It would be a strong deterrent if there are some fines to any violation. In the same instance, lifeguards and other personnel of ARNP assigned to supervise diving or snorkeling should be familiar with the guidelines.

5. Construction of new permanent infrastructures

In addition to maintaining existing infrastructures and facilities in ARNP, the PAMO and PAMB are procuring new pieces of equipment. The infrastructures that need improvement as recommended in the Sablayan Comprehensive Land Use Plan (CLUP 2015 – 2042), are the boardwalk for mangrove trekking, floating jetty and learning center.

6. Presence of Invasive Alien Species

The presence of rodents (*Rattus norvegicus* Berkenhout, 1769 and *Rattus tanezumi* Temminck 1844) has been documented as early as 2015 during the drafting of the ARNP Ecotourism Management Plan. It is said that these rodents come from fishing/tourist boats that dock near and in the ARNP. The proliferation of IAS poses a threat to the other species inhabiting the island, since they have become prolific predators, particularly of birds and their eggs. Further, the introduction of non-native flora such as giant ipil-ipil, hagonoy and century plant are competing with the native species in the park.

7. Crown-of-thorns outbreaks

A major threat to coral reefs especially those that are affected by coral bleaching brought about by natural events such as storms and El Nino is the crown of thorns (*Acanthaster planci* L. 1758). It is a large starfish that preys on hard or stony coral polyps³. The crown-of-thorns starfish (COTS) receives its name from venomous thorn-like spines that cover its upper surface, resembling the biblical crown of thorns⁴.

³ Invasive Species Compendium – Acanthaster planci (crown-of-thorns starfish) Retrieved from https://www.cabi.org/isc/datasheet/109203#tosummaryOfInvasiveness, on February 10, 2021, at 9:45 pm

⁴ Great Barrier Reef Marine Park Authority (1995)- Controlling Crown-of Thorns Starfish. Retrieved from

Hand-harvesting is the only widespread method used to date and is only feasible for protecting small areas - large scale control is not known⁵. However, they should not be cut into pieces and thrown back to the sea because they can regenerate. It is best to place them in the beach area to dry⁶.

A study showed that some fishes eat COTS. This study further showed that reef areas that are closed to commercial and recreational fishing tend to have fewer starfish than areas where fishing is allowed. When human activity removes the starfish's natural predators, their population can boom⁷.

An important intervention for ARNP is the constant patrolling of the coral reefs to check on outbreaks of the COTS and organize teams to collect and dispose them to dry.

8. Climate change impacts

In the Vulnerability Assessment conducted by Foresterei Consult and Landscape Services for ARNP, it was found out that the summer months of April, May and June are critical for the occurrence of coral bleaching. In the planning session with stakeholders, it was also mentioned that there are reported cases of receding coastlines in Apo Island. Climate change could also pose adverse effects to the terrestrial and marine species in the park.

9. Anchorage of dive boats

This is a major concern regarding the safety of the corals. When boatmen throw down their anchors it is possible that these hit into the coral beds and when the anchors are raised, they can scour and damage the coral beds. An intervention to reduce this risk if not eliminate it is to place markers where boatmen can anchor their boats. The boatmen should then be informed where to throw their anchors, away from coral beds.

ECONOMIC

1. Uncoordinated entry of live-aboard boats and yachts

Uncoordinated entry of live-aboard boats and yachts increases the risk of damage to

https://web.archive.org/web/20081012112935/http://www.reef.crc.org.au/publications/explore/feat45.html ⁵ Ibid

⁶ Villanueva, R. 2021. Marine Biologist, personal communication. February 9, 2021.

McChemer, T. 2020. What Eats the Crown-of-Thorns Starfish? The Evidence Is in the Poop. SmithsonianMag.com June 10, 2020. https://www.smithsonianmag.com/smart-news/what-eats-crown-thorns-starfish-evidence-poop-180975068/

the ANRP resources especially the coral beds as well as seagrass beds and beautifully colored coral fishes which are the main tourists' attraction of ARNP. Coordination with the Coast Guard with respect to preventing the entry of live-aboard vessels and yachts to the ANRP. A damage coral and seagrass beds reduce the tourism value of ANRP resulting in reduced visits and income of the protected area.

2. No identified carrying capacity for dive sites

A well-managed tourist destination has identified the carrying capacity of its various attractions, such as snorkeling sites, swimming areas and most especially dive sites. This will avoid disappointing afficionados especially SCUBA divers who visits good diving sites to find out that on that day that they visit the area for diving they cannot do so because the area is already crowded. The capacity of these various sites should be published in brochures of the ANRP.

In addition, ANRP should have good divers that it can call whenever there are visitors who want to dive and those that want to learn how to dive.

All these increase the value of ANRP as a tourist destination, increase visitors thereby increasing income of the protected area.

3. Poor tour guide performance

Poor tour guide performance can affect future visits to the tourist destination. Word could get around about how dissatisfied visitors were and this could discourage would-be tourist to ARNP. This could really affect the income of the protected area. Continuous monitoring of the performance of tour guides and continuous capacitation should be undertaken for the tour guides.

4. Low number of active local tour guides

Another aspect in satisfying tourists is the number of well-trained tour guides. For effective communication between the tour guides and the tourists there should be a maximum number of tourists handled by a tour guide. Limited number of trained tour guides would increase the number of tourists they have to accommodate which results in ineffective communication between the tour guide and the tourists. Again, this could affect the number of future visitors, thus affecting gate receipts.

5. Decrease in ARNP's income due to the COVID-19 pandemic

The lockdowns and travel restrictions brought about by the COVID-19 pandemic this 2020 resulted to a massive decrease in the Park's income, which largely relies on

tourism. This decrease in income could result to, in addition, the neighboring communities in mainland Sablayan and tourism workers such as guides, boat operators, hotel and resort staff, food providers, and souvenir makers, among others are greatly affected by the pandemic.

INSTITUTIONAL

1. Poor coordination between DENR, Municipal Tourism Office, and service providers regarding PA policies

Good coordination on PA policies of the ANRP with its tourism partners redound to the increased value of ANRP as a tourist destination. The Municipal Tourism Office is in the best position to advertise and inform would-be tourists about the tourism-attributes of ANRP. Service providers such as boat operators, tour guides, diving guides, and even food providers (in Sablayan) play important roles in making ANRP a world-class tourist destination. All relevant policies regarding the protected area enunciated by DENR should be and must be discussed with these partners of the ANRP for best results in providing world-class tourism services.

2. Non-compliance of the Tourism Office to the PA policies specifically in the carrying capacity in Apo Island

The carrying capacity of a particular tourist facility such as diving sites or snorkeling sites are established for the sustainable use of the facilities. Once these carrying capacities are established, they serve as guidelines in the operation and use of the facilities. If these guidelines are not followed and overcrowding occurs the sustainable use of the facility is compromised. The PAMO must sit down with the local Tourism Office regarding following of guidelines in the use of the facilities. Following the guidelines is for the benefit of all stakeholders, the tourists, the local tourism office and the ANRP PAMO.

3. Non-allocation/prioritization of funds for TF MARLEN

The Task Force MARLEN plays a very important role in the protection of the reef and the rest of the nature Park. Non-allocation of funds jeopardizes the operation of the Task Force and render it useless resulting in non-protection of the nature Park and exposing it to possible damage of facilities and natural resources therein.

4. Research gaps and priorities in ARNP are not identified

Sustainable management and development of the nature Park requires new

technologies targeted to solve issues and challenges faced by the park. For instance, the occurrence of COTS in the coral reef areas that feed on the corals. Management of COTS derived from results of research on the issue would help towards solving this challenge. There are other challenges faced by the nature Park that are technical as well as institutional and organizational. An assessment of the technological requirements of the park is needed in order to direct research and policies towards the solution of these challenges.

ORGANIZATIONAL

1. Lack of security of tenure of Park rangers and PA Staff

Section 11-B of the IRR of RA No. 11083 (ENIPAS Law) provides for "sufficient number of support staff with permanent plantilla position shall be appointed by the DENR to assist the PASU in the management of the protected area. Park Rangers and PA staff of the ARNP should be appointed to these plantilla positions. Where additional rangers and staff are needed beyond the number in the plantilla positions creation of such position should be requested to provide them with security of tenure. Those appointed to these positions should also possess the required qualifications for the positions.

2. Lack of training needs assessment

Capacity building is a continuing activity to equip staff with up-to-date knowledge, skills, and practices in the performance of their functions and duties. Determination of the specific capacity building activities is preceded a training needs assessment (TNA), which should be done on a regular basis.

V. MAP INFORMATION

a. Biodiversity

ARNP is endowed with rich biodiversity and habitats, which are depicted in the maps below. Apo Island has an intact mangrove and beach forests that are home to birds, including the near- endemic and endemic species such as Mantanani Scops Owl (*Otus mantanensis* Sharpe 1892) and the Philippine Pied Fantail (*Rhipidura nigritorquis* Vigors). The Nicobar Pigeon (*Caloenas nicobarica* L. 1758), which was classified as Near Threatened by the International Union for Conservation of Nature (IUCN) was also sighted in the park. (REECS, 2017)

Aside from its lush terrestrial ecosystems which is mostly located in Apo Island, ARNP's rich marine ecosystems, such as seagrass beds, coral reefs and open ocean serve as habitats for marine turtles, dolphins, and whales (Figure 17 and 18).

<u>Seagrasses</u> – Four major species of seagrasses were observed during the 2017 assessment conducted in the nature Park. These included *Enhalus acoroides* (L.f) Royle, *Halophila ovalis* (R. Br.) Hook.f., *Syringodium isoetifolium* (Asch.) Dandy 1939 and *Thalassia hemprichii* (Ehrenb. Ex Solms) Asch.

<u>Seaweeds</u> – Seaweeds are important marine resources that are sources of food and products of commerce. In the assessment of the biodiversity of the nature Park twenty-seven seaweed (macroalgae) species belonging to 17 families and 4 phyla were identified. Green, blue green, brown and red algae were among those identified during the assessment. The dominant algae are the species *Lyngbya majuscule* Harvey ex Gomont.

<u>Mangroves</u> – The assessment conducted by REECS in 2017showed that there were 8 dominant species located in the natural park, namely *Rhizophora mucronata* Lam., *Rhizophora apiculate* Blume, *Sonneratia alba* Sm. *Bruguiera gymnorhiza* (L,) Lam., *Xylocarpus granatum* K. D. Koenig, *Pemphis acidula* J. R, Forst & G. Forst, Ceriops *zippelina* Blume and *R. stylosa* Griff. The most dominant species were *R. mucronata* Lam. and *R. apiculata* Blume. It was assessed that the species diversity of the area is low having a diversity index of only 1.52.

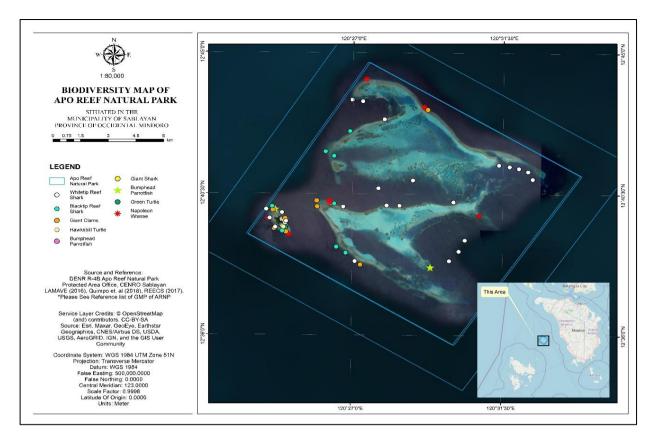


Figure 17. Map showing biodiversity of ARNP

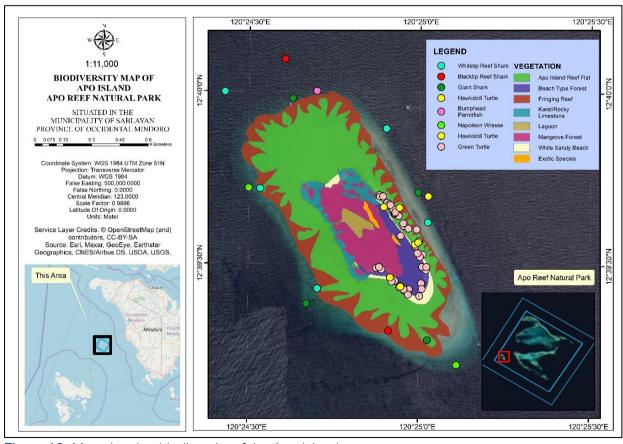


Figure 18. Map showing biodiversity of the Apo Island

b. Values

ARNP serves as a major ecotourism destination in the Municipality and in the country. Thousands of local and foreign tourists visit ARNP primarily for SCUBA diving. Other activities include swimming, snorkeling, kayaking, and bird watching.

Tourism provides direct activities to communities in Sablayan by generating employment such as Park rangers, divers, tour guides, and transport service (boat) providers. It also provides indirect economic benefits for the locals through the tourism supply chain (spill-over) benefits, by serving as vendors and operators of souvenir shops, caterers, and other tourism-related activities. Proceeds from Park entry fees, rental of facilities, and other fees collected from tourists are used by protected area management office for Park operations and conservation activities. (METT, 2017)

<u>Tourists' arrivals</u> – The total number of tourist arrivals in 2019 showed that there was a total of 4,504. Of this, 2,480 were local tourists while 2,024 were foreign tourists. Among the local tourists of that year, 1,338 were males and 1,142 were females. On the foreign tourists, 1, 237 were males and 787were males (Figure 20 and 21).

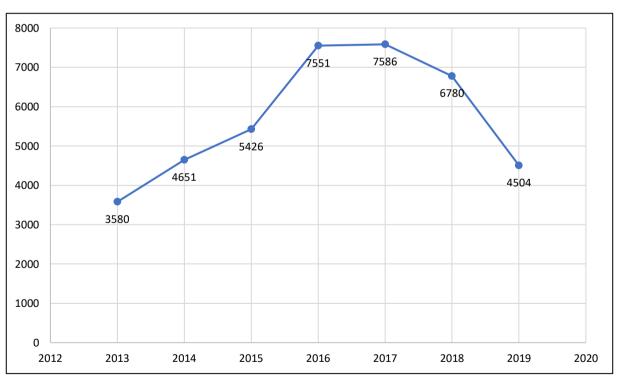


Figure 19. Trend in tourist arrivals in ARNP from 2016 – September 2019 (Source: PAMO, 2020)

<u>Income from visitors</u> – In 2019 the total income from entrance and other fees amounted to Php 5,856,367.00 (Figure 22). Of this amount, fees from divers were Php

4,183,358.00 or 71% of the receipts of that year. Non-divers paid a total amount of Php 989,335.00 while dive masters paid an entrance fee of Php 142,926.00 (Figure 23).

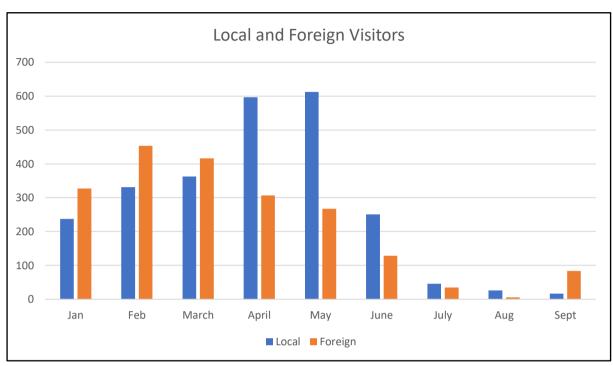


Figure 20. Graph showing the tourists visitors to ARNP in 2019

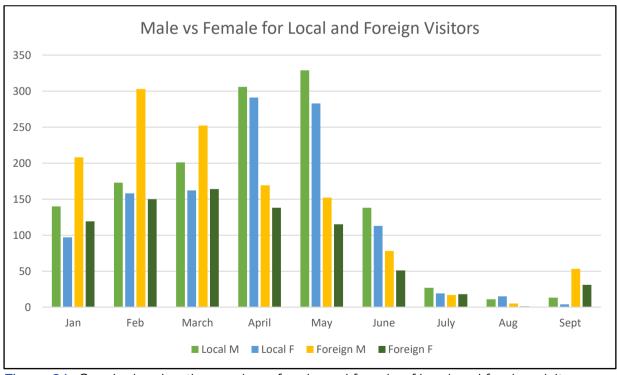


Figure 21. Graph showing the number of male and female of local and foreign visitors

Other fees were generated from refill of oxygen tanks which amounted to Php 46,408 while Php 494,340.00 were generated from vessel entry fees. February, March, and April

were the months that generated about 54% of the total receipts of 2019 which corresponded to the months that registered the highest number of visitors.

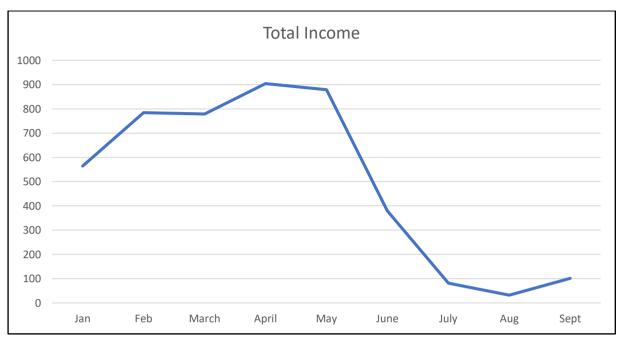


Figure 22. Graph of Income of ARNP from various fees in 2019

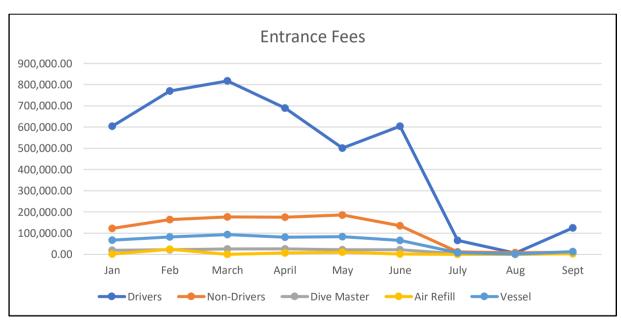


Figure 23. Gate receipts from different types of ARNP visitors

c. Threats

1. Climate change effects, such as coral bleaching

The ARNP Vulnerability Assessment conducted in 2018 showed that 2,300 hectares of the reef are classified to be very highly vulnerable to coral bleaching, particularly

during the months of April, May, and June. This assessment was validated by data from both WWF and REECS, which showed patches of corals that were already bleached (Figure 24). Figures 25 and 26 show threats to the Apo Reef Natural Park.

However, the cooler months of January, February and March may stabilize the sea temperature conditions of the coral reef, causing them to recover from the possible damages incurred during summer months and maintain their health conditions, especially those that are located in deeper waters. Reefs in shallower areas, however, may suffer from irreversible damages if sea surface temperatures continue to increase.

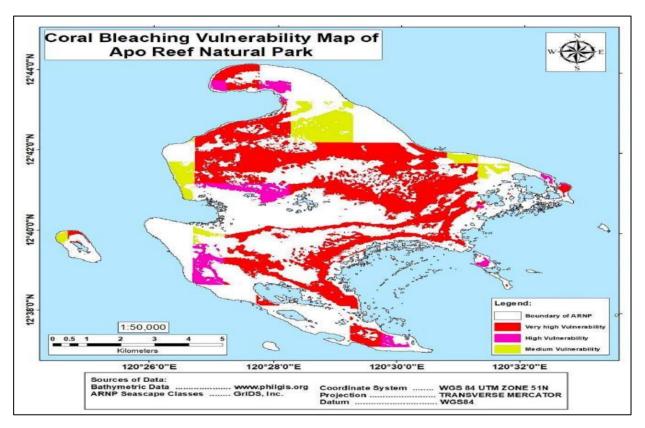


Figure 24. Vulnerability map of ARNP (Foresterei, 2018)

2. Influx of Tourists

Despite its high tourism potential, development of tourism – related infrastructure and the influx of tourists may pose a threat to the park. Existing facilities in ARNP include a visitor center, board walk, pavilion, administration building, and ranger station.

Tourism–related activities such as SCUBA diving, swimming, snorkeling, kayaking, and others should also be properly and carefully managed. At present, the Park has a sustainable carrying capacity of 104 persons per day, and this has to be maintained to minimize the adverse effects of tourism in the park.

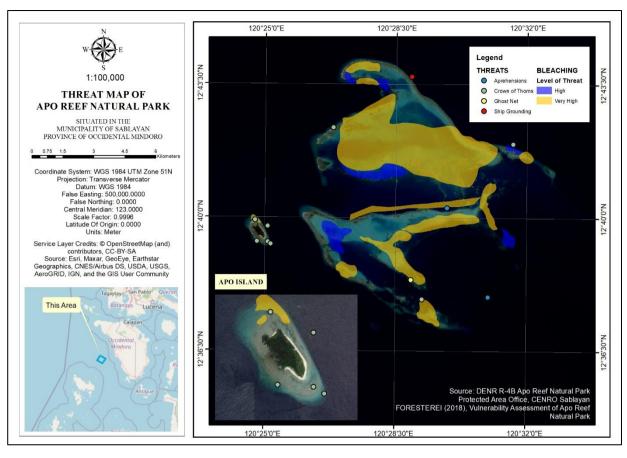


Figure 25. Map showing threats to Apo Reef Natural Park

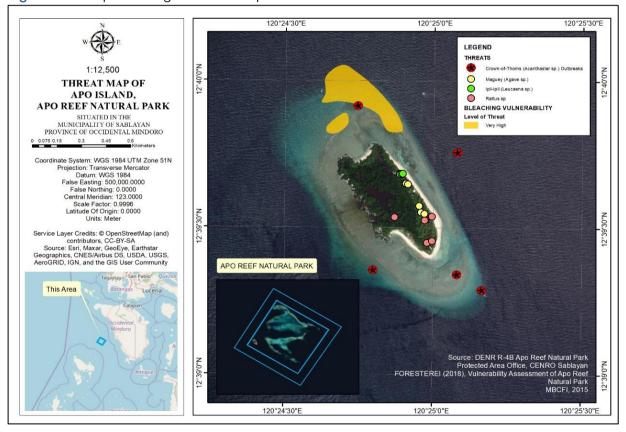


Figure 26. Map showing threats to Apo Island

3. Non-compliance to sustainable diving and snorkeling standards

One standard in the sustainable management of a tourist destination is the carrying capacity of different components such as diving, swimming, kayaking and snorkeling sites and number of participants in bird watching. Non-compliance to these standards jeopardizes the sustainability of the protected area. This is a continuing threat to the ARNP. Carrying capacity should be strictly implemented.

4. Illegal fishing and harvesting of marine resources.

Even though ARNP has been declared a no-take zone, there are still reported cases of unsustainable/illegal fishing and harvesting of marine resources. A more active monitoring of these illegal acts should be implemented.

5. Marine Litter

A major threat to the integrity of the marine resources of the ARNP is the proliferation of marine litter. The observed litter consists of plastic bag, Styrofoam, plastic bottles, and cans. It is suspected that most of these wastes are from the boats and ships that pass through the nature Park. A tighter monitoring is required to at least reduce if not entirely eliminate such pollutants.

6. Damage to coral reefs by anchorage

Since ARNP is widely promoted as a tourist destination, it is expected that some damage to coral reefs may take place. One major cause of such damage comes from anchorage in the coral beds. When a boat bringing tourists to the coral beds it must lower anchor. Some damage to coral bed occurs as the current moves the anchor. However, the greater damage is inflicted when the anchor is pulled on board. Mooring areas should be identified in areas with least or no coral beds are found.

VI. SITUATIONAL ANALYSIS

ARNP's location can be considered as strength in terms of conservation and management because of its 33-kilometer distance from mainland Sablayan, land-based activities such as agriculture and infrastructure development have little effects to the park, which is why conservation and management needs of ARNP has not been identified in the Sablayan Comprehensive Land Use Plan, apart from its importance as an ecotourism destination. In the REECS assessment, it is also notable that there has been an improvement in the percentage of live hard corals, which implies the resiliency of its marine habitats to perturbations.

Even with a moderate beach vegetation species diversity value (2.53), ARNP's Apo Island is teeming with bird species, including the near-endemic and endemic species of birds namely, the Mantanani Scops owl (*Otus mantananensis* Sharpe 1892) and the Philippine pied fantail (*Rhipidura nigritorquis* Vigors). The near-threatened nicobar pigeons are also common in the park, which makes it a haven for birdwatchers.

ARNP serves as a habitat to 45 hard coral genera under 14 families and 313 reef fish species belonging to 42 families, which makes it a must-visit for diving and even non-diving water enthusiasts. Divers are the highest sources of income for the park, however, tourism can also pose potential risks and threats, if not managed properly.

Despite the absence of detailed management strategies in the Sablayan CLUP, there is a high degree of collaboration between the Protected Area Management Office (PAMO) and the LGU, since the LGU is an active member of the ARNP PAMB. Conservation initiatives are mainly handled by the PAMO while the regulation and promotion of tourism is managed by the LGU through the Tourism Office.

Based on the reports and documents generated and reviewed and discussions with the stakeholders during the planning workshop, Apo Reef Natural Park has its own share of issues and concerns but at the same time, successes, and good practices in terms of management.

One of the notable accomplishments of the ARNP is its 85.2% rating in METT, which is considered HIGH in terms of protected area management performance. The assessment reveals that ARNP is strong (or has good capacities) in the areas of planning, particularly in protected area design and objectives despite the need to update the management plan; regulations and enforcement; protection systems; and research. The protected area also performed well across budget-related indicators as evidenced by secured budget, effective work and financial planning and implementation, and sound budget management. However, the protected area needs improvement in strengthening partnerships and collaboration with stakeholders, planning for adjacent land and water use, and input-related indicators such as staff number, equipment, and training. (ARNP, 2017).

The challenges and issues faced by the ARNP are attributed to environmental changes and increasing population causing an increased demand for its ecosystem services, which is inevitable, and therefore, the ARNP should implement activities that will enhance its adaptive capacity to these changes.

In relation to the management of ARNP, the following stakeholder map has been adopted based on the ARNP 2015 – 2020 Ecotourism Development Plan.

As seen in Table 4 and as stipulated earlier, the DENR and Sablayan LGU have the biggest chunk of responsibility in managing ARNP, particularly in the development and implementation of conservation policies and programs, ecotourism management, conduct of IEC activities, and financial management. An important partner of the LGU and DENR is the Task Force MARLEN, which is very active in law enforcement and monitoring. The LGU and DENR would have to ensure that support is given to the Task Force members, particularly in terms of capacity development and provision of equipment.

The unit that takes care of policies regarding the protected area is the Protected Area Management Board (PAMB). The PAMB is mandated to oversee the management of the protected area, approve policies and management plans, projects implemented in the protected area, adopt a manual of operations, and recommend deputation of appropriate agencies and individuals for the implementation of laws, rules and regulations governing the management of the protected area. It also assesses the effectiveness of the management plan in maintaining the sustainability of the protected area.

One of the PAMB's function is the allocation of funds for the implementation of the management plans of the protected area, set fees and fines in accordance with existing rules and regulations, resolve conflicts through effective means. The PAMB also recommends policy changes in the management of the protected area.

On the administrative side, the PAMB assesses the performance of PA personnel as well as the compliance of partners with the terms and conditions of any undertaking or agreement. The PAMB recommends qualified candidates for the Protected Area Superintendent (PASU).

Non-government organizations and donor organizations should also, as much as possible, be engaged in the management of ARNP since they have the financial and technical resources that can augment what DENR and LGU have. Both WWF Philippines and MBCFI are active members of the PAMB which is considered an asset, however, this should not stop the PAMO from exploring other potential partnerships, especially for conduct of research.

Table 4. Stakeholder Matrix

Stakeholder	Interests and Roles	Importance in Management³	Degree of Influence4
DENR (PAMO)	 IPAF / users' fees collection Protection and conservation Implementation of ecotourism programs 	5	5

PAMB	Formulation and implementation of policies and programs on conservation and protection	5	5
LGU Sablayan	 Conduct of IEC campaigns Development and implementation of ecotourism program and tourism- related livelihood opportunities Serves as partner in the protection and conservation of ARNP. Provides technical, logistical, financial, and human resource support. Coordinates with DOT for training of tour guides 	5	5
Task Force MARLEN	Law enforcementRegular patrolling and monitoring in ARNP	5	4
NGOs / ODA	 Research and support to protection and conservation Provision of financial, technical, and logistical support to development and protection of ARNP 	5	4
Divers	 Recreation Reef research and conservation Promotes diving industry. Sources of revenue 	5	4
Fisherfolks	 Income and sustenance from spillover of ARNP marine resources Implementation of protection and conservation measures Potential leaders for sustainable community development and ARNP conservation 	4	4

	 Potential guardians of ARNP resources from illegal fishers Control over commercial fishers 		
Dive operators	 Profits from dive tours Promotes diving industry. Controls itinerary of divers Provides orientation for divers and boat operators 	4	4
Hotel and resort owners	Profit generationJob generationProvides packages and itinerary for tourists	4	3
Visitors (Non-divers)	Recreation and researchSources of revenue	4	3
Cooperatives/people s' organizations	Livelihood opportunitiesSupport to PAMB/PAMO and LGU	3	3
Provincial Government of Occidental Mindoro	 Primary stewardship over ARNP Promotion of ARNP as a tourist destination 	3	2
Boats / ships passing through ARNP	Navigation	U	1

³ U – Unknown; 1 – No Importance; 2 – Some Importance; 3 – Moderate Importance; 4 – Very Important; 5 – Critical

Fisherfolks, particularly those who are based in Sablayan, also play a very important role in the management of ARNP. There are numerous success stories in other protected areas in the Philippines where fisherfolks are empowered and capacitated and greatly helped in the conservation and management of MPAs, since they are directly benefiting from the spillover effect. Local fisherfolks, when empowered, are effective agents of change and can lead their communities to conserve the marine resources in ARNP. However, on the other end, fisherfolks may also pose a threat to the park, if not properly monitored. Cases of intrusion to the ARNP have been reported in areas declared as a

⁴ U – Unknown; 1 – No Influence; 2 – Some Influence; 3 – Moderate Influence; 4 – Very Influential; 5 – Critical

no-take zone. This can be further aggravated with the continuously increasing population, and especially now with the loss of livelihoods and income during the COVID-19 pandemic.

Stakeholders in the tourism industry, such as hotel and resort owners, dive operators, divers, non-diving visitors, and other groups are useful in marketing the ARNP as a destination, however, they are also important in ensuring that proper tourist etiquette and protocols are practiced avoiding negative impacts of tourism in the natural resources of ARNP. Proper coordination with these groups is crucial to make sure that tourist arrivals and activities are well-organized and that they do not exceed the carrying capacity of the park.

One major issue that was identified in the previous assessments and in the planning, workshop was the disposal of solid and liquid wastes from boats and vessels that are passing through ARNP. These concerns, if not addressed, can cause detrimental effects, such as ingestion of wastes by marine fauna and alteration of the natural state of marine resources. Putting in place policies and enabling mechanisms for the implementation of these policies on waste management should be one of the priorities in terms of management.

The current lockdowns and restrictions brought about by the COVID-19 pandemic brought about positive and negative effects to ARNP. On the positive side, since there is less pressure on the environment due to the absence of tourists and guests, there has been an observed increase in the number of marine turtles in Apo Island and a decrease in the number of COTS. On the negative side, however, the closure of tourism industry in the region and in the country resulted to decreased income for the park which may cause drastic effects to its management.

VII. VISION, GOALS, OBJECTIVES

Vision

Well maintained ecosystem by committed stakeholders for improved biodiversity towards a more sustainable marine protected area.

Goals

The management goals identified are based on the issues identified during the planning workshop. These are:

1. Establish a management framework that will assure the maintenance and protection of the integrity and improvement of the quality of habitats and ecological

- species of flora and fauna therein.
- 2. Protect, conserve, and improve the status of biodiversity of the ARNP; and
- 3. To establish effective linkages with relevant institutions.

Objectives

This management plan aims to attain the ARNP vision by fulfilling the following objectives:

- 1. To provide a roadmap to maintain and protect the integrity and quality of habitats in the Park;
- 2. To guide the PAMO and stakeholders in implementing and monitoring activities related to Park management;
- 3. To establish strong and effective linkages with the LGU Sablayan and other adjacent coastal LGUs, including local stakeholders concerned with coastal and marine resources protection and conservation; and
- 4. To empower women and men Park stakeholders through ensuring their participation in Park governance and implementation of alternative biodiversity-friendly enterprises.

VIII. MANAGEMENT STRATEGIES, INTERVENTIONS AND ACTIVITIES

A. Management Zoning

In the 2015 – 2020 Ecotourism Management Plan, eight (8) management zones have been identified, namely: (1) Strict Protection Zone; (2) Sustainable Use Zone; (3) Recreational Zone; (4) Special Use Zone; (5) Buffer Zone; (6) Strict Protection Zone; (7) Restoration Zone; and (8) Habitat Management Zone. Five of these zones were in Apo Island. (See Figure 27)

The Implementation Rules and Regulations (IRR) of RA No. 7586 or the National Integrated Protected Areas System (NIPAS) Act of 1992, as amended by RA No. 11083 or the Expanded National Integrated Protected Areas System (ENIPAS) Act of 2018 identified three management zones of protected areas, namely: (1) Strict Protection Zone; (2) Multiple Use Zone and (3) Buffer Zone. (See Figure 28), however, formal delineation has not been conducted by the PAMO and to date, there are no existing coordinates for these zones. The following zones are therefore proposed based on the recent assessments and studies conducted.

1. Strict Protection Zone (SPZ)

The Strict Protection Zone has been identified with the highest biodiversity values, but at the same time, faces the highest level of threat. In the REECS assessment conducted in 2017, stations 1, 2, 6, 7, 9, 11, 12 have the highest percent hard coral cover (in fair condition) and have the highest fish standing stock biomass, which coincides with the WWF assessment wherein sites 5A, 5B, 3A and 3B have the highest percent coral cover (see Figure 29).

The SPZ covers the whole of Apo Island, including the mangrove forest, beach forest, seagrass beds, and karst areas which are inhabited by endemic and migratory bird species. Menor Island, and western side of Cayos del Bajo or roughly 5,468 hectares (Table 5 and Figure 28). In the Vulnerability Assessment Report by Foresterei in 2018, the same areas have the highest vulnerability to coral bleaching, and hence, would require utmost protection and management.

The SPZ will be prioritized for species and habitat conservation, therefore total protection through regular patrolling, law enforcement and biophysical monitoring is required. Although the ARNP facilities are in this Zone, it shall be closed to all human activities (including tourism), except for scientific studies and research.

Table 5. Area of the Management Zones of ARNP

Management zones	Area (ha)
Buffer Zone	11,689
Multiple-Use Zone	10.151
Strict Protection Zone	5,648
Total	27,488

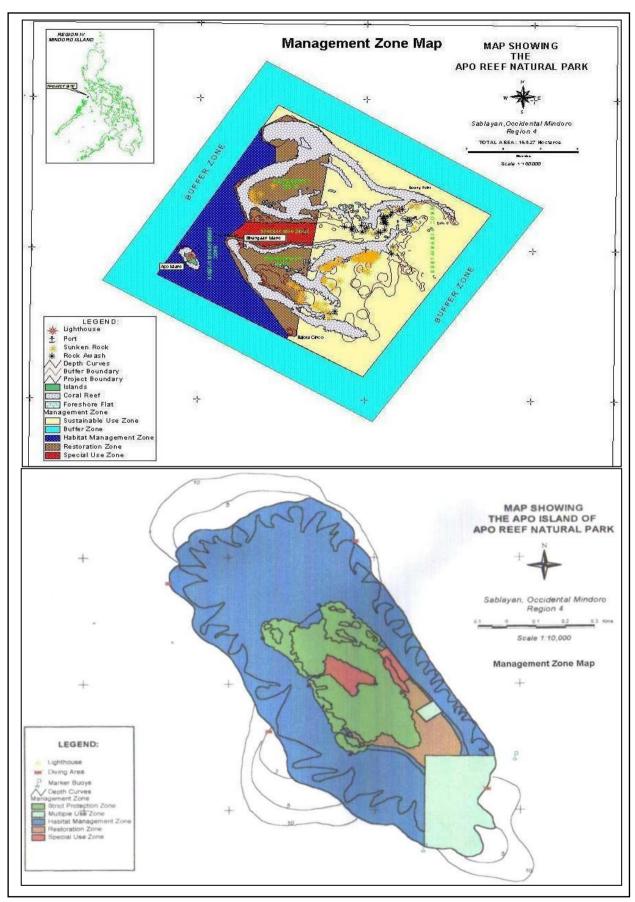


Figure 27. Old ARNP Management Zones as Depicted in the 2015 -2020 Ecotourism Management Plan

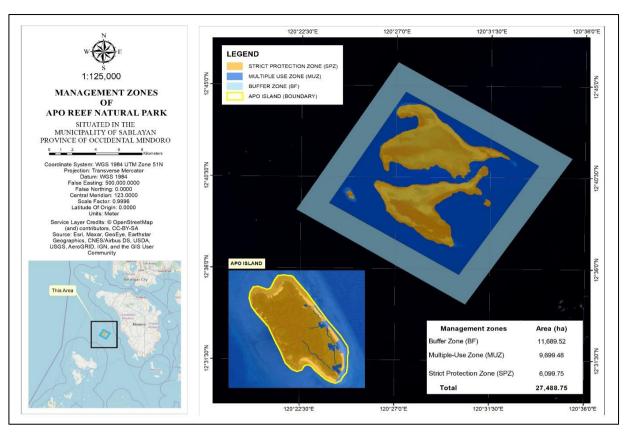


Figure 28. Mao showing Management Zones of ARNP



Figure 29. Map showing Management Zones in Apo Island

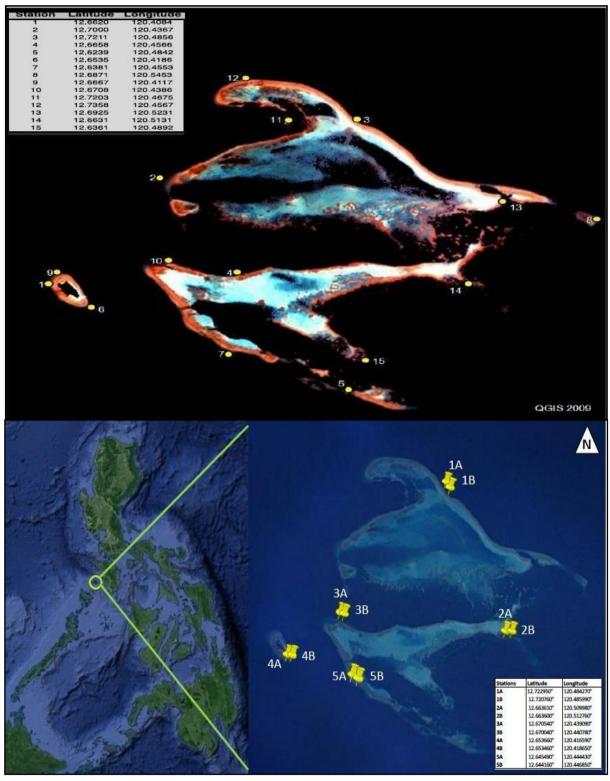


Figure 30. REECS and WWF assessment sites (Sites 1, 2, 6, 7, 9, 11 of REECS and 5A, 5B, 3A, and 3B of WWF have the highest percent coral cover)

2. Multiple Use Zone (MUZ)

This Zone has an area of about 10,151 hectares, and mostly covers the eastern part of ARNP. (See Table 5 and Figure 28).

This Zone where the Diving Sites are (Figure 30 and 31), will be accessible to tourists within acceptable limits (current carrying capacity is 104 people), and therefore should undergo regular monitoring (including biophysical and tourist arrivals and activities), patrolling, and law enforcement to ensure that proper management is practiced. Its management would entail collaboration with the LGU and other stakeholders; in addition, updating of the ARNP Ecotourism Management Plan is recommended.

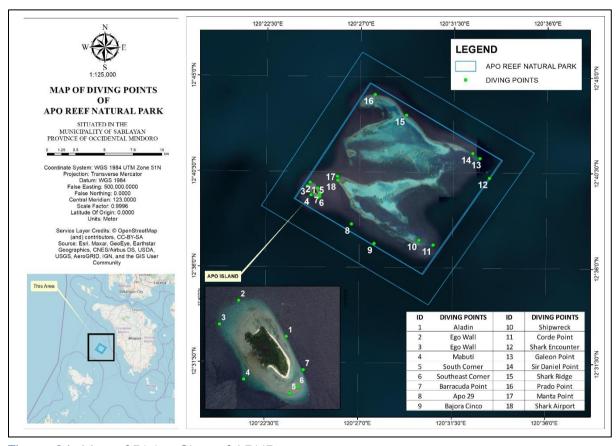


Figure 31. Map of Diving Sites of ARNP

3. Buffer Zone (BZ)

The buffer zone serves as an extra layer of protection from threats, such as pollution, unregulated boats, and encroachment of fisherfolks. In ARNP, the buffer zone covers the area peripheral to the park, around 2 kilometers from the park boundary. It has an area of around 11,689 hectares (Table 5). The PAMB exercises management authority over the buffer zones and ensures the facilitation of participatory management together with other government agencies, Sablayan LGU, POs, NGOs, and other stakeholders.



Figure 32. Map of Diving Sites near Apo Island

IX. MANAGEMENT PROGRAMS

The Management Programs and Subprograms identified during the planning workshop are clustered into five foci namely: a) Environmental Protection through Law Enforcement, b) Ecosystems and Biodiversity Conservation, c) Ecotourism, d) Linkages with Stakeholders, e) Communication, Education and Public Awareness (CEPA), and f) Support to PAMO Operations (Table 6). In each of the focus, the expected outputs, implementation period, and implementing agencies were likewise identified.

The selection and identification of the management foci were based, first, on the unique and tremendous biodiversity found in the Apo Reef Natural Park (ARNP) which led to its proclamation as a Protected Area (PA), and secondly on the objectives of conserving, and even preserving this unique biodiversity, thus the need to protect it from illegal activities. Thus, law enforcement contingent has to be organized, and capacitated for effective monitoring and protection of the Natural Park. There should be continuous monitoring of the various components of the biodiversity for conservation. Solutions to various threats have to be implemented such as the Crown-of-Thorns starfish (COTS) surveillance and control, invasive alien species (IAS) eradication, response and protection from vessel groundings and various pollutants, and climate change adaptation.

The attributes of ARNP have to be shared with people who value and enjoy the biodiversity of flora and fauna found it supports, thus it has become a tourist destination. Tourism is an excellent source of income for the management of the Natural Park but to protect the PA from intended or unintended acts of tourists, there is a need to regulate tourism activities in the area and enforce guidelines and protocols that tourists have to observe such as carrying capacity of certain areas within the ARNP exemplified by snorkeling and diving sites. Tourism service providers such as boatmen, tour guides, and even food service providers need to be trained, educated, and duly monitored.

There are many stakeholders in the management and use of the ARNP such as the local government units (LGUs), and residents of Sablayan particularly the coastal barangays that experience the impacts of the Protected Area through spillover effects. They need to be coopted in the protection and sustainable use of the Natural Park. Because of the rich marine biodiversity in the park, it cannot be denied that it is an important source of livelihood to residents of Sablayan, but in reaping the benefits of the park, they must observe certain set of behavior along the lines of nature conservation, thus a strong and working relationship with the stakeholder is important to establish and maintain.

Part and a strong element of that linkage can be established and maintained through education, communication and public awareness programs. Information, Education and Communication (IEC) materials will be developed and effectively disseminated to stakeholders. Part of this IEC effort shall be geared towards improving youth involvement in conservation through marine biology camps and tailored school lectures on the importance of the environment, of biodiversity and ecology in their everyday lives. These will be conducted in addition to coopting them to participate in periodic activities of cleaning of debris and polluting wastes thrown into the sea.

The greater responsibility of maintaining and sustaining, through conservation efforts, the Apo Reef Natural Park rests on the shoulders of the Protected Area Management Office (PAMO) with the policy direction provided by the Protected Area Management Board (PAMB). To be able to accomplish this daunting task of protecting and maintaining the Protected Area which supports a high marine biodiversity, the ARNP-PAMO must be provided with the needed support in terms of appropriate and implementable policies, tools and equipment such as high-speed water crafts, ICT equipment, support to the establishment of a comprehensive database system which can be enriched by results of research and investigations on the biodiversity of the Natural Park, technical equipment for surveillance and firearms for its law enforcement contingent. It should be noted, however, that the procurement of firearms is controversial to say the least, at this time, but in order to provide teeth for law enforcement in the PA, law enforcement has to be provided with these pieces of

equipment. DENR is in the process of establishing a Law Enforcement Bureau and when that is approved, then the provision of firearms to the PA law enforcement unit will become a possibility.

To ensure the effectiveness of the PAMO in performing its duties and responsibilities, management plans such as the General Management Plan, the Communication, Education and Public Awareness Plan, and updating of the Ecotourism Business Plan shall be formulated and duly updated.

Needless to say, the Management Plan of the Apo Reef Natural Park cannot be implemented properly without the needed budget to carry it out.

The crosscutting concern of the management plan is the inclusion of gender-sensitiveness of each of the various identified activities. The management plan recognizes the role of women and men in the management of the park. It also recognizes the fact that even persons with disabilities can be an important cog in the sustainable use of the park and so does the youth sector. These may not have been explicitly indicated in the activities, except the youth, but they are implicitly embedded in each activity.

Table 6. ARNP Management Strategies and Program

Management Focus	Issues, Threats and Concerns	Strategies	Programs/ Activities
Environmental Protection through Law Enforcement			1.1. Law enforcement
Objectives: 1.1. To improve the enforcement of PA laws and other related environmental law within the protected areas	Presence of illegal activities in the ARNP	Strengthening of law enforcement	operations 1.1.1. Patrolling of the Protected Area 1.1.2. Engagement of Protected Area monitoring personnel
1.2. To capacitate the			1.2. Capacity building of law enforcement 1.2.1. Conduct of law
law enforcers in patrolling and monitoring			enforcement related learning events 1.2.2. Deputization of TF MARLEN members as

			Enforcement Officers
			Enforcement Officers
			(i.e., Fish Warden,
			PCGA, and WEO)
			1.3. Demarcation of
1.3. To increase			Protected Area
the protection of			1.3.1. Physical demarcation
ARNP through			of boundaries
demarcation			1.3.2. Demarcation of
domai oddom			boundaries on digital
			platforms
Ecosystem and	Threats on the	Management and	2.1.A. Habitat monitoring and
Biodiversity	Apo Reef	reducing the	assessment
Conservation	Nature Park	threats	2.2.A. Ecological and
Conservation	Nature Faik	tilleats	biodiversity monitoring
			2.1.A.1. Monitoring using
			Biodiversity Monitoring
			and Assessment
			System (BAMS)
			2.1.A.2. Monitoring using
Objectives			Biodiversity
			Monitoring System
2.1. To identify			(BMS)
trends in the			2.1.A.3. Monitoring of coral
condition of			reefs, mangroves, and
ecosystems and			seagrasses
biodiversity			2.1.A.4 Bird survey
			2.1.A.5. Sea turtle nesting
			beach monitoring
			2.1.A.6. Elasmobranch's
			biodiversity
			assessment
			2.1.B. Water quality
			monitoring and
			assessment
			2.2. Threat Reduction
			2.2. A. Crown of Thorns
			(CoTS) Starfish
			Management
2.2. To address			9
identified threats			2.2.A.1. Development and
			updating of a strategic
to ecosystems			plan for the
and prevent			management of CoTS 2.2.A.2. Surveillance and
further decline in			
ecosystems			control of CoTS
health.			2.2.B. Eradication and
			control of Invasive
			Alien Species (IAS)

			
			2.2.B.1. Development and updating of a strategic plan for the eradication and control of IAS 2.2.B.2. Implementation of strategic plan for the eradication and control of IAS
			2.2.C. Response to oil spills and ship grounding
			2.2.C.1. Development of an emergency response guidelines for oil spills and ship grounding
			2.2.C.2. Capacity building of Protected Area staff in responding to oil spills and ship grounding
			2.2.D. Management of light and noise pollution
			2.2.D.1 Retrofitting of light fixtures in Apo Island, Apo Reef Nature Park
			2.2.D.2. Development of guidelines regulating noise and light pollution
			2.2.E. Solid waste and marine litter management
			2.2.E.1. Development of strengthening of Protected Area policies on solid waste and marine litter management 2.2.E.2. Formulation of communication campaign for public awareness
2.3. To enhance the resilience of ecosystems in	Threats of climate change	Climate change adaptation and mitigation	2.3. Enhancing Climate Change Resiliency
Apo Reef Natural Park to a changing			2.3.A. Formulation of Climate Change Adaptation Plan

climate			2.3.A.1. Assessment of ecosystem vulnerability 2.3.A.2. Development and upgrading of Climate Change Adaptation Plan 2.3.B. Research and development of localized, active habitat restoration interventions using best available science
Eco-tourism	Services and service providers need enhancement	Capacity building and upgrading of services on ecotourism	3.1. Regulation of tourism industry
Objectives 3.1. To minimize the impact of tourism to coastal and marine resources			 3.1.1. Orientation of service providers 3.1.2. Accreditation of service providers 3.1.3. Continuous capacity building of accredited service providers 3.1.4. Updating of code of conduct (CoC) 3.1.5. Updating of carrying capacity 3.1.6. Updating of fines and penalties for tourism related visitors
3.2. To provide conducive and environment friendly tourism facilities and equipment for the enjoyment of tourists			3.2. Eco-tourism facilities and equipment 3.2.1. Establishment of audio-visual room 3.2.2. Maintenance of existing eco-tourism facilities and equipment 3.2.3 Installation and maintenance of trails and buoy markers
3.3. To enhance the ecotourism services in ARNP			3.3. Support to eco-tourism operations 3.3.1. Development and maintenance of website and/or booking system

			with online payment scheme 3.3.2. Institutionalizing the hiring of tour guides 3.3.3. Capacity building of service providers
Linkages with other stakeholders	Community stakeholders need to participate more actively in the management of ARNP	Involve community and stakeholders in management of ARNP	4.1. Community and stakeholders' involvement
Objectives			4.1.1. Regular meeting with other law enforcement agencies
4.1. To increase the participation of stakeholders in all			4.1.2. Involvement of coastal barangays in monitoring and surveillance of illegal activities through Bantay Dagat volunteers
undertakings of ARNP			4.1.3. Conduct of environmental activities (i.e., coastal clean-up, tree planting, and SCUBASURA)
			4.2. PAMB operationalization and strengthening 4.2.1. Regular PAMB
4.2. To strengthen the			meeting 4.2.2. Updating of PAMB
membership of stakeholders in ARNP PAMB			Manual of Operations 4.2.3. Capacity building of PAMB members
			4.2.4. Review and updating of existing policies
4.3. To assist registered			4.3 BDFE 4.3.1 Technical assistance for the preparation of BDFE Business Plan
organizations of displaced fisherfolks of ARNP in having alternative livelihood			4.3.2. Technical assistance for the enhancement activities for POs (e.g., capacity building on enterprise and organizational

			development)
			4.3.3. Monitor the progress of the enterprise
Communication, Education and Public Awareness	Community and stakeholder are not familiar about ANRP	Information, education and communication drive for community and stakeholders	5.1. Communication, Education and Public Awareness
Objectives:			5.1.1. Environmental celebration
5.1. To highlight the importance			5.1.2. Celebration of Apo Reef Month
of conservation and protection			5.1.3. Production of promotional materials
of ARNP and other coastal and marine resources			5.1.4. Production of new mascot species
5.2. To promote			5.2. Youth Involvement
youth involvement in			5.2.1. Conduct of "Dalaw Turo" and bio camp
the conservation of ARNP			5.2.2. Development of Teaching Manual for ARNP
Support to PAMO Operations	PAMO facilities need upgrading	Upgrade and enhance PAMO facilities	6.1. Establishment and maintenance of office building and equipment
Objectives: 6.1. To provide conducive workplace and working environment with well-maintained equipment and			6.1.1. Construction of PAMO building
enough manpower for the whole PAMO operation			6.1.2. Maintenance of existing facilities and equipment
6.2. To effectively			6.2. PA planning 6.2.1. Updating of
manage ARNP through			Ecotourism Business Plan

continuous assessment of management strategies and provision of roadmap of activities	6.2.2. Updating of the General Management Plan 6.2.3. METT/MEA 6.2.4. Formulation of the CEPA Plan
6.3. To create a system for the organization, accessibility,	6.3. PA Database 6.3.1. Establishment of comprehensive Database System
and security of data	6.3.2. Research and data gap analysis
	6.4. Provision of supplies, materials, and equipment
	6.4.1. Procurement of ICT equipment
6.4. To provide adequate	6.4.2. Procurement of office furniture and fixtures
provisions of supplies,	6.4.3. Procurement of office supplies and equipment
materials, and equipment for smooth	6.4.4. Procurement of technical equipment for surveillance
operation of the PAMO	6.4.5. Procurement of high- speed watercraft
	6.4.6. Provision of firearms to law enforcers
	6.4.7. Procurement of machinery and equipment

Table 7 is a Summary of the focus of the PA Management Plan which indicates the overall goals and objectives of each of the identified management focus.

Table 7. Summary of Management Focus

Overall Goal The 15,799 hectares core zone of ARNP is protected from illegal activities The 15,799 hectares core zone of ARNP is protected from illegal activities The status of ecosystems and biodiversity in ARNP are maintained or improved Apo Reef Natural Park is ensured through compliance with environment- ecosystems and biodiversity in ARNP are maintained or improved. Apo Reef Natural Park is ensured through compliance with environment- ecosystems and biodiversity in ARNP are maintained or improved.	ation, and Support to PAN	Mgt. Focus 5: Communication, Education and Public Awareness	Ecosystem and Mgt. Focus No. Ecotourism	Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	Mgt. Focus. No. 1: Environmental Protection through Law Enforcement	Management focus
	well-implement programs/activ project of ARNI	awareness/knowled ge of different sectors on the importance, protection & sustainable management of	of ecotourism in Apo Reef Natura Park is ensured through compliance with environment-friendly guideline	ecosystems and biodiversity in ARNP are maintained or	hectares core zone of ARNP is protected from	Overall Goal
enforcement of PA laws and other related environmental law within the protected area 2.1. To identify trends in the condition of ecosystems and biodiversity 3.1. To minimize the impact of tourism to coastal and marine resources 3.1. To minimize the impact of tourism to coastal and marine resources 4.1 To increase the participation of stakeholders in all undertakings of ARNP	of working and environment wi ARNP well-maintained astal equipment and enough manpower for t whole PAMO operation		the impact of tourism to coast and marine resources	trends in the condition of ecosystems and biodiversity	the enforcement of PA laws and other related environmental law within the protected area	

capacitate the law enforcers in patrolling and monitoring	identified threats to ecosystems and prevent further decline in ecosystem health	conducive and environment- friendly tourism facilities and equipment for the enjoyment of tourists	strengthen the membership of stakeholders in ARNP PAMB	youth involvement in the conservation of ARNP	manage ARNP through continuous assessment of management strategies and provision of roadmap of activities
1.3. To increase the protection of ARNP through demarcation	2.3. To enhance the resilience of ecosystems in Apo Reef Natural Park to a changing climate	3.3. To enhance the ecotourism services in ARNP	4.3. To assist registered organizations of displaced fisherfolks of ARNP in having alternative livelihood		6.3. To create a system for the organization, accessibility, and security of data
					6.4. To provide adequate provisions of supplies, materials, and equipment for smooth operation of the PAMO

X. HUMAN RESOURCES AND INSTITUTIONAL FRAMEWORK

Organization and Management Structure

The ARNP as a Protected Area is under the control and administration of DENR. At the regional level, the ARNP Protected Area is under the jurisdiction of MIMAROPA Region At the site level, the ARNP is under the control and administration of the DENR through the Protected Area Management Board (PAMB) and Office of the Protected Area Superintendent (PASu), which shall exercise authority in overseeing the operations of the PAMO and PAMB to ensure that it is acting within the scope of its powers and functions. The local government of Sablayan serves as co-manager with DENR in the protection and tourism development in ARNP.

The various local stakeholders identified in the Apo Reef Natural Park are enumerated below. In addition to these, however, other stakeholders at the national level, include: (a) Department of Environment and Natural Resources (DENR) as the government agency that administers the NIPAS; (b) Protected Area Management Board (PAMB); and (c) Protected Area Management Office (PAMO) headed by the Protected Areas Superintendent (PASu).

1. Protected Area Management Board (PAMB)

The ENIPAS Act provided for the creation of PAMB, a multi-sectoral policymaking and permit-granting body which shall, by a majority vote, decide matters relating to planning, resource protection and general administration in ARNP, promulgate rules and regulations to promote development programs and projects on biodiversity conservation and sustainable development, delineate and demarcate protected area boundaries and buffer zones, and other functions and powers prescribed by law. It decides on allocation of funds for the implementation of the management plan and manage the Protected Area Retention Income Account. The PAMB is also tasked to recommend policy changes to the DENR and monitor and assess the performance of the PASu and other ARNP personnel and compliance of partners in any undertaking, contract, or agreement. The PAMB convenes at least once per quarter each year.

PAMB membership of the ARNP in accordance with the ENIPAS Act, shall be composed of the following: (a) the DENR Regional Executive Director of MIMAROPA Region as Chairperson, (b) a representative of the Occidental Mindoro Governor's office; (c) a Senator representative if he/she comes from the area (no Senator comes from Occidental Mindoro) d) representative of the Congressional Representative; (e) a representative of the Sablayan Mayor's office; (f) Mayor of Sablayan, (g) Chairman

of the Barangay, (h) representatives from the Department of Agriculture, National Economic and Development Authority, Department of Science and Technology, Philippine National Police, and Department of National Defense; (i) Liga ng mga Barangay representative from among the coastal barangays of Sablayan; (j) a representative from an academic institution (preferably from a university/college in Occidental Mindoro); (k) a representative from the private sector, preferably a resident of Occidental Mindoro who is distinguished in a profession or field of interest relevant to protected area management; and (l) three representatives from an NGO or PO which has been existing for at least five years and with track record in protected area management. The current membership of the ARNP PAMB is shown in Table 8.

In pursuant to RA 9710 or the Magna Carta of Women, the PAMB should be composed of at least forty percent (40%) women.

Table 8. Membership of the PAMB of ARNP

	PAMB Members	Υ	N	N/A	Remarks
1	Regional Director, MIMAROPA	✓			
	Region				
2	Office of the Provincial Governor	✓			
3	Office of Senator			✓	N/A as provided in RA No. 11083, Section 11.c
4	Office of District Representative	✓			
5	Office of Municipal Mayor	✓			
6	Barangay Chairperson			√	ARNP is not under the jurisdiction of any barangay in Sablayan
7	Regional Director of DA		✓		
8	Regional Director of NEDA		✓		
9	Regional Director of DOST		✓		
10	Regional Director of PNP		✓		
11	Regional Director of DND		✓		
12	3 NGOs/POS	✓			MBCFI, WWF, PCGA
13	IPs			✓	No IPs in ARNP
14	Academe	✓			
15	Private Sector		✓		

2. Protected Area Management Office

The PASu, who serves as the Chief Operating Officer of ARNP, is appointed by the DENR. The PASu performs and executes powers and functions set forth in the ENIPAS Act and its Implementing Rules and Regulations and other functions as the PAMB may assign. The PASu is directly responsible to the RED and PAMB. Some of the functions of the PASu include the preparation and implementation of the management plan (including the annual work and financial plan), ensure the integration of the ARNP management plans, programs, projects and policies with relevant national and LGUs' plans and programs, provide secretariat services to the PAMB, establish and maintain a database management system, enforce laws, rules, and regulations relevant to ARNP, and monitor, evaluate, and report the implementation of management activities of ARNP.

The PAMO may be augmented by the deputization of local environment and natural resources officers upon the recommendation of the PAMB and approval of the DENR. Figure 32 shows the current organizational structure of the PAMO.

Although the current PAMO is functional, the organizational structure has to be reviewed and eventually be enhanced to comply with the provisions of the ENIPAS, with the following positions: 1 Park Operations Superintendent; 1 Supervising Ecosystem Management Specialist; 3 Senior Ecosystems Management Specialists; 1 Accountant; 6 Ecosystems Management Specialists II; 6 Ecosystems Management Specialists II; 1 Information Officer I; 1 Administrative Officer I; 2 Tourism Operations Officers I; 1 Revenue Collection Officer I; 1 Records Officer I; 2 Administrative Assistants; 3 Park Maintenance Officers; 16 PA Rangers; 1 Disbursing Officer; 2 Administrative Aides 6; 4 Administrative IV; 4 Park Attendants II; and 3 Administrative Aides III.

3. Civil Society Organizations (CSOs)

In Sablayan, many NGOs are involved in either: protection of biodiversity and the environment; or sustainable development for local people. NGOs usually led research on best practices, guide training, regional planning and stakeholder meetings, community development, protected area management, and targeted conservation initiatives.

International and local NGOs are very supportive to Apo Reef including WWF-Philippines, Mindoro Biodiversity Conservation Foundation, Inc., GIZ, and the like.

It is important to note, however, that there is a need to involve fisherfolks'

organizations and ensure the participation of other community-based organizations (women, youth, etc.) in management initiatives.

4. Task Force MARLEN (Marine and Apo Reef Law Enforcement in Nature)

The Task Force is a Multi-Sectoral Marine Law Enforcement Team created to undertake law enforcement and related activities within the Municipal Waters of Sablayan and Apo Reef Natural Park. It was initially organized on September 24, 2004 and is composed of the following: (a) LGU Sablayan (*Park Rangers, boatman & other staff*); (b) Philippine Army (*76th Infantry Battalion*); (c) Philippine National Police - PNP (*Sablayan Municipal Police Station & Regional Public Safety Battalion*); (d) Philippine Coast Guard (PCG); and (e) WWF Philippines. The organizational structure of Task Force MARLEN is shown below (Figure 33).

It was officially organized and created on July 26, 2006, by virtue of Executive Order No. 02, Series of 2006, issued by the Local Chief Executive of Sablayan. The TF MARLEN Manual of Operation, entitled as "BATAYANG GABAY ng TAGAPAGPATUPAD NG BATAS PAMPANGISDAAN (Task Force MARLEN)" was produced, completed, and approved on June 20, 2006 through the initiative of WWF-Philippines in collaboration with the LGU Sablayan and PAMO. This Manual of Operation serves as guide of the TF MARLEN in the execution of their important task in the enforcement of laws for the conservation and protection of the marine resources of Sablayan, Occidental Mindoro.

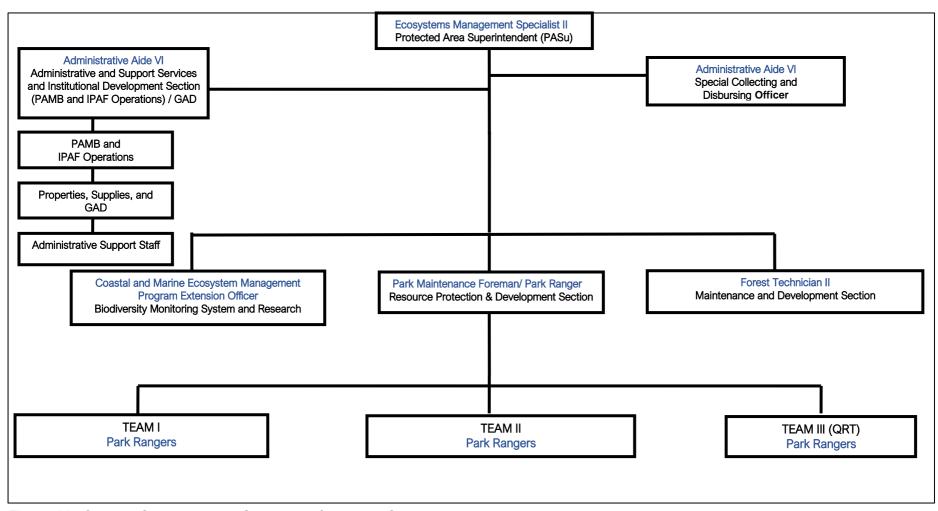


Figure 33. Current Organizational Structure of the PAMO

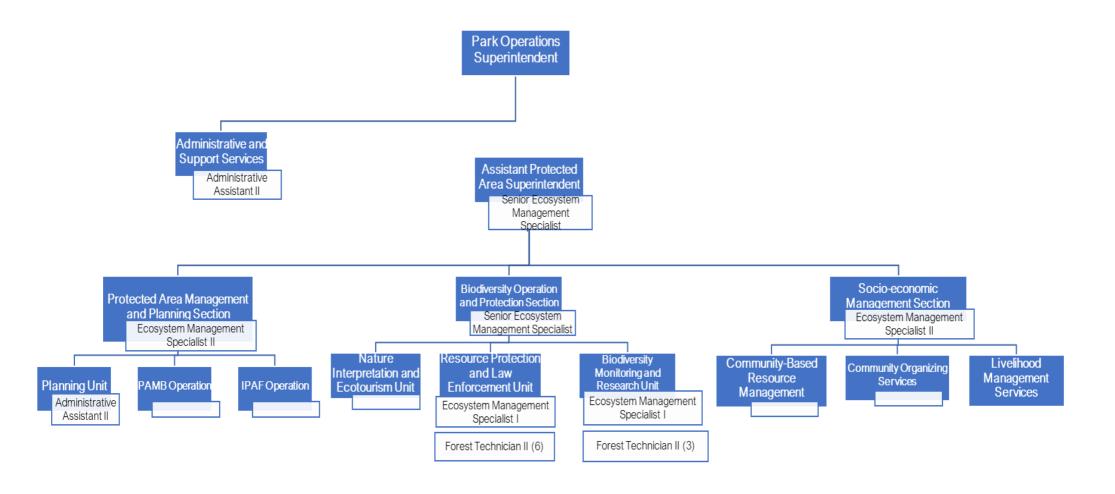


Figure 34. Proposed Organizational Structure of the PAMO

Ang Bumubuo ng Balangkas ng TF MARLEN

(Organizational Structure of the TF MARLEN)

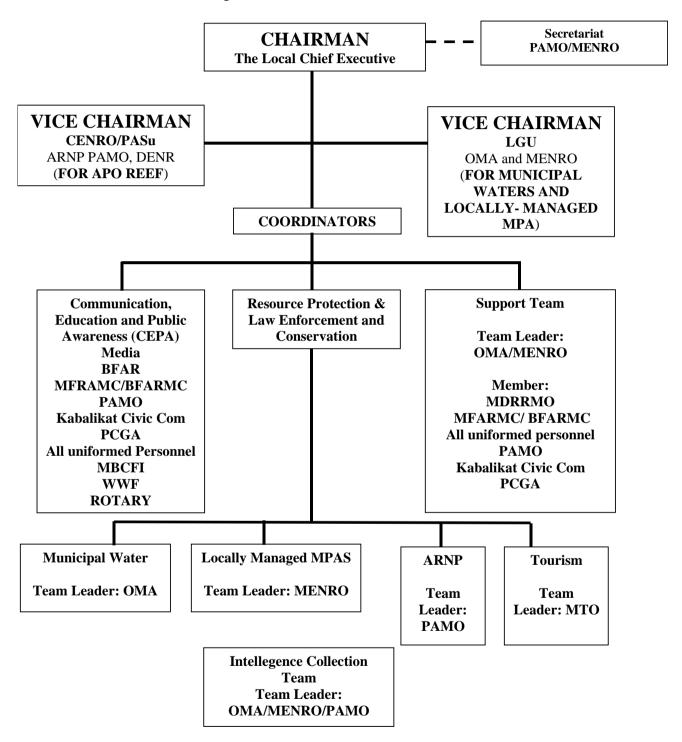


Figure 35. Organizational structure of TF MARLEN

5. LGU co-Management of the ARNP

Section 26 of the IRR of RA No. 11083 or the Expanded NIPAS Law defines the relationship of the Local Government Units in the management of protected areas. LGUs with territories inside the protected area may align their Comprehensive Land Use Plans (CLUP), local development plans, disaster risks reduction plans and other required plans with the with the Protected Area Management Plan (PAMP) and its objectives. The LGU can participate in the management of the PA through its membership with the PAMB. It can also contribute part of its Internal Revenue Allocation (IRA) for the management of the protected area.

The significant contribution of the LGU to the management of the protected area is in the form of infrastructures and facilities such as pavilion, multi-purpose halls, sheds, cottages, trails, water, and power system installed in the area.

XI. LOGICAL FRAMEWORK

The logical framework describes how the management plan is expected to work in achieving the desired vision and goals, as measured by the indicators. The GMP log frame resulted from the planning workshop conducted last November 2019. The vision and goals were identified by Park stakeholders who were present.

Table 9. Logical Framework

Long term goals		Indicators	Method Of Verification	External Assumptions
Well-maintained ecosystem by committed stakeholders for improved biodiversity towards a more	1	Reduced number of illegal activities in ARNP	Database and statistics of Apprehensions and cases filed from 2022-2031	
sustainable marine protected area	2	Improved and conserved habitats and ecological species of flora and fauna within 15,799 hectares core zone	Monitoring and Assessment Report	

	3	Sustained Ecotourism in ARNP with compliance on guidelines for environment- friendly tourism	Statistics of tourist arrival from 2022-2031	
	4	Stronger linkages with other institutions: local, national, and international, whose activities focuses on coastal and marine resources protection and conservation	Activity Reports, MOA/MOU, Usufruct, Collaborations	
	5	High awareness of the community and other sectors on the importance of conservation and protection of ARNP	CEPA Materials Produced, Activity reports on environmental celebrations conducted	
	6	Good performance of PAMO in all undertakings for the welfare of ARNP	MEA, IPCR of Personnel, Accomplishment reports	
Short term goals				

1. The 15,799 hectares core zone of ARNP is protected from illegal activities	1.1.	100% of the apprehended violators subjected to criminal case and the seized conveyance and paraphernalia subjected to administrative hearing	Patrol Plan, Spot Report, Apprehension Report, Resolution on Administrative hearing, Status Report of Cases Filed	100% active participation of the members of Task Force MARLEN
		capacitated and deputized Task Force MARLEN	Certificate of Deputization	
	1.3.	Physical and Digital demarcation of ARNP is completed	Integrated Map of ARNP in navigational maps; Official Map from NAMRIA, Property Inventory Report of witness monument	
2. The status of ecosystems and biodiversity in ARNP are maintained or improved.	2.1.	By 2031, the coral cover of ARNP is greater than 22%; fish abundance and richness is still high; seagrass and avifaunal species continuously monitored; mangrove and beach forest abundance and diversity maintained	Monitoring and Assessment Report, Activity Reports,	Favorable weather condition for assessment and monitoring; no damages incurred from natural disturbances;
	2.2.	By 2031, 100% of the identified threats have been addressed	Monitoring and Assessment Report, Activity Reports, Approved	

			Response	
			Response Protocol Manual	
	2.3.	By 2022, ARNP has an approved Climate Change Adaptation Plan and R&D for possible restoration measures has started	Climate Change Adaptation Plan, Copies of Research	
3. The ecotourism in Apo Reef Natural Park is enhanced by complying with the guidelines on sustainable tourism specially for SCUBA	3.1.	By 2031, ARNP is compliant with guidelines for environmental-friendly tourism	Certificate of Accreditation of Service Providers; Updated policies	Restrictions due to
diving and snorkeling	3.2.	By 2031, all tourism facilities in ARNP are functional, well-maintained and can accommodate the number of tourists	Maintenance and Inventory Report; Purchase orders; Inspection Report	COVID-19 Pandemic will be lifted in 2022 and ARNP will resume its normal operations
	3.3.	By 2031, 80% of the visitors in ARNP is satisfied with the ecotourism services provided	Client Satisfactory Survey	
4. The linkages with other institutions: local and international, whose activities focus on coastal and marine resources protection and conservation, are enhanced	4.1.	By 2031, 100% of the accredited CSOs and coastal communities in Sablayan has active participation on the protection and conservation of	MOA/USUFRACT, Certificate of Appointment of PAMB, Project Output Report, Attendance to activities, Updated Executive Orders; Manual of Operations;	100% willingness of stakeholders to participate in the conservation of ARNP

		ARNP and	Copies of	
		other coastal	research/studies	
		and marine	done	
		ecosystem	dono	
	4.2.	By 2023, all the		
	4.2.	stakeholders		
		listed in RA		
		10038 are		
		members of		
		PAMB		
	4.3.	By 2025, 3		
	4.3.	registered POs		
		of displaced		
		fisherfolks in		
		ARNP are		
		provided with livelihood		
		assistance		
	5.1.	All	Activity Report,	Restrictions
	J. 1.	environmental	Attendance,	due to
		celebrations	CEPA Materials	COVID-19
5. Increased		specifically for	Produced	Pandemic will
awareness/knowledge of		coastal and	TTOUUCEU	be lifted in
different sectors on the		marine are		2022
importance, protection &		being		2022
sustainable management		celebrated and		
of ARNP		CEPA Materials		
OI / II II II		continuously		
		produced and		
		updated until		
		2031		
	5.2.	By 2025, all	MOA/USUFRUCT	The DEPED/
	0.2.	Secondary and	with DEPED/	Local School
		Tertiary School	School; Activity	Board is
		in Sablayan has	Report	willing to
		incorporated	Пороге	include ARNP
		ARNP in their		in their
		lessons and		lessons
		activities		.5555115
	6.1.	By 2023,	Property Inventory	ARNP has
		PAMO building	Report,	procured lot
		is constructed,	Maintenance	in 2021
		and all facilities	Report	
		and equipment	- 1	
6. Well-implemented		are well-		
programs/activity/project		maintained		
of ARNP	6.2.	By 2031, ARNP	Mgt. Plan, MEA	
		updated plans	etc.	
	1	1 12 1	1	

	for implementation and allotment of budget		
6.3.	By 2023, ARNP has a comprehensive database readily available for stakeholders	Database System	
6.4.	By 2031, the operation of PAMO is well-supported with enough supplies, materials, and equipment	Property Inventory, Inventory Custodian Slip	

XII. FINANCIAL PLAN

In the planning workshop, the participants were made to prepare a budget proposal for their identified management strategies. These budgets served as the basis to form the proposed financial plan. Table 10 is the Budget Summary per Management Focus of the Manage Plan from 2022 to 2031. The total budget required is estimated at Php 228,134,758.63. The details of the budget per activity of the 6 Management Focus are shown in Annex 1. The Line-Item Budget is summarized in Table 11 for easier access.

Table 10. Financial Plan of ARNP for 2022 to 2031

Activity	Professio nal Services	Honoraria (For lecturers/ resource person in seminars/ training programs)	Travelling Expenses	Training Expenses	Office Supplies Expenses	Fuel, Oil and Lubricant	Other Supplies and Materials Expenses	Other Professional Services	Repair and Maintenance - Building and other Structures	Repair and Maintenance - Machinery and Equipment	Repair and Maintenance - Transportation Equipment	Labor and Wages	Other Maintenan ce and Operating Expenses	Buildings and other Structure Outlay	Machinery and Equipment Outlay	Transport ation and Equipmen t Outlay	Furniture and Fixture Outlay	TOTAL ALOTTED BUDGET	%
Mgt. Focus. No. 1: Environment al Protection through Law Enforcement	-	296,567.8 9	60,000.00	2,833,870 .91	-	15,816,95 3.92	5,549,114 .66	14,652,00 0.00	-	-	-	-	566,774.1 9	-	-	-		39,775,28 1.57	17 %
Sub Program 1.1: Law Enforcement Operations	-	-	-	-	-	15,816,95 3.92	5,061,425 .25	14,352,00 0.00	-	-	-	-	-	-	-	-	-	35,230,37 9.17	
1.1.1. Patrolling of the Protected Area	-	-	-	-	-	15,816,95 3.92	5,061,425 .25	-	-	-	-	-	-	-	-	-	-	20,878,37 9.17	
1.1.2. Engagement of Protected Area monitoring personnel	-	-	-	-	-	-	-	14,352,00 0.00	-	-	-	-	-	-	-	-	-	14,352,00 0.00	
Sub Program 1.2: Capacity Building of Law Enforcers	-	296,567.8 9	-	2,833,870 .91	•	-	487,689.4 1	-	-	-	-	-	566,774.1 9		-	•	1	4,184,902 .40	
1.2.1. Conduct of law enforcement -related learning events	-	296,567.8 9	-	2,833,870 .91	-	-	487,689.4 1	-	-	-	-	-	-	-	-	-	-	3,618,128 .21	

1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	-	-	-	-	-	-	-	-	-	-	-	-	566,774.1 9	,	-	-	-	566,774.1 9	
Sub Program 1.3. Demarcation of Protected Area	-	-	60,000.00	-	-	-	-	300,000.0 0	-	-	-	-	-	•	-	-	-	360,000.0 0	
1.3.1. Physical demarcation of Boundaries	-	-	50,000.00	-	-	-	-	300,000.0	-	-	-	-	-	ı	-	-	-	350,000.0 0	
1.3.2. Demarcation of Boundaries on Digital Platforms	-	-	10,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,000.00	
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	-	18,000.00	850,000.0 0	154,800.0 0	330,000.0	718,169.5 4	1,759,439 .48	4,700,000 .00	-	-	-	1,056,1 80.00	6,838,592 .75	-	50,000.00	-	-	16,475,18 1.77	7%
Sub Program 2.1. Habitat monitoring and assessment	•		850,000.0 0	-	330,000.0 0	560,000.0 0	1,060,000 .00	1,300,000 .00	-	-	-	1,000,0 00.00	5,300,000 .00	-	-	-	-	10,400,00 0.00	
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	-	-	350,000.0 0	-	30,000.00	60,000.00	160,000.0	-	-	-	-	-	1,300,000	-	-	-	-	1,900,000	
2.1.2. Monitoring using	-	-	100,000.0	-	100,000.0	100,000.0	200,000.0	-	-	-	-	400,00 0.00	1,600,000 .00	-	-	-	-	2,500,000 .00	

Biodiversity Monitoring System (BMS)																			
2.1.3. Monitoring of coral reefs, mangroves, and seagrasses	-	-	100,000.0	-	100,000.0	100,000.0	200,000.0	-	-	-	-	200,00	800,000.0	-	-	-	-	1,500,000	
2.1.4. Bird Survey	-	-	100,000.0	-	100,000.0	100,000.0	200,000.0	-	-	-	-	200,00 0.00	800,000.0	-	-	-	-	1,500,000	
2.1.5. Sea Turtle Nesting Beach Monitoring	-	-	100,000.0	-	-	100,000.0	300,000.0	-	-	-	-	200,00	800,000.0	-	-	-	-	1,500,000	
2.1.6. Elasmobran chs Biodiversity Assessment	-	-	-	-	-	-	-	500,000.0 0	-	-	-	-	-	-	-	-	-	500,000.0	
2.1.7. Water Quality Monitoring	-	-	100,000.0	-	-	100,000.0	-	800,000.0 0	-	-	-	-	-	-	-	-	-	1,000,000	
and Assessment						Ŭ.		Ŭ											
Sub Program 2.2. Threat reduction	-	18,000.00	-	154,800.0 0	-	158,169.5 4	699,439.4 8	1,300,000	-	-	-	<i>56,18</i> 0. 00	1,538,592 .75	-	50,000.00	-	-	3,975,181 .77	
Assessment Sub Program 2.2. Threat reduction 2.2.1. Crown-of- Thorns (CoTS) Starfish management	-	18,000.00			-	158,169.5		1,300,000	-	-	-			-	50,000.00		-	3,975,181	
Assessment Sub Program 2.2. Threat reduction 2.2.1. Crown-of- Thorns (CoTS) Starfish management -Development and updating of a strategic plan for the management			-	0		158,169.5 4	8	1,300,000		-		00		-	50,000.00			3,975,181	
Assessment Sub Program 2.2. Threat reduction 2.2.1. Crown-of- Thorns (CoTS) Starfish management -Development and updating of a strategic plan for the	-	-	-	-	-	158,169.5 4	-	1,300,000 .00	-	-	-	-	.75 -	-	-	-	-	3,975,181 .77	

1 .									_								_		
- Development and updating of strategic plan for the eradication and control of IAS	-	-	-	-	-	-	-	500,000.0	-	-	-	-	-	-	-	-	-	500,000.0	
- Implementation of strategic plan for the eradication and control of IAS	-	-	-	-	-	-	300,000.0	-	-	-	-	-	200,000.0	-	-	-	-	500,000.0	
2.2.3. Response to oil spills and ship groundings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
- Development of emergency response guidelines for oil spills and ship groundings	-	-	-	-	-	-	-	100,000.0	-	-	-	-	-	-	-	-	-	100,000.0	
- Capacity building of Protected Area staff in responding to oil spills and ship groundings	-	9,000.00	-	77,400.00	-	-	22,200.00	-	-	-	-	-	-	-	-	-	-	108,600.0	
2.2.4. Management of light and noise pollution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
- Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	-	-	-	-	-	-	344,739.4 8	-	-	-	-	-	-	-	50,000.00	-	-	394,739.4 8	
- Development of guidelines regulating noise and light pollution	-	-	-	-	-	-	-	200,000.0	-	-	-	-	-	-	-	-	-	200,000.0	
2.2.5. Solid waste and marine litter management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
- Development or strengthening of Protected Area policies	-	9,000.00	-	77,400.00	-	-	22,200.00	-	-	-	-	-	-	-	-	-	-	108,600.0	

on solid waste and marine litter management																			
- Formulation of communicatio n campaigns for public awareness	-	-	-	-	-	-	-	-	-	-	-	56,180. 00	602,859.7 5	-	-	-	-	659,039.7 5	
Sub Program 2.3. Enhancing Climate Change Resiliency	-	-	-	-	·		-	2,100,000 .00		-		-	·	ı	•	-	-	2,100,000 .00	
2.3.1. Formulation of Climate Change Adaptation Plan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
- Assessment of ecosystem vulnerability	-	-	-	-	-	-	-	1,000,000	-	-	-	-	-	-	-	-	-	1,000,000	
- Development and updating of Climate Change Adaptation Plan	-	-	-	-	-	-	-	300,000.0	-	-	-	-	-	-	-	-	-	300,000.0	
- Research and development of localized, active habitat restoration interventions using best- available science	-	-	-	,	1		-	800,000.0	-	,	-	-	1	1	1	-	-	800,000.0	
Mgt. Focus No. 3: Ecotourism	-	463,032.8 8	-	4,476,136 .40	-		761,431.6 5	1,050,000 .00	1,318,079 .49	659,039.7 5	-	560,00 0.00	585,730.8 1	5,785,933 .87	550,000.0 0	-	200,000.0	16,409,38 4.85	7%
Sub Program 3.1. Regulation of tourism industry	-	319,067.8 9	-	3,100,470 .91	-	-	524,689.4 1	750,000.0 0	-	-	-	-	470,818.8 1	-	-	-	-	5,165,047 .02	
3.1.1. Implementati on of Green Fins	-	-		-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	

- Orientation of service providers	-	22,500.00	-	215,000.0 0	-	-	37,000.00	-	-	-	-	-	-	-	-	-	-	274,500.0 0	
- Accreditation of service providers	-	-	-	-	-	-	-	-	-	-	-	-	187,485.1 5	-	-	-	-	187,485.1 5	
- Continuous capacity building of accredited service providers	-	296,567.8 9	1	2,833,870 .91	1	-	487,689.4 1	1	-	-	1	1	1	1	-	-	1	3,618,128 .21	
3.1.2. Updating of Code of Conduct (CoC)	-	-	-	-	-	-	-	-	-	-	1	-	135,947.2 9	-	-	-	-	135,947.2 9	
3.1.3. Updating of Carrying Capacity	-	-	-	-	-	-	-	750,000.0 0	-	-	-	-	-	-	-	-	-	750,000.0 0	
3.1.4. Updating of fines and penalties for tourismrelated violations	-	-	-	51,600.00	-	-	-	-	-	-	-	-	147,386.3 7	-	-	-	-	198,986.3 7	
Sub Program 3.2. Ecotourism Facilities and Equipment	-	-	,	-	·	-	-	·	1,318,079 .49	659,039.7 5	-	ı	·	5,785,933 .87	550,000.0 0	-	200,000.0 0	8,513,053 .11	
3.2.1. Establishme nt of audiovisual room	-	-	1	-	-	-	-	-	-	-	-	ı	-	250,000.0 0	550,000.0 0	-	200,000.0	1,000,000	
3.2.2. Maintenanc e of existing ecotourism facilities and equipment	-	-	-	-	ı	-	-	1	1,318,079 .49	659,039.7 5	-	ı	-	ı	-	-	1	1,977,119 .24	
3.2.3. Installation and maintenance of trails and buoy markers	-	-	-	-	-	-	-	-	-	-	-	-	-	5,535,933 .87	-	-	-	5,535,933 .87	

Sub Program 3.3. Support to Ecotourism Operation	-	143,964.9 9	-	1,375,665 .49	-	-	236,742.2 3	300,000.0 0	-	-	-	560,00 0.00	114,912.0 0	-	-	-	-	2,731,284 .72	
3.3.1. Developmen t and maintenance of website and/or booking system with online payment scheme	-	-	-	-	-	-	-	300,000.0	-	-	-	-	114,912.0 0	-	-	-	-	414,912.0 0	
3.3.2. Institutionaliz e the hiring of tour guides	-	-	-	-	-	-	-	-	-	-	-	560,00 0.00	-	-	-	-	-	560,000.0	
3.3.3. Capacity Building for service providers	-	143,964.9 9	-	1,375,665 .49	-	-	236,742.2	-	-	-	-	-	-	-	-	-	-	1,756,372 .72	
Mgt. Focus 4: Linkages with other stakeholders	-	22,500.00	740,000.0 0	6,602,600	280,000.0	-	594,800.0 0	-	-	-	-	4,800,0 00.00	4,566,774 .19	-	-	-	-	17,606,67 4.19	8%
Sub Program 4.1. Community and stakeholder involvement	-	-	-	-	-	-	500,000.0 0	-	-	-	-	4,800,0 00.00	2,566,774 .19	-	-	-	-	7,866,774 .19	
4.1.1. Regular Meeting of with other law enforcement agencies	-	-	-	-	-	-	-	-	-	-	-	-	566,774.1 9	-	-	-	-	566,774.1 9	
4.1.2. Involvement of coastal barangays in monitoring and surveillance	-	-	-	,	-	-	1	-	-	-	-	4,800,0 00.00	-	-	-	-	-	4,800,000	

of illegal activities through Bantay Dagat Volunteers 4.1.3. Conduct of environment al activities (i.e., Coastal Clean-up, Tree Planting, and	-	-	-	-	-	-	500,000.0	-	-	-	-	-	2,000,000	-	-	-	-	2,500,000	
SCUBASUR A)		'	'	'		1		·	!	'		l'	'	'	'	'	'		
Sub Program 4.2. PAMB Operationali zation and Strengthening	-	22,500.00	300,000.0 0	6,202,600 .00	200,000.0	-	14,800.00	-	-	-	-	-	2,000,000 .00	-	-	-	-	8,739,900 .00	
4.2.1. Regular PAMB Meeting	-	-	300,000.0	-	200,000.0	-	-	-	-	-	-	-	2,000,000	-	-	-	-	2,500,000	
4.2.2. Updating of PAMB Manual of Operations	-	-	-	98,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	98,000.00	
4.2.3. Capacity building of PAMB members	-	-	-	6,050,000	-	-	-	-	-	-	-	-	-	-	-	-	-	6,050,000	
4.2.4. Review and updating of existing policies	-	22,500.00	-	54,600.00	-	-	14,800.00	-	-	-	-	-	-	-	-	-	-	91,900.00	
Sub Program 4.3. BDFE	-	-	440,000.0 0	400,000.0 0	80,000.00	-	80,000.00	-	-	-	-	-	-	-	-	-	-	1,000,000	
4.3.1. Technical assistance for the preparation of BDFE	-	-	10,000.00	100,000.0	20,000.00	-	20,000.00	-	-	-	-	-	-	-	-	-	-	150,000.0	

Business	1	I	Í	1	I	I	1	1	1	1	1	1	1	I	1	Ì	İ	1	
Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1		
4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	-	-	30,000.00	300,000.0	60,000.00	-	60,000.00	-	-	-	-	-	-	-	-	-	-	450,000.0 0	
4.3.3. Monitor the progress of the enterprise	-	-	400,000.0	-	-	-	-	-	-		-	-	-	-	-	-	-	400,000.0	
Mgt. Focus 5: Communicat ion, Education and Public Awareness	-	-	1,070,903 .97	-	567,903.9 7	226,361.5 9	1,790,847 .70	3,050,000	-	-	-	-	17,415,78 0.87	-	-	-	-	24,121,79 8.10	11 %
Sub Program 5.1. Communicat ion Education and Public Awareness	•	-	1,000,000	-	500,000.0 0	200,000.0	1,659,039 .75	3,050,000 .00		-	-	-	15,306,11 9.24		-	-	-	21,715,15 8.99	
5.1.1. Environment al Celebration	-	-	1,000,000	-	500,000.0	200,000.0	1,000,000	-	-	_	-	-	6,329,000 .00	-	-	-	-	9,029,000	
5.1.2. Celebration of Apo Reef Month	-	-	-	-	-	-	659,039.7 5	-	-	-	-	-	1,977,119 .24	-	-	-	-	2,636,158 .99	
5.1.3. Production of promotional materials	-	-	-	-	-	-	-	3,000,000	-		-	-	7,000,000	-	-	-	-	10,000,00	
5.1.4. Production of new mascot of flagship species	-	-	-	-	-	-	-	50,000.00	-	-	-	-	-	-	-	-	-	50,000.00	

Sub Program 5.2. Youth Involvement	-	-	70,903.97	-	67,903.97	26,361.59	131,807.9 5	-	-	•	-	-	2,109,661 .63	-	-	-	-	2,406,639 .11	
5.2.1. Conduct of Dalaw Turo and Bio camp	-	-	65,903.97	-	65,903.97	26,361.59	131,807.9 5	-	-	-	-	-	2,016,661 .63	-	-	-	1	2,306,639 .11	
5.2.2. Developmen t of Teaching Manual for ARNP	-	-	5,000.00	-	2,000.00	-	-	-	-	-	-	-	93,000.00	-	-	-	-	100,000.0	
Mgt. Focus 6: Support to PAMO Operations	74,706,48 0.00	-		-	3,000,000	-	-	4,380,000 .00	4,000,000	1,500,000	5,000,000	-	136,714.5 3	4,100,000 .00	12,023,24 3.61	3,900,000	1,000,000	113,746,4 38.14	50 %
Sub Program 6.1. Establishme nt and Maintenance of Office Building and Equipment	-	-	-	-	-	-	-	,	4,000,000	1,500,000 .00	5,000,000 .00	-	-	4,100,000 .00	-	,		14,600,00 0.00	
6.1.1. Construction of PAMO Building	-	-	-	-	-	-	-	-	-	-	-	-	-	4,100,000 .00	-	-	1	4,100,000 .00	
6.1.2. Maintenanc e of Existing Facilities and Equipment	-	-	-	-	-	-	-	-	4,000,000	1,500,000 .00	5,000,000	-	-	-	-	-	-	10,500,00 0.00	
Sub Program 6.2. PA Planning	-	-		-	-	-	-	3,300,000 .00	-	-	1	-	136,714.5 3	-	-	,	1	3,436,714 .53	
6.2.1. Updating of Ecotourism Business Plan	-	-	-	-	-	-	-	2,550,000 .00	-	-	-	-	-	-	-	-	-	2,550,000 .00	
6.2.2. Updating of General Management Plan	-	-	-	-	-	-	-	500,000.0	-	-	-	-	-	-	-	-	-	500,000.0	

6.2.3 METT/MEA	-	-	-	-	-	-			-	-	-	-	136,714.5 3	-	-	-	-	136,714.5 3	
6.2.4 Formulation of CEPA Plan	-	-	-	-	-	-	-	250,000.0 0	-	-	-	-	-	-	-	-	-	250,000.0	
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	1,080,000	-	-	-	-	-	-	-	-	-	1,080,000	
6.3.1. Establishment of Comprehensive Database System	-	-	-	-	-	-	-	750,000.0 0	-	-	-	-	-	-	-	-	-	750,000.0 0	
6.3.2. Research and Data Gap Analysis	-	-	-	-	-	-	-	330,000.0	-	-	-	-	-	-	-	-	-	330,000.0	
Sub Program 6.4. Provision of Supplies, materials, and equipment	-	-	-	-	3,000,000	-	-	-		-	-	-	-	-	12,023,24 3.61	3,900,000	1,000,000	19,923,24 3.61	
6.4.1. Procuremen t ICT Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,300,000	-	-	2,300,000	
6.4.2. Procuremen t of Office Furniture and Fixtures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,000,000	1,000,000	
6.4.3. Procuremen t of Office Supplies and materials	-	-	-	-	3,000,000	-	-	-	-	-	-	-	-	-	-	-	-	3,000,000	
6.4.4. Procurement of technical equipment for surveillance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,100,000	-	-	2,100,000	
6.4.5. Procurement of highspeed watercraft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,900,000	-	3,900,000	

6.4.6. Provision of firearms to law enforcers 6.4.7. Procuremen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100,000.0	-	-	100,000.0	
t of Machinery and Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,523,243 .61	-	-	7,523,243 .61	
Sub Program 6.5. Implementati on of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	74,706,48 0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	74,706,48 0.00	
Park Operations Superintend ent (1) SG 22	11,095,28 0.00	-	-	-	-	-	-	-	-	-	-	-	-	- 	-	-	-	11,095,28 0.00	
Senior Ecosystem Managemen t Specialist (2) SG 18	14,493,94 0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,493,94 0.00	
Ecosystem Managemen t Specialist II (2) SG 15	11,336,83 0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,336,83 0.00	
Ecosystem Managemen t Specialist I (2) SG 11	8,307,170 .00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,307,170 .00	
Administrativ e Assistant II. (2) SG 8	3,274,810 .00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,274,810 .00	
Forest Technician II (9) SG 8	26,198,45 0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26,198,45 0.00	
TOTAL	74,706,48 0.00	800,100.7 7	2,720,903 .97	14,067,40 7.32	4,177,903 .97	16,761,48 5.05	10,455,63 3.49	27,832,00 0.00	5,318,079 .49	2,159,039 .75	5,000,000 .00	6,416,1 80.00	30,110,36 7.34	9,885,933 .87	12,623,24 3.61	3,900,000 .00	1,200,000 .00	228,134,7 58.63	10 0%

Table 11. Summary per Line Item

LINE ITEM	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
Professional Services	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	7,470,648.00	74,706,480.00
Honoraria (For lecturers/ resource person in seminars/ training programs)	108,000.00	70,200.00	75,843.00	53,595.72	85,217.19	60,220.15	95,750.04	67,663.36	107,584.75	76,026.55	800,100.77
Travelling Expenses	460,000.00	195,300.00	245,618.00	295,955.08	236,312.38	236,691.13	287,092.60	237,518.15	237,969.24	288,447.39	2,720,903.97
Training Expenses	2,474,400.00	610,400.00	2,034,722.00	612,136.88	2,024,297.64	575,437.00	2,124,944.83	646,561.01	2,238,032.01	726,475.95	14,067,407.32
Office Supplies Expenses	427,000.00	425,300.00	425,618.00	435,955.08	406,312.38	406,691.13	417,092.60	407,518.15	407,969.24	418,447.39	4,177,903.97
Fuel, Oil and Lubricant	1,284,000.00	1,356,840.00	1,434,050.40	1,535,893.42	1,602,647.03	1,694,605.85	1,812,082.20	1,895,407.13	2,004,931.56	2,141,027.46	16,761,485.05
Other Supplies and Materials Expenses	1,031,400.00	889,180.00	945,397.80	960,654.28	1,006,405.19	1,001,075.16	1,117,424.88	1,091,436.04	1,199,694.59	1,212,965.54	10,455,633.49
Other Professional Services	6,850,000.00	3,130,000.00	2,800,000.00	2,008,000.00	1,958,000.00	3,558,000.00	1,958,000.00	1,240,000.00	1,240,000.00	3,090,000.00	27,832,000.00
Repair and Maintenance - Building and other Structures	500,000.00	506,000.00	512,360.00	519,101.60	526,247.70	533,822.56	541,851.91	550,363.03	559,384.81	568,947.90	5,318,079.49
Repair and Maintenance - Machinery and Equipment	200,000.00	203,000.00	206,180.00	209,550.80	213,123.85	216,911.28	220,925.96	225,181.51	229,692.40	234,473.95	2,159,039.75
Repair and Maintenance -	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00	5,000,000.00

Transportation Equipment											
Labor and Wages	536,000.00	536,000.00	592,180.00	536,000.00	1,036,000.00	1,036,000.00	536,000.00	536,000.00	536,000.00	536,000.00	6,416,180.00
Other Maintenance and Operating Expenses	3,896,700.00	2,831,250.80	2,764,176.16	2,985,131.75	2,556,610.12	2,428,749.59	3,105,897.86	3,012,284.16	3,140,089.67	3,389,477.23	30,110,367.34
Buildings and other Structure Outlay	3,220,000.00	1,945,200.00	521,912.00	500,226.72	530,240.32	562,054.74	595,778.03	631,524.71	669,416.19	709,581.16	9,885,933.87
Machinery and Equipment Outlay	1,650,000.00	200,000.00	2,000,884.21	700,000.00	800,000.00	700,000.00	2,462,946.36	-	-	4,109,413.04	12,623,243.61
Transportation and Equipment Outlay	-	-	1	3,900,000.00	-	-	-	-	1	-	3,900,000.00
Furniture and Fixture Outlay	500,000.00	150,000.00	50,000.00	-	-	-	-	-	-	500,000.00	1,200,000.00
TOTAL	31,108,148.00	21,019,318.80	22,579,589.57	23,222,849.34	20,952,061.80	20,980,906.58	23,246,435.25	18,512,105.26	20,541,412.46	25,971,931.57	228,134,758.63

XIII. MANAGEMENT PLAN IMPLEMENTATION

The schedule of implementation of the activities under the six (6) Management Focus with the corresponding budgetary requirements for each activity under the Management Focus is shown in Table 12 below.

Table 12. Management Plan Implementation (Schedule of Implementation)

Table 12. W	Expected						nplementation						Source	Implementi
Activity	Output	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Budget	of Funds	ng Agency
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement		4,601,500.00	4,355,590.00	4,476,525.40	3,512,716.92	3,648,599.94	3,792,635.93	3,945,314.09	3,639,152.94	3,810,702.12	3,992,544.24	39,775,28 1.57		
Sub Program 1.1: Law Enforcement Operations		3,924,000.00	4,019,040.00	4,119,782.40	3,134,569.34	3,247,763.50	3,367,749.31	3,494,934.27	3,161,750.33	3,304,655.35	3,456,134.67	35,230,37 9.17		
1.1.1. Patrolling of the Protected Area	Area patrolled and monitored (ha.)	1,584,000.00	1,679,040.00	1,779,782.40	1,886,569.34	1,999,763.50	2,119,749.31	2,246,934.27	2,381,750.33	2,524,655.35	2,676,134.6 7	20,878,3 79.17		ARNP- PAMO, LGU Sablayan, AFP, PNP
1.1.2. Engagement of Protected Area monitoring personnel		2,340,000.00	2,340,000.00	2,340,000.00	1,248,000.00	1,248,000.00	1,248,000.00	1,248,000.00	780,000.00	780,000.00	780,000.00	14,352,0 00.00		ARNP- PAMO
Sub Program 1.2: Capacity Building of Law Enforcers		317,500.00	336,550.00	356,743.00	378,147.58	400,836.44	424,886.62	450,379.82	477,402.61	506,046.77	536,409.57	4,184,90 2.40		

1.2.1. Conduct of law enforcement-related learning events	Trainings conducted (No.)	247,500.00	262,350.00	278,091.00	294,776.46	312,463.05	331,210.83	351,083.48	372,148.49	394,477.40	418,146.04	3,262,24 6.75	ARNP- PAMO
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	Deputized enforcers (No.)	43,000.00	45,580.00	48,314.80	51,213.69	54,286.51	57,543.70	60,996.32	64,656.10	68,535.47	72,647.60	566,774. 19	ARNP- PAMO, DA-BFAR, PCGA
Sub Program 1.3. Demarcation of Protected Area		360,000.00	-	,	1	1		,		-	-	360,000. 00	
1.3.1. Physical demarcation of Boundaries	Witness monuments installed (No.)	350,000.00										350,000. 00	ARNP- PAMO, DENR- BMB
1.3.2. Demarcation of Boundaries on Digital Platforms	Map of boundaries integrated with NAMRIA (No.)												ARNP- PAMO
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation		3,965,800.0 0	1,085,716.0 0	1,095,058.9 6	1,554,962.5 0	1,115,460.2 5	2,126,587.8 6	1,588,383.1 4	1,150,886.1 2	1,164,139.2 9	1,628,187.6 5	16,475,1 81.77	

Sub Program 2.1. Habitat monitoring and assessment		2,350,000.0 0	800,000.00	800,000.00	1,000,000.0 0	800,000.00	1,050,000.0 0	1,000,000.0 0	800,000.00	800,000.00	1,000,000.0 0	10,400,0 00.00		
2.1.1. Ecological and biodiversity monitoring														
- Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	Activities Conducted (No.)	1,300,000.00			200,000.00			200,000.00			200,000.00	1,900,00 0.00	DENR GAA	ARNP- PAMO
- Monitoring using Biodiversity Monitoring System (BMS)	Activities Conducted (No.)	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	2,500,00 0.00	DENR GAA	ARNP- PAMO, LGU Sablayan, Academe
- Monitoring of coral reefs, mangroves, and seagrasses	Activities Conducted (No.)	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	1,500,00 0.00	DENR GAA	ARNP- PAMO
- Bird Survey	Activities Conducted (No.)	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	1,500,00 0.00	NGOs	ARNP- PAMO, NGOs
- Sea Turtle Nesting Beach Monitoring	Activities conducted (No.)	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	1,500,00 0.00	DENR GAA	ARNP- PAMO

Elasmobranch s Biodiversity Assessment	Activities conducted (No.)	250,000.00					250,000.00					500,000. 00	NGOs	ARNP- PAMO, NGOs, Academe
2.1.2. Water Quality Monitoring and Assessment	Activities conducted (No.)	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	1,000,00 0.00	DENR GAA	ARNP- PAMO
Sub Program 2.2. Threat reduction		1,135,800.0 0	205,716.00	215,058.96	224,962.50	235,460.25	846,587.86	258,383.14	270,886.12	284,139.29	298,187.65	3,975,18 1.77		
2.2.1. Crown- of-Thorns (CoTS) Starfish management														
- Developmen t and updating of a strategic plan for the managemen t of CoTS	Strategic plans developed (No.)	200,000.00					300,000.00					500,000. 00	IPAF, NGOs, Acade me	ARNP- PAMO, DENR- BMB, NGOs, Academe
- Surveillance and control of CoTS	Monitoring and culling activities conducted (No.)	68,600.00	72,716.00	77,078.96	81,703.70	86,605.92	91,802.27	97,310.41	103,149.04	109,337.98	115,898.26	904,202. 54	DENR GAA, IPAF	ARNP- PAMO, Private sector
2.2.2. Eradication and control of Invasive Alien Species (IAS)														

- Developmen t and updating of strategic plan for the eradication and control of IAS	Strategic Plans developed (No.)	200,000.00					300,000.00					500,000. 00	DENR GAA, IPAF	ARNP- PAMO, DENR- BMB, DENR- ERDB, NGOs, Academe
Implementation of strategic plan for the eradication and control of IAS	Activities conducted (No.)	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	500,000. 00	DENR GAA, IPAF	ARNP- PAMO, LGU Sablayan, Private sector
2.2.3. Response to oil spills and ship groundings														
- Development of emergency response guidelines for oil spills and ship groundings	Guidelines developed (No.)	100,000.00										100,000. 00	DENR GAA, IPAF	ARNP- PAMO, LGU Sablayan, PCG, DENR- BMB, NGOs, Academe
- Capacity building of Protected Area staff in responding to oil spills and ship groundings	Activities conducted (No.)	108,600.00										108,600. 00	DENR GAA	DENR- BMB, Academe
2.2.4. Management of light and noise pollution														

- Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	Activities conducted (No.)	50,000.00	30,000.00	31,800.00	33,708.00	35,730.48	37,874.31	40,146.77	42,555.57	45,108.91	47,815.44	394,739. 48	IPAF	ARNP- PAMO
- Development of guidelines regulating noise and light pollution	Guidelines developed (No.)	200,000.00										200,000. 00	DENR GAA, IPAF	ARNP- PAMO, NGOs, Academe
2.2.5. Solid waste and marine litter management														
- Development or strengthenin g of Protected Area policies on solid waste and marine litter management	Meetings conducted (No.)	108,600.00										108,600. 00	DENR GAA, IPAF	ARNP- PAMO, DENR- EMB, Private sector
- Formulation of communicati on campaigns for public awareness	Communic ation campaigns (No.)	50,000.00	53,000.00	56,180.00	59,550.80	63,123.85	66,911.28	70,925.96	75,181.51	79,692.40	84,473.95	659,039. 75	DENR GAA, IPAF	ARNP- PAMO, NGOs
Sub Program 2.3. Enhancing Climate Change Resiliency		480,000.00	80,000.00	80,000.00	330,000.00	80,000.00	230,000.00	330,000.00	80,000.00	80,000.00	330,000.00	2,100,00 0.00		

2.3.1. Formulation of Climate Change Adaptation Plan														
- Assessment of ecosystem vulnerability	Assessmen ts conducted (No.)	250,000.00			250,000.00			250,000.00			250,000.00	1,000,00 0.00	DENR GAA, IPAF	Academe
- Developmen t and updating of Climate Change Adaptation Plan	Adaptation plans developed (No.)	150,000.00					150,000.00					300,000. 00	DENR GAA, IPAF	Academe
- Research and developmen t of localized, active habitat restoration interventions using bestavailable science	Activities conducted (No.)	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00	80,000.00	800,000. 00	IPAF, Acade me, NGOs	ARNP- PAMO, DENR- BMB, DA- BFAR, Academe
Mgt. Focus No. 3: Ecotourism		2,585,500.0 0	1,359,484.8 0	1,473,908.2 0	1,073,049.0 1	1,896,738.2 4	1,198,756.5 0	1,656,704.8 9	1,340,000.7 6	1,936,794.5 5	1,888,447.8 9	16,409,3 84.85		
Sub Program 3.1. Regulation of tourism industry		885,000.00	339,284.80	308,428.20	326,933.89	762,666.46	367,342.92	389,383.50	412,746.51	519,753.86	853,506.89	5,165,04 7.02		

3.1.1. Implementatio n of Green Fins													
- Orientation of service providers	Activities conducted (No.)	247,500.00										247,500. 00	
- Accreditatio n of service providers	Service providers accredited (No.)		48,314.80			57,543.51					81,626.84	187,485. 15	
- Continuous capacity building of accredited service providers	Trainings conducted (No.)	247,500.00	262,350.00	278,091.00	294,776.46	312,463.05	331,210.83	351,083.48	372,148.49	394,477.40	418,146.04	3,262,24 6.75	
3.1.2. Updating of Code of Conduct (CoC)	CoC updated (No.)	34,400.00				43,429.21					58,118.08	135,947. 29	
3.1.3. Updating of Carrying Capacity	Carrying capacity research conducted (No.)	250,000				250,000					250,000	750,000. 00	
3.1.4. Updating of fines and penalties for tourism-related violations		51,600.00				65,143.81				82,242.56		198,986. 37	

Sub Program 3.2. Ecotourism Facilities and Equipment		1,070,000.0 0	954,200.00	790,452.00	678,879.12	719,611.86	762,788.58	808,555.90	857,069.25	908,493.40	963,003.00	8,513,05 3.11		
3.2.1. Establishment of audiovisual room		500,000.00	350,000.00	150,000.00								1,000,00 0.00	GAA, IPAF, LGU, DOT	PAMO, LGU, DOT
3.2.2. Maintenance of existing ecotourism facilities and equipment	Facilities maintained (No.)	150,000.00	159,000.00	168,540.00	178,652.40	189,371.54	200,733.84	212,777.87	225,544.54	239,077.21	253,421.84	1,977,11 9.24	LGU	PAMO, LGU
3.2.3. Installation and maintenance of trails and buoy markers	Buoys Installed (No.)	420,000.00	445,200.00	471,912.00	500,226.72	530,240.32	562,054.74	595,778.03	631,524.71	669,416.19	709,581.16	5,535,93 3.87	IPAF, LGU	PAMO, LGU
Sub Program 3.3. Support to Ecotourism Operation		630,500.00	66,000.00	375,028.00	67,236.00	414,459.93	68,625.00	458,765.50	70,185.00	508,547.30	71,938.00	2,731,28 4.72		
3.3.1. Development and maintenance of website and/or booking system with online payment scheme	Website developed and maintained (No.)	300,000.00	10,000.00	10,600.00	11,236.00	11,910.00	12,625.00	13,382.00	14,185.00	15,036.00	15,938.00	414,912. 00	IPAF	DENR, PAMO

3.3.2. Institutionalize the hiring of tour guides	Tour guides hired (No.)	56,000.00	56,000.00	56,000.00	56,000.00	56,000.00	56,000.00	56,000.00	56,000.00	56,000.00	56,000.00	560,000. 00	LGU	PAMO, LGU
3.3.3. Capacity Building for service providers	Trainings conducted (No.)	274,500.00		308,428.00		346,549.93		389,383.50		437,511.30		1,756,37 2.72	IPAF, GAA, LGU, NGO, DOT	PAMO, LGU, DOT
Mgt. Focus 4: Linkages with other stakeholders		2,481,000.0 0	1,267,480.0 0	2,438,314.8 0	1,231,213.6 9	2,294,286.5 1	1,087,543.7 0	2,300,996.3 2	1,094,656.1 0	2,308,535.4 7	1,102,647.6 0	17,606,6 74.19		
Sub Program 4.1. Community and stakeholder involvement		773,000.00	775,580.00	778,314.80	781,213.69	784,286.51	787,543.70	790,996.32	794,656.10	798,535.47	802,647.60	7,866,77 4.19		
4.1.1. Regular Meeting of with other law enforcement agencies	Activities conducted (No.)	43,000.00	45,580.00	48,314.80	51,213.69	54,286.51	57,543.70	60,996.32	64,656.10	68,535.47	72,647.60	566,774. 19	IPAF, GAA, LGU	PAMO, LGU
4.1.2. Involvement of coastal barangays in monitoring and surveillance of illegal activities through Bantay Dagat Volunteers		480,000.00	480,000.00	480,000.00	480,000.00	480,000.00	480,000.00	480,000.00	480,000.00	480,000.00	480,000.00	4,800,00 0.00	IPAF, GAA, LGU	PAMO, LGU

4.1.3. Conduct of environmental activities (i.e., Coastal Clean- up, Tree Planting, and SCUBASURA)		250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	2,500,00 0.00	IPAF, GAA, LGU	DENR, PAMO, LGU
Sub Program 4.2. PAMB Operationaliza tion and Strengthening		1,558,000.0 0	341,900.00	1,460,000.0 0	250,000.00	1,460,000.0 0	250,000.00	1,460,000.0 0	250,000.00	1,460,000.0 0	250,000.00	8,739,90 0.00		
4.2.1. Regular PAMB Meeting	Meetings conducted (No.)	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	2,500,00 0.00	IPAF, GAA	PAMO
4.2.2. Updating of PAMB Manual of Operations	Manual of Operations updated (No.)	98,000.00										98,000.0 0	IPAF, GAA	PAMO
4.2.3. Capacity building of PAMB members	Activities conducted (No.)	1,210,000.00		1,210,000.00		1,210,000.00		1,210,000.00		1,210,000.00		6,050,00 0.00	IPAF, GAA	PAMO
4.2.4. Review and updating of existing policies	Meetings conducted (No.)		91,900.00									91,900.0 0	IPAF, GAA	PAMO
Sub Program 4.3. BDFE		150,000.00	150,000.00	200,000.00	200,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	1,000,00 0.00		
4.3.1. Technical assistance for the preparation of BDFE Business Plan	Activity conducted (No.)	150,000.00										150,000. 00	GAA	PAMO

4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	Activity conducted (No.)		150,000.00	150,000.00	150,000.00							450,000. 00	GAA	РАМО
4.3.3. Monitor the progress of the enterprise	Activity conducted (No.)			50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	400,000. 00	GAA	DENR, PAMO
Mgt. Focus 5: Communicati on, Education and Public Awareness		2,377,900.0 0	2,300,400.0 0	2,324,250.0 0	2,399,531.0 0	2,376,328.8 6	2,404,734.6 0	2,434,844.6 6	2,466,761.3 5	2,500,593.0 2	2,536,454.6 1	24,121,7 98.10		
Sub Program 5.1. Communicati on Education and Public Awareness		2,102,900.0 0	2,114,900.0 0	2,127,620.0 0	2,191,103.2 0	2,155,395.3 9	2,170,545.1 2	2,186,603.8 2	2,203,626.0 5	2,221,669.6 1	2,240,795.7 9	21,715,1 58.98		
5.1.1. Environmental Celebration		902,900.00	902,900.00	902,900.00	902,900.00	902,900.00	902,900.00	902,900.00	902,900.00	902,900.00	902,900.00	9,029,00 0.00	GAA, IPAF, L:GU	DENR, PAMO
5.1.2. Celebration of Apo Reef Month	Activities conducted (No.)	200,000.00	212,000.00	224,720.00	238,203.20	252,495.39	267,645.12	283,703.82	300,726.05	318,769.61	337,895.79	2,636,15 8.98	IPAF	DENR, PAMO

5.1.3. Production of promotional materials	Materials Produced (No.)	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.0	10,000,0 00.00	GAA	DENR, PAMO
5.1.4. Production of new mascot of flagship species	Mascot produced (No.)				50,000.00							50,000.0	GAA, IPAF	DENR, PAMO
Sub Program 5.2. Youth Involvement		275,000.00	185,500.00	196,630.00	208,427.80	220,933.47	234,189.48	248,240.84	263,135.30	278,923.41	295,658.82	2,406,63 9.12		
5.2.1. Conduct of Dalaw Turo and Bio camp	Activities conducted (No.)	175,000.00	185,500.00	196,630.00	208,427.80	220,933.47	234,189.48	248,240.84	263,135.30	278,923.41	295,658.82	2,306,63 9.12	IPAF, GAA	DENR, PAMO
5.2.2. Development of Teaching Manual for ARNP	Approved teaching manual (No.)	100,000.00										100,000. 00	IPAF, GAA	DENR, PAMO
Mgt. Focus 6: Support to PAMO Operations		15,096,448. 00	10,650,648. 00	10,771,532. 21	13,451,376. 21	9,620,648.0 0	10,370,648. 00	11,320,192. 15	8,820,648.0 0	8,820,648.0 0	14,823,649. 57	113,746, 438.14		
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment		3,650,000.0 0	2,550,000.0 0	1,050,000.0 0	1,050,000.0 0	1,050,000.0 0	1,050,000.0 0	1,050,000.0 0	1,050,000.0 0	1,050,000.0 0	1,050,000.0 0	14,600,0 00.00		

6.1.1. Construction of PAMO Building	Building Constructe d (No.)	2,600,000.00	1,500,000.00									4,100,00 0.00	IPAF, GAA	PAMO
6.1.2. Maintenance of Existing Facilities and Equipment	Facilities Maintained (No.	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.0 0	10,500,0 00.00	IPAF, GAA	PAMO
Sub Program 6.2. PA Planning		1,125,800.0 0	-	-	30,728.21	-	850,000.00	36,597.79	-	-	1,393,588.5 3	3,436,71 4.53		
6.2.1. Updating of Ecotourism Business Plan	Approved Updated Ecotourism Business Plan (No.)	850,000.00					850,000.00				850,000.00	2,550,00 0.00	GAA, NGO	PAMO
6.2.2. Updating of PA Management Plan	Approved Updated PA Manageme nt Plan (No.)										500,000.00	500,000. 00	GAA, IPAF	PAMO
6.2.3. METT/MEA	METT/ MEA submitted (No.)	25,800.00			30,728.21			36,597.79			43,588.53	136,714. 53	GAA	PAMO
6.2.4. Formulation of CEPA Plan	Approved CEPA Plan (No.)	250,000.00										250,000. 00	IPAF, NGO	PAMO

Sub Program 6.3. PA Database		750,000.00	330,000.00		-					-	-	1,080,00 0.00		
6.3.1. Establishment of Comprehensi ve Database System	Database established (No.)	750,000.00										750,000. 00	IPAF, GAA	PAMO
6.3.2. Research and Data Gap Analysis	Report submitted (No.)		330,000.00									330,000. 00	IPAF, GAA, NGO, Acade me	PAMO
Sub Program 6.4. Provision of Supplies, materials, and equipment		2,100,000.0 0	300,000.00	2,250,884.2 1	4,900,000.0 0	1,100,000.0 O	1,000,000.0 O	2,762,946.3 6	300,000.00	300,000.00	4,909,413.0 4	19,923,2 43.61		
6.4.1. Procurement ICT Equipment	Equipment procured (No.)	500,000.00				800,000.00					1,000,000.0	2,300,00 0.00	IPAF, GAA	DENR, PAMO
6.4.2. Procurement of Office Furniture and Fixtures	Furniture and fixtures procured (No.)	500,000.00									500,000.00	1,000,00 0.00	IPAF, GAA	DENR, PAMO
6.4.3. Procurement of Office Supplies and materials	Office supplies procured (No.)	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	3,000,00 0.00	IPAF, GAA	DENR, PAMO

6.4.4. Procurement of technical equipment for surveillance	Technical Equipment procured (No.)	700,000.00			700,000.00		700,000.00					2,100,00 0.00	IPAF, GAA	DENR, PAMO
6.4.5. Procurement of highspeed watercraft	High Speed Watercraft procured (No.)				3,900,000.00							3,900,00 0.00	IPAF, GAA	DENR, PAMO
6.4.6. Provision of firearms to law enforcers	Firearms Procured (No.)	100,000.00										100,000. 00	IPAF, GAA	DENR, PAMO
6.4.7. Procurement of Machinery and Equipment	Machinery and Equipment procured (no.)			1,950,884.21				2,462,946.36			3,109,413.0 4	7,523,24 3.61	IPAF, GAA	DENR, PAMO
Sub Program 6.5. Implementatio n of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)		7,470,648.0 0	74,706,4 80.00											
Park Operations Superintende nt (1) SG 22	No. of Personnel Hired	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.00	1,109,528.0 0	11,095,2 80.00	GAA	DENR

TOTAL		31,108,148.00	21,019,318.80	22,579,589.57	23,222,849.33	20,952,061.80	20,980,906.59	23,246,435.25	18,512,105.26	20,541,412.45	25,971,931.5 7	228,134,7 58.62		
Forest Technician II (9) SG 8	No. of Personnel Hired	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.00	2,619,845.0 0	26,198,4 50.00	GAA	DENR
Administrative Assistant II. (2) SG 8	No. of Personnel Hired	327,481.00	327,481.00	327,481.00	327,481.00	327,481.00	327,481.00	327,481.00	327,481.00	327,481.00	327,481.00	3,274,81 0.00	GAA	DENR
Ecosystem Management Specialist I (2) SG 11	No. of Personnel Hired	830,717.00	830,717.00	830,717.00	830,717.00	830,717.00	830,717.00	830,717.00	830,717.00	830,717.00	830,717.00	8,307,17 0.00	GAA	DENR
Ecosystem Management Specialist II (2) SG 15	No. of Personnel Hired	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.00	1,133,683.0 0	11,336,8 30.00	GAA	DENR
Senior Ecosystem Management Specialist (2) SG 18	No. of Personnel Hired	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.00	1,449,394.0 0	14,493,9 40.00	GAA	DENR

The Biodiversity Management Bureau (BMB) prescribed the presentation of the Implementation Plan through Technical Bulletin 2016-08 (TB 2016-08). Table 12 shows the Implementation Plan according to TB 2016-08. In addition to the Expected Outputs, Table 13 shows the Resources Needed, the Budget, Sources of Funds and the Implementing Agency.

Table 13. Implementing Plan with budget (According to BMB Technical Bulletin 2016-08)

Table 13. Implei	northing i laif	vvitii bu	aget (71						10 00)						
Activity	Expected		1		Sch	edule of I	mplemer	itation			1	Resource	Budget.	Source of	Implementing
, totally	Output	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Needed	(2022-2031)	Funds	Agency
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement		-	-	-	-	-	1	-	-	-	-		39,775,281.57		
Sub Program 1.1: Law Enforcement Operations		-	-	-	-	-	-	-	-	-	-		35,230,379.17		
1.1.1. Patrolling of the Protected Area	Area patrolled and monitored (ha.)											Fuel, Food Provision	20,878,379.17	GAA, IPAF, LGU	PAMO, LGU Sablayan, AFP, PNP, PCG
1.1.2. Engagement of Protected Area monitoring personnel												Manpower/ Contract of Service	14,352,000.00	GAA, IPAF, LGU	PAMO, LGU Sablayan
Sub Program 1.2: Capacity Building of Law Enforcers													4,184,902.40		
1.2.1. Conduct of aw enforcement- related learning events	Trainings conducted (No.)											Meals and Snacks, Resource Speaker, Venue, Logistics	3,618,128.21	GAA, IPAF, LGU, NGO	PAMO
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	Deputized enforcers (No.)											Meals and Snacks, Resource Speaker, Venue, Logistics	566,774.19	GAA, IPAF	DENR, DA- BFAR, PCGA
Sub Program 1.3. Demarcation of Protected Area													360,000.00		

1.3.1. Physical demarcation of Boundaries	Witness monuments installed (No.)						Technical Services	350,000.00	GAA, IPAF	PAMO, DENR- BMB
1.3.2. Demarcation of Boundaries on Digital Platforms	Map of boundaries integrated with NAMRIA (No.)						Technical Services	10,000.00		PAMO, DENR- BMB, NAMRIA
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation								16,475,181.77		
Sub Program 2.1. Habitat monitoring and assessment								10,400,000.00		
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	Activities Conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Technical Services	1,900,000.00	GAA	PAMO
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	Activities Conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	2,500,000.00	GAA, IPAF	PAMO, LGU Sablayan, Academe
2.1.3. Monitoring of coral reefs, mangroves, and seagrasses	Activities Conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	1,500,000.00	GAA	PAMO
2.1.4. Bird Survey	Activities Conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	1,500,000.00	NGOs	PAMO, NGOs
2.1.5. Sea Turtle Nesting Beach Monitoring	Activities conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	1,500,000.00	GAA	PAMO

2.1.6. Elasmobranchs Biodiversity Assessment	Activities conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	500,000.00	NGOs	PAMO, NGOs, Academe
2.1.7. Water Quality Monitoring and Assessment	Activities conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies, Technical and Laboratory Services Transportation and Delivery	1,000,000.00	GAA	PAMO, DENR- EMB
Sub Program 2.2. Threat reduction								3,975,181.77		
2.2.1. Crown-of- Thorns (CoTS) Starfish management								-		
- Development and updating of a strategic plan for the management of CoTS	Strategic plans developed (No.)						Meals and Snacks, Venue, Logistics, Technical Services	500,000.00	IPAF, NGOs, Academe	PAMO, DENR- BMB, DENR, ERDB, NGOs, Academe
- Surveillance and control of CoTS	Monitoring and culling activities conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	904,202.54	GAA, IPAF	PAMO, LGU Sablayan, Private sector
2.2.2. Eradication and control of Invasive Alien Species (IAS)								-		
- Development and updating of strategic plan for the eradication and control of IAS	Strategic Plans developed (No.)						Meals and Snacks, Venue, Logistics, Technical Services	500,000.00	GAA, IPAF	PAMO, DENR- BMB, DENR- ERDB, NGOs, Academe

- Implementation of strategic plan for the eradication and control of IAS	Activities conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Supplies	500,000.00	GAA, IPAF	PAMO, LGU Sablayan, Private sector
2.2.3. Response to pil spills and ship groundings								-		
- Development of emergency response guidelines for oil spills and ship groundings	Guidelines developed (No.)						Meals and Snacks, Venue, Logistics, Technical Services	100,000.00	GAA, IPAF	PAMO, LGU Sablayan, PCG, DENR- BMB, NGOs, Academe
- Capacity building of Protected Area staff in responding to oil spills and ship groundings	Activities conducted (No.)						Meals and Snacks, Venue, Logistics, Technical Services	108,600.00	GAA	PAMO, DENR- BMB, Academe
2.2.4. Management of light and noise pollution										
- Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	Activities conducted (No.)						Supplies and Materials	394,739.48	NGO, IPAF	PAMO, NGOs
- Development of guidelines regulating noise and light pollution	Guidelines developed (No.)						Meals and Snacks, Venue, Logistics, Technical Services	200,000.00	GAA, IPAF	PAMO, NGOs, Academe
2.2.5. Solid waste and marine litter management										

- Development or strengthening of Protected Area policies on solid waste and marine litter management	Meetings conducted (No.)						Meals and Snacks, Venue, Logistics, Technical Services	108,600.00	GAA, IPAF	PAMO, LGU Sablayan, DENR-EMB, Private sector
- Formulation of communication campaigns for public awareness	Communicati on campaigns (No.)						Technical Services, Printing and Publication	659,039.75	GAA, IPAF, NGOs, Academe	PAMO, NGOs
Sub Program 2.3. Enhancing Climate Change Resiliency								2,100,000.00		
2.3.1. Formulation of Climate Change Adaptation Plan								-		
- Assessment of ecosystem vulnerability	Assessments conducted (No.)						Fuel, Meals and Snacks, Travelling Expenses, Technical Services	1,000,000.00	GAA, IPAF	Academe
- Development and updating of Climate Change Adaptation Plan	Adaptation plans developed (No.)						Meals and Snacks, Venue, Logistics, Technical Services	300,000.00	GAA, IPAF, Academe	Academe
- Research and development of localized, active habitat restoration interventions using best-available science	Activities conducted (No.)						Meals and Snacks, Venue, Logistics, Technical Services	800,000.00	IPAF, Academe, NGOs	PAMO, DENR- BMB, DA- BFAR, Academe
Mgt. Focus No. 3: Ecotourism								16,409,384.85		

Sub Program 3.1.										
Regulation of tourism industry								5,165,047.02		
3.1.1. Implementation of Green Fins								-		
- Orientation of service providers	Activities conducted (No.)						Meals and Snacks, Venue, Logistics	274,500.00	GAA, NGO	PAMO
- Accreditation of service providers	Service providers accredited (No.)						Meals and Snacks, Venue, Logistics	187,485.15	GAA, NGO	PAMO, Green Fins
- Continuous capacity building of accredited service providers	Trainings conducted (No.)						Meals and Snacks, Venue, Logistics	3,618,128.21	GAA, NGO	PAMO, Green Fins
3.1.2. Updating of Code of Conduct (CoC)	CoC updated (No.)							135,947.29		
3.1.3.Updating of Carrying Capacity	Carrying capacity research conducted (No.)						Meals and Snacks, Venue, Logistics, Technical Services	750,000.00	GAA, IPAF, NGO	PAMO, NGO, Academe
3.1.4. Updating of fines and penalties for tourism-related violations	Fines and Penalties Updated (No.)						Meals and Snacks, Venue, Logistics	198,986.37	GAA, IPAF	PAMO
Sub Program 3.2. Ecotourism Facilities and Equipment								8,513,053.11		
3.2.1. Establishment of audiovisual room	Audiovisual room established (No.)						Engineering design, Labor and Materials	1,000,000.00	GAA, IPAF, LGU, DOT	PAMO, LGU, DOT

3.2.2. Maintenance of existing ecotourism facilities and equipment	Facilities maintained (No.)						Labor and Materials	1,977,119.24	LGU	PAMO, LGU
3.2.3. Installation and maintenance of trails and buoy markers	Buoys Installed (No.)						Labor and Materials, Technical Services	5,535,933.87	IPAF, LGU	PAMO, LGU
Sub Program 3.3. Support to Ecotourism Operation								2,731,284.72		
3.3.1. Development and maintenance of website and/or oooking system with online payment scheme	Websites developed and maintained (No.)						IT Services	414,912.00	IPAF	DENR, PAMO
3.3.2. Institutionalize the hiring of tour guides	Tour guides hired (No.)						Salary and Wages	560,000.00	LGU	PAMO, LGU
3.3.3. Capacity Building for service providers	Trainings conducted (No.)						Meals and Snacks, Venue, Logistics	1,756,372.72	IPAF, GAA, LGU, NGO, DOT	PAMO, LGU, DOT
Mgt. Focus 4: Linkages with other stakeholders								17,606,674.19		
Sub Program 4.1. Community and stakeholder involvement								7,866,774.19		
4.1.1. Regular Meeting of with other law enforcement agencies	Activities conducted (No.)						Meals and Snacks, Venue, Logistics	566,774.19	IPAF, GAA, LGU	PAMO, LGU

4.1.2. Involvement of coastal barangays in monitoring and surveillance of llegal activities through Bantay Dagat Volunteers							Labor and Wages	4,800,000.00	IPAF, GAA, LGU	PAMO, LGU
4.1.3. Conduct of environmental activities (i.e., Coastal Clean-up, Tree Planting, and SCUBASURA)							Meals and Snacks, Venue, Logistics	2,500,000.00	IPAF, GAA, LGU	DENR, PAMO, LGU
Sub Program 4.2. PAMB Operationalization and Strengthening								8,739,900.00		
4.2.1. Regular PAMB Meeting	Meetings conducted (No.)						Meals and Snacks, Venue, Logistics	2,500,000.00	IPAF, GAA	PAMO
4.2.2. Updating of PAMB Manual of Operations	Manual of Operations updated (No.)						Meals and Snacks, Venue, Logistics	98,000.00	IPAF, GAA	PAMO
4.2.3. Capacity building of PAMB members	Activities conducted (No.)						Meals and Snacks, Venue, Logistics	6,050,000.00	IPAF, GAA	PAMO
4.2.4. Review and updating of existing policies	Meetings conducted (No.)						Meals and Snacks, Venue, Logistics	91,900.00	IPAF, GAA	PAMO
Sub Program 4.3. BDFE								1,000,000.00		
4.3.1. Technical assistance for the preparation of BDFE Business Plan	Activity conducted (No.)						Meals and Snacks, Venue, Logistics	150,000.00	GAA	PAMO

4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	Activity conducted (No.)						Meals and Snacks, Venue, Logistics	450,000.00	GAA	PAMO
4.3.3. Monitor the progress of the enterprise	Activity conducted (No.)						Travelling Expenses	400,000.00	GAA	DENR, PAMO
Mgt. Focus 5: Communication, Education and Public Awareness								24,121,798.10		
Sub Program 5.1. Communication Education and Public Awareness								21,715,158.98		
5.1.1. Environmental Celebration	Activities conducted (No.)						Meals and Snacks, Venue, Logistics	9,029,000.00	GAA, IPAF, L:GU	DENR, PAMO
5.1.2. Celebration of Apo Reef Month	Activities conducted (No.)						Meals and Snacks, Venue, Logistics	2,636,158.98	IPAF	DENR, PAMO
5.1.3. Production of promotional materials	Materials Produced (No.)						Printing and Publication	10,000,000.00	GAA	DENR, PAMO
5.1.4. Production of new mascot of flagship species	Mascot produced (No.)						Professional Services	50,000.00	GAA, IPAF	DENR, PAMO
Sub Program 5.2. Youth Involvement								2,406,639.12		
5.2.1. Conduct of Dalaw Turo and Bio camp	Activities conducted (No.)						Meals and Snacks, Logistics	2,306,639.12	IPAF, GAA	DENR, PAMO

5.2.2. Development of Teaching Manual for ARNP	Approved teaching manual (No.)						Meals and Snacks, Venue, Logistics, Technical Services	100,000.00	IPAF, GAA	DENR, PAMO
Mgt. Focus 6: Support to PAMO Operations								113,746,438.14		
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment								14,600,000.00		
6.1.1. Construction of PAMO Building	Building Constructed (No.)						Labor and Materials	4,100,000.00	IPAF, GAA	PAMO
6.1.2. Maintenance of Existing Facilities and Equipment	Facilities Maintained (No.						Labor and Materials	10,500,000.00	IPAF, GAA	PAMO
Sub Program 6.2. PA Planning								3,436,714.53		
6.2.1. Updating of Ecotourism Business Plan	Approved Updated Ecotourism Business Plan (No.)						Technical Services	2,550,000.00	GAA, NGO	PAMO
6.2.2. Updating of General Management Plan	Approved Updated PA Management Plan (No.)						Technical Services	500,000.00	GAA, IPAF	PAMO
6.2.3. METT/MEA	METT/ MEA submitted (No.)						Technical Services	136,714.53	GAA	PAMO
6.2.4. Formulation of CEPA Plan	Approved CEPA Plan (No.)						Technical Services	250,000.00	IPAF, NGO	PAMO
Sub Program 6.3. PA Database								1,080,000.00		

6.3.1. Establishment of Comprehensive Database System	Database established (No.)						IT Services	750,000.00	IPAF, GAA	PAMO
6.3.2. Research and Data Gap Analysis	Report submitted (No.)						Technical Services	330,000.00	IPAF, GAA, NGO, Academe	PAMO
Sub Program 6.4. Provision of Supplies, materials, and equipment								19,923,243.61		
6.4.1. Procurement CT Equipment	Equipment procured (No.)						Supplies and Materials	2,300,000.00	IPAF, GAA	DENR, PAMO
6.4.2. Procurement of Office Furniture and Fixtures	Furniture and fixtures procured (No.)						Supplies and Materials	1,000,000.00	IPAF, GAA	DENR, PAMO
6.4.3. Procurement of Office Supplies and materials	Office supplies procured (No.)						Supplies and Materials	3,000,000.00	IPAF, GAA	DENR, PAMO
6.4.4. Procurement of technical equipment for surveillance	Technical Equipment procured (No.)						Supplies and Materials	2,100,000.00	IPAF, GAA	DENR, PAMO
6.4.5. Procurement of highspeed watercraft	High Speed Watercraft procured (No.)						Supplies and Materials	3,900,000.00	IPAF, GAA	DENR, PAMO
6.4.6. Provision of firearms to law enforcers	Firearms Procured (No.)						Supplies and Materials	100,000.00	IPAF, GAA	DENR, PAMO
6.4.7. Procurement of Machinery and Equipment	Machinery and Equipment procured (no.)						Supplies and Materials	7,523,243.61	IPAF, GAA	DENR, PAMO

Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)								74,706,480.00		
Park Operations Superintendent (1) SG 22	No. of Personnel Hired						Personnel Services	11,095,280.00	GAA	DENR
Senior Ecosystem Management Specialist (2) SG 18	No. of Personnel Hired						Personnel Services	14,493,940.00	GAA	DENR
Ecosystem Management Specialist II (2) SG 15	No. of Personnel Hired						Personnel Services	11,336,830.00	GAA	DENR
Ecosystem Management Specialist I (2) SG 11	No. of Personnel Hired						Personnel Services	8,307,170.00	GAA	DENR
Administrative Assistant II. (2) SG 8	No. of Personnel Hired						Personnel Services	3,274,810.00	GAA	DENR
Forest Technician II (9) SG 8	No. of Personnel Hired						Personnel Services	26,198,450.00	GAA	DENR
TOTAL								228,134,758.62		

^a Implementation Plan presentation following to template in BMB Technical Bulletin 2016-08

A summary of the Projected Budget Allocation for the planned period from 2022 to 2031 is shown on Table 14. It should be noted that there was no entry for LGU for 2021 and IPAF PA RIA for years 2020 and 2021 as there was no income for 2020 and projected to be the same situation for 2021 because of the pandemic. The budget from MBCFI depends on the activity that they are implementing on the ARNP which are not in their regular budget.

Budget from the GAA/SAA is unstable and depends on the downloaded funds from the Regional Office of Php 3,271,038 which is the regular fund allocated for ARNP, hence it is the only certain fund for the PA.

The data for 2022 to 2031 was obtained using the linear forecasting formula in excel except for GAA/SAA which has a regular budget.

Table 14. Projected Budget Allocation 2022-2031

	· · · · · · · · · · · · · · · · · · ·				
Year	LGU	MBCFI	GAA/SAA	IPAF PA RIA	TOTAL
2016	2,536,000	208,400	2,150,916	6,541,303	11,436,619
2017	2,932,300	148,400	22,881,128	7,792,458	33,754,286
2018	2,125,000	128,400	3,348,604	9,481,914	15,083,918
2019	1,830,159	128,400	5,968,040	7,665,906	15,592,505
2020	2,951,560	128,400	4,053,580		7,133,540
2021	0	20,000	3,737,580		3,757,580
2022	770,797	26,800	3,271,038	10,148,865	14,217,500
2023	401,738	3,413	3,271,038	10,309,361	13,985,550
2024	32,679	0	3,271,038	10,594,199	13,897,916
2025	0	0	3,271,038	11,501,020	14,772,058
2026	0	0	3,271,038	11,723,687	14,994,725
2027	0	0	3,271,038	12,157,818	15,428,856
2028	0	0	3,271,038	12,591,948	15,862,986
2029	0	0	3,271,038	13,112,318	16,383,356
2030	0	0	3,271,038	13,576,583	16,847,621
2031	0	0	3,271,038	13,941,680	17,212,718

A summary of Sources of Funds is shown in Table 15 below. Based on the approved Work and Financial Plan (WFP) from 2021 for LGU is zero because their budget allotment is based on the income generated from the previous year. Since ARNP was closed during 2020 due to COVID-19 there was no income generated, hence there was no budget allotment for 2021 coming from the LGU Sablayan.

The funds coming from IFAP-PA RIA is 75% retained from income of ARNP from collection from tourists visiting the PA. Likewise, because ARNP was closed in 2020 there was no allotment for 2021 coming from IPAF-PA RIA.

The projected allocation from the IPAF-PA RIA from 2022 to 2031 is also shown in Table

13 with the assumption that ARNP will open in 2022. The projected total available budget from from GAA/SAA and IPAF-PA RIA for the period 2022 to 2031 is also shown in Table 14.

Table 15. Sources of Fund

SOURCE OF FUND	2016	2017	2018	2019	2020	2021
LGU Sablayan	2,536,000 .00	2,932,300 .00	2,125,000	1,830,159 .00	2,951,56 0.00	0.00
MBCFI (NGO)	208,400.0 0	148,400.0 0	128,400.0 0	128,400.0 0	128,400. 00	20,000.0
GAA/SAA	2,150,916 .00	22,881,12 8.00	3,348,604	5,968,040	4,053,58 0.00	3,737,58 0.00
IPAF-PA RIA	6,541,303 .00	7,792,458 .00	9,481,914	7,665,906 .00	2,153,83 6.00	0.00
TOTAL	11,436,61 9.00	33,754,28 6.00	15,083,91 8.00	15,592,50 5.00	9,287,37 6.00	3,757,58 0.00
Notes:						
LGU Sablayan	2021 is zer generation	o because the from the pre 19 Pandemic	neir budget a evious year. S	om 2016-202 allotment dep Since ARNP income gen	pends on the is closed in	e income 2020 due
MBCFI (NGO)	Direct fund	s allotted to	ARNP			
GAA/SAA	FUNDS DO)WNLOADE	D FROM DE	NR		
IPAF-PA-RIA	75 % RETA	INED INCO	ME OF ARN	P FROM CO	LLECTION	

Table 16 is a comparison of the estimated expenses from 2022 to 2031 and the estimated available budget and corresponding yearly deficit during the planned period. The total projected deficit amounts to Php 73,538,230.72.

Table 16. Estimated Expenses versus Available Funds

		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
	AILABLE FUND	14,516, 540	14,316, 631	14,261, 037	14,772, 058	14,994, 725	15,42 8,856	15,862, 986	16,383, 356	16,847, 621	17,212, 718	154,596, 528
	TIMATED PENSES	31,108, 148.00	21,019, 318.80	22,579, 589.57	23,222, 849.33	20,952, 061.80	20,98 0,906. 59	23,246, 435.25	18,512, 105.26	20,541, 412.45	25,971, 931.57	228,134, 759
D	UDGET EFICIT/ JRPLUS	(16,591 ,608.17	(6,702, 688.08)	(8,318, 552.80)	(8,450, 791.29)	(5,957, 336.43)	(5,552 ,050.7 3)	(7,383, 448.90)	(2,128, 748.92)	(3,693, 791.46)	(8,759, 213.93)	(73,538, 230.72)

Table 17 shows the nature of the existing and potential sources of funds for the

operations of ARNP, the description of the fund sources as well as whether the funds are coming from private sources such as user fees and from government through GAA/SAA.

Many of the sources of funds need active campaigning from the local tourism office as well as from the PAMO. These campaign activities cover encouraging tourists to visit ARNP, sales of products for conservation of wildlife, and campaign for private sector CSR projects at the ANRP.

Table 17. Identified Possible Financial Solution

Finance Solution	Description	Private	Public
Government budget allocation	Biodiversity is a public good which can be enjoyed by the entire population for present and future generations. Public funding comprises most of the funding but can still be increased through mainstreaming and better delivery mechanisms. There are at least 50 national agencies contributing to biodiversity spending based on their mandates.	No	Yes
Improvement in the access and utilization of IPAF	The Integrated Protected Area Fund (IPAF) refers to the special account established for the purpose of financial projects of the NIPAS and individual protected areas.	No	Yes
User Fees	User fees are charges imposed by management authorities on types of activities. Imposition of user fees is supported by various laws and regulations both at national and local levels. Proceeds from user fees can be significant but the concomitant issue is that of ring fencing/earmarking of revenues and whether the fees accurately reflect resource scarcity value and willingness to pay	Yes	Yes

Promotion of sustainable tourism	Responsible travel to natural areas can provide an alternative source of income for the conservation of protected areas and the welfare of local communities. Receipts from tourists include accommodation and catering as well as any expenditure in the country where they travel to. The Government benefits from the direct and/or indirect taxation. The promotion of sustainable tourism through an enabling legal framework and direct or indirect incentives is critical in the early development stages and can direct tourism investment towards sustainable infrastructure and tourism activities.	Yes	No
Taxes and fees in the tourism sector	The collection of taxes and fees (or comparable instruments such as the sale or auctioning of concessions) from the tourism sector and/or tourists can provide ring-fenced financing for conservation either through retaining fees, revenue sharing agreements with communities, or receiving earmarked transfers from the central government.	No	Yes
Entrance fees	Fees charged to tourists for entering a Park or protected area. It can include a Parking fee.	No	Yes
Fee on international travel (air/cruise)	Fees charged to the consumer when buying an international air ticket or cruise package. Fees can also be charged by a country or locality for disembarking. The revenue is ring-fenced for conservation or carbon offsets. It is common to charge higher fees for business and elite travel packages.	No	Yes
Diving fees	Fees charged for a permit to snorkel or dive in a certain local, marine Park or protected area.	No	Yes
Filming and photography fees	Fees charged for taking photos in a certain park or protected area. The fee might be charged for commercial or personal photography and filming.	No	Yes
Camping fees	Fees charged for the permit of camping in a certain park or protected area.	No	Yes
Mooring Fees	Fees charged for marine vehicles to moor inside or near a protected area	No	Yes

Other PA and tourism fees	Fees and charges other than those listed in other categories	No	Yes
Products sold for conservation or wildlife	A range of products from chocolate, water bottles, toys, cloths, etc. are developed and sold to help generate profit for conservation and endangered species. A significant percentage of profit should go to target NGOs or conservation efforts, or the product may be seen as benefitting from marketing nature while not actually contributing (green washing).	Yes	Yes
Earmarked funds	Huge amounts stranded at national level due to lack of capacity to access. Three earmarked funds are targeted: People's Survival Fund; Energy Regulation 1-94 (ER 1-94); and Malampaya Fund	No	Yes
Expenditure tagging	Accurate expenditure tagging and the exercise itself contributes to biodiversity awareness but serves also as entry point to reverse negative expenditures	No	Yes
Mainstreaming	There are more than 30 national agencies indirectly supporting biodiversity but are unaware or are not reporting as such; biodiversity encompasses broad aspects of sustainable consumption and production, green economy, access and benefits sharing, which are shared by a host of other agencies	No	Yes
Effective procurement	Cluster of cost-effectiveness measures that can enhance an organization's procurement practices and thus free resources for programming. Typical measures include central procurement, digital procurement, process flow analysis, supplier optimization, green procurement, etc. While not specific to biodiversity, these measures can and should be considered by conservation organizations to optimize their spending practices. The resources saved can be reinvested in conservation.	No	Yes

Enhance local budget execution	Local revenues, budgeting and spending impact biodiversity through managing land use, natural resource exploitation, local protected areas, and financing biodiversity supportive programs and projects. Guidelines for increasing effectiveness and biodiversity impact of local budgets can enhance impact and direct funds to biodiversity. Countries with a defined legal mandate on decentralization and devolution, including that of public finance, can maximize opportunities to address financing issues related to biodiversity. Some countries like the Philippines, Indonesia, Bhutan, and India are working with sub-national levels of government to develop appropriate finance mechanisms.	No	Yes
Lobbying for public budget allocations	National budget allocations are and shall remain to be the major source of funding to biodiversity. Unless a performance based /results-based budgeting system is in place, budgets are linked to previous expenditures and political prioritization objectives. Lobbying for additional allocations (or retention of current allocations in case of public cuts) towards conservation and biodiversity by line ministries, as well as national, regional, and local authorities require a profound understanding of the budgeting process, a strong business case, and awareness raising, advocacy and communication efforts. Lobbying strategies may target both earmarked and non-earmarked resources (e.g., emergency funds, special funds).	No	Yes
Biodiversity friendly subsidies	Government subsidies that favor biodiversity by supporting individuals and organizations acting in biodiversity friendly ways. This can include biodiversity businesses such as ecotourism, sustainable use, reduced impact forestry, fisheries, and agriculture, etc.	Yes	Yes

	-		
Private Sector- CSR	The corporate sector is a great source of wealth providing 90 percent of jobs and 60 percent of the country's GDP thus being an inherent source of funding. CSR is generally understood as a way by which a company achieves a balance of economic, environmental, and social imperatives ("Triple-Bottom-Line- Approach"), while at the same time addressing the expectations of shareholders and stakeholders. Companies usually target sites where their operations are situated. There is no law governing CSR fund deployment, but several bills have been previously filed in both houses of Congress.	Yes	No
Public Private Partnership	Policy support for PPP but needs further clarification when applied to PAs; take advantage of skills and outlook of private sector to enhance wealth creation from PAs	Yes	Yes
Crowdfunding	Crowdfunding is "a method of collecting many small contributions, by means of an online funding platform, to finance or capitalize a popular enterprise". Rising disposable incomes, increased awareness about environmental issues, and a young population that is tech-savvy make crowdfunding a viable funding scheme especially when personal connections such as pride of place resonates well with the target "donors".	Yes	No
Diaspora funding	Similar to crowdfunding but targeting permanent and non-permanent migrants. Pride of place appeal for "on-site" projects and requirement for transparent utilization of funds and report back system.	Yes	No

Corporate and corporate foundations' donations	Corporations provide support to organizations implementing sustainable development including nonprofits through direct-giving programs, private foundations, and/or public charities. As well, companies can also offer their employees' time by encouraging employee volunteerism. A foundation can be established as part of a company's corporate social responsibility (CSR) strategy and be funded via the allocation of a percentage of accrued profits, an endowment, or other means. Annual giving could range from a few hundred thousand of dollars to hundreds of millions. They may or may not have a specific mandate or geographic coverage. Some companies and corporate foundations have a focus on biodiversity and conservation.	Yes	No
Mobile banking	Mobile banking is a service that allows customers to conduct financial transactions using mobile devices. Due to the higher cost of traditional banking (i.e., establishment of physical presence) in developing countries, it has expanded financial inclusion among the poor and among populations living in remote locations. Beyond commercial banking services, the same system can be used to pay taxes, receive Government benefits, or regulate other payments (e.g., payments for ecosystem services). Associated systems allow for microenterprise loans financing solar panels and other environmentally beneficial investments, including biodiversity conservation.	Yes	Yes
Damage Fees	The strict imposition of damage/ violation fees will increase the PAs IPAF. There is a need for damage valuation	Yes	No
Academe	Research	Yes	Yes
International NGOs	International NGOs most likely help the PA by conducting research, thereby illuminating research costs from internally sourced fund	Yes	No

Prioritizing activities	PAMO together with PAMB and other stakeholder can hold an action planning to prioritize activities which can be funded by the currently available budget	Yes	Yes	
-------------------------	--	-----	-----	--

XIV. MONITORING AND EVALUATION

Proper monitoring and evaluation are to ensure that the inputs (human and financial resources, time, materials, etc.) are systematically and fully utilized to generate, capture, and assess the GMP targets and determine the extent of achievement of its objectives, thus, strengthening both the effectiveness and efficiency of the GMP implementation.

The Monitoring and Evaluation scheme is anchored on the GMPs logical framework. It is divided into three basic components/stages, namely:

- 1. *Pre-evaluation stage*: Composed of information at the baseline, inputs and activity interventions and outputs.
- 2. Mid-evaluation stage: Assessment of the short-term goals are measured.
- 3. Impact assessment stage: Assessment of the long-term goal is measured.

Given a 10 – year management plan (2022-2031), the pre-evaluation starts at the beginning of the implementation of the GMP, or ideally, before any intervention is made. Mid-evaluation is done after most interventions and activities are conducted. In this case, it can be conducted by the end of 2026 or after the series of trainings and capacity development activities for the staff and stakeholders, some of the research, and construction of facilities in the park and the ecotourism one-stop shop.

Impact assessment will be conducted two years after the implementation of this GMP to gauge if the desired long-term goals had been met.

Details for each of the stage are as follows:

- 1. Pre-evaluation
- Baseline information

The M&E starts with a set of baseline information such as biophysical characteristics (see log frame) and socio-economic data of Park stakeholders. Data from the REECS assessment may be used for the biophysical characteristics, while data from the Survey and Registration of Protected Area Occupants (SRPAO) the Socio-Economic Assessment and Monitoring Systems (SEAMS), and 2018 METT assessment results

for the overall management aspect should be used, since it is required that Baseline analyses will serve as inputs to mid- evaluation, impact assessment, and post-evaluation comparisons.

• Inputs, activities, and outputs

This should cover and consolidate reports for the accomplishments vis-à-vis the short-term goals and targets of the GMP. Apart from assessment of numerical or quantitative targets⁸, specific analysis on strategies and activities that work and did not work may be highlighted at each report. Qualitative descriptions of accomplishments, specifically for the socio-economic indicators, should be included at each annual reporting period to aid in decision-making processes. Annual conduct of habitat assessments and monitoring, socio-economic monitoring, and METT assessment is recommended.

2. Mid-evaluation

The mid-evaluation stage would practically assess the accomplishments vis-à-vis the GMP after the end of 2024 or mid-2025, since the last two years would practically measure the incoming results of the interventions, so that adjustments in strategies and approaches can be made in the last years (towards the end of 2030and 2031), if needed.

3. Impact assessment

This stage should include reporting on the long-term goal (vision) that would include indicators on overall health of the park ecosystems and improved socio-economic status of stakeholders. There could be certain descriptors of the indicators which may happen within or after 2030. An impact study should be conducted after 2030 and should serve as inputs to the next updating of the GMP.

REFERENCES

ASEAN Centre for Biodiversity (Formerly ARCBC). 2003. Competence Standards for Protected Area Jobs in Southeast Asia. Los Banos, Philippines

Biodiversity Management Bureau Technical Bulletin No. 2016 – 08: Clarifying the Protected Area Management Process and Providing the Annotated Outline for Protected Area Management Plans

Biodiversity Management Bureau Technical Bulletin No. 2018 – 01: Clarifying the Procedures in the Identification, Designation and Delineation of Management Zones of Protected Areas under the National Integrated Protected Areas System (NIPAS)

COMPREHENSIVE LAND USE PLAN 2015-2042 Volume I: Development Framework and the Land Use Plan. Municipality of Sablayan, Province of Occidental Mindoro

COMPREHENSIVE LAND USE PLAN 2015-2042 Volume II: The Integrated Zoning Ordinance. Municipality of Sablayan, Province of Occidental Mindoro

COMPREHENSIVE LAND USE PLAN 2015-2042 Volume III: Socio-Economic and Physical Profile. Municipality of Sablayan, Province of Occidental Mindoro

Far East Scuba Institute. 2017. Report on Identification and Establishment of Sampling Area for Coral Propagation and Training on Coral Propagation

Foresterei Consult and Landscape Services. 2018. Vulnerability Assessment of Apo Reef Natural Park in Sablayan, Occidental Mindoro.

Chan MA, Bahinting SE, Licuanan AM, Mostrales TPI, Eneria JA, Licuanan WY. 2017. Assessment and monitoring of the state of coral communities in the Apo Reef Marine Natural Park: 2016 – 2017 Results. Br. Alfred Shields FSC Ocean Research Center, De La Salle University, Manila, Philippines.

Mindoro Biodiversity Conservation Foundation, Inc. 2014. ARNP Biophysical and Socioeconomic Profile Updating 2014 Presentation and Validation of Results to ARNP-PAMB.

Management Effectiveness Assessment of Apo Reef Natural Park Occidental Mindoro, Philippines. (November 17). DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (DENR) OCCIDENTAL MINDORO

Marine Science Institute, University of the Philippines. 2015. Apo Reef Survey Report

Geophysical Coral Mapping

Mindoro Biodiversity Conservation Foundation, Inc. (September 2014). Apo Reef Natural Park Ecotourism Management Plan 2015 – 2020.

Resources, Environment and Economics Center for Studies. (June 2017). Comprehensive Assessment of Marine and Coastal Resources of Apo Reef Natural Park. Baseline Information for the Pilot Testing Project.

United Nations World Tourism Organization. 2020. Global Guidelines to Restart Tourism. Retrieved from https://www.unwto.org/restarting-tourism.

ANNEXES

Annex 1. Yearly Budget Allocation per activity of the six (6) Management Focus

Activity	Schedule of Impleme ntation	Professi onal Services	Honoraria (For lecturers/r esource person in seminars/tr aining programs)	Travelli ng Expen ses	Training Expens es	Office Supplies Expen ses	Fuel, Oil and Lubricant	Other Supplies and Materials Expenses	Other Professi onal Services	Repair and Mainte nance - Buildin g and other Structu res	Repair and Mainte nance - Machin ery and Equipm ent	Repair and Mainten ance - Transpo rtation Equipment	Labor and Wages	Other Mainten ance and Operati ng Expens es	Building s and other Structure Outlay	Machin ery and Equipment Outlay	Transpo rtation and Equipment Outlay	Furnitu res and Fixtures Outlay
Mgt. Focus. No. 1: Environme ntal Protection through Law Enforceme nt	4,601,50 0.00	-	22,500.00	60,000	215,00 0.00		1,200,0 00.00	421,00 0.00	2,640,0 00.00	-	-			43,000. 00	-	-	-	-
Sub Program 1.1: Law Enforceme nt Operations	3,924,00 0.00	-	-	-	-	-	1,200,0 00.00	384,00 0.00	2,340,0 00.00	-	-	-	-	-	-	-	-	-
1.1.1. Patrolling of the Protected Area	1,584,00 0.00						1,200,0 00.00	384,00 0.00										
1.1.2. Engageme nt of Protected Area monitoring personnel	2,340,00 0.00								2,340,0 00.00									
Sub Program 1.2: Capacity Building of	317,500. 00	-	22,500.00	-	215,00 0.00	•	-	<i>37,000.</i> 00	-	•	-	•	•	43,000. 00	-	-	•	-

Law Enforcers																		
1.2.1. Conduct of law enforceme nt-related learning events	274,500. 00		22,500.00		215,00 0.00			37,000. 00										
1.2.2. Deputization of TF MARLEN members as Enforcemen t Officers (i.e., Fish Warden, PCGA, and WEO)	43,000.0													43,000. 00				
Sub Program 1.3. Demarcation of Protected Area	<i>360,000.</i> 00	-	-	60,000	-		-	1	300,00 0.00	-	-	-		-	-	-	-	-
1.3.1. Physical demarcati on of Boundaries	350,000. 00			50,000					300,00 0.00									
1.3.2. Demarcati on of Boundaries on Digital Platforms	10,000.0 0			10,000 .00														
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	3,965,80 0.00	-	18,000.00	250,00 0.00	154,80 0.00	30,000 .00	62,000. 00	269,40 0.00	1,510,0 00.00		•	-	•	1,621,6 00.00	•	50,000. 00	-	-
Sub Program 2.1.	2,350,00 0.00	-	-	250,00 0.00	-	30,000 .00	<i>50,000.</i> 00	190,00 0.00	330,00 0.00	-	-	-	-	1,500,0 00.00	-	-	-	-

Habitat monitoring and assessment																		
2.1.1. Monitoring using Biodiversity Monitoring and Assessme nt System (BAMS)	1,300,00 0.00			200,00				100,00 0.00						1,000,0 00.00				
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	250,000. 00			10,000 .00		10,000 .00	10,000. 00	20,000. 00						200,00 0.00				
2.1.3. Monitoring of coral reefs, mangroves, and seagrasses	150,000. 00			10,000 .00		10,000	10,000. 00	20,000. 00						100,00 0.00				
2.1.4. Bird	150,000.			10,000		10,000	10,000.	20,000. 00						100,00 0.00				
Survey 2.1.5. Sea Turtle Nesting Beach Monitoring	00 150,000. 00			10,000		.00	00 10,000. 00	30,000.						100,00				
2.1.6. Elasmobra nchs Biodiversity Assessment	250,000. 00								250,00 0.00									
2.1.7. Water Quality Monitoring and Assessment	100,000. 00			10,000 .00			10,000. 00		80,000. 00									
Sub Program	1,135,80 0.00	ı	18,000.00	ı	154,80 0.00	-	12,000. 00	79,400. 00	700,00 0.00	-	-	•	1	121,60 0.00	-	<i>50,000.</i> <i>00</i>	-	-

2.2. Threat reduction											
2.2.1. Crown-of- Thorns (CoTS) Starfish management	-										
-Development and updating of a strategic plan for the management of CoTS	200,000. 00					200,00 0.00					
Surveillanc e and control of CoTS	68,600.0 0			12,000. 00	5,000.0 0				51,600. 00		
2.2.2. Eradicatio n and control of Invasive Alien Species (IAS)	-										
-Development and updating of strategic plan for the eradication and control of IAS	200,000. 00					200,00 0.00					
Implement ation of strategic plan for the eradication and control of IAS	50,000.0 0				30,000. 00				20,000. 00		
2.2.3. Response to oil spills	-										

	•	1			,			•	•	•	•	
and ship grounding s												
-Development of emergenc y response guidelines for oil spills and ship grounding s	100,000. 00					100,00 0.00						
- Capacity building of Protected Area staff in respondin g to oil spills and ship grounding s	108,600. 00	9,000.00	77,400. 00		22,200. 00							
s 2.2.4. Managem ent of light and noise pollution	-											
Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	50,000.0 0										50,000. 00	
-Development of guidelines regulating noise and light pollution	200,000. 00					200,00 0.00						
2.2.5. Solid	-											

waste and marine litter management																		
- Development or strengthen ing of Protected Area policies on solid waste and marine litter management	108,600. 00		9,000.00		77,400. 00			22,200. 00										
- Formulation of communic ation campaigns for public awareness	50,000.0													50,000. 00				
Sub Program 2.3. Enhancing Climate Change Resiliency	480,000. 00	-	-	1	•	1	-	1	480,00 0.00	-	1	1	1	1	1	-	-	-
2.3.1. Formulation of Climate Change Adaptation Plan	-																	
- Assessment of ecosystem vulnerability	250,000. 00								250,00 0.00									
Development and updating of Climate Change	150,000. 00								150,00 0.00									

Adaptation Plan - Research and developme nt of localized, active habitat restoration interventio ns using best- available science	80,000.0								80,000. 00									
Mgt. Focus No. 3: Ecotouris m	2,585,50 0.00	-	67,500.00	-	696,60 0.00	-	-	111,00 0.00	550,00 0.00	100,00 0.00	50,000. 00	-	56,000 .00	34,400. 00	620,00 0.00	300,00 0.00	-	-
Sub Program 3.1. Regulation of tourism industry	885,000. 00	-	45,000.00	-	481,60 0.00	-	-	74,000. 00	<i>25</i> 0,00 0.00	-	-	-	1	<i>34,400.</i> 00	-	-	-	-
3.1.1. Implement ation of Green Fins	-																	
- Orientation of service providers	274,500. 00		22,500.00		215,00 0.00			37,000. 00										
- Accreditatio n of service providers	-																	
Continuous capacity building of accredited service providers	274,500. 00		22,500.00		215,00 0.00			37,000. 00										
3.1.2. Updating of Code of	34,400.0 0													34,400. 00				

Conduct (CoC)																		
3.1.3. Updating of Carrying Capacity	250,000. 00								250,00 0.00									
3.1.4. Updating of fines and penalties for tourism- related violations	51,600.0 0				51,600. 00													
Sub Program 3.2. Ecotouris m Facilities and Equipment	1,070,00 0.00	-	-	-	-	-	-	-	-	100,00 0.00	50,000. 00	-	-	-	620,00 0.00	300,00 0.00	-	-
3.2.1. Establishm ent of audiovisua I room	500,000.														200,00 0.00	300,00 0.00		
3.2.2. Maintenan ce of existing ecotouris m facilities and equipment	150,000. 00									100,00 0.00	50,000. 00							
3.2.3. Installation and maintenan ce of trails and buoy markers	420,000. 00														420,00 0.00			
Sub Program 3.3. Support to	630,500. 00	-	22,500.00	-	215,00 0.00	-	-	<i>37,000.</i> <i>00</i>	300,00 0.00	-	-	-	<i>56,000</i> .00	-	-	-	-	-

Ecotouris m Operation																		
3.3.1. Developm ent and maintenan ce of website and/or booking system with online payment scheme	300,000.								300,00 0.00									
3.3.2. Institutiona lize the hiring of tour guides	56,000.0 0												56,000 .00					
3.3.3. Capacity Building for service providers	274,500. 00		22,500.00		215,00 0.00			37,000. 00										
Mgt. Focus 4: Linkages with other stakeholders	2,481,00 0.00	-		40,000 .00	1,408,0 00.00	40,000 .00	-	70,000. 00	-	-	-	-	480,00 0.00	443,00 0.00	-	-	-	-
Sub Program 4.1. Community and stakeholder involvement	773,000. 00	-	1	1	-	-	1	<i>50,000.</i> <i>00</i>	-	1	1	-	480,00 0.00	243,00 0.00	-	1	-	-
4.1.1. Regular Meeting of with other law enforcement agencies	43,000.0 0													43,000. 00				

4.1.2. Involveme nt of coastal barangays in monitoring and surveillanc e of illegal activities through Bantay Dagat Volunteers	480,000. 00												480,00 0.00					
4.1.3. Conduct of environme ntal activities (i.e., Coastal Clean-up, Tree Planting, and SCUBASU RA)	250,000. 00							50,000. 00						200,00 0.00				
Sub Program 4.2. PAMB Operation alization and Strengthen ing 4.2.1.	1,558,00 0.00	-	-	30,000 .00	1,308,0 00.00	20,000 .00	-	-	-	ı	-	-	-	200,00 0.00	-	-	-	-
Regular PAMB Meeting	250,000. 00			30,000		20,000								200,00				
4.2.2. Updating of PAMB Manual of Operations	98,000.0				98,000. 00													

4.2.3. Capacity building of PAMB members	1,210,00 0.00				1,210,0 00.00												
4.2.4. Review and updating of existing policies	-																
Sub Program 4.3. BDFE	150,000. 00	-	-	10,000 .00	100,00 0.00	<i>20,000</i> .00	-	<i>20,000.</i> 00	-	-	-	-	-	-	-	-	-
4.3.1. Technical assistance for the preparatio n of BDFE Business Plan	150,000. 00			10,000 .00	100,00 0.00	20,000		20,000. 00									
4.3.2. Technical Assistance for the enhancem ent activities for POs (e.g., Capacity Building on enterprise and organizatio nal developme nt)	-																
4.3.3. Monitor the progress of the enterprise	-																

Mgt. Focus 5: Communic ation, Education and Public Awareness	2,377,90 0.00	•	-	110,00 0.00	-	57,000 .00	22,000. 00	160,00 0.00	300,00 0.00	-	-	-	-	1,728,9 00.00	-	-	-	-
Sub Program 5.1. Communic ation Education and Public Awareness	2,102,90 0.00	1	-	100,00 0.00	-	50,000 .00	<i>20,000.</i> 00	150,00 0.00	300,00 0.00	-	-	-	-	1,482,9 00.00	-	-	-	-
5.1.1. Environme ntal Celebration	902,900. 00			100,00 0.00		50,000	20,000.	100,00						632,90 0.00				
5.1.2. Celebration of Apo Reef Month	200,000.							50,000. 00						150,00 0.00				
5.1.3. Production of promotional materials	1,000,00 0.00								300,00 0.00					700,00 0.00				
5.1.4. Production of new mascot of flagship species	-																	
Sub Program 5.2. Youth Involvement	<i>275</i> ,000.	,	-	10,000 .00	-	7,000. 00	2,000.0 0	10,000. 00	,		-	-	-	246,00 0.00	-	-	-	-
5.2.1. Conduct of Dalaw Turo and Bio camp	175,000. 00			5,000. 00		5,000. 00	2,000.0	10,000. 00						153,00 0.00				
5.2.2. Developm	100,000. 00			5,000. 00		2,000. 00								93,000. 00				

ent of Teaching Manual for ARNP																		
Mgt. Focus 6: Support to PAMO Operations	15,096,4 48.00	7,470,6 48.00	-	-	-	300,00 0.00	-	-	1,850,0 00.00	400,00 0.00	150,00 0.00	500,000	-	25,800. 00	2,600,0 00.00	1,300,0 00.00	-	500,00 0.00
Sub Program 6.1. Establishm ent and Maintenan ce of Office Building and Equipment	3,650,00 0.00		-	-	-	-	-	-	-	400,00 0.00	150,00 0.00	500,000 .00	-	-	2,600,0 00.00	-	-	-
6.1.1. Construction of PAMO Building	2,600,00 0.00														2,600,0 00.00			
6.1.2. Maintenan ce of Existing Facilities and Equipment	1,050,00 0.00									400,00 0.00	150,00 0.00	500,000						
Sub Program 6.2. PA Planning	1,125,80 0.00		-	-	-	-	-	-	1,100,0 00.00	-	-	-	-	<i>25,8</i> 00. 00	-	-	-	-
6.2.1. Updating of Ecotourism Business Plan	850,000. 00								850,00 0.00									
6.2.2 Updating of General Managem ent Plan	-																	

		•	ī		•				•			Ī	•	•			•	
6.2.3. METT/ MEA	25,800.0 0													25,800. 00				
6.2.4. Formulatio n of CEPA Plan	250,000. 00								250,00 0.00									
Sub Program 6.3. PA Database	750,000. 00	-	-	-		-	-	-	750,00 0.00	-	-	-	-	-	-	-	-	
6.3.1. Establishm ent of Comprehe nsive Database System	750,000. 00								750,00 0.00									
6.3.2. Research and Data Gap Analysis	-																	
Sub Program 6.4. Provision of Supplies, materials, and equipment	2,100,00 0.00	-	-	-	-	300,00	-	-	-	-	-	-	-	-	-	1,300,0 00.00	-	500,00 0.00
6.4.1. Procurement ICT Equipment	500,000. 00															500,00 0.00		
6.4.2. Procurement of Office Furniture and Fixtures	500,000. 00																	500,00 0.00
6.4.3. Procurement of Office Supplies	300,000. 00					300,00 0.00												

and																		
materials								1										
6.4.4.																		
Procurement								1										
of																		
technical	700,000.															700,00		
	00															0.00		
equipment																		
for																		
surveillance											-							
6.4.5.																		
Procureme																		
nt of																		
highspeed																		
watercraft																		
6.4.6.																		
Provision																		
of firearms	100,000.															100,00		
to law	00							1								0.00		
enforcers																		
6.4.7.																		
Procureme																		
nt of	_																	
Machinery	_																	
and																		
Equipment																		
Sub																		
Program																		
6.5.																		
Implement																		
impiement																		
ation of																		
Proposed	7,470,64	7,470,6																
Staffing	8.00	48.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pattern	0.00	40.00																
Under RA																		
11038																		
(Salaries																		
and all																		
incentives)																		
Dorle																		
Park																		
Operations	1,109,52	1,109,5						1										
Superinten	8.00	28.00																
dent (1)	0.00	20.00						1										
SG 22																		
Senior	4 440 00	4 440 6																
Ecosystem	1,449,39	1,449,3																
Managem	4.00	94.00																
	1						<u> </u>				1			<u> </u>				

ent Specialist (2) SG 18																		
Ecosystem Managem ent Specialist II (2) SG 15	1,133,68 3.00	1,133,6 83.00																
Ecosystem Managem ent Specialist I (2) SG 11	830,717. 00	830,71 7.00																
Administra tive Assistant II. (2) SG 8	327,481. 00	327,48 1.00																
Forest Technician II (9) SG 8	2,619,84 5.00	2,619,8 45.00																
TOTAL	31,108,1 48.00	7,470,6 48.00	108,000.0 0	460,00 0.00	2,474,4 00.00	427,00 0.00	1,284,0 00.00	1,031,4 00.00	6,850,0 00.00	500,00 0.00	200,00 0.00	500,000 .00	536,00 0.00	3,896,7 00.00	3,220,0 00.00	1,650,0 00.00	-	500,00 0.00

Activity	Schedul e of Implem entation	Profes sional Servic es	Honoraria (For lecturers/ resource person in seminars/ training programs)	Travel ling Expen ses	Training Expens es	Office Suppli es Expen ses	Fuel, Oil and Lubric ant	Other Supplies and Materials Expenses	Other Professio nal Services	Repair and Maintena nce - Building and other Structures	Repair and Maintena nce - Machinery and Equipment	Repair and Mainten ance - Transp ortation Equipm ent	Labor and Wages	Other Maint enanc e and Opera ting Expen ses	Buildin gs and other Structu re Outlay	Machiner y and Equipme nt Outlay	Transport ation and Equipme nt Outlay	Furnitur es and Fixtures Outlay
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement	4,355,5 90.00	-	23,850.0 0	-	227,90 0.00	-	1,272, 000.00	446,260. 00	2,340,00 0.00	-	-	-	-	45,58 0.00	-	-	-	-
Sub Program 1.1: Law Enforcement Operations	4,019,0 40.00	•	-	-	-	-	1,272, 000.00	407,040. 00	2,340,00 0.00	-	-	-	-	-	-	-	-	
1.1.1. Patrolling of the Protected Area	1,679,0 40.00						1,272, 000.00	407,040. 00										
1.1.2. Engagement of Protected Area monitoring personnel	2,340,0 00.00								2,340,00 0.00									
Sub Program 1.2: Capacity Building of Law Enforcers	336,55 0.00	1	23,850.0 0	-	227,90 0.00	-	-	39,220.0 0	-	-	-	-	-	45,58 0.00	-	-	ì	ì

1.2.1. Conduct of law enforcement-related learning events	290,97 0.00		23,850.0 0		227,90 0.00			39,220.0 0										
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	45,580. 00													45,58 0.00				
Sub Program 1.3. Demarcation of Protected Area	-	ı	1	ı	1	1	ı	-	1	•	-	1	-	ı	ı	1	-	-
1.3.1. Physical demarcation of Boundaries	-																	
1.3.2. Demarcation of Boundaries on Digital Platforms	-																	
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,085,7 16.00	1	-	50,00 0.00	-	30,00 0.00	62,720 .00	155,300. 00	160,000. 00	1	-	-	-	627,6 96.00	1	-	-	-

Sub Program 2.1. Habitat monitoring and assessment	800,00 0.00	-	-	50,00 0.00	-	30,00 0.00	50,000 .00	90,000.0	80,000.0 0	-	-	-	-	500,0 00.00	-	-	-	-
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	1																	
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	250,00 0.00			10,00 0.00		10,00 0.00	10,000 .00	20,000.0						200,0				
2.1.3. Monitoring of coral reefs, mangroves, and seagrasses	150,00 0.00			10,00 0.00		10,00 0.00	10,000	20,000.0						100,0 00.00				
2.1.4. Bird Survey	150,00 0.00			10,00 0.00		10,00 0.00	10,000 .00	20,000.0 0						100,0 00.00				
2.1.5. Sea Turtle Nesting Beach Monitoring	150,00 0.00			10,00 0.00			10,000	30,000.0						100,0 00.00				
2.1.6. Elasmobranch s Biodiversity Assessment	-																	

2.1.7. Water Quality Monitoring and Assessment	100,00 0.00			10,00 0.00			10,000		80,000.0 0									
Sub Program 2.2. Threat reduction	205,71 6.00	,	,	ı	,	ı	12,720 .00	65,300.0 0	-	ı	ı	,	1	127,6 96.00	,	-	1	-
2.2.1. Crown- of-Thorns (CoTS) Starfish management	-																	
- Development and updating of a strategic plan for the management of CoTS	-																	
- Surveillance and control of CoTS	72,716. 00						12,720 .00	5,300.00						54,69 6.00				
2.2.2. Eradication and control of Invasive Alien Species (IAS)	-																	
- Development and updating of strategic plan for the eradication and control of IAS	-																	

•		ī	i i						•	ī	
Implementati on of strategic plan for the eradication and control of IAS	50,000. 00				30,000.0			20,00 0.00			
2.2.3. Response to oil spills and ship groundings	-										
- Development of emergency response guidelines for oil spills and ship groundings	-										
- Capacity building of Protected Area staff in responding to oil spills and ship groundings	-										
2.2.4. Management of light and noise pollution	-										
- Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	30,000. 00				30,000.0						
- Development of guidelines regulating noise and light pollution	-										

1	I							l			İ	ĺ	ĺ	ĺ				
2.2.5. Solid waste and marine litter management	-																	
- Development or strengthening of Protected Area policies on solid waste and marine litter management	-																	
- Formulation of communicatio n campaigns for public awareness	53,000. 00													53,00 0.00				
Sub Program 2.3. Enhancing Climate Change Resiliency	80,000. 00	-	1	-	-	•	-	-	80,000.0 0	•	•	•	,		•	-	-	-
2.3.1. Formulation of Climate Change Adaptation Plan	-																	
- Assessment of ecosystem vulnerability	-																	
- Development and updating of Climate Change Adaptation Plan	-																	

- Research and development of localized, active habitat restoration interventions using best- available science	80,000. 00								80,000.0 0									
Mgt. Focus No. 3: Ecotourism	1,359,4 84.80	-	23,850.0 0	-	227,90 0.00	•	-	39,220.0 0	-	106,000 .00	53,000. 00	-	56,00 0.00	58,31 4.80	445,20 0.00	200,000. 00	-	150,000 .00
Sub Program 3.1. Regulation of tourism industry	339,28 4.80	-	23,850.0 0	-	227,90 0.00	-	-	39,220.0 0	-	,	-	-	-	48,31 4.80	-	-	-	-
3.1.1. Implementatio n of Green Fins	-																	
- Orientation of service providers	-																	
- Accreditatio n of service providers	48,314. 80													48,31 4.80				
- Continuous capacity building of accredited service providers	290,97 0.00		23,850.0 0		227,90 0.00			39,220.0 0										

3.1.2. Updating of Code of Conduct (CoC)	-																	
3.1.3. Updating of Carrying Capacity	-																	
3.1.4. Updating of fines and penalties for tourismrelated violations	-																	
Sub Program 3.2. Ecotourism Facilities and Equipment	954,20 0.00	•	-	-	-	-	-	-	-	106,000 .00	53,000. 00	-	-	-	445,20 0.00	200,000. 00	-	150,000 .00
3.2.1. Establishment of audiovisual room	350,00 0.00															200,000. 00		150,000
3.2.2. Maintenance of existing ecotourism facilities and equipment	159,00 0.00									106,000 .00	53,000. 00							
3.2.3. Installation and maintenance of trails and buoy markers	445,20 0.00														445,20 0.00			

Sub Program 3.3. Support to Ecotourism Operation	66,000. 00	-	-	-	•	-	-	-	-	-	-	-	56,00 0.00	10,00 0.00	-	-	-	-
3.3.1. Development and maintenance of website and/or booking system with online payment scheme	10,000. 00													10,00 0.00				
3.3.2. Institutionalize the hiring of tour guides	56,000. 00												56,00 0.00					
3.3.3. Capacity Building for service providers	-																	
Mgt. Focus 4: Linkages with other stakeholders	1,267,4 80.00		22,500.0 0	40,00 0.00	154,60 0.00	40,00 0.00	-	84,800.0 0	-	-	-	-	480,0 00.00	445,5 80.00		-	-	-
Sub Program 4.1. Community and stakeholder involvement	775,58 0.00	1	1	-	•	-	-	50,000.0 0	-	-	-	-	480,0 00.00	245,5 80.00	1	-	-	-

4.1.1. Regular Meeting of with other law enforcement agencies	45,580. 00													45,58 0.00				
4.1.2. Involvement of coastal barangays in monitoring and surveillance of illegal activities through Bantay Dagat Volunteers	480,00 0.00												480,0 00.00					
4.1.3. Conduct of environmental activities (i.e., Coastal Clean- up, Tree Planting, and SCUBASURA)	250,00 0.00							50,000.0 0						200,0 00.00				
Sub Program 4.2. PAMB Operationaliz ation and Strengthening	341,90 0.00	•	<i>22,5</i> 00.0 0	30,00 0.00	<i>54,6</i> 00. 00	20,00 0.00	•	14,800.0 0	-	,	•	,	,	200,0 00.00	•	-	-	-
4.2.1. Regular PAMB Meeting	250,00 0.00			30,00 0.00		20,00								200,0 00.00				
4.2.2. Updating of PAMB Manual of Operations	-																	

4.2.3. Capacity building of PAMB members	-																	
4.2.4. Review and updating of existing policies	91,900. 00		22,500.0 0		54,600. 00			14,800.0 0										
Sub Program 4.3. BDFE	150,00 0.00	-	-	10,00 0.00	100,00 0.00	20,00 0.00	-	20,000.0 0	-	-	-	-	-	-	,	-	-	-
4.3.1. Technical assistance for the preparation of BDFE Business Plan	-																	
4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	150,00 0.00			10,00 0.00	100,00 0.00	20,00 0.00		20,000.0										
4.3.3. Monitor the progress of the enterprise	-																	

Mgt. Focus 5: Communicati on, Education and Public Awareness	2,300,4 00.00	-	-	105,3 00.00	-	55,30 0.00	22,120 .00	163,600. 00	300,000. 00	-	-	-	-	1,654 ,080. 00	-	-	-	-
Sub Program 5.1. Communicati on Education and Public Awareness	2,114,9 00.00	-	-	100,0 00.00	-	50,00 0.00	20,000 .00	153,000. 00	300,000. 00	-	-	-	-	1,491 ,900. 00	-	-	1	
5.1.1. Environmental Celebration	902,90 0.00			100,0 00.00		50,00 0.00	20,000	100,000. 00						632,9 00.00				
5.1.2. Celebration of Apo Reef Month	212,00 0.00							53,000.0 0						159,0 00.00				
5.1.3. Production of promotional materials	1,000,0 00.00								300,000. 00					700,0 00.00				
5.1.4. Production of new mascot of flagship species	-																	
Sub Program 5.2. Youth Involvement	185,50 0.00	-	-	<i>5,300.</i> 00	-	5,300 .00	<i>2,12</i> 0. 00	10,600.0 0	-	-	-	-	-	162,1 80.00	-	-	-	

5.2.1. Conduct of Dalaw Turo and bio camp	185,50 0.00			5,300. 00		5,300 .00	2,120. 00	10,600.0 0						162,1 80.00				
5.2.2. Development of Teaching Manual for ARNP	-																	
Mgt. Focus 6: Support to PAMO Operations	10,650, 648.00	7,470, 648.00	-	-	-	300,0 00.00	-	-	330,000. 00	400,000 .00	150,00 0.00	500,00 0.00	-	-	1,500, 000.00	-	-	-
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment	2,550,0 00.00	-	-	•	-	•	-	-	-	400,000 .00	150,00 0.00	500,00 0.00	•	-	1,500, 000.00	-	-	-
6.1.1. Construction of PAMO Building	1,500,0 00.00														1,500, 000.00			
6.1.2. Maintenance of Existing Facilities and Equipment	1,050,0 00.00									400,000 .00	150,00 0.00	500,00 0.00						
Sub Program 6.2. PA Planning	-	-	-	-	-	1	-	-	-	•	-	-	·	-	i	-	-	-
6.2.1. Updating of Ecotourism Business Plan	-																	

6.2.2. Updating of General Management Plan	-																
6.2.3. METT/ MEA	-																
6.2.4. Formulation of CEPA Plan	-																
Sub Program 6.3. PA Database	330,00 0.00		-			,	-	-	330,000. 00	-	-	-	-	-	-	-	-
6.3.1. Establishment of Comprehensi ve Database System	-																
6.3.2. Research and Data Gap Analysis	330,00 0.00								330,000. 00								
Sub Program 6.4. Provision of Supplies, materials, and equipment	300,00 0.00	,	•	1	•	300,0 00.00	1	-	-	,	-	-	-	1	•	-	-
6.4.1. Procurement ICT Equipment	-																

6.4.2. Procurement of Office Furniture and Fixtures	-																	
6.4.3. Procurement of Office Supplies and materials	300,00 0.00					300,0 00.00												
6.4.4. Procurement of technical equipment for surveillance	-																	
6.4.5. Procurement of highspeed watercraft	-																	
6.4.6. Provision of firearms to law enforcers	-																	
6.4.7. Procurement of Machinery and Equipment	-																	
Sub Program 6.5. Implementatio n of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,6 48.00	7,470, 648.00	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Park Operations Superintende nt (1) SG 22	1,109,5 28.00	1,109, 528.00																

Senior Ecosystem Management Specialist (2) SG 18	1,449,3 94.00	1,449, 394.00																
Ecosystem Management Specialist II (2) SG 15	1,133,6 83.00	1,133, 683.00																
Ecosystem Management Specialist I (2) SG 11	830,71 7.00	830,71 7.00																
Administrative Assistant II. (2) SG 8	327,48 1.00	327,48 1.00																
Forest Technician II (9) SG 8	2,619,8 45.00	2,619, 845.00																
TOTAL	21,019, 318.80	7,470, 648.00	70,200.0 0	195,3 00.00	610,40 0.00	425,3 00.00	1,356, 840.00	889,180. 00	3,130,00 0.00	506,000 .00	203,00 0.00	500,00 0.00	536,0 00.00	2,831 ,250. 80	1,945, 200.00	200,000. 00	1	150,000 .00

Activity	Schedule of Impleme ntation	Professi onal Services	Honoraria (For lecturers/ resource person in seminars/ training programs)	Travell ing Expen ses	Training Expens es	Office Supplies Expenses	Fuel, Oil and Lubricant	Other Suppli es and Materi als Expen ses	Other Professi onal Services	Repair and Mainten ance - Building and other Structur es	Repair and Mainte nance - Machin ery and Equipm ent	Repair and Mainten ance - Transpo rtation Equipm ent	Labor and Wages	Other Mainten ance and Operati ng Expens es	Buildin gs and other Struct ure Outlay	Machin ery and Equipm ent Outlay	Transpo rtation and Equipm ent Outlay	Furnitures and Fixtures Outlay
Mgt. Focus. No. 1: Environment al Protection through Law Enforcement	4,476,52 5.40	-	25,281.0 0	-	241,57 4.00	-	1,348,3 20.00	473,0 35.60	2,340,0 00.00	-	-	-	-	48,314. 80	-	-	-	-
Sub Program 1.1: Law Enforcement Operations	4,119,78 2.40	-	-	-	-	-	1,348,3 20.00	431,4 62.40	2,340,0 00.00	-	-	-	-	-	-	-	-	-
1.1.1. Patrolling of the Protected Area	1,779,78 2.40						1,348,3 20.00	431,4 62.40										
1.1.2. Engagement of Protected Area monitoring personnel	2,340,00 0.00								2,340,0 00.00									
Sub Program 1.2: Capacity Building of Law Enforcers	<i>356,743.</i> 00		<i>25,281.</i> 0 0	-	241,57 4.00	-	-	41,57 3.20	-	-	-	-	-	48,314. 80	-	-	-	-
1.2.1. Conduct of law enforcement -related learning events	308,428. 20		25,281.0 0		241,57 4.00			41,57 3.20										

1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e. Fish Warden, PCGA, and WEO)	48,314.8 0													48,314. 80				
Sub Program 1.3. Demarcatio n of Protected Area	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-
1.3.1. Physical demarcation of Boundaries	-																	
1.3.2. Demarcation of Boundaries on Digital Platforms	-																	
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,095,05 8.96	-	-	50,00 0.00	-	30,000. 00	63,483. 20	151,8 00.00	160,00 0.00	-	-	-	56,18 0.00	583,59 5.76	-	-		-
Sub Program 2.1. Habitat monitoring and assessment	800,000. 00	-	-	50,00 0.00	-	<i>30,000.</i> 00	50,000. 00	90,00 0.00	80,000. 00	-	-	-	-	500,00 0.00	-	-	-	-
2.1.1. Monitoring using Biodiversity Monitoring	-																	

		•			ı	•	•	i	•	·	•							
and																		
Assessment																		
System (BAMS)																		
2.1.2.																		
Monitoring																		
using																		
Biodiversity	250,000.			10,00		10,000.	10,000.	20,00						200,00				
Monitoring	00			0.00		00	00	0.00						0.00				
System																		
(BMS)																		
2.1.3.																		
Monitoring																		
of coral	150,000.			10,00		10,000.	10,000.	20,00						100,00				
reefs,	00			0.00		00	00	0.00						0.00				
mangroves, and																		
seagrasses																		
2.1.4. Bird	150,000.			10,00		10,000.	10,000.	20,00						100,00				
Survey	00			0.00		00	00	0.00						0.00				
2.1.5. Sea																		
Turtle	150,000.			10,00			10,000.	30,00						100,00				
Nesting	00			0.00			00	0.00						0.00				
Beach				0.00			00	0.00						0.00				
Monitoring 2.1.6.																		
Elasmobran																		
chs	_																	
Biodiversity																		
Assessment																		
2.1.7. Water																		
Quality	100,000.			10,00			10,000.		80,000.									
Monitoring	00			0.00			00		00,000.									
and	00			0.00			00		00									
Assessment																		
Sub Program	215,058.						13,483.	61,80					56,18	83,595.				
2.2. Threat	96	-	-	-	-	-	13,463. 20	0.00	-	-	-	-	0.00	76	-	-	-	-
reduction	30						20	0.00					0.00	70				
2.2.1.																		
Crown-of-																		
Thorns	_																	
(CoTS)																		
Starfish																		
management											<u> </u>							

•										,				
- Development														1
and														i l
updating of														i l
a strategic	-													i l
plan for the														i l
managemen														i l
managemen t of CoTS														1
-Surveillance														
and control	77,078.9					13,483.					63,595.			1
of CoTS	6					20					76			i
2.2.2.														
Eradication														i
Eradication														1
and control														1
of Invasive	-													1
Alien														i
Species (IAS)														i
(IAS)														
-Development														1
and														1
updating of														1
strategic														1
plan for the	-													1
eradication														1
and control														1
of IAS														1
of IAS -Implementation														
of strategic														1
plan for the	50,000.0						30,00				20,000.			1
eradication	0						0.00				00			1
and control	U						0.00				00			i
of IAS														i
2.2.3.														
Response to														1
iveshouse ro														i l
oil spills and	-													i l
ship														i
groundings														\vdash
-Development														i l
of														į l
emergency														i l
response	-													í l
guidelines	_													į l
for oil spills														i l
and ship														į l
groundings														i l
- Capacity														
building of	-													į l
- ananig 01	1	L	l	l		l			l			l	l	

Protected	I	I									
Area staff in											
responding											
to oil spills											
and ship groundings											
2.2.4.											
Managemen											
t of light and	-										
noise											
pollution											
- Retrofitting											
of light											
fixtures in	31,800.0				31,80						
Apo Island,	0				0.00						
Apo Reef											
Natural Park -Development											
of guidelines											
regulating											
noise and	-										
light											
pollution											
2.2.5. Solid											
waste and	_										
marine litter											
management - Development											
or											
strengthenin											
g of											
Protected											
Area	-										
policies on											
solid waste											
and marine litter											
management											
- Formulation											
of											
communicati	56,180.0							56,18			
on	0							0.00			
campaigns								0.00			
for public											
awareness		1									

Sub Program 2.3. Enhancing Climate Change Resiliency	80,000.0 0	-	-	-	-	-	-	-	80,000. 00		-	-	-	-	-	-	-	
2.3.1. Formulation of Climate Change Adaptation Plan	-																	
-Assessment of ecosystem vulnerability	-																	
- Development and updating of Climate Change Adaptation Plan	-																	
- Research and development of localized, active habitat restoration interventions using best- available science	80,000.0								80,000. 00									
Mgt. Focus No. 3: Ecotourism	1,473,90 8.20	-	50,562.0 0	-	483,14 8.00	•	-	83,14 6.20	-	112,360. 00	56,180 .00	-	56,00 0.00	10,600. 00	521,9 12.00	50,000. 00	-	50,000.0 0
Sub Program 3.1. Regulation of tourism industry	308,428. 20	-	25,281.0 0	-	241,57 4.00	-	-	41,57 3.20	-	-	-	-	-	-	-	-	-	-
3.1.1. Implementat	-																	

	1	i		1			ì	ī	ì	1	i	1	i		i	Ī	1	
ion of Green																		
Fins - Orientation																		
of service	_																	
providers																		
- Accreditation																		
of service	-																	
providers																		
- Continuous																		
capacity	000 400		05 004 0		044.57			44.57										
building of	308,428. 20		25,281.0		241,57 4.00			41,57 3.20										
accredited service	20		0		4.00			3.20										
providers																		
3.1.2.																		
Updating of																		
Code of	-																	
Conduct																		
(CoC)																		
3.1.3.																		
Updating of	-																	
Carrying																		
Capacity 3.1.4.																		
Updating of																		
fines and																		
penalties for	-																	
tourism-																		
related																		
violations																		
Sub																		
Program																		
3.2. Ecotourism	790,452.									112,360.	56,180				521,9	50,000.		50,000.0
Facilities	00	-	-	-	-	-	-	-	-	00	.00	-	-	-	12.00	00	-	0
and																		
Equipment																		
3.2.1.																		
Establishme	150,000.														50,00	50,000.		50,000.0
nt of	00														0.00	00		0.000.0
audiovisual	00														0.00	00		U
room																		
3.2.2.	400 540									440.000	FO 100							
Maintenanc	168,540.									112,360. 00	56,180 .00							
e of existing	00									00	.00							
ecotourism]	1	l	l		l]]	

facilities and equipment 3.2.3. Installation and maintenanc e of trails and buoy markers	471,912. 00														471,9 12.00			
Sub Program 3.3. Support to Ecotourism Operation	375,028. 00	-	25,281.0 0	1	241,57 4.00	,	,	41,57 3.00	-	1	,	1	56,00 0.00	10,600. 00	-	-	-	-
3.3.1. Developmen t and maintenanc e of website and/or booking system with online payment scheme	10,600.0													10,600. 00				
3.3.2. Institutionali ze the hiring of tour guides	56,000.0 0												56,00 0.00					
3.3.3. Capacity Building for service providers	308,428. 00		25,281.0 0		241,57 4.00			41,57 3.00										
Mgt. Focus 4: Linkages with other stakeholders	2,438,31 4.80	-	-	90,00 0.00	1,310,0 00.00	40,000. 00	•	70,00 0.00	-	1	•	-	480,0 00.00	448,31 4.80	-	-	-	-
Sub Program 4.1. Community and	778,314. 80	-	-	•	-	-	1	50,00 0.00	-	•	1	-	480,0 00.00	248,31 4.80	-	-	-	-

stakeholder																		
involvement 4.1.1.																		
Regular																		
Meeting of																		
with other	48,314.8													48,314.				•
law	0													80				
enforcement																		
agencies																		
4.1.2.																		
Involvement																		
of coastal																		
barangays in																		
monitoring																		
and	480,000.												480,0					
surveillance of illegal	00												00.00					
activities																		
through																		
Bantay																		
Dagat																		
Volunteers																		
4.1.3.																		
Conduct of																		
environment																		
al activities																		
(i.e., Coastal	250,000.							50,00						200,00				
Clean-up, Tree	00							0.00						0.00				
Planting,																		
and																		
SCUBASUR																		
A)																		
Sub																		
Program																		
4.2. PAMB	1,460,00	_	_	30,00	1,210,0	20,000.	_	_	_	_	_	_	_	200,00	_	_	_	_
Operationali	0.00		_	0.00	00.00	00								0.00			_	
zation and																		
Strengthening 4.2.1.																		
4.2.1. Regular	250,000.			30,00		20,000.								200,00				,
PAMB	250,000.			0.00		20,000.								0.00				,
Meeting	00			0.00		00								0.00				
4.2.2.																		
Updating of	_																	
PAMB																		
PAMB																		

Manual of Operations																		
4.2.3. Capacity building of PAMB members	1,210,00 0.00				1,210,0 00.00													
4.2.4. Review and updating of existing policies	-																	
Sub Program 4.3. BDFE	200,000. 00	-	-	60,00 0.00	100,00 0.00	<i>2</i> 0,000. 00	-	20,00 0.00	-	-	-	-	-	-	-	-	-	-
4.3.1. Technical assistance for the preparation of BDFE Business Plan	-																	
4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	150,000. 00			10,00 0.00	100,00 0.00	20,000. 00		20,00 0.00										
4.3.3. Monitor the progress of the enterprise	50,000.0			50,00 0.00														
Mgt. Focus 5: Communicat ion, Education and Public Awareness	2,324,25 0.00	-	-	105,6 18.00	-	55,618. 00	22,247. 20	167,4 16.00	300,00 0.00	-	-	-	-	1,673,3 50.80	-	-	-	-

Sub Program 5.1. Communicat ion Education and Public Awareness	2,127,62 0.00	-	-	100,0 00.00	-	50,000. 00	<i>20,000.</i> 00	156,1 80.00	300,00 0.00	-	-	-	-	1,501,4 40.00	-	-	-	-
5.1.1. Environment al Celebration	902,900. 00			100,0 00.00		50,000. 00	20,000. 00	100,0 00.00						632,90 0.00				
5.1.2. Celebration of Apo Reef Month	224,720. 00							56,18 0.00						168,54 0.00				
5.1.3. Production of promotional materials	1,000,00 0.00								300,00 0.00					700,00 0.00				
5.1.4. Production of new mascot of flagship species	-																	
Sub Program 5.2. Youth Involvement	196,630. 00			5,618. 00	-	<i>5,618.0</i> 0	<i>2,247.2</i> 0	11,23 6.00	-	-	-		-	171,91 0.80	-		,	-
5.2.1. Conduct of Dalaw Turo and Bio camp	196,630. 00			5,618. 00		5,618.0 0	2,247.2 0	11,23 6.00						171,91 0.80				
5.2.2. Developmen t of Teaching Manual for ARNP	-																	
Mgt. Focus 6: Support to PAMO Operations	10,771,5 32.21	7,470,6 48.00	•	-	-	300,000	•	-	-	400,000. 00	150,00 0.00	500,000 .00	-	•	-	1,950,8 84.21	•	-

Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment	1,050,00 0.00	-	-	-	-	-	-	-		400,000. 00	150,00 0.00	500,000 .00	-	-	-	-	-	-
6.1.1. Constructio n of PAMO Building	-																	
6.1.2. Maintenanc e of Existing Facilities and Equipment	1,050,00 0.00									400,000. 00	150,00 0.00	500,000						
Sub Program 6.2. PA Planning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.2.1. Updating of Ecotourism Business Plan	-																	
6.2.2. Updating of General Managemen t Plan	-																	
6.2.3. METT/ MEA	-																	
6.2.4. Formulation of CEPA Plan	-																	
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3.1. Establishment of	-																	

Comprehen sive Database System 6.3.2.																		
Research and Data Gap Analysis	-																	
Sub Program 6.4. Provision of Supplies, materials, and equipment	2,250,88 4.21	-	-	•	-	300,000 .00	-	•	-	-	-	-	•	-	•	1,950,8 84.21	•	-
6.4.1. Procurement ICT Equipment	-																	
6.4.2. Procuremen t of Office Furniture and Fixtures	-																	
6.4.3. Procurement of Office Supplies and materials	300,000. 00					300,000												
6.4.4 Procurement of technical equipment for surveillance	-																	

6.4.5. Procurement of highspeed watercraft	-															
6.4.6. Provision of firearms to law enforcers	-															
6.4.7. Procuremen t of Machinery and Equipment	1,950,88 4.21														1,950,8 84.21	
Sub Program 6.5. Implementat ion of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,64 8.00	7,470,6 48.00	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Park Operations Superintend ent (1) SG 22	1,109,52 8.00	1,109,5 28.00														
Senior Ecosystem Managemen t Specialist (2) SG 18	1,449,39 4.00	1,449,3 94.00														

Ecosystem Managemen t Specialist II (2) SG 15	1,133,68 3.00	1,133,6 83.00																
Ecosystem Managemen t Specialist I (2) SG 11	830,717. 00	830,71 7.00																
Administrati ve Assistant II. (2) SG 8	327,481. 00	327,48 1.00																
Forest Technician II (9) SG 8	2,619,84 5.00	2,619,8 45.00																
TOTAL	22,579,5 89.57	7,470,6 48.00	75,843.0 0	245,6 18.00	2,034,7 22.00	425,618 .00	1,434,0 50.40	945,3 97.80	2,800,0 00.00	512,360. 00	206,18 0.00	500,000 .00	592,1 80.00	2,764,1 76.16	521,9 12.00	2,000,8 84.21	-	50,000.0 0

Activity	Schedule of Implement ation	Professio nal Services	Honoraria (For lecturers/ resource person in seminars/ training programs)	Travelling Expens es	Traini ng Expen ses	Office Supplies Expens es	Fuel, Oil and Lubrica nt	Other Supplies and Materials Expenses	Other Professi onal Services	Repair and Maintena nce - Building and other Structures	Repair and Maintena nce - Machiner y and Equipme nt	Repair and Maintena nce - Transport ation Equipment	Labor and Wages	Other Maintena nce and Operating Expenses	Building s and other Structure Outlay	Machin ery and Equipm ent Outlay	Transp ortation and Equipm ent Outlay
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement	3,512,716. 92	-	26,797.8 6	-	256,0 68.44	•	1,429,2 19.20	501,417 .73	1,248,0 00.00	-	-	-	-	51,213.6 9	-	-	-
Sub Program 1.1: Law Enforcement Operations	3,134,569. 34	-	-	-	-	-	1,429,2 19.20	457,350 .14	1,248,0 00.00	-	-	-	-	-	-	-	-
1.1.1. Patrolling of the Protected Area	1,886,569. 34						1,429,2 19.20	457,350 .14									
1.1.2. Engagement of Protected Area monitoring personnel	1,248,000. 00								1,248,0 00.00								
Sub Program 1.2: Capacity Building of Law Enforcers	378,147.5 8	-	26,797.8 6	-	256,0 68.44	-	-	44,067. 59	-	-	-	-	-	<i>51,213.6</i> 9	-	-	-
1.2.1. Conduct of law enforcement- related learning events	326,933.8 9		26,797.8 6		256,0 68.44			44,067. 59									
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden,	51,213.69													51,213.6 9			

PCGA, and WEO)																	
Sub Program 1.3. Demarcation of Protected Area	-	-	-	-	-		-	-	-	•	-	-	-	-	-	-	-
1.3.1. Physical demarcation of Boundaries	-																
1.3.2. Demarcation of Boundaries on Digital Platforms	-																
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,554,962. 50	-	-	100,00 0.00	-	40,000. 00	84,292. 19	173,708 .00	410,00 0.00	-	-	-	-	746,962. 31	-	-	-
Sub Program 2.1. Habitat monitoring and assessment	1,000,000. 00	-	-	100,00 0.00	-	40,000. 00	70,000. 00	110,000 .00	80,000. 00	-	-	-	-	600,000. 00	-	-	-
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	200,000.0			50,000. 00		10,000. 00	20,000.	20,000.						100,000.			
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	250,000.0			10,000. 00		10,000. 00	10,000. 00	20,000.						200,000.			
2.1.3. Monitoring of coral reefs, mangroves, and seagrasses	150,000.0 0			10,000. 00		10,000. 00	10,000. 00	20,000.						100,000.			
2.1.4. Bird Survey 2.1.5. Sea Turtle Nesting	150,000.0 0 150,000.0 0			10,000. 00 10,000. 00		10,000.	10,000. 00 10,000. 00	20,000. 00 30,000. 00						100,000. 00 100,000. 00			

Beach Monitoring																	
2.1.6. Elasmobranchs Biodiversity Assessment	-																
2.1.7. Water Quality Monitoring and Assessment	100,000.0			10,000. 00			10,000. 00		80,000. 00								
Sub Program 2.2. Threat reduction	224,962.5 0	-	-	-	1	•	14,292. 19	63,708. 00	-	•	1	-	-	146,962. 31	-	-	-
2.2.1. Crown- of-Thorns (CoTS) Starfish management	-																
- Development and updating of a strategic plan for the management of CoTS	-																
-Surveillance and control of CoTS	81,703.70						14,292. 19							67,411.5 1			
2.2.2. Eradication and control of Invasive Alien Species (IAS)	-																
-Development and updating of strategic plan for the eradication and control of IAS	-																
-Implementation of strategic plan for the eradication and control of IAS	50,000.00							30,000. 00						20,000.0			
2.2.3. Response to oil	-																

spills and ship	I	İ	İ		I	1 1	l			İ			I		
groundings															
-Development															
of emergency															
response															
guidelines for oil	-														
spills and ship															
groundings															
- Capacity															
building of															
Protected Area															
staff in	-														
responding to															
oil spills and															
ship groundings															
2.2.4.															
Management of	_														
light and noise	-														
pollution															
-Retrofitting of															
light fixtures in							33,708.								
Apo Island, Apo	33,708.00						00								
Reef Natural							00								
Park															
-Development															
of guidelines															
regulating noise	-														
and light															
pollution															
2.2.5. Solid															
waste and	-														
marine litter															
management															
- Development															
or strengthening															
of Protected															
Area policies on	-														
solid waste and															
marine litter															
management															
- Formulation of															
communication															
campaigns for	59,550.80											59,550.8			
public	20,000.00											0			
awareness															
2.741011000	L	l	<u> </u>			l	l								

Sub Program 2.3. Enhancing Climate Change Resiliency	330,000.0 0	-	-	•	-	•	-	-	330,00 0.00	-	-	-	-	-	•	-	-
2.3.1. Formulation of Climate Change Adaptation Plan	-																
-Assessment of ecosystem vulnerability	250,000.0 0								250,00 0.00								
- Development and updating of Climate Change Adaptation Plan	-																
- Research and development of localized, active habitat restoration interventions using bestavailable science	80,000.00								80,000. 00								
Mgt. Focus No. 3: Ecotourism	1,073,049. 01	-	26,797.8 6	-	256,0 68.44	-	-	44,067. 59	-	119,101. 60	59,550.8 0	-	56,000 .00	11,236.0 0	500,22 6.72	-	-
Sub Program 3.1. Regulation of tourism industry	326,933.8 9	-	26,797.8 6	-	256,0 68.44	•	-	44,067. 59	-	-	-	-	-	-	-	-	-
3.1.1. Implementation of Green Fins	-																
- Orientation of service providers	-																
 Accreditation of service providers 	-																
- Continuous capacity	326,933.8 9		26,797.8 6		256,0 68.44			44,067. 59									

	i	Ī	Ī		•		•	ī	•		•	i					
building of																	<u> </u>
accredited																	i l
service																	i I
providers																	i
3.1.2. Updating																	
of Code of	_																i
Conduct (CoC)																	i
3.1.3. Updating																	<u> </u>
3.1.3. Updating																	i
of Carrying	-																i
Capacity																	ļ
3.1.4. Updating																	i
of fines and																	i
penalties for	-																i
tourism-related																	i
violations																	i
Sub Program																	
3.2. Ecotourism	678,879.1									119,101.	59,550.8				500,22		i
Facilities and	2	-	-	-	-	-	-	-	-	60	0	-	-	-	6.72	-	i - I
										60	0				0.72		i
Equipment																	
3.2.1.																	i
Establishment	_																i l
of audiovisual																	i
room																	i
3.2.2.																	İ
Maintenance of																	i l
existing	178,652.4									119,101.	59,550.8						i
ecotourism	0									60	0						i
facilities and										00	O						i
																	i l
equipment	 	-															
3.2.3.																	1
Installation and	500,226.7														500,22		i l
maintenance of	2														6.72		i l
trails and buoy	_														0.72		i
markers																	<u> </u>
Sub Program																	
3.3. Support to													56,000	11,236.0			
Ecotourism	67,236.00	-	-	-	-	-	-	-	-	-	-	-	.00	0	-	-	-
Operation													.00	J			
3.3.1.																	
																	i I
Development																	i I
and	44.000.00													11,236.0			i I
maintenance of	11,236.00													0			i l
website and/or														U			i I
booking system																	į l
with online																	1
	I .		l	1	ı	1		l		ı	l	1	l		l	l	

payment scheme																	
3.3.2. Institutionalize the hiring of tour guides	56,000.00												56,000 .00				
3.3.3. Capacity Building for service providers	-																
Mgt. Focus 4: Linkages with other stakeholders	1,231,213. 69	-	-	90,000. 00	100,0 00.00	40,000. 00	-	70,000. 00	-	-	-	-	480,00 0.00	451,213. 69	-	-	-
Sub Program 4.1. Community and stakeholder involvement	781,213.6 9	1	-	1	-	-	-	50,000. 00	-	-	-	-	480,00 0.00	251,213. 69	-	-	-
4.1.1. Regular Meeting of with other law enforcement agencies	51,213.69													51,213.6 9			
4.1.2. Involvement of coastal barangays in monitoring and surveillance of illegal activities through Bantay Dagat Volunteers	480,000.0 0												480,00 0.00				
4.1.3. Conduct of environmental activities (i.e., Coastal Clean- up, Tree Planting, and SCUBASURA)	250,000.0 0							50,000. 00						200,000. 00			
Sub Program 4.2. PAMB Operationalizati	<i>25</i> 0,000.0 0	1	-	30,000. 00	-	20,000. 00	-	1	-	-	1	-	-	200,000. 00	-	-	-

on and Strengthening																	
4.2.1. Regular PAMB Meeting	250,000.0 0			30,000. 00		20,000. 00								200,000. 00			
4.2.2. Updating of PAMB Manual of Operations	-																
4.2.3. Capacity building of PAMB members	-																
4.2.4. Review and updating of existing policies	-																
Sub Program 4.3. BDFE	200,000.0 0	-	-	60,000. 00	100,0 00.00	<i>2</i> 0,000.	-	20,000. 00	-	-	-	-	-	-	-	-	-
4.3.1. Technical assistance for the preparation of BDFE Business Plan	-																
4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	150,000.0			10,000. 00	100,0 00.00	20,000. 00		20,000.									
4.3.3. Monitor the progress of the enterprise	50,000.00			50,000. 00													
Mgt. Focus 5: Communication , Education and Public Awareness	2,399,531. 00	-	-	105,95 5.08	-	55,955. 08	22,382. 03	171,460 .96	350,00 0.00	-	-	-	-	1,693,77 7.85	-	-	-
Sub Program 5.1.	2,191,103. 20	-	-	100,00 0.00	-	<i>50,000.</i> <i>00</i>	<i>2</i> 0,000.	159,550 .80	350,00 0.00	-	-	-	-	1,511,55 2.40	-	-	-

Communication Education and Public																	
Awareness 5.1.1. Environmental Celebration	902,900.0			100,00		50,000. 00	20,000.	100,000						632,900. 00			
5.1.2. Celebration of Apo Reef Month	238,203.2							59,550. 80						178,652. 40			
5.1.3. Production of promotional materials	1,000,000.								300,00 0.00					700,000. 00			
5.1.4. Production of new mascot of flagship species	50,000.00								50,000. 00								
Sub Program 5.2. Youth Involvement	208,427.8 0	-	-	5,955.0 8	-	<i>5,955.0</i> 8	2,382.0 3	11,910. 16	-	-	-	-	-	182,225. 45	-	-	-
5.2.1. Conduct of Dalaw Turo and Bio camp	208,427.8 0			5,955.0 8		5,955.0 8	2,382.0 3	11,910. 16						182,225. 45			
5.2.2. Development of Teaching Manual for ARNP	-																
Mgt. Focus 6: Support to PAMO Operations	13,451,37 6.21	7,470,64 8.00	-	-	-	300,00 0.00	-	-	-	400,000. 00	150,000. 00	500,000. 00	-	30,728.2 1	-	700,00 0.00	3,900,0 00.00
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment	1,050,000. 00	-	-	-	-	1	1	-	-	400,000. 00	150,000. 00	500,000. 00	-	-	-	-	-
6.1.1. Construction of PAMO Building 6.1.2.	1,050,000.									400,000.	150,000.	500,000.					
Maintenance of	00									400,000.	00	00,000.					

i			ī				i	•			Ī	Ī	•	i			
Existing Facilities and Equipment																	
Sub Program 6.2. PA Planning	30,728.21	-	-	-	-	•	-	-	-	-	-	-	-	30,728.2 1	-	-	-
6.2.1. Updating of Ecotourism Business Plan	-																
6.2.2. Updating of General Management Plan	-																
6.2.3. METT/ MEA	30,728.21													30,728.2 1			
6.2.4. Formulation of CEPA Plan	-																
Sub Program 6.3. PA Database	-	-	-	-	-	,	-	-	-	-	-	-	-	-	-	-	-
6.3.1. Establishment of Comprehensive Database System	-																
6.3.2. Research and Data Gap Analysis	-																
Sub Program 6.4. Provision of Supplies, materials, and equipment	4,900,000. 00	-	-	-	-	300,00 0.00	-	-	-	-	-	-	-	-	-	700,00 0.00	3,900,0 00.00

6.4.1. Procurement ICT Equipment	-									
6.4.2. Procurement of Office Furniture and Fixtures	-									
6.4.3. Procurement of Office Supplies and materials	300,000.0			300,00 0.00						
6.4.4. Procurement of technical equipment for surveillance	700,000.0								700,00 0.00	
6.4.5. Procurement of highspeed watercraft	3,900,000.									3,900,0 00.00
6.4.6. Provision of firearms to law enforcers	-									
6.4.7. Procurement of Machinery and Equipment	-									

Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,648. 00	7,470,64 8.00	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-
Park Operations Superintendent (1) SG 22	1,109,528. 00	1,109,52 8.00															
Senior Ecosystem Management Specialist (2) SG 18	1,449,394. 00	1,449,39 4.00															
Ecosystem Management Specialist II (2) SG 15	1,133,683. 00	1,133,68 3.00															
Ecosystem Management Specialist I (2) SG 11	830,717.0 0	830,717. 00															
Administrative Assistant II. (2) SG 8	327,481.0 0	327,481. 00															
Forest Technician II (9) SG 8	2,619,845. 00	2,619,84 5.00															
TOTAL	23,222,84 9.34	7,470,64 8.00	53,595.7 2	295,95 5.08	612,1 36.88	435,95 5.08	1,535,8 93.42	960,654 .28	2,008,0 00.00	519,101. 60	209,550. 80	500,000. 00	536,00 0.00	2,985,13 1.75	500,22 6.72	700,00 0.00	3,900,0 00.00

Activity	Schedule of Implemen tation	Professi onal Services	Honoraria (For lecturers/re source person in seminars/tr aining programs)	Travelli ng Expens es	Training Expenses	Office Supplies Expenses	Fuel, Oil and Lubricant	Other Supplies and Materials Expenses	Other Professi onal Services	Repair and Mainten ance - Building and other Structur es	Repair and Mainten ance - Machin ery and Equipment	Repair and Maintena nce - Transpor tation Equipment	Labor and Wages	Other Mainten ance and Operating Expenses	Buildin gs and other Structu re Outlay	Machin ery and Equipm ent Outlay	Transpor tation and Equipment Outlay
Mgt. Focus.	2026									es							
No. 1: Environment al Protection through Law Enforcement	3,648,59 9.94	-	28,405.73	1	271,432 .55	-	1,514,9 72.35	531,502 .80	1,248,0 00.00	-	-	ı	,	54,286. 51	1	-	-
Sub Program 1.1: Law Enforcement Operations	3,247,76 3.50	-	-	1	-	-	1,514,9 72.35	484,791 .15	1,248,0 00.00	-	-	•	1	-	1	-	-
1.1.1. Patrolling of the Protected Area	1,999,76 3.50						1,514,9 72.35	484,791 .15									
1.1.2. Engagement of Protected Area monitoring personnel	1,248,00 0.00								1,248,0 00.00								
Sub Program 1.2: Capacity Building of Law Enforcers	400,836. 44	-	28,405.73	-	271,432 .55	-	-	46,711. 65	-	-	-	-	-	54,286. 51	-	-	-
1.2.1. Conduct of law enforcemen t-related	346,549. 93		28,405.73		271,432 .55			46,711. 65									

learning events																	
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	54,286.5 1													54,286. 51			
Sub Program 1.3. Demarcation of Protected Area	-	-	-	-	-	-	-	1	1	•	-	-	-	-	1	-	-
1.3.1. Physical demarcation of Boundaries 1.3.2.	-																
Demarcatio n of Boundaries on Digital Platforms	-																
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,115,46 0.25	-	-	50,000 .00	-	30,000 .00	65,149. 72	155,730 .48	160,000 .00	-	-	-	500,000	154,580 .05	-	-	-
Sub Program 2.1. Habitat monitoring and assessment	800,000. 00	-	-	50,000 .00	-	30,000 .00	<i>50,000.</i> 00	90,000. 00	80,000. 00	-	-	-	500,000 .00	-	-	-	-
2.1.1. Monitoring using Biodiversity	-																

•		•		,		,				•			ī		,	i	
Monitoring and Assessment System (BAMS)																	
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	250,000. 00			10,000 .00		10,000	10,000. 00	20,000.					200,000				
2.1.3. Monitoring of coral reefs, mangroves, and seagrasses	150,000. 00			10,000		10,000	10,000. 00	20,000. 00					100,000				
2.1.4 Bird Survey	150,000. 00			10,000 .00		10,000 .00	10,000. 00	20,000. 00					100,000 .00				
2.1.5 Sea Turtle Nesting Beach Monitoring	150,000. 00			10,000		.55	10,000. 00	30,000. 00					100,000				
2.1.6. Elasmobran chs Biodiversity Assessment	-																
2.1.7. Water Quality Monitoring and Assessment	100,000. 00			10,000 .00			10,000. 00		80,000. 00								
Sub Program 2.2. Threat reduction	235,460. 25	-	-	•	ı	ı	15,149. 72	65,730. 48	ı	-	-	-	-	154,580 .05	•	•	-
2.2.1. Crown-of- Thorns (CoTS) Starfish management	-																

		•	•		•					•	•		
- Development													i l
and													i l
updating of													i l
a strategic	-												i l
plan for the													i l
management													i l
of CoTS													i l
-Surveillance	86,605.9					15,149.					71,456.		
and control	00,003.9					70					7 1,430.		i l
of CoTS	2					72					20		i l
2.2.2.													
Eradication													i l
and control													i l
of Invasive	_												i l
Alien													i l
Species													i l
Species													i l
(IAS) -Development	-												
and													i I
updating of													i l
atratagia													i l
strategic	_												i l
plan for the													i l
eradication													i l
and control													i l
of IAS	1												
-Implementation													i l
of strategic													i l
plan for the	50,000.0						30,000.				20,000.		i l
eradication	0						00				00		i l
and control													i l
of IAS	1												
2.2.3.													i l
Response to													i
oil spills and	-												i l
ship													i l
groundings													i l
-Development													
of													i l
emergency													ı
response	1												
guidelines	-												
for oil spills													i
and ship	1												
groundings													i
- Capacity	1												
building of	_												ı
Protected	1 -												ı
Protected	1			L									

I	ı	ı	I	1 1	1	İ	1		ı		1	Ī	1	I	ı	1 1	ı ,
Area staff in																	1
responding																	ł
to oil spills																	ł
and ship																	ł
groundings																	1
2.2.4.Mana																	
gement of																	l
light and	-																ł
noise																	ł
pollution																	l
-Retrofitting																	
of light																	ł
fixtures in	25 720 4							35,730.									l
And Island	35,730.4 8							35,730. 48									l
Apo Island,	0							40									ł
Apo Reef																	l
Natural Park	ļ	-															
-Development																	l
of guidelines																	
regulating	_																1
noise and																	ł
light																	1
pollution																	
2.2.5. Solid																	1
waste and	_																1
marine litter	-																l
management																	l
 Development 																	
or																	ł
strengthenin																	l
g of																	l
Protected																	l
Area	-	ĺ															l
policies on	1	1															l
solid waste		ĺ															i
and marine		ĺ															i
litter		ĺ															i
management	1	1															l
- Formulation															İ		
of		ĺ															i
communicat		ĺ															i
ion	63,123.8	ĺ												63,123.			i
campaigns	5	ĺ												85			i
for public		ĺ															i
awareness		ĺ															l
Sub	80,000.0								80,000.								
	0	-	-	-	-	-	-	-	00	-	-	-	-	-	-	-	-
Program	U								UU								

2.3. Enhancing Climate Change Resiliency																	
2.3.1. Formulation of Climate Change Adaptation Plan	-																
-Assessment of ecosystem vulnerability - Development	-																
and updating of Climate Change Adaptation Plan	-																
- Research and development of localized, active habitat restoration interventions using best- available science	80,000.0 0								80,000. 00								
Mgt. Focus No. 3: Ecotourism	1,896,73 8.25	-	56,811.46	-	542,865 .09	-	-	93,423. 30	250,000 .00	126,247 .70	63,123. 85	-	56,000. 00	178,026 .53	530,24 0.32	-	-
Sub Program 3.1. Regulation of tourism industry	762,666. 46	-	28,405.73	-	271,432 .55	-	-	46,711. 65	250,000 .00	-	-	-	-	166,116 .53	-	-	-
3.1.1. Implementat	-																

		1		Ī		i	1		1		•	1	1	1			
ion of Green																	
Fins - Orientation																	
of service	_																
providers																	
- Accreditation	E7 E 10 E													57,543.			
of service	57,543.5 1													57,543. 51			
providers	'													JI			
- Continuous																	
capacity building of	240 540				074 400			10 711									
accredited	346,549. 93		28,405.73		271,432 .55			46,711. 65									
service	93				.55			03									
providers																	
3.1.2.																	
Updating of	40 400 0													40.400			
Updating of Code of	43,429.2 1													43,429. 21			
Conduct	'													21			
(CoC)																	
3.1.3.																	
Updating of	250,000.								250,000								
Carrying	00								.00								
Capacity 3.1.4.																	
Updating of																	
fines and																	
penalties for	65,143.8													65,143.			
tourism-	1													81			
related																	
violations																	
Sub																	
Program																	
3.2.	719,611.									126,247	63,123.				530,24		
Ecotourism	86	-	-	-	-	-	-	-	-	.70	85	-	-	-	0.32	-	-
Facilities and																	
Equipment																	
3.2.1.																	
Establishme																	
nt of	-																
audiovisual																	
room																	
3.2.2.																	
Maintenanc	189,371.									126,247	63,123.						
e of existing	54									.70	85						
ecotourism																	

facilities and equipment 3.2.3. Installation and maintenanc e of trails and buoy markers	530,240. 32														530,24 0.32		
Sub Program 3.3. Support to Ecotourism Operation	414,459. 93	1	28,405.73	1	271,432 .55	1	ı	46,711. 65	1	-	-	-	<i>56,000.</i> <i>00</i>	11,910. 00	-	ı	-
3.3.1. Developme nt and maintenanc e of website and/or booking system with online payment scheme	11,910.0 0													11,910. 00			
3.3.2. Institutionali ze the hiring of tour guides	56,000.0 0												56,000. 00				
3.3.3. Capacity Building for service providers	346,549. 93		28,405.73		271,432 .55			46,711. 65									
Mgt. Focus 4: Linkages with other stakeholders	2,294,28 6.51	1	-	80,000 .00	1,210,0 00.00	20,000 .00	1	50,000. 00	1	-	-	-	480,000 .00	454,286 .51	-	•	-
Sub Program 4.1. Community and	784,286. 51	ı	-	-	-	-	-	50,000. 00	-	-	-	-	480,000 .00	254,286 .51	-	ı	-

stakeholder involvement																	
4.1.1. Regular Meeting of with other law enforcemen t agencies	54,286.5 1													54,286. 51			
4.1.2. Involvement of coastal barangays in monitoring and surveillance of illegal activities through Bantay Dagat Volunteers	480,000. 00												480,000 .00				
4.1.3. Conduct of environment al activities (i.e., Coastal Clean-up, Tree Planting, and SCUBASUR A) Sub	250,000. 00							50,000. 00						200,000			
Program 4.2. PAMB Operationali zation and Strengtheni	1,460,00 0.00	-	-	30,000 .00	1,210,0 00.00	20,000 .00	-	-	1	-	1	-	-	200,000 .00	1	1	-
4.2.1. Regular PAMB Meeting	250,000. 00			30,000		20,000								200,000			

•	i	•	-	•	Ī		•	i	Ī		•	•	Ī	Ī			
4.2.2. Updating of																	
PAMB	_																
Manual of																	
Operations																	
4.2.3.																	
Capacity building of	1,210,00				1,210,0												
PAMB	0.00				00.00												
members																	
4.2.4.																	
Review and																	
updating of	-																
existing policies																	
Sub	50,000,0			50.000													
Program	50,000.0 0	-	-	<i>50,000</i> .00	-	-	-	-	-	-	-	-	-	-	-	-	-
4.3. BDFE	U			.00													
4.3.1.																	
Technical assistance																	
for the																	
preparation	-																
of BDFE																	
Business Plan																	
4.3.2.																	
Technical																	
Assistance for																	
the enhancement																	
activities for																	
POs (e.g., Capacity	-																
Building on																	
enterprise				1													
and organizational																	
organizational development)																	
4.3.3.																	
Monitor the progress of	50,000.0			50,000													
the	0			.00													
enterprise																	
Mgt. Focus	2,376,32			106,31		56,312	22,524.	175,748	300,000					1,715,4			
5: Communica	8.86	-	-	2.38	-	.38	95	.62	.00	-	-	-	-	30.52	-	-	-
Communica																	

tion, Education																	
and Public Awareness																	
Sub Program 5.1. Communica tion Education and Public Awareness	2,155,39 5.39	-	-	100,00 0.00	-	50,000 .00	<i>20,000.</i> <i>00</i>	163,123 .85	300,000 .00	ı	-	-	1	1,522,2 71.54	-	1	-
5.1.1. Environmental Celebration	902,900. 00			100,00 0.00		50,000 .00	20,000. 00	100,000 .00						632,900 .00			
5.1.2. Celebration of Apo Reef Month	252,495. 39							63,123. 85						189,371 .54			
5.1.3. Production of promotional materials	1,000,00 0.00								300,000					700,000 .00			
5.1.4. Production of new mascot of flagship species	-																
Sub Program 5.2. Youth Involvement	220,933. 47	-	-	6,312. 38	-	6,312. 38	2,524.9 5	12,624. 77	-	-	-	-	-	193,158 .97		•	-
5.2.1. Conduct of Dalaw Turo and Bio camp	220,933. 47			6,312. 38		6,312. 38	2,524.9 5	12,624. 77						193,158 .97			
5.2.2. Developme nt of Teaching Manual for ARNP	-																

Mgt. Focus 6: Support to PAMO Operations	9,620,64 8.00	7,470,6 48.00	-	-	-	300,00 0.00	-	-	-	400,000 .00	150,000 .00	500,000. 00	-	-	-	800,00 0.00	-
Sub Program 6.1. Establishme nt and Maintenanc e of Office Building and Equipment	1,050,00 0.00	-	•	,	,	,	,	,	,	400,000 .00	150,000 .00	500,000. 00	,	-	-	•	-
6.1.1. Constructio n of PAMO Building	-																
6.1.2. Maintenanc e of Existing Facilities and Equipment	1,050,00 0.00									400,000	150,000 .00	500,000. 00					
Sub Program 6.2. PA Planning	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
6.2.1. Updating of Ecotourism Business Plan	-																
6.2.2. Updating of General Managemen t Plan	-																
6.2.3. METT/ MEA	-																
6.2.4. Formulation of CEPA Plan	-																
Sub Program	-	-	1	1	-	1	1	1	1	-	-	1	1	-	-	-	-

6.3. PA Database																	
6.3.1. Establishme nt of Comprehen sive Database System	-																
6.3.2. Research and Data Gap Analysis	-																
Sub Program 6.4. Provision of Supplies, materials, and equipment	1,100,00 0.00	-	-	-	-	300,00 0.00	ı	ı	·	-	·	ı	-	-	-	800,00 0.00	-
6.4.1. Procurement ICT Equipment	800,000. 00															800,00 0.00	
6.4.2. Procuremen t of Office Furniture and Fixtures	-																
6.4.3. Procurement of Office Supplies and materials	300,000. 00					300,00 0.00											

	1]						[I	İ	j			ĺ	l		į	. 1
6.4.4. Procurement of technical equipment for surveillance	-																
6.4.5. Procurement of highspeed watercraft	-																
6.4.6. Provision of firearms to law enforcers	-																
6.4.7. Procurement of Machinery and Equipment	-																
Sub Program 6.5. Implementat ion of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,64 8.00	7,470,6 48.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Park Operations Superintend ent (1) SG 22	1,109,52 8.00	1,109,5 28.00															

Senior Ecosystem Managemen t Specialist (2) SG 18	1,449,39 4.00	1,449,3 94.00															
Ecosystem Managemen t Specialist II (2) SG 15	1,133,68 3.00	1,133,6 83.00															
Ecosystem Managemen t Specialist I (2) SG 11	830,717. 00	830,717 .00															
Administrati ve Assistant II. (2) SG 8	327,481. 00	327,481 .00															
Forest Technician II (9) SG 8	2,619,84 5.00	2,619,8 45.00															
TOTAL	20,952,0 61.80	7,470,6 48.00	85,217.19	236,31 2.38	2,024,2 97.64	406,31 2.38	1,602,6 47.03	1,006,4 05.19	1,958,0 00.00	526,247 .70	213,123 .85	500,000. 00	1,036,0 00.00	2,556,6 10.12	530,24 0.32	800,00 0.00	-

Activity	Schedule of Implemen tation	Professi onal Services	Honorar ia (For lecturers / resource person in seminars /training program s)	Travell ing Expen ses	Trainin g Expen ses	Office Suppli es Expen ses	Fuel, Oil and Lubrica nt	Other Supplies and Materials Expenses	Other Professi onal Service s	Repair and Mainte nance - Buildin g and other Structu res	Repair and Mainte nance - Machin ery and Equipm ent	Repair and Mainte nance - Transp ortation Equipm ent	Labor and Wages	Other Mainte nance and Operati ng Expens es	Buildin gs and other Struct ure Outlay	Machi nery and Equip ment Outlay	Transp ortation and Equipm ent Outlay
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement	3,792,63 5.93	-	30,110. 08	-	287,7 18.50	-	1,605, 870.69	563,392.9 7	1,248, 000.00	-	-	-	-	57,543 .70	-	-	-
Sub Program 1.1: Law Enforcement	3,367,74	-	-	-	-	-	1,605,	513,878.6	1,248,	-	-	-	-	-	-	-	-
Operations CH D + + + + A	9.31 2,119,74						870.69 1,605,	2 513,878.6	000.00								
1.1.1 Patrolling of the Protected Area	9.31						870.69	2									
1.1.2 Engagement of Protected Area monitoring personnel	1,248,00 0.00								1,248, 000.00								
Sub Program 1.2: Capacity Building of	424,886.	_	30,110.	_	287,7	_	_	49,514.35	_	_	_	_	_	57,543	_	_	_
Law Enforcers	62	_	08	_	18.50	_	_	43,014.00		_		_	_	.70	_	_	
1.2.1 Conduct of law enforcement-	367,342.		30,110.		287,7			49,514.35									ĺ
related learning events 1.2.2 Deputization of TF MARLEN	92		08		18.50												
members as Enforcement Officers	57,543.7													57,543			ĺ
(i.e., Fish Warden, PCGA, and WEO)	0													.70			1
Sub Program 1.3. Demarcation of																	
Protected Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3.1. Physical demarcation of	_																
Boundaries																	
1.3.2. Demarcation of Boundaries on Digital Platforms	-																
Mgt. Focus No. 2: Ecosystem and	2,126,58			50,00		30,00	66,058	157,874.3	1,160,				500,00	162,65			
Biodiversity Conservation	7.86	-	-	0.00	-	0.00	.71	1	000.00	-	-	-	0.00	4.84	-	-	-
Sub Program 2.1. Habitat monitoring	1,050,00			50,00		30,00	50,000	90,000.00	330,00				500,00				
and assessment	0.00	-	-	0.00	-	0.00	.00	90,000.00	0.00	-	-	-	0.00	-	-	-	-
2.1.1 Monitoring using Biodiversity																	ĺ
Monitoring and Assessment System (BAMS)	-																
2.1.2 Monitoring using Biodiversity	250,000.			10,00		10,00	10,000						200,00				
Monitoring System (BMS)	00			0.00		0.00	.00	20,000.00					0.00				i l
2.1.3 Monitoring of coral reefs,	150,000.			10,00		10,00	10,000	00.000.00		1			100,00				
mangroves, and seagrasses	00		<u> </u>	0.00		0.00	.00	20,000.00			<u> </u>		0.00		<u></u>	<u></u>	<u> </u>
2.1.4 Bird Survey	150,000.			10,00		10,00	10,000	20,000.00					100,00				
Z. 1. 1 Bild Odi Voy	00			0.00		0.00	.00	20,000.00					0.00				

,											•1	•1					
2.1.5 Sea Turtle Nesting Beach	150,000.			10,00			10,000	30,000.00					100,00				
Monitoring	00			0.00			.00	00,000.00					0.00				
2.1.6 Elasmobranchs Biodiversity	250,000.								250,00								
Assessment	00			40.00			40.000		0.00								
2.1.7 Water Quality Monitoring and	100,000.			10,00			10,000		80,000								
Assessment	00			0.00			.00		.00					400.05			
Sub Program 2.2. Threat reduction	846,587. 86	-	-	-	-	-	16,058 .71	67,874.31	600,00 0.00	-	-	-	-	162,65 4.84	-	-	-
2.2.1 Crown-of-Thorns (CoTS) Starfish management	-																
- Development and updating of a	300,000.								300,00								
strategic plan for the management of CoTS	00								0.00								
-Surveillance and control of CoTS	91,802.2 7						16,058 .71							75,743 .56			
2.2.2 Eradication and control of Invasive Alien Species (IAS)	-																
-Development and updating of strategic plan for the eradication and control of IAS	300,000. 00								300,00 0.00								
-Implementation of strategic plan for the eradication and control of IAS	50,000.0 0							30,000.00						20,000			
2.2.3 Response to oil spills and ship groundings	-																
-Development of emergency response guidelines for oil spills and ship groundings	-																
Capacity building of Protected Area staff in responding to oil spills and ship groundings	-																
2.2.4 Management of light and noise pollution	-																
-Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	37,874.3 1							37,874.31									
-Development of guidelines regulating noise and light pollution	-																
2.2.5 Solid waste and marine litter management	-																
Development or strengthening of Protected Area policies on solid waste and marine litter management	-																
- Formulation of communication campaigns for public awareness	66,911.2 8													66,911 .28			

Sub Program 2.3. Enhancing Climate Change Resiliency	230,000. 00	-	-	-	-	-	-	-	230,00 0.00	-	-	-	-	-	-	-	-
2.3.1 Formulation of Climate Change Adaptation Plan	-																
-Assessment of ecosystem vulnerability	-																
- Development and updating of Climate Change Adaptation Plan	150,000. 00								150,00 0.00								
 Research and development of localized, active habitat restoration interventions using best-available science 	80,000.0								80,000								
Mgt. Focus No. 3: Ecotourism	1,198,75 6.50	-	30,110. 08	•	287,7 18.50	ı	-	49,514.35	-	133,8 22.56	66,91 1.28	ı	56,000 .00	12,625 .00	562,0 54.74	ı	•
Sub Program 3.1. Regulation of tourism industry	367,342. 92	-	30,110. 08	ı	287,7 18.50	ı	-	49,514.35	-	-	-	ı	-	-	-	•	ı
3.1.1 Implementation of Green Fins	-																
- Orientation of service providers	-																
- Accreditation of service providers	-																
- Continuous capacity building of accredited service providers	367,342. 92		30,110. 08		287,7 18.50			49,514.35									
3.1.2 Updating of Code of Conduct (CoC)	-																
3.1.3Updating of Carrying Capacity	-																
3.1.4 Updating of fines and penalties for tourism-related violations	-																
Sub Program 3.2. Ecotourism Facilities and Equipment	762,788. 58	-	-	-	-	-	-	-	-	133,8 22.56	66,91 1.28	-	-	-	562,0 54.74	-	-
3.2.1 Establishment of audiovisual room	-																
3.2.2 Maintenance of existing ecotourism facilities and equipment	200,733. 84									133,8 22.56	66,91 1.28						
3.2.3 Installation and maintenance of trails and buoy markers	562,054. 74														562,0 54.74		
Sub Program 3.3. Support to Ecotourism Operation	68,625.0 0	-	-	-	-	-	-	-	-	-	-	-	<i>56,000</i> .00	12,625 .00	-	-	-
3.3.1Development and maintenance of website and/or booking system with online payment scheme	12,625.0 0													12,625 .00			
3.3.2 Institutionalize the hiring of tour guides	56,000.0 0												56,000 .00				
3.3.3 Capacity Building for service providers	-																

Mgt. Focus 4: Linkages with other	1,087,54			80,00		20,00		50,000.00					480,00	457,54			
stakeholders	3.70	•	-	0.00	-	0.00	-	50,000.00	•	-	-	-	0.00	3.70	1	-	-
Sub Program 4.1. Community and stakeholder involvement	787,543. 70	-	-	-	-	-	-	50,000.00	-	-	-	-	480,00 0.00	257,54 3.70	-	-	-
4.1.1 Regular Meeting of with other	57,543.7												0.00	57,543			
law enforcement agencies	0													.70			
4.1.2 Involvement of coastal																	
barangays in monitoring and	480,000.												480,00				
surveillance of illegal activities through	00												0.00				
Bantay Dagat Volunteers																	
4.1.3 Conduct of environmental	250,000.													200,00			
activities (i.e., Coastal Clean-up, Tree	00							50,000.00						0.00			
Planting, and SCUBASURA)																	
Sub Program 4.2. PAMB	250,000.	_	_	30,00	_	20,00	_	_	_	_	_	_	_	200,00	_	_	_
Operationalization and Strengthening	00			0.00		0.00								0.00			
4.2.1 Regular PAMB Meeting	250,000. 00			30,00 0.00		20,00 0.00								200,00 0.00			
4.2.2 Updating of PAMB Manual of Operations	-																
4.2.3 Capacity building of PAMB																	
members	-																
4.2.4 Review and updating of existing	_																
policies																	
Sub Program 4.3. BDFE	<i>50,000.0</i> 0	-	-	50,00 0.00	-	-	-	-	-	-	-	-	-	-	-	-	-
4.3.1 Technical assistance for the																	
preparation of BDFE Business Plan	-																
4.3.2 Technical Assistance for the																	
enhancement activities for POs (e.g.,	_																
Capacity Building on enterprise and																	
organizational development)	50,000,0			50.00													
4.3.3 Monitor the progress of the	50,000.0 0			50,00 0.00													
enterprise Mgt. Focus 5: Communication,	2,404,73			106,6		56,69	22,676	180,293.5	300,00					1,738,			
Education and Public Awareness	4.59	-	-	91.13	-	1.13	.45	3	0.00	-	-	-	-	382.35	-	-	-
Sub Program 5.1. Communication	2,170,54			100,0		50,00	20,000	166,911.2	300,00					1,533,			
Education and Public Awareness	5.12	-	-	00.00	-	0.00	.00	8	0.00	-	-	-	-	633.84	-	-	-
5.1.1 Environmental Celebration	902,900.			100,0		50,00	20,000	100,000.0						632,90			
5.1.1 Environmental Celebration	00			00.00		0.00	.00	0						0.00			
5.1.2 Celebration of Apo Reef Month	267,645. 12							66,911.28						200,73 3.84			
5.1.3 Production of promotional	1,000,00								300,00					700,00			-
materials .	0.00								0.00					0.00			
5.1.4 Production of new mascot of																	
flagship species																	

Sub Program 5.2. Youth Involvement	234,189. 48	-	-	6,691 .13	-	6,691 .13	2,676. 45	13,382.26	-	-	-	-	-	204,74 8.51	-	-	-
5.2.1 Conduct of Dalaw Turo and Biocamp	234,189. 48			6,691 .13		6,691 .13	2,676. 45	13,382.26						204,74 8.51			
5.2.2 Development of Teaching Manual for ARNP	=																
Mgt. Focus 6: Support to PAMO Operations	10,370,6 48.00	7,470,6 48.00	-	-	-	300,0 00.00	-	-	850,00 0.00	400,0 00.00	150,0 00.00	500,0 00.00	-	-	-	700,0 00.00	-
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment	1,050,00 0.00	-	-	-	-	-	-	-	-	400,0 00.00	150,0 00.00	500,0 00.00	-	-	-	-	-
6.1.1. Construction of PAMO Building	-																
6.1.2 Maintenance of Existing Facilities and Equipment	1,050,00 0.00									400,0 00.00	150,0 00.00	500,0 00.00					
Sub Program 6.2. PA Planning	850,000. 00	•	-	-	-	-	-	-	850,00 0.00	-	-	-	-	1	-	-	-
6.2.1 Updating of Ecotourism Business Plan	850,000. 00								850,00 0.00								
6.2.2 Updating of General Management Plan	-																
6.2.3 METT/MEA	-																
6.2.4 Formulation of CEPA Plan	-																
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3.1 Establishment of Comprehensive Database System	-																
6.3.2 Research and Data Gap Analysis	-																
Sub Program 6.4. Provision of Supplies, materials, and equipment	1,000,00 0.00	-	-	-	-	300,0 00.00	-	-	-	-	-	-	-	-	-	700,0 00.00	-
6.4.1 Procurement ICT Equipment	-																
6.4.2 Procurement of Office Furniture and Fixtures	-																
6.4.3 Procurement of Office Supplies and materials	300,000. 00					300,0 00.00											
6.4.4 Procurement of technical	700,000.															700,0	
equipment for surveillance	00															00.00	
6.4.5 Procurement of highspeed watercraft	-																
6.4.6 Provision of firearms to law enforcers	-																
6.4.7 Procurement of Machinery and Equipment	-																

Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,64 8.00	7,470,6 48.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Park Operations Superintendent (1) SG 22	1,109,52 8.00	1,109,5 28.00															
Senior Ecosystem Management Specialist (2) SG 18	1,449,39 4.00	1,449,3 94.00															
Ecosystem Management Specialist II (2) SG 15	1,133,68 3.00	1,133,6 83.00															
Ecosystem Management Specialist I (2) SG 11	830,717. 00	830,71 7.00															
Administrative Assistant II. (2) SG 8	327,481. 00	327,48 1.00															
Forest Technician II (9) SG 8	2,619,84 5.00	2,619,8 45.00															
TOTAL	20,980,9 06.58	7,470,6 48.00	60,220. 15	236,6 91.13	575,4 37.00	406,6 91.13	1,694, 605.85	1,001,075 .16	3,558, 000.00	533,8 22.56	216,9 11.28	500,0 00.00	1,036, 000.00	2,428, 749.59	562,0 54.74	700,0 00.00	-

Activity	Schedul e of Implem entation	Profess ional Services	Honora ria (For lecturers/ resource person in seminars /training programs)	Travel ling Expen ses	Training Expens es	Office Suppli es Expen ses	Fuel, Oil and Lubrica nt	Other Supplie s and Materi als Expens es	Other Profess ional Services	Repair and Mainte nance - Buildin g and other Struct ures	Repair and Mainte nance - Machi nery and Equip ment	Repair and Mainte nance - Transp ortation Equipm ent	Labor and Wages	Other Mainte nance and Operati ng Expens es	Buildi ngs and other Struct ure Outlay	Machin ery and Equip ment Outlay	Transp ortation and Equipm ent Outlay
Mgt. Focus. No. 1: Environmental	3,945,3	_	31,91	_	304,98	-	1,702,	597,19	1,248,	-	-	-	-	60,996	_	-	_
Protection through Law Enforcement	14.09		6.68		1.61		222.93	6.55	000.00					.32			
Sub Program 1.1: Law Enforcement Operations	3,494,9 34.27	-	-	-	-	-	1,702, 222.93	544,71 1.34	1,248, 000.00	-	-	-	-	-	-	-	-
1.1.1. Patrolling of the Protected Area	2,246,9 34.27						1,702, 222.93	544,71 1.34	000.00								
1.1.2. Engagement of Protected Area monitoring personnel	1,248,0						222.00	1.54	1,248, 000.00								
Sub Program 1.2: Capacity Building of Law Enforcers	450,379 .82	-	31,91 6.68	-	304,98 1.61	-	-	52,485 .21	-	-	-	-	-	60,996 .32	-	-	-
1.2.1. Conduct of law enforcement-	389,383		31,91		304,98			52,485									
related learning events	.50		6.68		1.61			.21									
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	60,996. 32													60,996 .32			
Sub Program 1.3. Demarcation of Protected Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
1.3.1. Physical demarcation of Boundaries	-																
1.3.2. Demarcation of Boundaries on Digital Platforms	-																
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,588,3 83.14	-	-	100,0 00.00	-	40,00 0.00	87,022 .23	180,14 6.77	410,00 0.00	-	-	-	•	771,21 4.14	-	-	-
Sub Program 2.1. Habitat monitoring and assessment	1,000,0 00.00	-	-	100,0 00.00	-	40,00 0.00	70,000 .00	110,00 0.00	80,000 .00	-	-	-	-	600,00 0.00	-	-	-
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	200,000			50,00 0.00		10,00 0.00	20,000	20,000						100,00 0.00			
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	250,000 .00			10,00 0.00		10,00 0.00	10,000	20,000						200,00 0.00			
2.1.3. Monitoring of coral reefs,	150,000			10,00		10,00	10,000	20,000						100,00			
mangroves, and seagrasses 2.1.4. Bird Survey	.00 150,000 .00			0.00 10,00 0.00		0.00 10,00 0.00	.00 10,000 .00	.00 20,000 .00						0.00 100,00 0.00			

O 4 C Coo Toutle Nesting Beach	I 150 000 I		I	I 40.00	l	ı	I 40 000	I 20 000	Í	Ī	1 1		I	1 100 00	I	i	1
2.1.5. Sea Turtle Nesting Beach Monitoring	150,000 .00			10,00 0.00			10,000 .00	30,000						100,00			
2.1.6. Elasmobranchs Biodiversity	.00			0.00			.00	.00						0.00			
Assessment	-																
2.1.7. Water Quality Monitoring and	100,000			10,00			10,000		80,000								
Assessment	.00			0.00			.00		.00								
Sub Program 2.2. Threat reduction	258,383 .14	-	-	-	-	-	17,022 .23	70,146 .77	-	-	-	-	-	171,21 4.14	-	-	-
2.2.1. Crown-of-Thorns (CoTS) Starfish management	-																
- Development and updating of a strategic plan for the management of CoTS	-																
-Surveillance and control of CoTS	97,310. 41						17,022 .23							80,288 .18			
2.2.2. Eradication and control of Invasive Alien Species (IAS)	-																
-Development and updating of strategic plan for the eradication and control of IAS	-																
-Implementation of strategic plan for	50,000.							30,000						20,000			
the eradication and control of IAS	00							.00						.00			
2.2.3. Response to oil spills and ship																	
groundings	_																
-Development of emergency response guidelines for oil spills and ship groundings	-																
Capacity building of Protected Area staff in responding to oil spills and ship groundings	-																
2.2.4. Management of light and noise pollution	-																
-Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	40,146. 77							40,146 .77									
-Development of guidelines regulating noise and light pollution	-																
2.2.5. Solid waste and marine litter management	-																
Development or strengthening of Protected Area policies on solid waste and marine litter management	-																
- Formulation of communication campaigns for public awareness	70,925. 96													70,925 .96			
Sub Program 2.3. Enhancing Climate Change Resiliency	330,000	-	-	-	-	-	-	-	330,00 0.00	-	-	-	-	-	-	-	-

2.3.1. Formulation of Climate Change	1 1		ĺ		1			ĺ					ĺ				
Adaptation Plan	-																
 Assessment of ecosystem vulnerability 	250,000 .00								250,00 0.00								
- Development and updating of Climate Change Adaptation Plan	-																
- Research and development of localized, active habitat restoration interventions using best-available science	80,000. 00								80,000 .00								
Mgt. Focus No. 3: Ecotourism	1,656,7 04.89	-	63,83 3.36	-	609,96 3.22	-	-	104,97 0.41	-	141,85 1.91	70,925 .96	-	56,00 0.00	13,382 .00	595,7 78.03	-	-
Sub Program 3.1. Regulation of tourism industry	389,383 .50	-	31,91 6.68	-	304,98 1.61	•	-	52,485 .21	-	•	-	-	-	-	•		-
3.1.1. Implementation of Green Fins	-																
- Orientation of service providers	-																
- Accreditation of service providers	-																
- Continuous capacity building of accredited service providers	389,383 .50		31,91 6.68		304,98 1.61			52,485 .21									
3.1.2. Updating of Code of Conduct (CoC)	-																
3.1.3. Updating of Carrying Capacity	-																
3.1.4. Updating of fines and penalties for tourism-related violations	-																
Sub Program 3.2. Ecotourism Facilities and Equipment	808,555 .90	-	-	-	-	-	-	-	-	141,85 1.91	70,925 .96	-	-	-	595,7 78.03	-	-
3.2.1. Establishment of audiovisual room	-																
3.2.2. Maintenance of existing ecotourism facilities and equipment	212,777 .87									141,85 1.91	70,925 .96						
3.2.3. Installation and maintenance of trails and buoy markers	595,778 .03														595,7 78.03		
Sub Program 3.3. Support to Ecotourism Operation	458,765 .50	-	31,91 6.68	-	304,98 1.61	-	-	52,485 .21	-	-	-	-	56,00 0.00	13,382 .00	-	-	-
3.3.1. Development and maintenance of website and/or booking system with online payment scheme	13,382. 00													13,382 .00			
3.3.2. Institutionalize the hiring of tour guides	56,000. 00												56,00 0.00				
3.3.3. Capacity Building for service providers	389,383 .50		31,91 6.68		304,98 1.61			52,485 .21					0.00				
Mgt. Focus 4: Linkages with other stakeholders	2,300,9 96.32	-	-	80,00 0.00	1,210, 000.00	20,00 0.00	-	50,000	-	-	-	-	480,0 00.00	460,99 6.32	-	-	-

Sub Program 4.1. Community and stakeholder involvement	790,996 .32	-	-	-	-	-	-	50,000 .00	-	-	-	-	480,0 00.00	260,99 6.32	-	-	-
4.1.1. Regular Meeting of with other law enforcement agencies	60,996. 32													60,996			
4.1.2. Involvement of coastal barangays in monitoring and surveillance of illegal activities through Bantay Dagat Volunteers	480,000												480,0 00.00	.02			
4.1.3. Conduct of environmental activities (i.e., Coastal Clean-up, Tree Planting, and SCUBASURA)	250,000 .00							50,000						200,00 0.00			
Sub Program 4.2. PAMB Operationalization and Strengthening	1,460,0 00.00	-	-	30,00 0.00	1,210, 000.00	20,00 0.00	-	-	-	-	-	-	-	200,00 0.00	-	-	-
4.2.1. Regular PAMB Meeting	250,000 .00			30,00 0.00		20,00 0.00								200,00 0.00			
4.2.2. Updating of PAMB Manual of Operations	-																
4.2.3. Capacity building of PAMB members	1,210,0 00.00				1,210, 000.00												
4.2.4. Review and updating of existing policies	-																
Sub Program 4.3. BDFE	50,000. 00	-	-	50,00 0.00	-	-	-	-	-	-	-	-	-	-	•	-	-
4.3.1. Technical assistance for the preparation of BDFE Business Plan	-																
4.3.2. Technical Assistance for the enhancement activities for POs (e.g., Capacity Building on enterprise and organizational development)	-																
4.3.3. Monitor the progress of the enterprise	50,000. 00			50,00 0.00													
Mgt. Focus 5: Communication, Education and Public Awareness	2,434,8 44.67	-	-	107,0 92.60	-	57,09 2.60	22,837 .04	185,11 1.15	300,00 0.00	•	-	-	-	1,762, 711.29	ı	-	-
Sub Program 5.1. Communication Education and Public Awareness	2,186,6 03.82	-	-	100,0 00.00	-	50,00 0.00	20,000 .00	170,92 5.96	300,00 0.00	i	-	-	-	1,545, 677.87	ı	-	-
5.1.1. Environmental Celebration	902,900			100,0 00.00		50,00 0.00	20,000	100,00 0.00						632,90 0.00			
5.1.2. Celebration of Apo Reef Month	283,703 .82							70,925 .96						212,77 7.87			
5.1.3. Production of promotional materials	1,000,0 00.00								300,00 0.00					700,00 0.00			
5.1.4. Production of new mascot of flagship species																	
Sub Program 5.2. Youth Involvement	248,240 .84			7,092 .60	-	7,092 .60	2,837. 04	14,185 .19	-	-	-	-	-	217,03 3.42	-	-	-

5.2.1. Conduct of Dalaw Turo and Bio	248,240			7,092 .60		7,092 .60	2,837. 04	14,185 .19					1	217,03 3.42			
camp 5.2.2. Development of Teaching Manual for ARNP	84			.00		.60	04	.19						3.42			
Mgt. Focus 6: Support to PAMO Operations	11,320, 192.15	7,470, 648.00	-	-	ı	300,0 00.00	ı	-	-	400,00 0.00	150,00 0.00	500,00 0.00	-	36,597 .79	-	2,462, 946.36	•
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment	1,050,0 00.00	-	-	-	-	-	-	-	-	400,00 0.00	150,00 0.00	500,00 0.00	-	-	-	-	-
6.1.1. Construction of PAMO Building	-																
6.1.2 Maintenance of Existing Facilities and Equipment	1,050,0 00.00									400,00 0.00	150,00 0.00	500,00 0.00					
Sub Program 6.2. PA Planning	36,597. 79	-	-	-	1	-	1	-	-	-	-	ı	-	36,597 .79	-	-	-
6.2.1. Updating of Ecotourism Business Plan	-																
6.2.2. Updating of General Management Plan	-																
6.2.3. METT/MEA	36,597. 79													36,597 .79			
6.2.4. Formulation of CEPA Plan	-																
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3.1. Establishment of Comprehensive Database System	-																
6.3.2. Research and Data Gap Analysis	-																
Sub Program 6.4. Provision of	2,762,9	_	_	_		300,0	-	_	_	_	_	-	_	_	_	2,462,	_
supplies, materials, and equipment	46.36					00.00										946.36	
6.4.1. Procurement ICT Equipment	-																
6.4.2. Procurement of Office Furniture and Fixtures	-																
6.4.3. Procurement of Office Supplies and materials	300,000					300,0											
6.4.4. Procurement of technical	.00					00.00											
equipment for surveillance	-																
6.4.5. Procurement of highspeed watercraft	-																
6.4.6. Provision of firearms to law enforcers	-																
6.4.7. Procurement of Machinery and Equipment	2,462,9 46.36															2,462, 946.36	

Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,6 48.00	7,470, 648.00	-	-	1	-	1	-	1	-	-	•	-	-	-	1	-
Park Operations Superintendent (1) SG 22	1,109,5 28.00	1,109, 528.00															
Senior Ecosystem Management Specialist (2) SG 18	1,449,3 94.00	1,449, 394.00															
Ecosystem Management Specialist II (2) SG 15	1,133,6 83.00	1,133, 683.00															
Ecosystem Management Specialist I (2) SG 11	830,717 .00	830,71 7.00															
Administrative Assistant II. (2) SG 8	327,481 .00	327,48 1.00															
Forest Technician II (9) SG 8	2,619,8 45.00	2,619, 845.00															
TOTAL	23,246, 435.25	7,470, 648.00	95,75 0.04	287,0 92.60	2,124, 944.83	417,0 92.60	1,812, 082.20	1,117, 424.88	1,958, 000.00	541,85 1.91	220,92 5.96	500,00 0.00	536,0 00.00	3,105, 897.86	595,7 78.03	2,462, 946.36	-

Activity	Schedule of Implem entation	Profess ional Services	Honoraria (For lecturers/ resource person in seminars/ training programs)	Travel ling Expen ses	Traini ng Expen ses	Office Supplies Expen ses	Fuel, Oil and Lubrica nt	Other Supplies and Materi als Expenses	Other Profess ional Services	Repair and Mainte nance - Buildin g and other Struct	Repair and Mainte nance - Machi nery and Equip	Repair and Mainten ance - Transp ortation Equipm ent	Labor and Wages	Other Mainte nance and Operati ng Expens es	Buildi ngs and other Struct ure Outlay	Mach inery and Equip ment Outlay	Transp ortation and Equipm ent Outlay
			00.004.0		000.0		4.004	000.00	700.00	ures	ment			04.050			
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement	3,639,1 52.94	-	33,831.6 8	-	323,2 80.51	-	1,804, 356.31	633,02 8.34	780,00 0.00	-	-	-	-	64,656 .10	-	-	-
Sub Program 1.1: Law Enforcement	3,161,7		0		60.51		1,804,	577,39	780,00					.10			
Operations	50.33	-	-	-	-	-	356.31	4.02	0.00	-	-	-	-	-	-	-	-
	2,381,7						1,804,	577,39	0.00								
1.1.1. Patrolling of the Protected Area	50.33						356.31	4.02									
1.1.2. Engagement of Protected Area	780,000								780,00								
monitoring personnel	.00								0.00								
Sub Program 1.2: Capacity Building of	477,402	_	33,831.6	_	323,2	_	_	55,634	_	_	_	_	_	64,656	_	_	_
Law Enforcers	.61		8		80.51			.32						.10			
1.2.1. Conduct of law enforcement-	412,746		33,831.6		323,2			55,634									
related learning events	.51		8		80.51			.32									
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	64,656. 10													64,656 .10			
Sub Program 1.3. Demarcation of Protected Area	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-
1.3.1. Physical demarcation of Boundaries	-																
1.3.2. Demarcation of Boundaries on Digital Platforms	-																
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,150,8 86.12	-	-	50,00 0.00	-	30,00 0.00	68,043 .56	162,55 5.57	160,00 0.00	-	-	-	-	680,28 6.99	-	-	-
Sub Program 2.1. Habitat monitoring and assessment	800,000 .00	-	-	50,00 0.00	-	30,00 0.00	<i>50,000</i> .00	90,000 .00	80,000 .00	-	-	-	-	500,00 0.00	-	-	-
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	-																
2.1.2. Monitoring using Biodiversity	250,000			10,00		10,00	10,000	20,000						200,00			
Monitoring System (BMS)	.00			0.00		0.00	.00	.00						0.00			
2.1.3. Monitoring of coral reefs,	150,000		_	10,00		10,00	10,000	20,000						100,00			
mangroves, and seagrasses	.00			0.00		0.00	.00	.00						0.00			
2.1.4. Bird Survey	150,000 .00			10,00 0.00		10,00 0.00	10,000	20,000						100,00 0.00			

	450.000 I	İ		I 40.00	Ì	İ	L 40 000	I 00 000	i i	Ī	Ī	Ì	i	I 400 00	i i	i i	ı
2.1.5. Sea Turtle Nesting Beach Monitoring	150,000 .00			10,00 0.00			10,000	30,000						100,00 0.00			
2.1.6. Elasmobranchs Biodiversity	.00			0.00			.00	.00						0.00			
Assessment	-																
2.1.7. Water Quality Monitoring and	100,000			10,00			10,000		80,000								
Assessment	.00			0.00			.00		.00								
Sub Program 2.2. Threat reduction	270,886 .12	-	-	-	-	-	18,043 .56	72,555 .57	-	-	-	-	-	180,28 6.99	-	-	-
2.2.1. Crown-of-Thorns (CoTS) Starfish management	-																
- Development and updating of a strategic plan for the management of CoTS	-																
-Surveillance and control of CoTS	103,149 .04						18,043 .56							85,105 .48			
2.2.2. Eradication and control of Invasive Alien Species (IAS)	-																
-Development and updating of strategic plan for the eradication and control of IAS	-																
-Implementation of strategic plan for	50,000.							30,000						20,000			
the eradication and control of IAS	00							.00						.00			
2.2.3. Response to oil spills and ship	_																
groundings	-																
-Development of emergency response guidelines for oil spills and ship groundings	-																
- Capacity building of Protected Area staff in responding to oil spills and ship	-																
groundings 2.2.4Management of light and noise pollution	-																
-Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	42,555. 57							42,555 .57									
-Development of guidelines regulating noise and light pollution	-							.51									
2.2.5. Solid waste and marine litter																	
management	-																
- Development or strengthening of Protected Area policies on solid waste	-																
and marine litter management																	
- Formulation of communication	75,181.													75,181			
campaigns for public awareness Sub Program 2.3. Enhancing Climate Change Resiliency	51 80,000. 00	-	-	-	-	-	-	-	80,000 .00	-	-	-	-	.51	-	-	-

2.3.1. Formulation of Climate Change Adaptation Plan	-																
-Assessment of ecosystem vulnerability	-																
- Development and updating of Climate Change Adaptation Plan	-																
- Research and development of localized, active habitat restoration interventions using best-available science	80,000. 00								80,000 .00								
Mgt. Focus No. 3: Ecotourism	1,340,0 00.75	ı	33,831.6 8	ı	323,2 80.51	ı	1	55,634 .32	-	150,36 3.03	75,181 .51	1	56,00 0.00	14,185 .00	631,5 24.71	ı	-
Sub Program 3.1. Regulation of tourism industry	412,746 .51	-	33,831.6 8	-	323,2 80.51	-	-	55,634 .32	-	-	-	-	-	-	-	-	-
3.1.1. Implementation of Green Fins	-																
- Orientation of service providers	-																
- Accreditation of service providers	-																
- Continuous capacity building of accredited service providers	412,746 .51		33,831.6 8		323,2 80.51			55,634 .32									
3.1.2. Updating of Code of Conduct (CoC)	-																
3.1.3. Updating of Carrying Capacity	-																
3.1.4. Updating of fines and penalties for tourism-related violations	-																
Sub Program 3.2. Ecotourism Facilities and Equipment	857,069 .25	-	-	-	-	-	-	-	-	150,36 3.03	75,181 .51	-	-	-	631,5 24.71	-	-
3.2.1. Establishment of audiovisual room	-																
3.2.2. Maintenance of existing ecotourism facilities and equipment	225,544 .54									150,36 3.03	75,181 .51						
3.2.3. Installation and maintenance of trails and buoy markers	631,524 .71														631,5 24.71		
Sub Program 3.3. Support to Ecotourism Operation	70,185. 00	-	-	-	-	-	-	-	-	-	-	-	56,00 0.00	14,185 .00	-	-	-
3.3.1. Development and maintenance of website and/or booking system with online payment scheme	14,185. 00													14,185 .00			
3.3.2. Institutionalize the hiring of tour guides	56,000. 00												56,00 0.00				
3.3.3. Capacity Building for service providers	-																
Mgt. Focus 4: Linkages with other stakeholders	1,094,6 56.10	-	-	80,00 0.00	-	20,00 0.00	•	50,000	-	-	-	-	480,0 00.00	464,65 6.10	-	•	-

Sub Program 4.1. Community and stakeholder involvement	794,656 .10	-	-	-	-	-	-	50,000 .00	-	-	-	-	480,0 00.00	264,65 6.10	-	-	-
4.1.1. Regular Meeting of with other	64,656.							100						64,656			
law enforcement agencies	10													.10			
4.1.2. Involvement of coastal																	
barangays in monitoring and	480,000												480,0				
surveillance of illegal activities through	.00												00.00				
Bantay Dagat Volunteers																	
4.1.3. Conduct of environmental	250,000							50,000						200,00			
activities (i.e., Coastal Clean-up, Tree	.00							.00						0.00			
Planting, and SCUBASURA)								.00									
Sub Program 4.2. PAMB	250,000	_	_	30,00	_	20,00	_	_	_	_	_	_	_	200,00	_	_	_
Operationalization and Strengthening	.00			0.00	_	0.00	_	_	_					0.00		_	_
4.2.1. Regular PAMB Meeting	250,000			30,00		20,00								200,00			
4.2.2. Updating of PAMB Manual of																	
Operations	-																
4.2.3. Capacity building of PAMB																	
members	-																
4.2.4. Review and updating of existing																	
policies	_																
Sub Program 4.3. BDFE	<i>50,000.</i> <i>00</i>	-	-	50,00 0.00	-	-	-	-	-	-	-	-	-		-	-	-
4.3.1. Technical assistance for the																	
preparation of BDFE Business Plan	-																
4.3.2. Technical Assistance for the																	
enhancement activities for POs (e.g.,																	
Capacity Building on enterprise and	-																
organizational development)																	
4.33.Monitor the progress of the	50,000.			50,00													
enterprise	00			0.00													
Mgt. Focus 5: Communication,	2,466,7	_	_	107,5	_	57,51	23,007	190,21	300,00	_	_	_	_	1,788,	_	_	_
Education and Public Awareness	61.35			18.15		8.15	.26	7.82	0.00					499.97			
Sub Program 5.1. Communication	2,203,6	_	_	100,0	_	50,00	20,000	175,18	300,00	_	_	_	_	1,558,	_	_	_
Education and Public Awareness	26.05			00.00		0.00	.00	1.51	0.00					444.54			
5.1.1. Environmental Celebration	902,900			100,0		50,00	20,000	100,00						632,90			
	.00			00.00		0.00	.00	0.00						0.00			
5.1.2. Celebration of Apo Reef Month	300,726							75,181						225,54			
'	.05							.51	000.00					4.54			
5.1.3. Production of promotional	1,000,0								300,00					700,00			
materials	00.00								0.00					0.00			
5.1.4. Production of new mascot of	_																
flagship species	000 405			7.540		7.540	0.007	45.000						000.05			
Sub Program 5.2. Youth Involvement	263,135 .30	-	-	7,518 .15	-	7,518 .15	3,007. 26	15,036 .30	-	-	-	-	-	230,05 5.43	-	-	-

5.2.1. Conduct of Dalaw Turo and Bio camp	263,135 .30			7,518 .15		7,518 .15	3,007. 26	15,036 .30						230,05 5.43			
5.2.2. Development of Teaching Manual for ARNP	-													0.10			
Mgt. Focus 6: Support to PAMO Operations	8,820,6 48.00	7,470, 648.00	-	-	ı	300,0 00.00	-	-	-	400,00 0.00	150,00 0.00	500,00 0.00	-	-	-	-	-
Sub Program 6.1. Establishment and Maintenance of Office Building and Equipment	1,050,0 00.00	-	-	-	-	-	-	-	-	400,00 0.00	150,00 0.00	500,00 0.00	-	-	-	-	-
6.1.1. Construction of PAMO Building 6.1.2. Maintenance of Existing Facilities and Equipment	- 1,050,0 00.00									400,00 0.00	150,00 0.00	500,00 0.00					
Sub Program 6.2. PA Planning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.2.1. Updating of Ecotourism Business Plan	-																
6.2.2. Updating of General Management Plan	-																
6.2.3. METT/ MEA	-																
6.2.4 Formulation of CEPA Plan	-																
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	_
6.3.1 Establishment of Comprehensive Database System	-																
6.3.2. Research and Data Gap Analysis	-																
Sub Program 6.4. Provision of supplies, materials, and equipment	300,000	-	-	-	1	300,0 00.00	-	-	1	-	ı	ı	1	-	ı	-	-
6.4.1. Procurement ICT Equipment	-																
6.4.2. Procurement of Office Furniture and Fixtures	-																
6.4.3. Procurement of Office Supplies and materials	300,000					300,0 00.00											
6.4.4. Procurement of technical equipment for surveillance	-																
6.4.5. Procurement of highspeed watercraft	-																
6.4.6. Provision of firearms to law enforcers	-																
6.4.7. Procurement of Machinery and Equipment	-																
Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,6 48.00	7,470, 648.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TOTAL	18,512, 105.26	7,470, 648.00	67,663.3 6	237,5 18.15	646,5 61.01	407,5 18.15	1,895, 407.13	1,091, 436.04	1,240, 000.00	550,36 3,03	225,18 1.51	500,00 0,00	536,0 00.00	3,012, 284.16	631,5 24.71	-	-
Forest Technician II (9) SG 8	2,619,8 45.00	2,619, 845.00															
Administrative Assistant II. (2) SG 8	327,481 .00	327,48 1.00															
Ecosystem Management Specialist I (2) SG 11	830,717 .00	830,71 7.00															
Ecosystem Management Specialist II (2) SG 15	1,133,6 83.00	1,133, 683.00															
Senior Ecosystem Management Specialist (2) SG 18	1,449,3 94.00	1,449, 394.00															
Park Operations Superintendent (1) SG 22	1,109,5 28.00	1,109, 528.00															

Activity	Schedul e of Implem entation	Profess ional Services	Honoraria (For lecturers/ resource person in seminars/ training	Travel ling Expen ses	Training Expens es	Office Suppli es Expen ses	Fuel, Oil and Lubrica nt	Other Supplie s and Materi als Expens es	Other Profess ional Services	Repair and Mainte nance - Buildin g and other	Repair and Mainte nance - Machi nery and	Repair and Mainte nance - Transp ortation Equipm	Labor and Wages	Other Mainte nance and Operati ng Expens	Buildi ngs and other Struct ure Outlay	Mach inery and Equip ment Outlay	Transp ortation and Equipm ent Outlay
	2030		programs)					Es		Struct ures	Equip ment	ent		es	Outlay		
Mgt. Focus. No. 1: Environmental Protection through Law Enforcement	3,810,7 02.12	-	35,861.5 8	-	342,67 7.34	-	1,912, 617.69	671,01 0.04	780,00 0.00	-	-	-	-	68,535 .47	-	-	-
Sub Program 1.1: Law Enforcement Operations	3,304,6 55.35	-	-	-	-	-	1,912, 617.69	612,03 7.66	780,00 0.00	-	-	-	-	-	-	-	-
1.1.1. Patrolling of the Protected Area	2,524,6 55.35						1,912, 617.69	612,03 7.66									
1.1.2. Engagement of Protected Area monitoring personnel	780,000 .00								780,00 0.00								
Sub Program 1.2: Capacity Building of Law Enforcers	506,046 .77	-	35,861.5 8	-	342,67 7.34	-	-	58,972 .38	-	-	-	-	-	68,535 .47	-	-	-
1.2.1. Conduct of law enforcement- related learning events	437,511 .30		35,861.5 8		342,67 7.34			58,972 .38									
1.2.2. Deputization of TF MARLEN members as Enforcement Officers (i.e., Fish Warden, PCGA, and WEO)	68,535. 47													68,535 .47			
Sub Program 1.3. Demarcation of Protected Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3.1. Physical demarcation of Boundaries	-																
1.3.2. Demarcation of Boundaries on Digital Platforms	-																
Mgt. Focus No. 2: Ecosystem and Biodiversity Conservation	1,164,1 39.29	1	1	50,00 0.00	1	30,00 0.00	69,126 .18	165,10 8.91	160,00 0.00	-	ı	1	1	689,90 4.20	•	•	-
Sub Program 2.1. Habitat monitoring and assessment	800,000 .00	-	-	50,00 0.00	-	30,00 0.00	50,000 .00	90,000 .00	80,000 .00	-	-	-	-	500,00 0.00	•	•	-
2.1.1. Monitoring using Biodiversity Monitoring and Assessment System (BAMS)	-																
2.1.2. Monitoring using Biodiversity Monitoring System (BMS)	250,000 .00			10,00 0.00		10,00 0.00	10,000	20,000						200,00 0.00			

2.1.3. Monitoring of coral reefs,	150,000		Ì	10,00]	10,00	10,000	20,000		ĺ			ĺ	100,00		l	1
mangroves, and seagrasses	.00			0.00		0.00	.00	.00						0.00			
	150,000			10,00		10,00	10,000	20,000						100,00			
2.1.4. Bird Survey	.00			0.00		0.00	.00	.00						0.00			
2.1.5. Sea Turtle Nesting Beach	150,000			10,00			10,000	30,000						100,00			
Monitoring	.00			0.00			.00	.00						0.00			
2.1.6. Elasmobranchs Biodiversity																	
Assessment	-																
2.1.7. Water Quality Monitoring and	100,000			10,00			10,000		80,000								
Assessment	.00			0.00			.00		.00								
Sub Program 2.2. Threat reduction	284,139 .29	-	-	-	-	-	19,126 .18	75,108 .91	-	-	-	-	-	189,90 4.20	-	-	-
2.2.1. Crown-of-Thorns (CoTS)	_																
Starfish management	_																
- Development and updating of a																	
strategic plan for the management of	-																
CoTS																	
- Surveillance and control of CoTS	109,337 .98						19,126 .18							90,211 .80			
2.2.2 Eradication and control of Invasive Alien Species (IAS)	-																
- Development and updating of strategic plan for the eradication and control of IAS	-																
- Implementation of strategic plan for	50,000.							30,000						20,000			
the eradication and control of IAS	00							.00						.00			
2.2.3. Response to oil spills and ship groundings	-																
- Development of emergency response																	
guidelines for oil spills and ship	-																
groundings																	
- Capacity building of Protected Area																	
staff in responding to oil spills and ship																	
groundings																	
2.2.4. Management of light and noise	_																
pollution																	
- Retrofitting of light fixtures in Apo	45,108.							45,108									
Island, Apo Reef Natural Park	91							.91									

- Development of guidelines regulating	1	1	1		I		I	I			1		I	I	1		1 1
noise and light pollution	-																
2.2.5. Solid waste and marine litter																	
management	-																
- Development or strengthening of																	
Protected Area policies on solid waste	-																
and marine litter management																	
- Formulation of communication	79,692.													79,692			
campaigns for public awareness	40													.40			
Sub Program 2.3. Enhancing Climate	80,000.								80,000					_			
Change Resiliency	00	•	-	•	•	-		•	.00	-	•	-	•	-	-	-	-
2.3.1. Formulation of Climate Change																	
Adaptation Plan	_																
- Assessment of ecosystem	-																
vulnerability	_																
- Development and updating of	-																
Climate Change Adaptation Plan	-																
- Research and development of																	
localized, active habitat restoration	80,000.								80,000								
interventions using best-available	00								.00								
science																	
Mgt. Focus No. 3: Ecotourism	1,936,7	_	71,723.1	_	685,35	_	_	117,94	_	159,3	79,69	_	56,00	97,278	669,4	_	_
	94.55		6		4.67			4.76		84.81	2.40		0.00	.56	16.19		
Sub Program 3.1. Regulation of	519,753	_	35,861.5	_	342,67	_	_	58,972	_	_	_	_	_	82,242	_	_	_
tourism industry	.86		8		7.34			.38						.56			
3.1.1. Implementation of Green Fins	-																
- Orientation of service providers	-																
- Accreditation of service providers	-																
- Continuous capacity building of	437,511		35,861.5		342,67			58,972									
accredited service providers	.30		8		7.34			.38									
3.1.2. Updating of Code of Conduct	_																
(CoC)	-																
3.1.3. Updating of Carrying Capacity	-												1	82,242			
3.1.3. Updating of Carrying Capacity 3.1.4. Updating of fines and penalties	82,242.													02,242			
														.56			
3.1.4. Updating of fines and penalties	82,242.									159,3	79,69			.56	669,4		
3.1.4. Updating of fines and penalties for tourism-related violations Sub Program 3.2. Ecotourism Facilities and Equipment	82,242. 56		-	-	-	-	-	-	-	159,3 84.81	79,69 2.40	-	-		669,4 16.19	-	-
3.1.4. Updating of fines and penalties for tourism-related violations Sub Program 3.2. Ecotourism Facilities	82,242. 56 908,493	-	-	-	-	-	-	-	-			-	-	.56		-	-

3.2.2. Maintenance of existing	239,077		1	1	İ			I	1	159,3	79,69		I	İ			İ
ecotourism facilities and equipment	.21									84.81	2.40						
3.2.3. Installation and maintenance of	669,416														669,4		
trails and buoy markers	.19														16.19		
Sub Program 3.3. Support to	508,547		35,861.5		342,67			58,972					56,00	15,036			
Ecotourism Operation	.30	-	8	-	7.34	-	-	.38	-	-	-	-	0.00	.00	-	-	-
3.3.1. Development and maintenance	15,036.													15,036			
of website and/or booking system with	00													.00			
online payment scheme	00													.00			
3.3.2. Institutionalize the hiring of tour	56,000.												56,00				
guides	00												0.00				
3.3.3. Capacity Building for service	437,511		35,861.5		342,67			58,972									
providers	.30		8		7.34			.38									
Mgt. Focus 4: Linkages with other	2,308,5		_	80,00	1,210,	20,00	_	50,000	_	_	_	_	480,0	468,53	_	_	_
stakeholders	35.47			0.00	000.00	0.00		.00					00.00	5.47			
Sub Program 4.1. Community and	798,535	_	_	_	_	_	_	50,000	_	_	_	_	480,0	268,53	_	_	_
stakeholder involvement	.47							.00					00.00	5.47			
4.1.1. Regular Meeting of with other	68,535.													68,535			
law enforcement agencies	47													.47			
4.1.2. Involvement of coastal																	
barangays in monitoring and	480,000												480,0				
surveillance of illegal activities through	.00												00.00				
Bantay Dagat Volunteers																	
4.1.3. Conduct of environmental	250,000							50,000						200,00			
activities (i.e., Coastal Clean-up, Tree	.00							.00						0.00			
Planting, and SCUBASURA)																	
Sub Program 4.2. PAMB	1,460,0	-	-	30,00	1,210,	20,00	-	-	-	-	-	-	-	200,00	-	-	-
Operationalization and Strengthening	00.00			0.00	000.00	0.00								0.00			
4.2.1. Regular PAMB Meeting	250,000			30,00		20,00								200,00			
400111111111111111111111111111111111111	.00			0.00		0.00								0.00			
4.2.2. Updating of PAMB Manual of Operations	-																
4.2.3. Capacity building of PAMB	1,210,0				1,210,												
members	00.00				000.00												
4.2.4. Review and updating of existing					1						1						
policies	_																
Sub Program 4.3. BDFE	<i>50,000.</i> <i>00</i>	-	-	50,00 0.00	-	-	-	-	-	-	-	-	-	-	-	-	-

4.3.1. Technical assistance for the				1		1					1			[l
preparation of BDFE Business Plan	-																
4.3.2. Technical Assistance for the																	
enhancement activities for POs (e.g.,																	
Capacity Building on enterprise and	-																
organizational development)																	
4.3.3. Monitor the progress of the	50,000.			50,00													
enterprise	00			0.00													
Mgt. Focus 5: Communication, Education and Public Awareness	2,500,5 93.03	-	-	107,9 69.24	-	57,96 9.24	23,187 .70	195,63 0.88	300,00 0.00	-	-	-	-	1,815, 835.97	-	-	-
Sub Program 5.1. Communication	2,221,6			100.0		50.00	20,000	179,69	300,00					1,571,			
Education and Public Awareness	69.61	-	-	00.00	-	0.00	.00	2.40	0.00	-	-	-	-	977.21	-	-	-
E 1.1 For incompanied Colob action	902,900			100,0		50,00	20,000	100,00						632,90			
5.1.1. Environmental Celebration	.00			00.00		0.00	.00	0.00						0.00			
5.1.2. Celebration of Apo Reef Month	318,769							79,692						239,07			
5.1.2. Celebration of Apo Reel Month	.61							.40						7.21			
5.1.3. Production of promotional	1,000,0								300,00					700,00			
materials	00.00								0.00					0.00			
5.1.4. Production of new mascot of	_																
flagship species																	
Sub Program 5.2. Youth Involvement	278,923 .41	-	-	7,969 .24	-	7,969 .24	3,187. 70	15,938 .48	-	-	-	-	-	243,85 8.76	-	-	-
5.2.1. Conduct of Dalaw Turo and Bio	278,923			7,969		7,969	3,187.	15,938						243,85			
camp	.41			.24		.24	70	.48						8.76			
5.2.2. Development of Teaching																	
Manual for ARNP	-																
Mgt. Focus 6: Support to PAMO	8,820,6	7,470,				300,0				400,0	150,0	500,00					
Operations	48.00	648.00	-	-	-	00.00	-	-	-	00.00	00.00	0.00	-	-	-	-	-
Sub Program 6.1. Establishment and	1,050,0									400,0	150,0	500,00					
Maintenance of Office Building and	00.00	-	-	-	-	-	-	-	-	00.00	00.00	0.00	-	-	-	-	-
Equipment	00.00									00.00	00.00	0.00					
6.1.1. Construction of PAMO Building	-																
6.1.2. Maintenance of Existing	1,050,0									400,0	150,0	500,00					
Facilities and Equipment	00.00									00.00	00.00	0.00					
Sub Program 6.2. PA Planning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.2.1. Updating of Ecotourism																	
Business Plan	_																
6.2.2. Updating of General						1					1						
Management Plan																	

6.2.3. METT/MEA	_				1												1 1
6.2.4. Formulation of CEPA Plan	-																
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3.1. Establishment of Comprehensive Database System	-																
6.3.2. Research and Data Gap	_																
Analysis	222 222					222.2											
Sub Program 6.4. Provision of supplies, materials, and equipment	300,000	-	-	-	-	300,0 00.00	-	-	-	-	-	-	-	-	-	-	-
6.4.1. Procurement ICT Equipment	-																
6.4.2. Procurement of Office Furniture																	
and Fixtures	-																
6.4.3. Procurement of Office Supplies	300,000					300,0											
and materials	.00					00.00											
6.4.4 Procurement of technical	_																
equipment for surveillance																	
6.4.5. Procurement of highspeed	_																
watercraft																	
6.4.6. Provision of firearms to law enforcers	-																
6.4.7. Procurement of Machinery and																	
Equipment	-																
Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,6 48.00	7,470, 648.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Park Operations Superintendent (1)	1,109,5	1,109,															
SG 22	28.00	528.00															
Senior Ecosystem Management	1,449,3	1,449,															
Specialist (2) SG 18	94.00	394.00															
Ecosystem Management Specialist II	1,133,6	1,133,				1		1									
(2) SG 15	83.00	683.00															
Ecosystem Management Specialist I	830,717	830,71				1		1									
(2) SG 11	.00	7.00															
Administrative Assistant II. (2) SG 8	327,481 .00	327,48 1.00															
Forest Technician II (9) SG 8	2,619,8 45.00	2,619, 845.00															

	20.541.	7.470.	107,584.	237.9	2.238.	407.9	2.004.	1.199.	1.240.	559.3	229.6	500.00	536.0	3.140.	669.4		
() (A)																_	_
	412.46	648.00	75	69.24	032.01	69.24	931.56	694.59	000.00	84.81	92.40	0.00	00.00	089.67	16.19		

Activity	Schedu le of Impleme ntation	Profes sional Services	Honoraria (For lecturers/ resource person in seminars /training programs)	Trave Iling Expe nses	Training Expe nses	Office Suppl ies Expe nses	Fuel, Oil and Lubric ant	Other Suppli es and Materi als Expen ses	Other Profes sional Services	Repair and Mainte nance - Buildin g and other Struct ures	Repair and Mainte nance - Machi nery and Equip ment	Repair and Mainte nance - Transp ortation Equip ment	Labor and Wages	Other Mainte nance and Operat ing Expen ses	Buildi ngs and other Struct ure Outlay	Machi nery and Equip ment Outlay	Transp ortation and Equipm ent Outlay	Furnit ure and Fixture Outlay
	2031																	

Mgt. Focus. No. 1: Environmental	3,992,5		38,013.2		363,2		2,027,	711,27	780,00					72,647				
Protection through Law Enforcement	44.24	-	8	-	37.98	-	374.75	0.64	0.00	-	-	-	-	.60	-	-	-	-
Sub Program 1.1: Law Enforcement	3,456,1						2,027,	648,75	780,00									
Operations	34.67	-	-	-	-	-	374.75	9.92	0.00	-	-	-	-	-	-	-	-	-
1.1.1. Patrolling of the Protected	2,676,1						2,027,	648,75										
Area	34.67						374.75	9.92										
1.1.2. Engagement of Protected	780,00								780,00									
Area monitoring personnel	0.00								0.00									
Sub Program 1.2: Capacity Building	536,40		38,013.2		363,2			62,510						72,647				
of Law Enforcers	9.57		8	-	37.98		-	.72	1	_	-	•	,	.60	•	-	-	-
1.2.1. Conduct of law enforcement-	463,76		38,013.2		363,2			62,510										
related learning events	1.97		8		37.98			.72										
1.2.2. Deputization of TF MARLEN	72,647.													72,647				
members as Enforcement Officers	60													.60				
(i.e., Fish Warden, PCGA, and WEO)	00													.00				
Sub Program 1.3. Demarcation of	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Protected Area																		
1.3.1. Physical demarcation of	_																	
Boundaries																		
1.3.2. Demarcation of Boundaries on	_																	
Digital Platforms																		
Mgt. Focus No. 2: Ecosystem and	1,628,1	_	-	100,0	_	40,00	90,273	187,81	410,00	_	_	-	-	800,09	_	-	_	_
Biodiversity Conservation	87.65			00.00		0.00	.75	5.44	0.00					8.46				
Sub Program 2.1. Habitat monitoring	1,000,0	-	-	100,0	-	40,00	70,000	110,00	80,000	-	_	-	-	600,00	-	-	_	-
and assessment	00.00			00.00		0.00	.00	0.00	.00					0.00				
2.1.1. Monitoring using Biodiversity	200,00			50,00		10,00	20,000	20,000						100,00				
Monitoring and Assessment System (BAMS)	0.00			0.00		0.00	.00	.00						0.00				
2.1.2. Monitoring using Biodiversity	250,00			10,00		10,00	10,000	20,000						200,00				
Monitoring System (BMS)	0.00			0.00		0.00	.00	.00						0.00				
2.1.3. Monitoring of coral reefs,	150,00			10,00		10,00	10,000	20,000						100,00				
mangroves, and seagrasses	0.00			0.00		0.00	.00	.00						0.00				
	150,00			10,00		10,00	10,000	20,000						100,00		-		
2.1.4. Bird Survey	0.00			0.00		0.00	.00	.00						0.00				
2.1.5. Sea Turtle Nesting Beach	150,00			10,00		0.00	10,000	30,000						100,00				
Monitoring	0.00			0.00			.00	.00						0.00				
2.1.6. Elasmobranchs Biodiversity	0.00			0.00			.00	.00						0.00				
Assessment	-																	
7.000001110111					l .			l								l		

i		ı	1			ı	1	1	1 1	1	1		ı	1 1	ı	i	1 1	
2.1.7. Water Quality Monitoring and	100,00			10,00			10,000		80,000									i
Assessment	0.00			0.00			.00		.00									
Sub Program 2.2. Threat reduction	298,18 7.65	-	-	-	-	-	20,273 .75	77,815 .44	-	-	-	-	-	200,09 8.46	-	-	-	-
2.2.1. Crown-of-Thorns (CoTS) Starfish management	-																	
- Development and updating of a strategic plan for the management of CoTS	-																	
- Surveillance and control of CoTS	115,89 8.26						20,273 .75							95,624 .51				
2.2.2. Eradication and control of Invasive Alien Species (IAS)	-																	
- Development and updating of strategic plan for the eradication and control of IAS	-																	
- Implementation of strategic plan for the eradication and control of IAS	50,000. 00							30,000						20,000				
2.2.3. Response to oil spills and ship groundings	-																	
- Development of emergency response guidelines for oil spills and ship groundings	-																	
- Capacity building of Protected Area staff in responding to oil spills and ship groundings	-																	
2.2.4. Management of light and noise pollution	-																	
- Retrofitting of light fixtures in Apo Island, Apo Reef Natural Park	47,815. 44							47,815 .44										
- Development of guidelines regulating noise and light pollution	-																	
2.2.5. Solid waste and marine litter management	-																	
- Development or strengthening of Protected Area policies on solid waste and marine litter management	-																	
- Formulation of communication campaigns for public awareness	84,473. 95													84,473 .95				

Sub Program 2.3. Enhancing	330,00	_	_	-	_	_	_	_	330,00	_	_	_	_	_	_	-	_	_
Climate Change Resiliency	0.00								0.00									
2.3.1. Formulation of Climate	_																	
Change Adaptation Plan																		
- Assessment of ecosystem	250,00								250,00									
vulnerability	0.00								0.00									
- Development and updating of Climate Change Adaptation Plan	-																	
- Research and development of																		
	80,000.								80,000									
interventions using best-available	00								.00									
science																		
Mgt. Focus No. 3: Ecotourism	1,888,4 47.90	-	38,013.2 8	-	363,2 37.98	-	-	62,510 .72	250,00 0.00	168,9 47.90	84,47 3.95	-	56,00 0.00	155,68 2.92	709,5 81.16	-	-	-
Sub Program 3.1. Regulation of	853,50	_	38,013.2	1	363,2	_	_	62,510	250,00	_		_	_	139,74		_	_	_
tourism industry	6.89		8		37.98			.72	0.00					4.92				
3.1.1. Implementation of Green Fins	-																	
- Orientation of service providers	-																	
- Accreditation of service providers	81,626. 84													81,626 .84				
- Continuous capacity building of	463,76		38,013.2		363,2			62,510										
accredited service providers	1.97		8		37.98			.72										
3.1.2. Updating of Code of Conduct	58,118.													58,118				
(CoC)	80													.08				
3.1.3. Updating of Carrying Capacity	250,00 0.00								250,00 0.00									
3.1.4. Updating of fines and																		
penalties for tourism-related	-																	
violations																		
Sub Program 3.2. Ecotourism	963,00						_			168,9	84,47			_	709,5			
Facilities and Equipment	3.00	-	-	,	-		-		•	47.90	3.95	-		_	81.16		-	-
3.2.1. Establishment of audiovisual	_																	
room	-																	
3.2.2. Maintenance of existing	253,42									168,9	84,47							
ecotourism facilities and equipment	1.84									47.90	3.95							
3.2.3. Installation and maintenance	709,58														709,5			
of trails and buoy markers	1.16														81.16			
Sub Program 3.3. Support to Ecotourism Operation	71,938. 00	_	-	-	-	-	-	-	-	-	-	-	56,00 0.00	15,938 .00	-	-	-	-

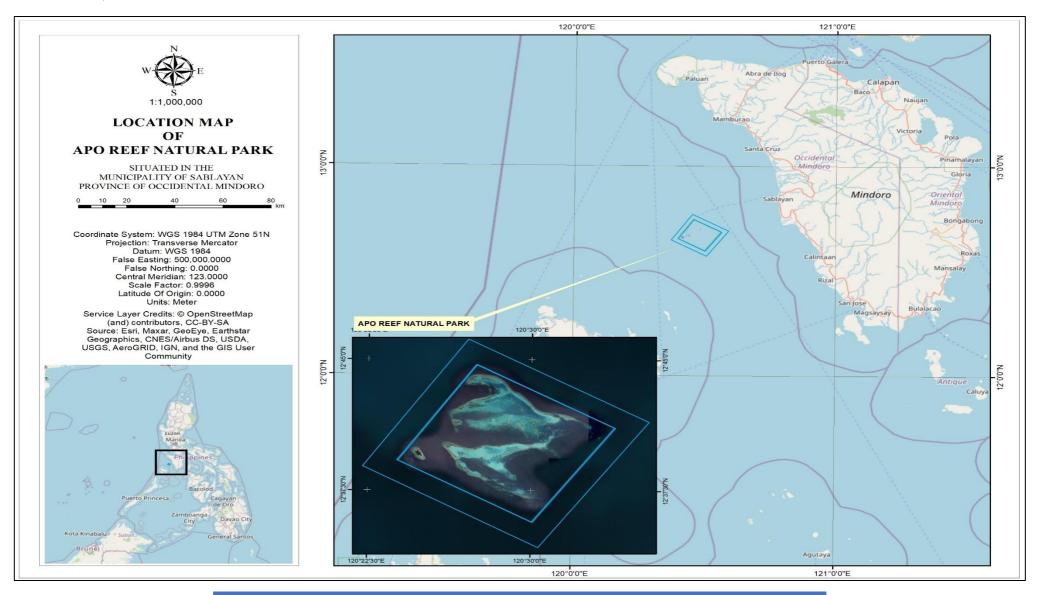
1			ı	1	ı	ı	1	ı	1	1	ı	ı	ı	ı	ı	1	í	1
3.3.1. Development and	45.000													45.000				
maintenance of website and/or	15,938.													15,938				
booking system with online payment	00													.00				
scheme																		
3.3.2. Institutionalize the hiring of	56,000.												56,00					
tour guides	00												0.00					
3.3.3. Capacity Building for service	_																	
providers																		
Mgt. Focus 4: Linkages with other	1,102,6	_	_	80,00	_	20,00	_	50,000	_		_	_	480,0	472,64	_	_	_	_
stakeholders	47.60			0.00		0.00		.00					00.00	7.60		_		_
Sub Program 4.1. Community and	802,64						_	50,000					480,0	272,64				_
stakeholder involvement	7.60	_	-	_	_	_	-	.00	-	_	-	-	00.00	7.60	_	_	_	_
4.1.1. Regular Meeting of with other	72,647.													72,647				
law enforcement agencies	60													.60				
4.1.2. Involvement of coastal																		
barangays in monitoring and	480,00												480,0					
surveillance of illegal activities	0.00												00.00					
through Bantay Dagat Volunteers																		
4.1.3. Conduct of environmental	250,00							FO 000						200.00				
activities (i.e., Coastal Clean-up,	0.00							50,000						200,00				
Tree Planting, and SCUBASURA)	0.00							.00						0.00				
Sub Program 4.2. PAMB	250,00			30,00		20,00								200,00				
Operationalization and	0.00	-	-	0.00	-	0.00	-	-	-	-	-	-	-	0.00	-	-	-	-
Strengthening	0.00			0.00		0.00								0.00				
4.2.1 Decular DAMP Macting	250,00			30,00		20,00								200,00				
4.2.1. Regular PAMB Meeting	0.00			0.00		0.00								0.00				
4.2.2. Updating of PAMB Manual of																		
Operations	-																	
4.2.3. Capacity building of PAMB																		
members	-																	
4.2.4. Review and updating of																		
existing policies	-																	
	50,000.			50,00														
Sub Program 4.3. BDFE	00	-	-	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.3.1. Technical assistance for the																		
preparation of BDFE Business Plan	-																	
4.3.2. Technical Assistance for the																		
enhancement activities for POs (e.g.,	-																	
2 2000000000000000000000000000000000000					L			1			L	L	L	L	L		I	

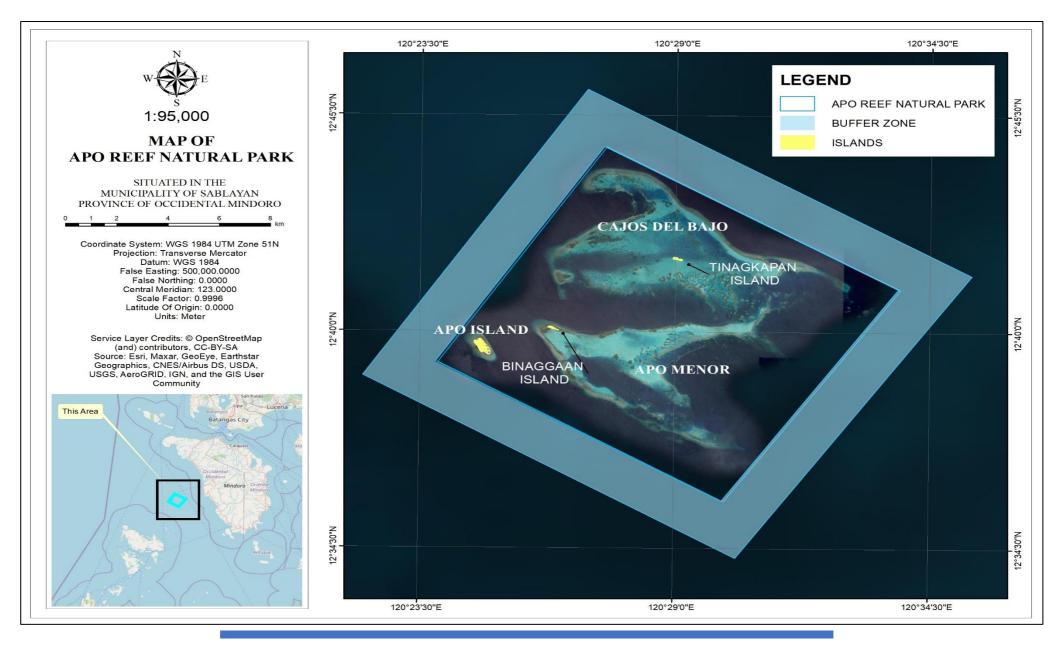
10 " 5 " "	1 1		Ī	1	I	1	1	İ	Ī	l	İ	l	l	ı	I	ı	Ī	
Capacity Building on enterprise and organizational development)																		
4.3.3. Monitor the progress of the	50,000.			50,00														
enterprise	00			0.00														
Mgt. Focus 5: Communication,	2,536,4	-	-	108,4	_	58,44	23,378	201,36	300,00	_	_	_	_	1,844,	_	_	_	_
Education and Public Awareness	54.61			47.39		7.39	.96	8.74	0.00					812.12				
Sub Program 5.1. Communication	2,240,7	_	_	100,0	_	50,00	20,000	184,47	300,00	_	_	_	_	1,586,	_	_	_	_
Education and Public Awareness	95.79			00.00		0.00	.00	3.95	0.00					321.84				
5.1.1. Environmental Celebration	902,90 0.00			100,0 00.00		50,00 0.00	20,000	100,00						632,90 0.00				
5.1.2. Celebration of Apo Reef	337,89							84,473						253,42				
Month	5.79							.95						1.84				
5.1.3. Production of promotional	1,000,0								300,00					700,00				
materials	00.00								0.00					0.00				
5.1.4. Production of new mascot of	_																	
flagship species																		
Sub Program 5.2. Youth Involvement	295,65 8.82	-	-	8,447 .39	-	8,447 .39	3,378. 96	16,894 .79	-	-	-	-	-	258,49 0.28	-	-	-	-
5.2.1. Conduct of Dalaw Turo and	295,65			8,447		8,447	3,378.	16,894						258,49				
Bio camp	8.82			.39		.39	96	.79						0.28				
5.2.2. Development of Teaching																		
Manual for ARNP	_																	
Mgt. Focus 6: Support to PAMO Operations	14,823, 649.57	7,470, 648.0 0	-	-	-	300,0 00.00	-	-	1,350, 000.00	400,0 00.00	150,0 00.00	500,0 00.00	-	43,588 .53	-	4,109, 413.04	-	500,0 00.00
Sub Program 6.1. Establishment and Maintenance of Office Building and	1,050,0 00.00		-	-	-	-	-	-	-	400,0 00.00	150,0 00.00	500,0 00.00	-	-	-	-	-	-
Equipment																		
6.1.1. Construction of PAMO	-																	
Building	4.050.0									400.0	450.0	500.0						
6.1.2. Maintenance of Existing Facilities and Equipment	1,050,0 00.00									400,0 00.00	150,0 00.00	500,0 00.00						
	1,393,5								1,350,	00.00	00.00	00.00		43,588				
Sub Program 6.2. PA Planning	88.53	•	-	-	-	-	-	-	000.00	-	-	-	-	.53	-	-	-	-
6.2.1. Updating of Ecotourism	850,00								850,00									
Business Plan	0.00								0.00									
6.2.2. Updating of General	500,00								500,00									
Management Plan	0.00								0.00									

0.000 METT/MEA	43,588.			[I									43,588		1		
6.2.3. METT/MEA	53													.53				
6.2.4. Formulation of CEPA Plan	-																	
Sub Program 6.3. PA Database	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3.1. Establishment of Comprehensive Database System	-																	
6.3.2. Research and Data Gap Analysis	-																	
Sub Program 6.4. Provision of	4,909,4					300,0										4,109,		500,0
supplies, materials, and equipment	13.04	-	-	-	-	00.00	-	-	-	-	-	-	-	-	-	413.04	-	00.00
6.4.1. Procurement ICT Equipment	1,000,0 00.00															1,000, 000.00		
6.4.2. Procurement of Office Furniture and Fixtures	500,00 0.00																	500,0 00.00
6.4.3. Procurement of Office	300,00					300,0												
Supplies and materials	0.00					00.00												
6.4.4 Procurement of technical equipment for surveillance	-																	
6.4.5. Procurement of highspeed watercraft	-																	
6.4.6. Provision of firearms to law enforcers	-																	
6.4.7. Procurement of Machinery and Equipment	3,109,4 13.04															3,109, 413.04		
Sub Program 6.5. Implementation of Proposed Staffing Pattern Under RA 11038 (Salaries and all incentives)	7,470,6 48.00	7,470, 648.0 0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Park Operations Superintendent (1) SG 22	1,109,5 28.00	1,109, 528.0 0																
Senior Ecosystem Management Specialist (2) SG 18	1,449,3 94.00	1,449, 394.0 0																
Ecosystem Management Specialist II (2) SG 15	1,133,6 83.00	1,133, 683.0 0																
Ecosystem Management Specialist I (2) SG 11	830,71 7.00	830,7 17.00																

Administrative Assistant II. (2) SG 8	327,48 1.00	327,4 81.00														
Forest Technician II (9) SG 8	2,619,8 45.00	2,619, 845.0 0														
TOTAL	25,971, 931.57	7,470, 648.0 0	76,026.5 5	288,4 47.39	726,4 75.95	418,4 47.39	2,141, 027.46	1,212, 965.54	3,090, 000.00	568,9 47.90	500,0 00.00	536,0 00.00	3,389, 477.23	709,5 81.16	4,109, 413.04	500,0 00.00

Annex 2. Maps







1:8,000 VALUES MAP OF APO ISLAND APO REEF NATURAL PARK

SITUATED IN THE MUNICIPALITY OF SABLAYAN PROVINCE OF OCCIDENTAL MINDORO



Legend

DIVING POINTS



Rest Houses

Lighthouse

Boardwalk (North)

Boardwalk (South)

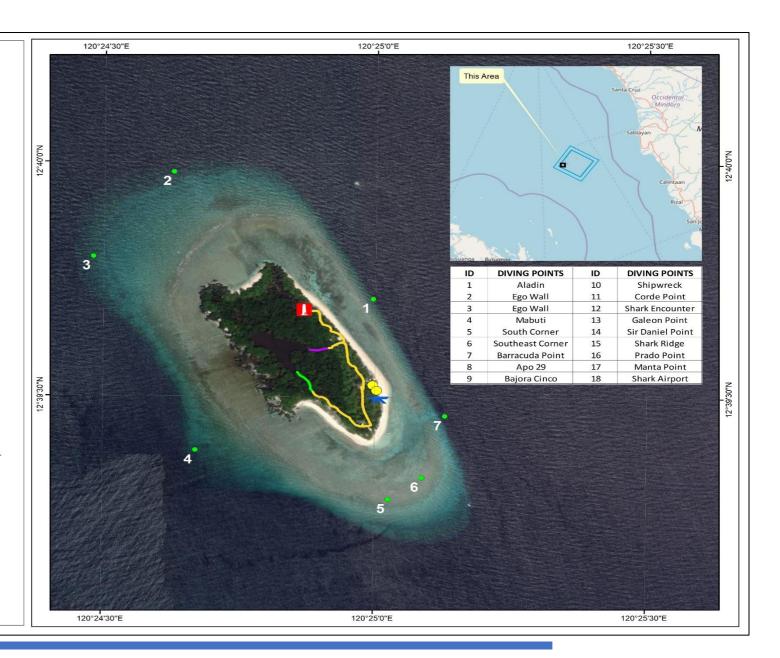
Trails

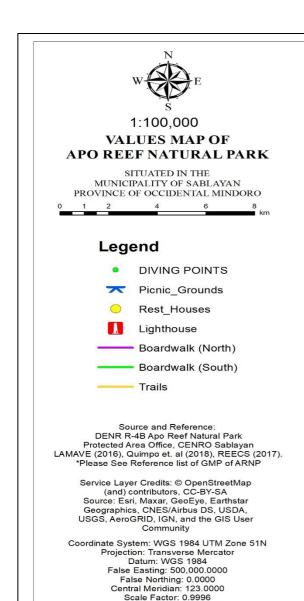
Source and Reference:
DENR R-4B Apo Reef Natural Park
Protected Area Office, CENRO Sablayan
LAMAVE (2016), Quimpo et. al (2018), REECS (2017).
*Please See Reference list of GMP of ARNP

Service Layer Credits:

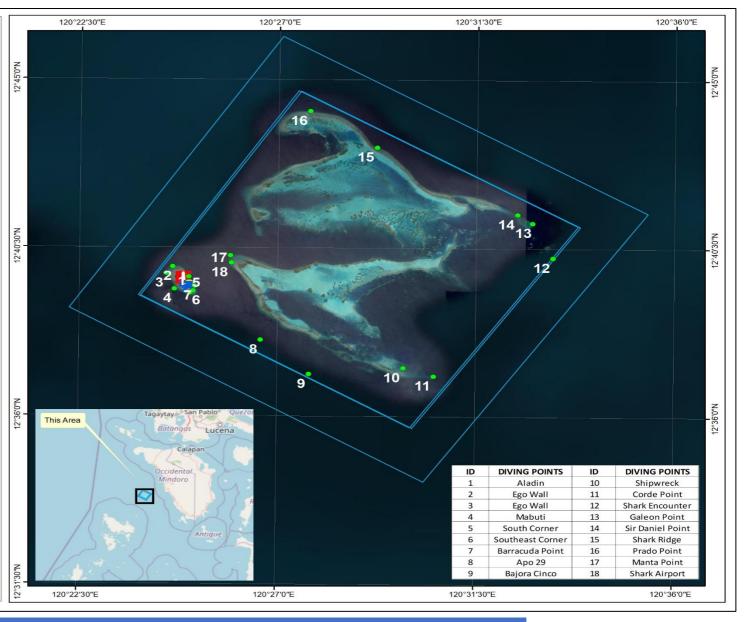
OpenStreetMap
(and) contributors, CC-BY-SA
Source: Esri, Maxar, GeoEye, Earthstar
Geographics, CNES/Airbus DS, USDA,
USGS, AeroGRID, IGN, and the GIS User
Community

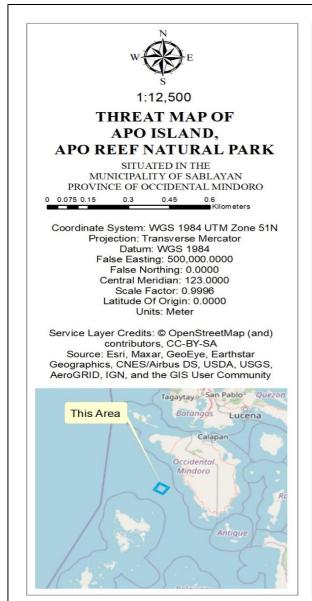
Coordinate System: WGS 1984 UTM Zone 51N Projection: Transverse Mercator Datum: WGS 1984 False Easting: 500,000,0000 False Northing: 0,0000 Central Meridian: 123,0000 Scale Factor: 0,9996 Latitude Of Origin: 0,0000 Units: Meter

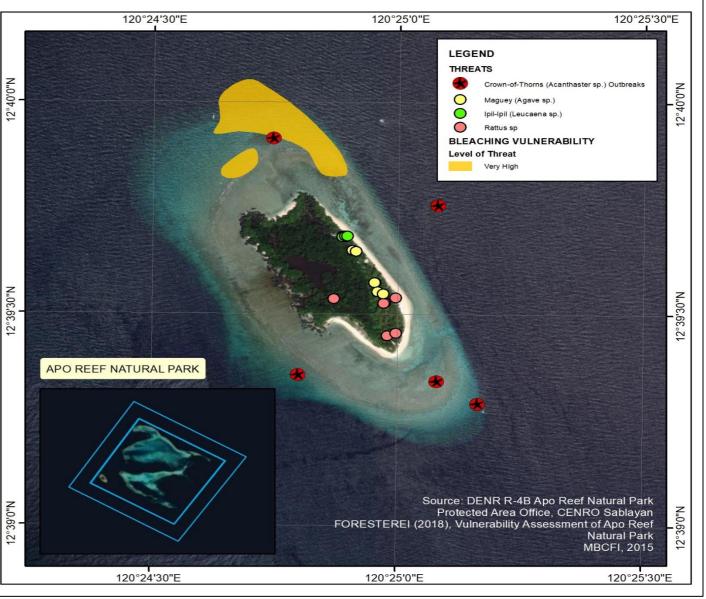


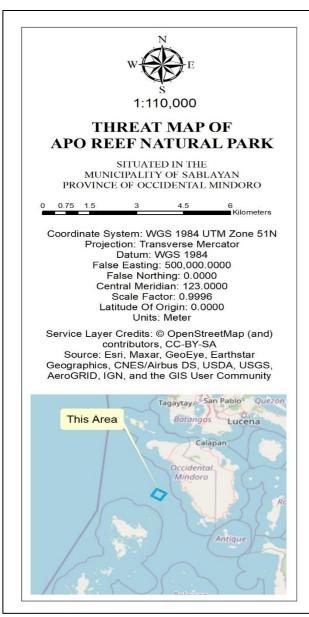


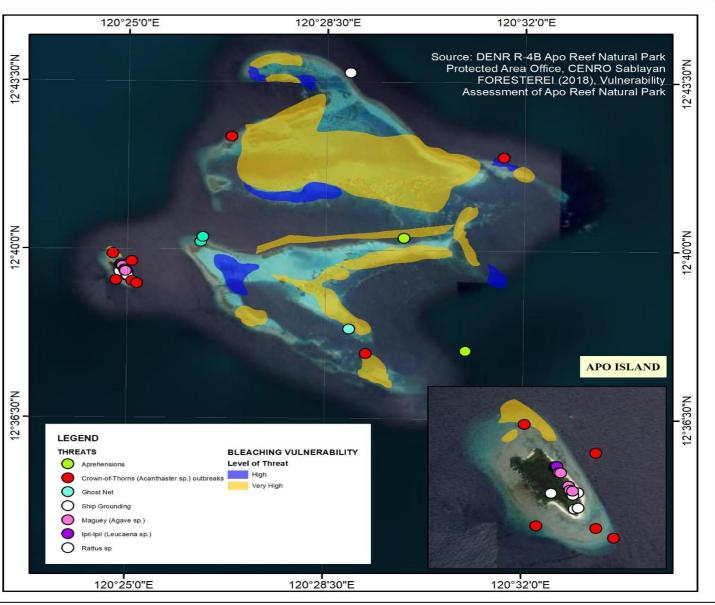
Latitude Of Origin: 0.0000 Units: Meter













1:4.000

MAP OF FACILITIES OF APO ISLAND, APO REEF NATURAL PARK

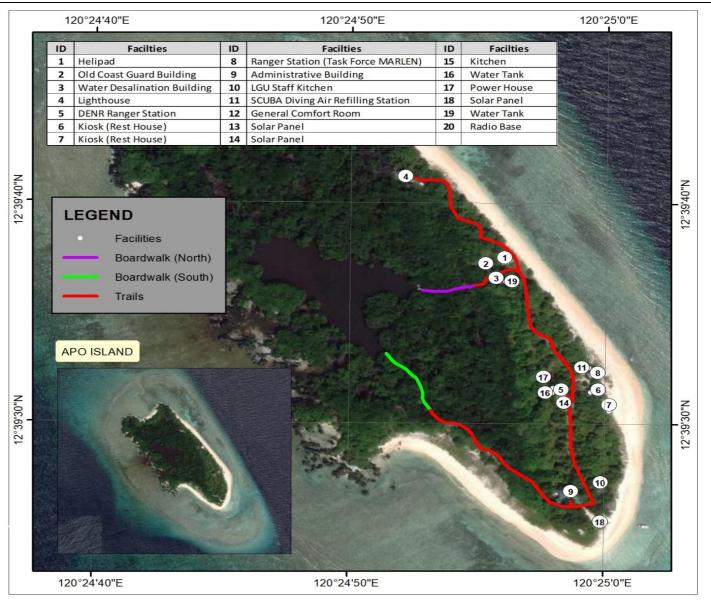
SITUATED IN THE MUNICIPALITY OF SABLAYAN PROVINCE OF OCCIDENTAL MINDORO

Kilometers

Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: 123,0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User







MAP OF DIVING POINTS OF APO ISLAND, APO REEF NATURAL PARK

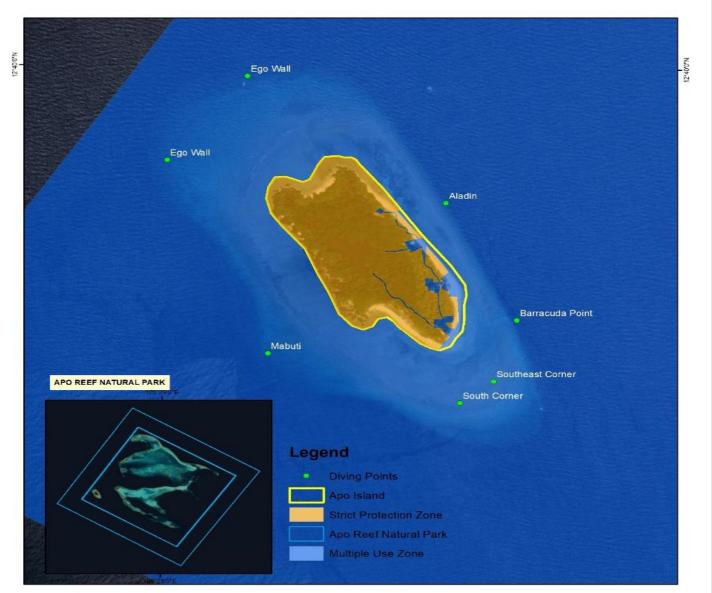
SITUATED IN THE MUNICIPALITY OF SABLAYAN PROVINCE OF OCCIDENTAL MINDORO

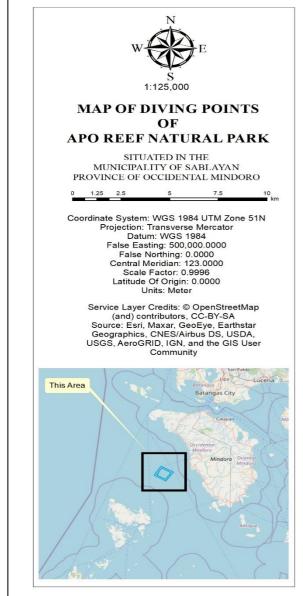
0 0.05 0.1 0.2 0.3 0.4 Kilometers

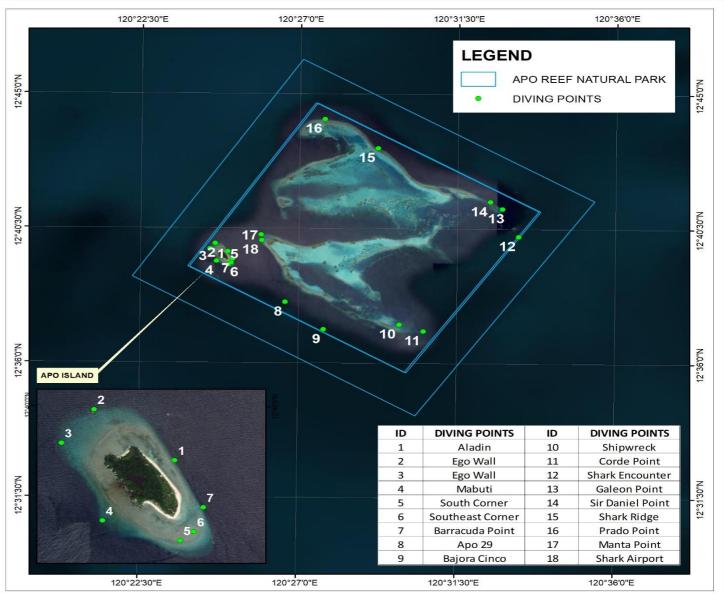
Coordinate System: WGS 1984 UTM Zone 51N Projection: Transverse Mercator Datum: WGS 1984 False Easting: 500,000,0000 False Northing: 0.0000 Central Mendian: 123,0000 Scale Factor: 0.9996 Latitude Of Origin: 0.0000 Units: Meter

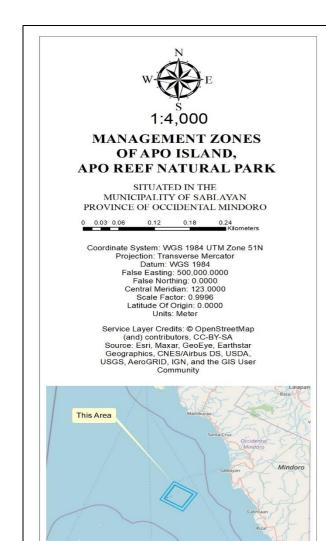
Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA Source: Esrí, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



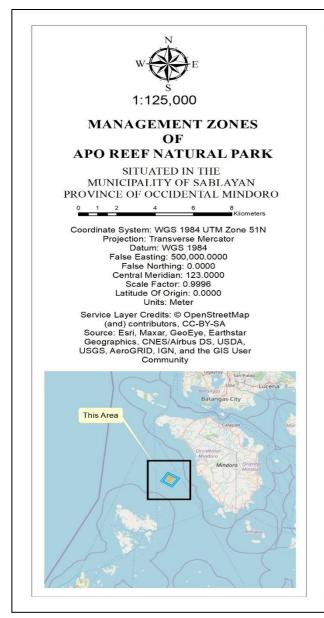


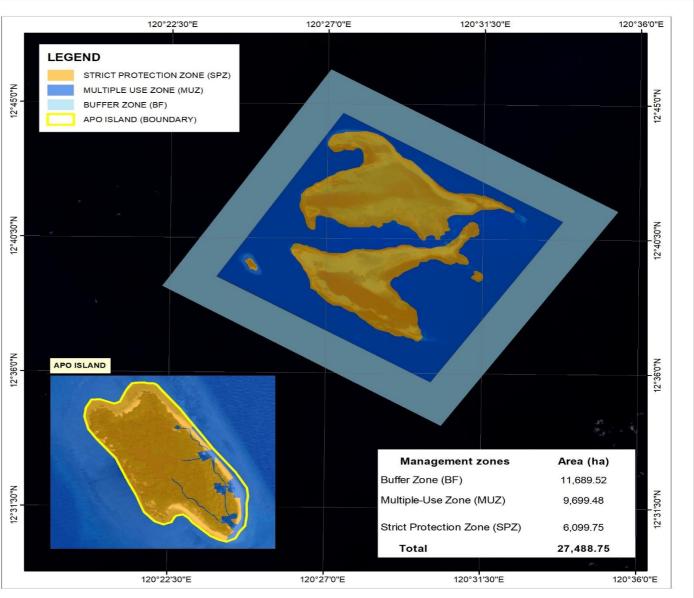












Center for Environmental Law and Policy Advocacy Incorporated (CELPA, Inc.)



Unit 1, 2nd floor, L and L Building, Lopez Avenue, Batong Malake, Los Banos. Laguna (049) 536 4078

management@celpa-inc.com www.celpa-inc.com