



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

DEC 23 2022

**MEMORANDUM**

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

**THRU** : The ARD for Technical Services

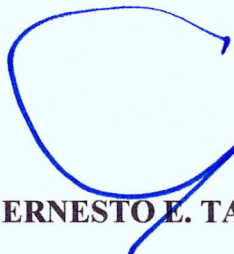
**FROM** : The OIC, PENR Officer

**SUBJECT** : **SUBMISSION OF MANAGEMENT EFFECTIVENESS  
ASSESSMENT OF APO REEF NATURAL PARK**

Forwarded is the memorandum dated December 20, 2022 of CENRO Sablayan regarding submission of Management Effectiveness Assessment (MEA) of Apo Reef Natural Park using the Management Effectiveness Tracking Tool (METT). The completion of METT was initiated through an Orientation and Focus Group Discussion conducted during the PAMB meeting held on November 28, 2022.

Attached with the report are the Data Sheet 1 (Reporting Progress at Protected Area Site), Data Sheet 2 (Protected Area Threats), Assessment Form, Attendance Sheet and Photo Documentation.

For information and record.

  
**ERNESTO E. TAÑADA**

TSD-CDS12/22/2022

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

December 20, 2022

**MEMORANDUM:**

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

**THRU** : The OIC, PENR Officer

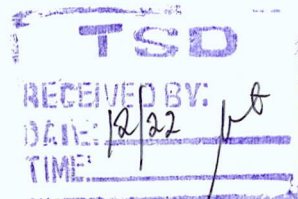
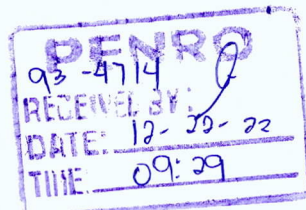
**FROM** : The CENR Officer

**SUBJECT** : SUBMISSION OF MANAGEMENT EFFECTIVENESS  
ASSESSMENT OF APO REEF NATURAL PARK

Respectfully forwarded is the memorandum, submitted by Protected Area Superintendent (PASu) Krystal Dayne T. Villanada dated December 20, 2022, regarding the results of the Management Effectiveness Assessment (MEA) of Apo Reef Natural Park conducted last November 28, 2022.

For your information and record.

  
**FOR. ANASTACIO A. SANTOS, MPA**







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



December 20, 2022

**MEMORANDUM**

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

The OIC, PENR Officer  
DENR-PENRO, Mamburao, Occidental Mindoro

**THRU :** The CENR Officer

**FROM :** The Protected Area Superintendent

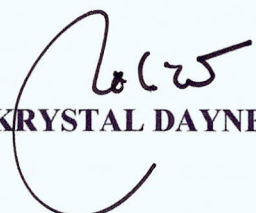
**SUBJECT :** SUBMISSION OF MANAGEMENT EFFECTIVENESS  
ASSESSMENT OF APO REEF NATURAL PARK

Submitted herewith is the report of the Management Effectiveness Assessment (MEA) of Apo Reef Natural Park using the Management Effectiveness Tracking Tool (METT). The completion of METT was initiated through an Orientation and Focus Group Discussion conducted during the PAMB meeting held on November 28, 2022.

Upon consolidation and analysis of results, the overall management effectiveness rating of ARNP is 91.63%, which qualifies as a “high performing protected area”.

Attached with this are the Data Sheet 1 (Reporting Progress at Protected Area Site), Data Sheet 2 (Protected Area Threats), Assessment Form, Attendance Sheet, and Photo Documentation.

For information and record.

  
**KRYSTAL DAYNE T. VILLANADA**

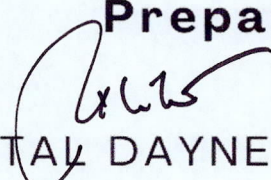




# MANAGEMENT EFFECTIVENESS ASSESSMENT

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Prepared by :

  
KRYSTAL DAYNE T. VILLANADA



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## DESCRIPTION OF THE PROTECTED AREA

Apo Reef Natural Park (ARNP) 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.<sup>1</sup> 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. Finally, through the enactment of Ra 11038 also known as the Expanded NIPAS Act of 2018, ARNP was declared as a national park.

Apo Reef has 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 (Binangaan Island), and Cayos del Bajo (Tinankapan). 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.

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.

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. Prior to COVID-19 Pandemic, ARNP has recorded an average of 6, 504 tourist arrival from year 2015 to 2019. This constitutes income generation of at most P9, 481, 914.00 from the collected users fee. 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.

SCUBA diving 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).



## METHODOLOGY

### The Management Effectiveness Tracking Tool (METT)

Management effectiveness is a measure of how well a protected area is being managed or the extent to which it is protecting values and achieving its goals and objectives (Hockings et al., 2006). Pursuant to DENR Technical Bulletin No. 2018-05, the Management Effectiveness Tracking Tool (METT) was used in the Management Effectiveness Assessment of Apo Reef Natural Park for 2022. The framework for assessing the management effectiveness was developed by the World Commission on Protected Areas (WPCA). The primary aim of the tool is to provide data about the progress of protected area management over time, as well as provide inputs on areas for improvement in terms of management effectiveness. It was hoped that the tracking tool will be used more generally where it can help monitor progress towards improving management effectiveness. In addition, the use of the Tracking Tool enables managers, government decision-makers, and development organizations to track progress in implementing commitments under the Convention on Biological Diversity, the Ramsar Convention on Wetlands, and other international treaties and agreements on biodiversity and protected areas. It adopts the six distinct elements of effective protected area management listed below:

*Table 1. List of elements of effective protected area management*

ELEMENTS	EXPLANATION	CRITERIA THAT ARE ASSESSED	FOCUS OF EVALUATION
Context	Where are we now? Assessment of importance, threats, policy environment	Significance Threats Vulnerability National Context Partners	Status
Planning	Where do we want to be? Assessment of protected area design and planning	PA legislation and policy PA system design Management Planning	Appropriateness
Inputs	What do we need? Assessment of resources needed to carry out management	Resourcing of agency Resourcing of site	Resource adequacy
Process	How do we go about it? Assessment of the way in which the management is conducted	Suitability of management process	Efficiency and appropriateness
Outputs	What were the results? Assessment of the implementation of management programs and actions; delivery of products and services	Result of management actions Services and products	Effectiveness
Outcomes	What did it achieve? Assessment of the outcomes and extent to which they achieve objectives	Impact: effect of management in relation to objectives	Effectiveness and appropriateness

The design of METT is based on the framework that good protected area management follows a process with six distinct stages or elements, starting from understanding the context of existing values and threats, followed by planning and allocation of resources (inputs) and conduct of management actions (processes) to produce products and services (outputs) that eventually result in desired impacts or outcomes (Stolton et al., 2007).

Key informant interview (KII) was used in answering the METT Forms. This was conducted during the 4<sup>th</sup> Quarter regular PAMB Meeting of Apo Reef Natural Park. Three (3) METT forms were accomplished for the MEA of ARNP.

Data sheet 1 which contains the basic information about the PA were filled up by the PAMO staff using all available data in the office.

Data Sheet 2 and the METT Assessment form were answered by the PAMB members, assisted by the PAMO staff and administered by PASu. ARNP PAMB has eight (8) PAMB Members which is composed of the following:

*Table 2. List of PAMB Members of ARNP, 2022*

1. Hon. Leody F. Tariela Office of the Representative	5. Ms. Apolonia Marie Grace C. Diamante Executive Director, MBCFI
2. Hon. Eduardo B. Gadiano Office of the Provincial Government	6. Mr. Davin N. David WWF/KKP, Sablayan, Occ. Mdo.
3. Hon. Walter B. Marquez LGU – Sablayan	7. Mr. Algene Edward M. Francisco Representative, PUP Sablayan Campus
4. Capt. Roberto S. Rodil PCGA PCGA 506.2 Division, Sablayan	8. EnP Agustin C. Mendoza Regional Director, NEDA- MIMAROPA

Six PAMB members were able to attend the 4<sup>th</sup> Quarter PAMB Meeting and successfully finished the management effectiveness assessment last November 28, 2022 at Palayok Ni Jing Restaurant in Sablayan, Occidental Mindoro.

Data sheet two contains the list of generic threats which may be seen in the protected area. The goal is for the respondents to classify how these threats are affecting ARNP and rank them based on their impact – 3 for high, 2 for medium and 1 for low and 0 for those threats which are perceived to be not present or not applicable for ARNP. The overall rating for each threat was determined using this procedure.

1. The threat rating was assigned an equivalent point as follows:  
High = 3 points; Medium = 2 points; Low = 1 point
2. The total maximum score (TMS) was calculated by multiplying the highest possible score/points with the total number of assessment participants.
3. The total score (TS) was computed by aggregating the number of points each threat gets from all participants.



4. The percentage score (PS) of the threat was computed based on the following formula:  $PS = TS/TMS \times 100\%$
5. The Indicative Qualitative Rating was assigned based on the following range of PS: High = 68-100%; Medium = 34-67%; Low = 0-33%

The METT Assessment Form contains 30 questions that reflects the six (6) distinct elements for effective management of protected areas. Each respondent has scored the various parameters ranging from 0 to 3 corresponding the poor to excellent management. The METT Score was computed as follows:

1. Total Maximum Score (TMS)

The Total Maximum Score is important as a reference for determining the rating or overall performance of a protected area in a particular year.

TMS will be taken by multiplying the total number of respondents to the number of applicable questions and the highest rating. That is,

$$TMS = \text{No of respondents} \times \text{No. of Applicable Questions} \times 3 \text{ (highest rating)}$$

2. Rating the Score

The scored by themselves have less meaning if not compared to another year or another element. Hence, the first step to the analysis is getting the ratings (a) by element and (b) of the total scores That is,

- a. By Element

$$\text{Per element Rating (\%)} = \frac{\text{TS for element}}{\text{TMS for element}} \times 100\%$$

Where:

TS = total Respondent Score for each element

TMS = No of respondents x No. of Questions x Highest Rating

- b. Total METT Rating

3. The Indicative Qualitative Rating was assigned based on the following range of PS: High = 68-100%; Medium = 34-67%; Low = 0-33%



## RESULTS AND DISCUSSION

### THREATS AND STRESSOR

A major component of the management effectiveness assessment is to identify key threats and stressors to ARNP. The METT's Data Sheet 2 contains a list of generic threats which may affect the protected area. Identifying these different threats and stressors is important in effective and efficient management in terms of prioritization of programs that will address them.

During the assessment, the ARNP PAMB and key stakeholders were asked which of the specific threats are present and have an effect on the conditions and values of ARNP. The summary of stakeholder's assessment is shown in Annex 1. The 57 pre-identified threats and stressors in the protected area were assessed by the respondents based on their impact in ARNP. Figure 1 shows the average percentage score of the major categories of threats in the protected area.

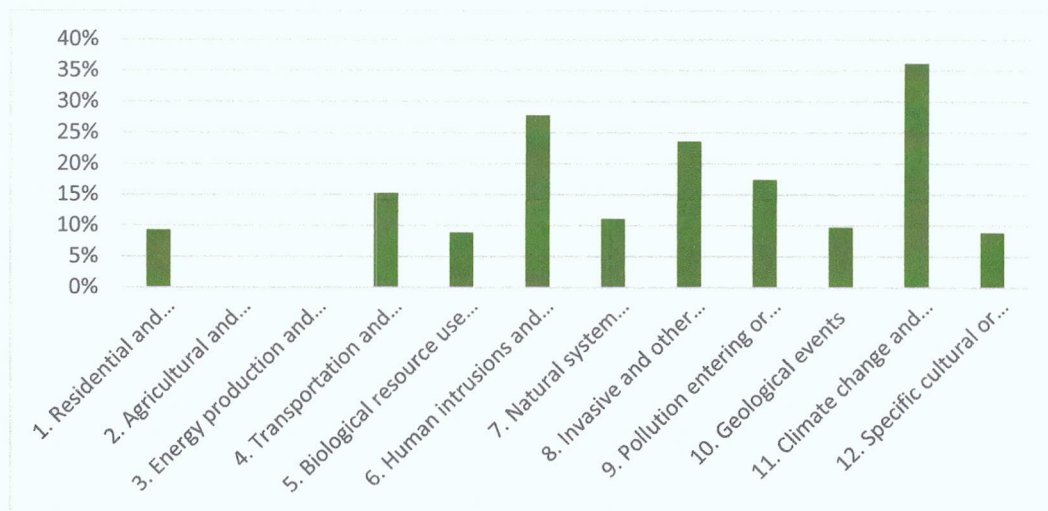


Figure 1. Average percentage scores on the major categories of threats and stressors in protected areas

Using the Percentage Score, the major category of threats and stressors in ARNP were summarized based on the answer of the respondents. The top 10 threats with highest score were obtained and summarized in Table 3.

The percentage score of these major categories were obtained thru the mean of the specific threats listed under it. Of the 12 major categories of threats and stressors in protected area, the highest score given by the respondents was on climate change and severe weather. This is also the only threat that has a medium indicative qualitative rating which means that its impact in ARNP is higher as compared with the rest of the identified threats. The result of the ranking agrees with the observation of PAMO during biodiversity monitoring activities like coral monitoring and mangrove monitoring. Most of the disturbances recorded in ARNP were caused by natural occurrences like typhoon. One example of this is the destruction of corals due to strong waves. The 2<sup>nd</sup> major category with the most impact to ARNP is human intrusions and disturbances in the protected areas. This is due to the presence if illegal poachers of marine resources and disturbances from tourism activities.

Table 3. Percentage score of major categories of threats and stressors in protected areas

MAJOR CATEGORY OF THREATS/ STRESSORS IN PROTECTED AREA	AVERAGE PERCENTAGE SCORE	INDICATIVE QUALITATIVE RATING
1. Residential and Commercial Development within the Protected Area	9%	Low
2. Agricultural and aquaculture within a protected area	0%	Low
3. Energy production and mining within or outside the protected area	0%	Low
4. Transportation and service corridors within the protected area	15%	Low
5. Biological resource use and harm within a protected area	9%	Low
6. Human intrusions and disturbances within a protected area	28%	Low
7. Natural system modifications	11%	Low
8. Invasive and other problematic species and genes	24%	Low
9. Pollution entering or generated within a protected area	17%	Low
10. Geological events	10%	Low
11. Climate change and severe weather	36%	Medium
12. Specific cultural or social threats	9%	Low

The specific threats under the major categories were also summarized and ranked based on percentage scores. The top ten threats were identified. Figure 2 shows the summary of specific threats and its percentage scores while the list of the top 10 threats is in Table 2.

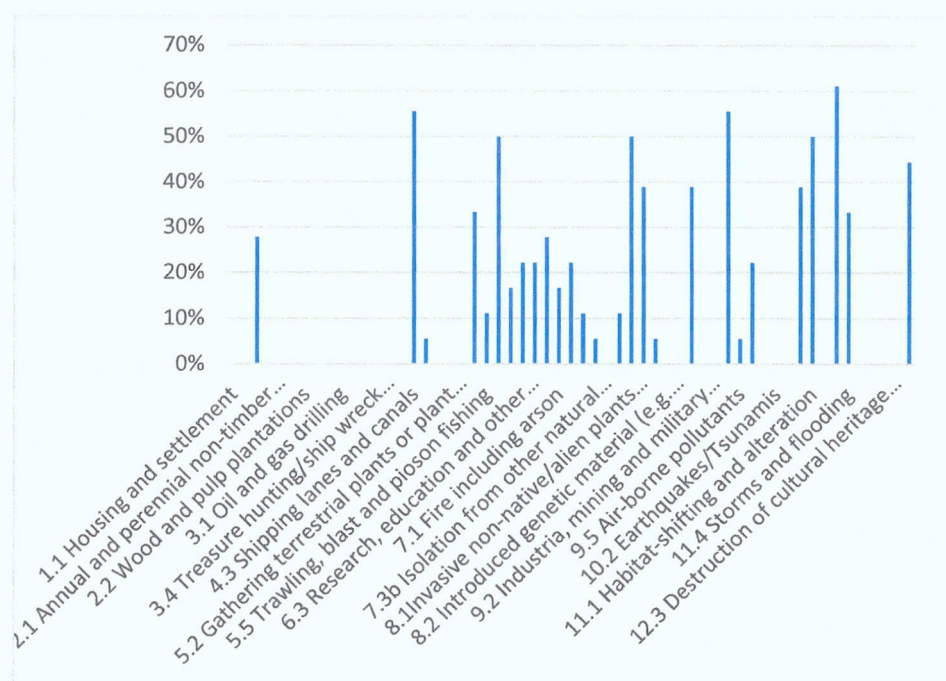


Figure 2. Percentage score of major categories of threats in the protected area



Table 4. Top 10 Threats and Stressors to PA

TOP 10 THREATS/ STRESSORS	PERCENT AGE SCORE	FREQUENCY OF SCORE			
		High (3)	Medium (2)	Low (1)	N/A or ND (0)
11.3 Temperature extremes	61%	3	0	2	1
4.3 Shipping lanes and canals	56%	1	3	1	1
9.4 Garbage and solid waste	56%	1	2	3	0
6.1 Recreational activities and tourism	50%	1	1	4	0
8.1 Invasive non-native/alien plants (weeds)	50%	2	1	1	2
11.1 Habitat-shifting and alteration	50%	3	0	0	3
12.5 Loss of support to communities and projects due to changes in political leadership possible impact in change of leadership	44%	1	1	3	1
8.1a Invasive nonnative/alien animals	39%	0	2	3	1
9.1b Sewage and waste water from protected area facilities (e.g., toilets, hotels etc)	39%	0	2	3	1
10.4 Erosion and siltation/deposition (e.g., shoreline or riverbed changes)	39%	0	2	3	1



### Temperature Extremes

Rising temperatures increase the risk of irreversible loss of marine and coastal ecosystems. Extreme temperature events have occurred in all ocean basins in the past two decades with detrimental impacts on marine biodiversity, ecosystem functions, and services (Cheung W., *et al.* 2021).

In ARNP, one of the major impacts of temperature extremes is the Crown of Thorns (COTs) outbreak in 2018 and 2019. Though there are several factors that affect the presence of COTs in reef areas, increase in sea temperature can enhance the probability of survival of COTs (Uthicke S., *et.al.* 2015).

### Shipping Lanes and Canal

ARNP is included in the major sea lanes of the Philippines. It is proximal to two major nautical highways, the Apo West Pass and Apo East Pass. Being such, certain maritime incidents which mainly involve ship grounding have been recorded in ARNP. In 2020, MV Star San Carlos owned by Atienza Interisland Shipping Line ran aground in the eastern part of the reef causing around 463.72 square meters which was valued at around five (5) million pesos. In 2022, another vessel, the FV Monalinda 85, also ran aground at the southeast part of the reef. This has caused damage to around 191.55- square meters of reef area with an estimated value of around two (2) million pesos.





Additionally, the level of oil and grease in ARNP waters does not pass the standard set by the Environment Management Bureaus for Marine Protected Waters (Class SA) due to its proximity to sea lanes. In 2021 and 2022, the average level of oil and grease in ARNP waters, based on the water quality monitoring assessment reports, are 3.5 mg/L and 5.9 mg/L. The standard oil and grease for Class SA waters is 1 mg/L.



### Garbage and Solid Waste

Included in the code of conduct being practiced in ARNP is to bring in departure all accumulated garbage/wastes during the course of stay inside the protected area. Over the years, wastes generated by tourists and rangers on duty are not a problem in ARNP.

Marine litter, however, is a serious threat in ARNP. Garbage collected along the shoreline of Apo Island were mostly plastic bottles, caps, Styrofoam and nylon string. Origin of these wastes are from Asian countries. This year, 214 garbage bags of trashes were collected and brought back to mainland Sablayan for disposal. On top of this, approximately 250 kilograms of ghost nets were retrieved from reef areas of ARNP.

### Recreational Activities and Tourism

Ecotourism is one of the major activities in ARNP. Prior to the pandemic, the average tourist arrival in ARNP is around 6,000 individuals. To control this, ARNP has an existing carrying capacity of 104 tourists per day, in Apo Island. This is set to ensure that the quality of physical resources in ARNP meets the standard. However, violations on wildlife interaction are evident. Tourists, especially divers and snorkelers, tend to violate guidelines on wildlife interaction like keeping minimum distance from sea turtles and cetaceans when swimming. Another threat is the use of artificial light in the picnic ground which is disturbing to sea turtles at night. Capacity and number of rangers to monitor tourism activities is lacking.



### Invasive Non-Native/Alien Plants

Apo Island and Apo Menor are the island with existing vegetations comprising of both mangrove and beach forest. Several invasive alien species were recorded in Apo Island. These includes *Agave* sp. Locally known as maguey, Siam weed (*Chromolaena odorata*), Ipil-ipil (*Leucaena leucocephala*), Wild licorice (*Abrus precatorius*). Inventory of these AIS are still unknown.





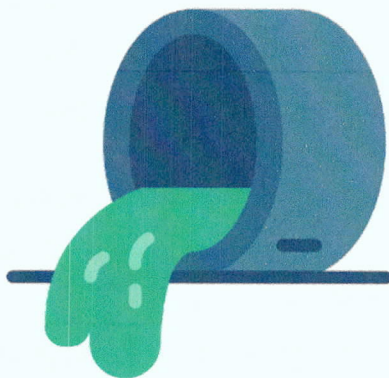
### Loss of Support to Communities and Projects due to Changes in Political Leadership Possible Impact in Change of Leadership

Since its declaration as a no-take zone in 2011, ARNP PAMO had little to no interventions to displaced fisherfolk. Aside from regular community education and public awareness, which has no direct impact on their livelihood, the implementation of Biodiversity Friendly Enterprise (BDFE) is the only program that has support to local communities. The three (3) registered people's organizations of displaced fisherfolk have undergone several training for the establishment and strengthening of their organization. They've also been assisted in drafting their project proposal for possible funding. After more than 3 years since its implementation, no financial assistance has been downloaded to them, both from LGU and the DENR. The change in leadership for both offices has been a great factor as each head of the agency has their own priority program.

### Invasive Non-native/Alien Animals

There are three (3) identified invasive non-native or alien animal in ARNP and all of it were found in Apo Island. Brown Rat (*Rattus norvegicus*) and Orienta House Rat (*Rattus tanezumi*) were seen in ARNP as early as \_\_\_\_, when the construction of the Apo Lighthouse commenced. Theory of those in ARNP back then says that these rats were from the barge that carried supplies and materials for the construction. Right now, these rodents were threats to the small chicks that were laid in Apo Island.

Monitor Lizard (*Varanus* sp.), on the other hand, were recorded in 2020. The origin of this reptile is still unknown. Traps were set up to capture it as it is a known predator of bird and turtle eggs. In 2022, it was captured and turned over to the Wildlife Rescue Center in Rizal, Occidental Mindoro for assessment. It will be released back into the wild once capable.



### Sewage and waste water from protected area facilities (e.g., toilets, hotels etc)

In Apo Island, where there are established buildings for tourists and rangers, there are 14 comfort rooms. Each septic tank is built with 3 compartments which is the standard to ensure that the discharge water is safe. The level of coliform in ARNP water, which measures the pathogens coming from human feces, is still within the Class SA Standard. Though the sewage and waste from the comfort rooms do not pose harm today, it is still a major threat to the protected area especially if the influx of tourists is not regulated.



**Erosion and siltation/deposition (e.g., shoreline or riverbed changes)**

Increased coastal erosion is one of the impacts of sea level rise (Leatherman et al., 2000; Voudoukas et al., 2020). As the sea level in Southeast Asian seas rise (Strassburg et al. 2014), the western coastline of the Philippines is at risk of retreating significantly. In fact, the entire Southeast Asia is projected to have one of the highest sandy beach retreat due to sea level rise by 2100 (Voudoukas et al., 2020). Extreme weather events such as storms may also exacerbate coastal erosion from sea level rise. Following climate trends, extreme weather events are expected to

increase in frequency and severity. Storm clustering may induce significant beach erosion (Karunaratna et al., 2014). In Apo Reef Natural Park, sandy beach retreat especially in Apo Island will endanger the populations beach-nesting fauna like the Black-naped Tern (*Sterna sumatrana*), Philippine Megapode (*Megapodus cumingii*), Hawksbill Turtle (*Eretmochelys imbricata*), and Green Turtle (*Chelonia mydas*), among others.



## MANAGEMENT EFFECTIVENESS

The overall management effectiveness rating of ARNP is 91.63%, which qualifies as a “high performing protected area”. The overall score includes both the score from the core questions as well as bonus points garnered by the ARNP for additional practices. The core score is 77.25%, while the score from the additional bonus points totals 14.38%. The bonus points are important indicator of progress in terms of the process and higher-level practices for protected area. The summary of METT Score is shown in Figure 3.



Figure 3. Average percentage scores on the major categories of threats and stressors in protected areas Figure 3. Summary of METT Score of ARNP, 2022

CONTEXT 100%	PLANNING 116.67%	INPUT 75.71%	PROCESS 71.31%	OUTCOME 125%	OUTPUT 61.11%
Where are we now?	Where do we want to be?	What do we need?	How do we go about it?	What were the results?	What did we achieve?
Assessment of importance, threats and policy environment	Assessment of protected area design and planning.	Assessment of resource needed to carry out management	Assessment of the way the management is conducted	Assessment of the implementation of management programs and actions; delivery of products and services	Assessment of the outcomes and the extent to which they achieve the objectives

### Management Categories

#### 1. Context (100%)

The context category includes the legal status of ARNP. In 2018, the enactment of RA 11038 also known as Enhanced National Integrated Protected Areas System Act of 2018 as amendment to RA 7586 or the NIPAS Act of 1992, paved way for ARNP to be declared as a National Park. Through this law, the Protected Area Management Office



(PAMO) was created. Prior to this, ARNP was declared as a Natural Park in 1996 by virtue of Presidential Proclamation No. 868 signed by the then President Fidel V. Ramos.

## 2. Planning (116.67%)

The Planning category assesses the overall protected area design as well as the plans that guide how it is currently being managed. As a management parameter, this category considers the design, guiding framework, and the strategic direction that PA management will take to achieve the goals and purpose of the protected area. The indicators that are measured under the planning category include: (a) presence of a management plan; (b) presence and adequacy of regulations; (c) protected area objectives; and (d) appropriateness of the design (shape and size) of the protected area. ARNP scored 82% in this category.

The core METT Score for planning is 88% but an additional 29% were earned from bonus questions. This indicates that in terms of planning, the management of ARNP has taken extra measure to ensure that ARNP has a sound management plan. The summary of each indicator under planning can be seen in Figure 4.

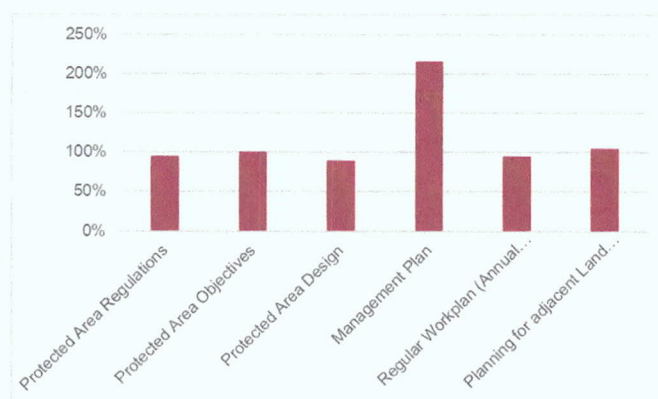


Figure 4. Summary of Planning Indicators

### 2.a. PA Regulations (94%)

The PAMB Resolution No. 005 Series of 2007 and the PAMB Ordinance No. AR07-001-1 contains all most of the rules and regulations inside the protected area. The passage of the ordinance declares the whole of ARNP as no-take zone and set prohibitions and penal provisions. Though this set of regulations have guided the PAMO in law enforcement, it needs to be updated and realigned to the IRR of RA 11038 and new department administrative orders of DENR.

### 2.b. Objectives (100%)

There is general consensus among the PAMB members that the PA is currently being managed based on the set in the drafting of the general management plan. Due to this, a high rating was obtained under this sub-category. Table 5 contains the list of objectives with the corresponding goals.

Table 5. Goals and Objectives of ARNP based on PAMP, 2022-2031

GOALS	OBJECTIVES
1. The 15,799 hectares core zone of ARNP is protected from illegal activities	1.1. To improve the enforcement of PA laws and other related environmental law within the protected area
	1.2. To capacitate the law enforcers in patrolling and monitoring
	1.3. To increase the protection of ARNP through demarcation
2. The status of ecosystems and biodiversity in ARNP are maintained or improved.	2.1. To identify trends in the condition of ecosystems and biodiversity
	2.2. To address identified threats to ecosystems and prevent further decline in ecosystem health
	2.3. To enhance the resilience of ecosystems in Apo Reef Natural Park to Climate Change
3. The ecotourism in Apo Reef Natural Park is enhanced by complying with the guidelines on sustainable tourism specially for SCUBA diving and snorkeling	3.1. To minimize the impact of tourism to coastal and marine resources
	3.2. To provide conducive and environment-friendly tourism facilities and equipment for the enjoyment of tourists
	3.3. To enhance the ecotourism services in ARNP
4. The linkages with other institutions: local and international, whose activities focus on coastal and marine resources protection and conservation, are enhanced	4.1 To increase the participation of stakeholders in all undertakings of ARNP
	4.2 To strengthen the membership of stakeholders in ARNP PAMB
	4.3 To assist registered organizations of displaced fisherfolks of ARNP in having alternative livelihood
5. Increased awareness/knowledge of different sectors on the importance, protection & sustainable management of ARNP	5.1. To highlight the importance of conservation and protection of ARNP and other coastal and marine resources
	5.2. To promote youth involvement in the conservation of ARNP
6. Well-implemented programs/activity/project of ARNP	6.1. To provide conducive workplace and working environment with well-maintained equipment and enough manpower for the whole PAMO operation
	6.2. To effectively manage ARNP through continuous assessment of management strategies and provision of roadmap of activities
	6.3. To create a system for the organization, accesibility and security of data
	6.4. To provide Supplies, materials and equipment necessary for the operation of PAMO
	6.5 To implement the approved Staffing Pattern under RA 11038



**2.c. Design (89%)**

The size and configuration of ARNP was based from a suitability assessment conducted in 1995, which became the basis for the technical description of the boundaries specified in Presidential Proclamation No. 868 issued in 1996. The delineation of the management zones was conducted along with the drafting of the management plan. The key considerations for the management zone is the area being utilized by tourists, vulnerability of areas, and marine resources. The buffer zone, however, is not included in the declared area of ARNP in RA 10038. The management zone can also be improved with further studies.

**2.d. Management Plan (216%)**

The Protected Area Management Plan (PAMP) of ARNP has been outdated since 2010. In 2019, the updating of management plan has commenced. It was finished in 2021 and was adapted by the PAMB thru ARNP PAMB Resolution No. 005 series of 2021. Though it has not yet been affirmed by the DENR Secretary, the management plan is being implemented by PAMO.

Additional 5.17 points were given by the respondents. More than 50% of the PAMB has participated in the drafting of the management plan which ensures that majority of the stakeholders of ARNP were consulted. The management plan will also be reviewed every 3 years and will be updated after 10 years. The result of the Comprehensive Resource Assessment conducted in 2017 served as the basis for management planning. There is also an existing PAMB Operations Manual. ARNP, however, has no existing enforcement manual but all enforcement activities were given priority in the PAMP.

**2.e. Regular Workplan (Annual Work and Financial Plan) (94%)**

ARNP has two (2) major workplans that are being implemented every year. The regular workplan is being downloaded by the DENR. Its source of funds is through the General Appropriations Act which is the basis of the budget for all national agencies. The other workplan is from the Integrated Protected Area Fund (IPAF). The work and financial plan for IPAF is being presented by PAMO to PAMB for approval. Once approved and signed by the PAMB Chair, the PAMO can implement the workplan immediately.

On top of these workplans, there are sub workplans that were downloaded to PAMO by the Regional office and the Biodiversity Management Bureau. The funds for these sub workplans were downloaded through Sub allotment allocation.

**2.f. Planning for adjacent Land and Water Use (105%)**

Currently, planning for adjacent land and water use does not take into account the conservation and management needs of ARNP. However, activities in these areas are not detrimental to the conditions of the protected area.

Within the Municipality of Sablayan, there is significant degree of collaboration between the PAMB, through the PA Office, and the Municipal LGU. The Sablayan LGU is a member of the PAMB. The LGU is well informed and consulted about significant policies and decisions implemented by the PAMB. The PA Office and Municipal LGU also share in the responsibility of managing ARNP. Conservation initiatives are currently handled mainly by the PA Office, while the regulation and promotion of tourism is managed by the LGU. In terms of programmatic planning, the LGU has provided inputs in the crafting of the existing PA Management Plan, and will continue to be extensively involved in the updating of the management plan as a member of the PAMB.

The establishment of Sablayan- Calintaan and the approval of the Municipal Tourism Development Plan, which both considers the management of ARNP, provided extra points for this parameter.

### 3. Input (75.71%)

The Input category assesses the availability and sufficiency of resources needed for effectively conserving and delivering the objectives of the protected area. This category looks into eight focus areas that cover human resources, financial, social capital, equipment, and information vital to management. In the context of METT, indicators under this category focuses on presence of adequate technical information from resource inventory; number and capacity of staff; sufficiency and security of budget, law enforcement, and fees and revenues.

ARNP scored 73% in this component. Figure 5 summarizes the scores obtained from input-related indicators:

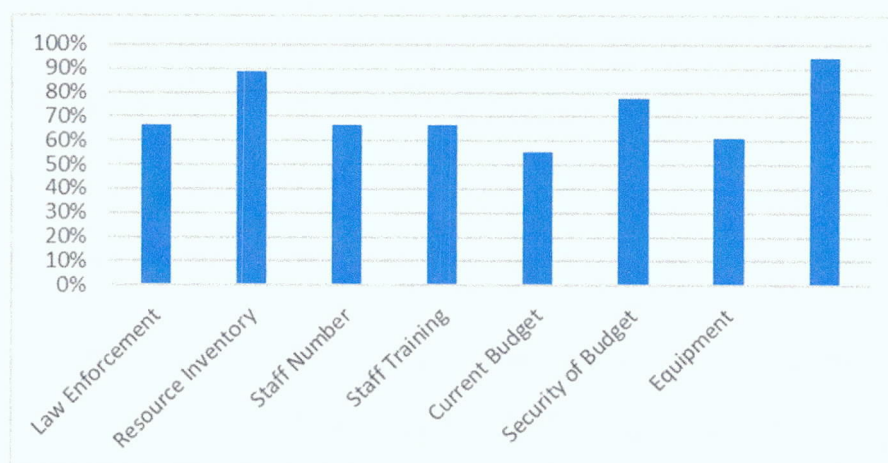


Figure 5. Summary of Input Indicators

#### 3.a. Law Enforcement (67%)

Law enforcement in ARNP is being conducted by the Task Force Marine and Apo Reef Law Enforcement for Nature (TF MARLEN). TF MARLEN is a multi-stakeholder marine law enforcement team composed of representatives from the DENR, LGU Sablayan, Philippine Army, Philippine National Police,



Philippine Coast Guard and other organizations/institutions tasked to enforce and implement laws, rules and policies within the municipal waters of Sablayan and ARNP. TF MARLEN also includes several NGOs with advocacy on conservation, such as the WWF and Kabalikat Civicom. Since its establishment in 2006, it has implemented the “no-take zone” policy in ARNP. Though very effective, some of the stakeholders included in the taskforce lacks commitment. As of this year, the Local Government Unit of Sablayan, the Philippine National Police and the Philippine Army, are the only agencies that provides assistance to ARNP in terms of law enforcement.

**3.b. Resource Inventory (89%)**

This component assesses whether there is enough information available to park managers and the PAMB to effectively manage the protected area. Overall, the PAMB believes that information on the critical habitats, species, ecological processes and other conservation values of ARNP is sufficient for most areas of planning and decision making relevant for PA management.

The regular resource monitoring being conducted in ARNP is the implementation of Biodiversity Monitoring System (BMS). Aside from this, coral and mangrove monitoring are also being conducted. Additionally, water quality is also being monitored under the coastal and marine ecosystems management subprogram. These programs were funded under GAA. Though improvements in resource monitoring were observed, there other monitoring activities which are not directly funded and is being conducted with the help of partner-NGOs. One of which is the monitoring of sea birds in ARNP.

**3.c. Staff Number (67%)**

Currently, ARNP has eighteen (18) personnel. Six (6) of whom are personnel of CENRO Sablayan who are detailed in ARNP while the rest are hired under contract of service. The implementation of staffing pattern under RA 11038 will ensure that enough human resources is available in ARNP. 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.

**3.d. Staff Training (67%)**

The personnel of ARNP attended various trainings that improved their capacity in biodiversity monitoring and law enforcement. However, most of these trainings are confined to the permanent employees only. All staff must undergo several capacity buildings in order to ensure the proper management of ARNP.

The PAMB, through PAMB Resolution No. 003 series of 2020, has approved the provision of training on law enforcement and first aid to all PAMO Staff and has instructed the PAMO to include the activity in the yearly Work and Financial Plan of IPAF.

**3.e. Current Budget (56%)**

The financial resources of ARNP for management come from three main sources. A huge percentage of the total budget of ARNP comes from the national government, through the annual budget allocation for the DENR. The DENR allocates budget for park operations, personnel salary, and maintenance and operating expenses. The level of budget is based from the work and financial plans prepared by the PA Office and adopted by the PAMB, which goes through the regular government budget cycle.

The ARNP also generates income from user fees which accrues to the Integrated Protected Area Fund (IPAF). Majority of the IPAF revenues come from entrance fees of both diving and non-diving tourists, rentals of facilities in Apo Island, and vessel entry fees. Presently, ARNP ranks one of the highest revenue-earning protected areas in the country. However, during the onset of pandemic, ARNP has been closed to tourists until April 2022. With this, the income of the park has decreased tremendously which causes conservative budget allocation for this year through prioritization of activities.

**3.f. Security of Budget (78%)**

There is a reasonably secure budget for regular park operations, management and implementation of conservation initiatives. There is stable support from the DENR for the PA's core annual budget, strong collaboration with partner NGOs and other development partners, and an increasing trend in visitor arrivals which translate into increased collection from tourism-related fees year-on-year. Innovations and initiatives of the PA, which were previously reliant from outside funding, have now started to be integrated in the regular budget cycle of the PA. Moreover, ARNP has set up its IPAF retention income account, pursuant to the implementing guidelines of Republic Act No. 10629. This enables ARNP to facilitate faster utilization of its IPAF.

The drafting of the Protected Area Finance Plan provides a glimpse on the fund security of the PA. Aside from the COVID-19 Pandemic, there is no other threat in the fund allocation for ARNP.

**3.g. Equipment (61%)**

ARNP has been provided with various technical and scientific equipment for patrolling and biodiversity monitoring. This year alone, high -end equipment like underwater camera, water checker, and marine radar were also procured. Watercrafts, highspeed boat and outrigger boats, since they are regularly used, have high maintenance. They should be regularly repaired and maintain to ensure that patrolling within ARNP is being carried out. Radio communication equipment have also been provided. The issue on its maintenance lies on the corrosion of its parts due to high salinity.

Though lots of new equipment have been provided, its maintenance should be given priority.



### 3.h. Fees (94%)

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.

ARNP PAMB Resolution No. 012 series of 2010 sets the user's fee to be collected inside the park which increased by 20% every 2 years until 2020. Until now, the schedule of park fees in 2020 is still being implemented.

## 4. Process (71.31%)

The Process category looks into the way in which management is conducted. It evaluates the aspects of efficiency and appropriateness of interventions in the context of protected area management. Figure 6 presents the scores obtained from process-related indicators:

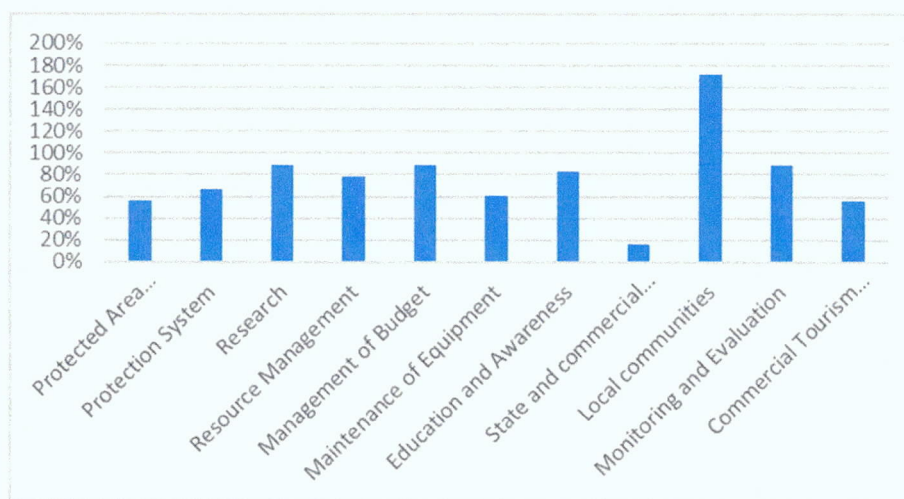


Figure 6. Summary of Process Indicators

### 4.a. Protected Area Management Demarcation (56%)

The boundary of ARNP is known and has already been mapped in the database of DENR. Physical demarcation is not feasible as all the corners of ARNP lies on a very deep part of the ocean and has strong waves and current. The buoys that should be use in its demarcation must be a specialized one to withstand the condition. Digital demarcation is another type of activity wherein the boundary of ARNP will be included in the nautical map. This will guide the mariners in their navigation near the PA. However, it has limitation. The digital boundaries are only visible using equipment with GPS. Small scale fisherfolk fishing in adjacent fishing ground might not be aware that they are inside ARNP specially at night.

#### 4.b. Protection System (67%)

Existing protection systems are moderately effective in controlling access/resource use in the protected area. For instance, while the policy on the “no take zone” is implemented throughout the protected area, there are still areas for improvement in terms of its enforcement. Limitations on equipment, patrol boats, and number of staff, to name a few, limit the geographic coverage of the patrols. These limitations also hinder the PA Office to conduct effective 24/7 patrols, particularly night patrols. With the presence of marine radar, protection of ARNP is expected to improve.

#### 4.c. Research (89%)

Researches being conducted in ARNP is one of the major source of database especially on key biodiversity monitoring. Together with partner-academe, data gaps of ARNP are slowly being filled. Table \_\_ the summary of researches conducted in ARNP from 2018-2022:

*Table 6. Researches conducted in ARNP, 2018-2022*

Assessing the status of giant clams and advancing culture techniques	Patrick C. Cabaitan	2018
Vulnerability assessment of Apo Reef Natural Park	FORESTEREI Consult and Landscape Services	2018
Preliminary observations of macrobenthic invertebrates and megafauna communities in the upper mesophotic coral ecosystems in Apo Reef Natural Park, Philippines	Timothy Joseph R. Quimpo, Patrick C. Cabaitan, Ronald Dionnie D. Olavides, Edwin E. Dumalagan, Jr., Jeffrey Munar & Fernando P. Siringan	2018
Spatial variability in reef-fish assemblages in shallow and upper mesophotic coral ecosystems in the Philippines	Timothy Joseph R. Quimpo, Patrick C. Cabaitan, Ronald Dionnie D. Olavides, Edwin E. Dumalagan Jr., Jeffrey Munar & Fernando P. Siringan	2018
Juvenile scleractinian assemblage and its association with adults and benthos at shallow and upper mesophotic depths in fringing and atoll reefs in the Philippines	Ritzelle L. Albelda, Patrick C. Cabaitan, Frederic P. Sinniger, Edwin E. Dumalagan Jr., Timothy Joseph R. Quimpo, Ronald Dionnie D. Olavides, Jeffrey C. Munara, Cesar L. Villanoy & Fernando P. Siringan	2018
Ranger and Community Perception Study	Protect Wildlife funded by USAID	2019
Microplastic contamination determination sampling	ERDB	2019
Spatio-temporal Monitoring and Rehabilitation Technology of Coral Reefs (SMaRT Coral)	Dr. Victor S. Ticzon, University of the Philippines Los Banos	2020

Presently, all scientific research activities are regulated and require PAMB clearance before being implemented. However, during the threat assessment, it was noted that some research methods can post damage, either major or minor,



to the natural resources in the area. While the PAMB has the authority to review and screen research methodologies prior to the conduct of the research, several PAMB members noted that the body lacks the technical knowledge and skill to determine if a particular methodology could have potential adverse impact to Apo Reef. As a result, the action of the PAMB would only be reactive (in response after research is conducted) rather than proactive.

**4.d. Resource Management (78%)**

There is strong indication of active management of habitats and species in ARNP, as evidenced by the different biodiversity conservation programs implemented by the PA Office. The biomass of fishes in ARNP, 34 kg/ 250 sqm, is still under the high category (Hilomen et.al, 2000). This is despite the declining hard coral cover of ARNP.

ARNP has shown consistent degradation brought about by large scale natural disturbances. From 2017 to 2022 for example, mean hard coral cover dropped from 21% to 11%. Frequent high intensity storm events and repeated crown of thorns (*Acanthaster spp.*) outbreaks have negatively impacted the hard coral community of the reef complex. The physical protection of ARNP from illegal fishing activities is the main contributor in keeping ARNP stable in the face of increasing frequency of natural disturbance. The associated fish community, particularly the large piscivores, invertivores, and herbivores, plays an important positive role in the recovery of hard corals across the reef complex. Protection from fishing, however, is still not enough to reverse the declining health of the reef. It is important that the government and stakeholders realize the importance of a unified effort to protect and rebuild ARNP (Ticzon et al, 2022).

**4.e. Management of Budget (89%)**

The budget of ARNP is directly being managed by the PASu, subject to usual accounting and auditing procedure. The utilization of fund is in line with the approved work and financial plan. The Financial Plan of Apo Reef Natural Park for year 2022-2031 was formulated using secondary data of the implemented projects and programs in ARNP. This contains the budget requirement for the implementation of management strategies which addresses the identified issues and concerns. The costing of the activities to be implemented are based on the existing Unit of Work Measure (UWM) of the DENR and was subjected to inflation rate every year for the projection of budget need. The financial plan was completed with the help of the United Nations Development Programme- Biodiversity Finance Initiative (UNDP-BIOFIN) through series of Protected Area Finance Planning Workshops.

**4.f. Maintenance of Equipment (61%)**

The score of the respondents to the maintenance of equipment emanates from the currently non-operation of all watercrafts of ARNP. All watercraft of

ARNP-PAMO needs to be repaired (Table 7). Both the 24- and 30-footer speedboat remain non-functional as of this writing. The welding of the stainless frame as well as the fiber-coating of the boat roofing were completed this quarter. The engine for this speed boat has already been delivered and it shall be installed within the quarter. Aside from these two speedboats, the outrigger boat (MBCa Jerlyn) is also currently dry-docked and its repair is ongoing. Several parts of the boat will be replaced including the sternpost and outrigger boom.

*Table 7. Parts of watercraft that were repaired from September 21 to December 2, 2022.*

<b>Watercraft</b>	<b>Parts Repaired</b>	<b>Status</b>
MBca Jerlyn	Platform	For repair (replacement of sternpost, outrigger boom, and pilot house, and strengthening of boat hull)
24-footer Hi-speed Watercraft	None	For repair (steering cable for replacement, repainting of boat hull, and repair of engine)
30-footer Hi-speed Watercraft	Stainless frame and fiber-coated roofing	For repair (engine replacement and installation)
Spotter Boat	None	Unserviceable

#### **4.g. Education and Awareness (83%)**

ARNP PAMO focused in strengthening information drive and awareness-raising campaigns, resulting in an overall improvement in this specific area of management. PAMO has developed various CEPA materials, Adaption of Green Fins, Biodiversity Magazine and species guidebook.

The PA Office continues to harness social media as an important medium not just to promote the aesthetic beauty of Apo Reef and attract tourists, but also to raise awareness on its ecological importance.

Additionally, the mascot of the flagship species of ARNP, the Napoleon Wrasse named Napnap, was launched in 2018. Napnap served as the face of ARNP which aims to raise support for the conservation and protection of ARNP.

#### **4.h. State and commercial neighbors (17%)**

This component is strongly linked to the component for planning for adjacent land and water use". State neighbors of ARNP include the Municipality of Coron, Palawan and other LGUs with jurisdiction over marine areas adjacent to ARNP. Commercial neighbors, on the other hand, refer to private entities or groups with commercial interests in areas adjacent to or have an impact to ARNP. The full protection of ARNP entails that the Coron MPA network, as well as its adjacent areas, needs to be adequately protected. To attain this,



proper and sufficient level of coordination, partnership and harmonization of efforts among all management units is vital.

Aside from enhanced protection, partnerships with state and commercial neighbors can benefit ARNP's tourism sector. During the assessment, there were numerous suggestions of linking-up with the Provincial Tourism Office, through the Sablayan Tourism Office, to promote Apo Reef Natural Park during province-wide events and activities. There were also suggestions for the Provincial Tourism Office to initiate coordination among various tourism businesses and operators within the Province of Occidental Mindoro to develop a tourism package and establish a centralized registration and tourism monitoring system.

**4.i. Indigenous People**

This element is not applicable and was not rated since there are no inhabitants within ARNP.

**4.j. Local communities (172%)**

Despite the closure of ARNP to any kind of fishing-related activities, the respondents perceived the management to have a strong tie with the local community. This might be the result of the CEPA Activities explaining the importance of the conservation and protection of ARNP.

Resistance can still be seen from local fisherfolks but because of the strict law enforcement, illegal activities decreased through time. Additional scores were also garnered for this indicator as there is open communication and trust between local, stakeholders and protected area managers through series of meetings and dialogues. There are also programs to enhance community welfare, while conserving protected area resources that are being implemented such as Biodiversity-friendly Enterprise and Capacity building. Local communities also actively support the protected area by joining environmental celebrations like Month of the Ocean and the International Coastal Clean-up Day.

**4.k. Monitoring and Evaluation (89%)**

The monitoring and evaluation of the activities being carried out by PAMO is being done through management effectiveness assessment. This is the only activity that involves the PAMB with regards to monitoring and evaluation. Administratively, the DENR requires monthly, quarterly and annual reports from PAMO to track the progress of activities and ensure that the targets are done in accordance to time and budget allotted.

Apart from these, no other monitoring and evaluation activities are being conducted. The parameters being used were, in the case of MEA, perception of PAMB members, and physical and financial performance in the case of DENR. There is no monitoring and evaluation tool that takes into account the biodiversity resources of the PA.

#### 4.1. Commercial Tourism Operators (56%)

Presently, there is contact between the PAMB/PA Office and operators of tourism facilities linked to ARNP, but these are largely confined only to administrative or regulatory matters (e.g., booking and registration of tourists, compliance with policies). Although commercial tour operators benefit from ARNP, they are not fully engaged as partners in conservation and there are very limited collaboration and cooperative activities to maintain the values and condition of the protected area. During the assessment workshop, there were even issues raised that some operators are not fully aware of the policies and regulations in the protected area, while those who are aware about the policies have different levels of commitment to adhere to these policies.

Private sectors and Peoples Organizations are encouraged to be part of the ARNP PAMB but to no avail until now.

#### 5. Outcome (125%)

The output category evaluates the goods and services of the protected area as a product of its management. Unfortunately, in the METT analysis, this category is only evaluated in terms of the adequacy of visitor facilities as well as in terms of economic benefits derived from PA management and the perceived condition of significant values of the PA. The figure below presents the summary of METT scores in the outputs and outcomes-related indicators.

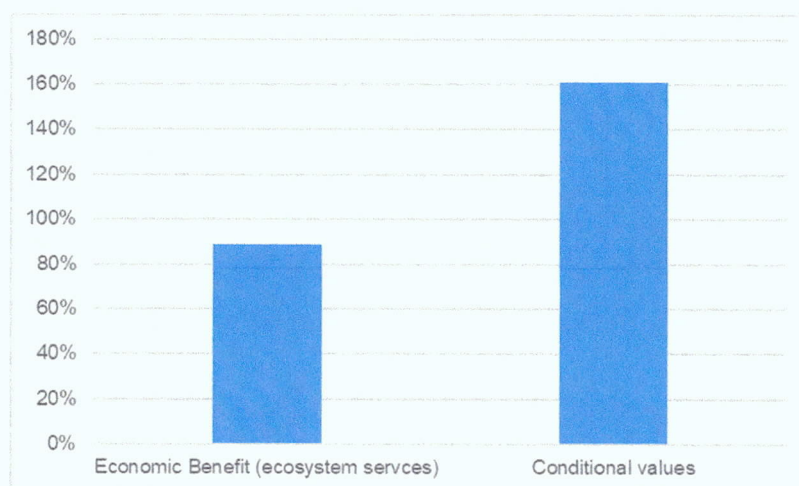


Figure 7. Summary of Outcome Indicators

##### 5.a. Economic Benefit (89%)

ARNP provides economic services to local communities through ecotourism. This 2022, six (6) local tour boats, 3 dive resorts, 2 tour operators, tour guides and caterers have directly benefited and given livelihood by ARNP. On top of this, 2 support personnel were hired whose salary are charged from the income of ARNP (IPAF).



ARNP has also been providing economic services to local fishers by being one of the sources of fish larvae for the municipal waters. However, there's a data gap on the actual spill over of ARNP.

**5.b. Conditional Values (161%)**

This parameter measures the perception of the respondents on the condition of important values of protected areas as compare to when it was first designated.

The core score for this parameter is only 66.67%. The perception of the respondents may come from the declining coral cover of ARNP. In 2017, ARNP has a \_\_\_\_ coral cover. In 2022, the coral cover of ARNP was \_\_\_\_, both under poor category (Ticzon, et al, 2022). Despite this, the fish biomass of ARNP remains in the high category. The mangrove and beach forest are also intact and there is an increase in the recorded sea turtle emergence in Apo Island.

Albeit the low core score, additional points were given to the management for basing the assessment of conditions of resources on research. In cooperation with partner-academe and NGOs, the monitoring of resources in ARNP has become more science-based. Additionally, different policies were also crafted based on the result of these assessments. Activities to maintain key biodiversity and ecological values were also given priority as a routine part of park management.

**6. Output (61.11%)**

This indicator only assesses whether visitor facilities and services are adequate for the current levels of visitation in a protected area. For ARNP, the importance of tourism is widely acknowledged. Tourism is a primary source of economic benefits and a major contributor to the IPAF of ARNP. The presence of ecotourism facilities in ARNP is a double edge sword. While the welfare and comfort of the tourist and ARNP is considered, it should also be considered that the ecosystem in ARNP is permanently altered because of these structures.

## RECOMMENDATIONS

The management of ARNP has relatively high scores for both context and planning element. For the planning component of ARNP, strong linkage with adjacent municipalities and other stakeholders should be established. This is to mainstream the PA Management Plan with other development plans like Integrated Coastal Management Plan, Comprehensive land use Plan and Tourism Development Plan.

The inputs for an effective management needs improvement. The management of ARNP needs to prioritize the maintenance of the equipment and capacity building of staff. The realization of the staffing pattern based on RA 11038 is also a major leap in the management. It ensures the right manpower to manage ARNP effectively and efficiently. The budget of the PA should also be secured without compromising the ecological integrity through the implementation of sustainable ecotourism.

The process component should also be improved. The demarcation of ARNP should not just be done digitally. Physical demarcation is necessary. There should be research on what type of mooring system and buoys should be used. Again, the maintenance of equipment and facilities should be given priority,

Centralized computer booking system for tourism should also be developed. The system is recommended to be in a web-based platform to enable tour operators to book online. Coordination with the Provincial Tourism Office, through the Sablayan Tourism Office, to promote Apo Reef Natural Park during province-wide events and activities should also be done. The Provincial Tourism Office could also initiate coordination among various tourism businesses and operators within the Province of Occidental Mindoro to develop a tourism package and establish a centralized registration and tourism monitoring system.



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# ANNEXES



### Annex 1- Summary of Data Sheet 2: Threats and Stressors in the Protected Area

THREATS/ STRESSORS		PAMB MEMBERS						Total
		Roberto S. Rodil	Fernando B. Dalangin	David N. David	Algene Edward M. Francisco	Grace C. Diamante	John Paul Aristotle Ramos	
1	1.1 Housing and settlement	0	0	0	0	0	0	0
	1.2 Commercial and industrial areas	0	0	0	0	0	0	0
	1.3 Tourism and recreation infrastructure	2	1	1	0	0	1	5
2	2.1 Annual and perennial non-timber crop cultivation	0	0	0	0	0	0	0
	2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	0	0	0	0	0	0	0
	2.1b Illegal drug cultivation	0	0	0	0	0	0	0
	2.2 Wood and pulp plantations	0	0	0	0	0	0	0
	2.3 Livestock farming and grazing	0	0	0	0	0	0	0
	2.4 Marine and freshwater aquaculture	0	0	0	0	0	0	0
3	3.1 Oil and gas drilling	0	0	0	0	0	0	0
	3.2 Mining/quarrying	0	0	ND	0	0	0	0
	3.3 Energy generation, including from hydropower dams	0	0	0	0	0	0	0
	3.4 Treasure hunting/ship wreck recovery	0	ND	0	0	0	0	0

4	4.1 Roads and railroads, include road kill	0	0	ND	0	0	0	0
	4.2 Utility and service lines (e.g. electricity cables, telephone lines)	0	0	0	0	0	0	0
	4.3 Shipping lanes and canals	2	2	3	2	0	1	10
	4.4 Flight paths	0	0	1	0	0	0	1
5	5.1 Hunting, killing and collecting terrestrial animals as a result of human/wildlife conflict)	ND	0	0	0	0	0	0
	5.2 Gathering terrestrial plants or plant products (non-timber)	ND	ND	0	0	0	0	0
	5.3 Logging and wood harvesting	ND	ND	0	0	0	0	0
	5.4 Fishing, killing and harvesting aquatic resources	1	1	2	1	1	0	6
	5.5 Trawling, blast and poison fishing	ND	0	1	ND	1	0	2
6	6.1 Recreational activities and tourism	1	1	3	2	1	1	9
	6.2 War, civil unrest and military exercise	0	0	2	1	0	0	3
	6.3 Research, education and other work-related activities in PA's	2	1	0	0	0	1	4
	6.4 Activities of PA manager (e.g. construction or vehicle use, artificial watering points and dams)	1	0	1	1	0	1	4
	6.5 Deliberate vandalism, destructive activities or threats to protected area staff visitors	2	1	1	1	0	0	5



7	7.1 Fire including arson	1	0	1	1	0	0	3
	7.2 Dams, hydrological modification and water management/use	1	1	1	1	0	0	4
	7.3a Increased fragmentation within PA ('Fragmentation'-division of habitats by various causes)	1	1	0	0	0	0	2
	7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	0	1	0	ND	0	0	1
	7.3c Other 'edge effects' on park values	ND	ND	ND	ND	0	0	0
	7.3d Loss of keystone species (e.g. top predators, pollinators etc)	1	0	0	1	0	0	2
4	8.1 Invasive non-native/alien plants (weeds)	3	1	2	3	0	0	9
	8.1a Invasive non--native/alien animals	1	1	2	1	2	0	7
	8.1b Pathogens (non-native or native but creating new/increased problems)	ND	ND	ND	ND	1	0	1
	8.2 Introduced genetic material (e.g. genetically modified organism)	ND	ND	0	ND	0	0	0
9	9.1a Household sewage and urban waste water	0		0	0	0	0	0
	9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	2	1	1	2	0	1	7

	9.2 Industria, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperature, de-oxygenated, other pollution)	0	0	0	0	0	0	0
	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	ND	0	ND	0	0	0	0
	9.4 Garbage and solid waste	3	1	2	2	1	1	10
	9.5 Air-borne pollutants	ND	ND	ND	1	0	0	1
	9.6 Excess energy (e.g. heat pollution, lights etc)	1	0	2	1	0	0	4
10	10.1 Volcanoes	0	0	0	0	0	0	0
	10.2 Earthquakes/Tsunamis	0	0	0	0	0	0	0
	10.3 Avalanches/Landslides	0	0	0	0	0	0	0
	10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	1	1	2	2	0	1	7
11	11.1 Habitat-shifting and alteration	3	0	3	3	0	0	9
	11.2 Droughts	ND	0	ND	ND	0	0	0
	11.3 Temperature extremes	3	1	3	3	1	0	11
	11.4 Storms and flooding	1	0	2	3	0	0	6
12	12.1 Loss of cultural links, traditional knowledge and/or management practices	0	ND	0	0	0	0	0
	12.2 Natural deterioration of important cultural sites values	0	0	0	0	0	0	0



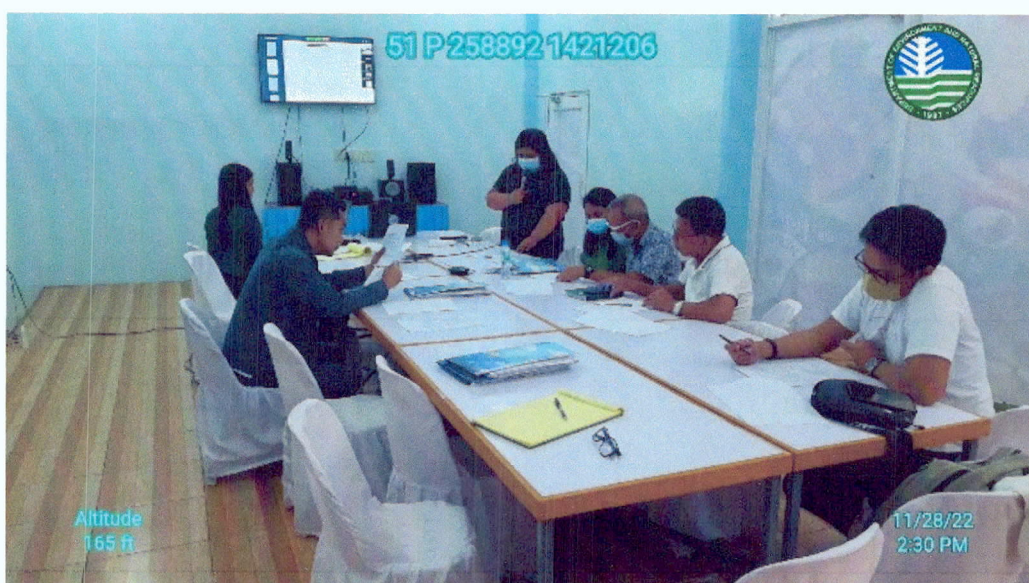
12.3 Destruction of cultural heritage buildings, gardens, sites etc.	0	0	0	0	0	0	0
12.4 Effect of influence groups on IP values and freedom to decide	0	ND	0	0	0	0	0
12.5 Loss of support to communities and projects due to changes in political leadership =possible impact in change of leadership	1	1	2	3	0	1	8

## Annex 2. Summary of Scores on Assessment Form, 2022

QUESTION NO.		STD Assessor Name					
		Roberto S. Rodil	Fernando B. Dalangin	David N. David	Algene Edward M. Francisco	Grace C. Diamante	John Paul Aristotle Ramos
1	Context	3	3	3	3	3	3
2	Planning	3	2	3	3	3	3
3	Input	2	3	2	2	1	2
4	Planning	3	3	3	3	3	3
5	Planning	2	3	3	2	3	3
6	Process	2	2	1	2	1	2
7	Planning	3	3	3	3	2	3
8	Planning	2	3	3	3	3	3
9	Input	3	3	2	3	2	3
10	Process	3	2	2	2	1	2
11	Process	3	3	3	3	2	2
12	Process	2	3	2	3	2	2
13	Input	2	2	2	1	2	3
14	Input	3	2	2	2	1	2
15	Input	2	2	2	1	1	2
16	Input	3	3	2	3	1	2
17	Process	3	3	3	3	2	2
18	Input	2	2	2	2	1	2
19	Process	3	2	1	2	1	2
20	Process	3	3	3	3	1	2
21	Planning	2	3	1	0	2	2
22	Process	0	0	0	0	1	2
23	Process	0	0	0	0	0	0
24	Process	3	3	2	3	3	2
25	Outcomes	3	3	3	3	2	2
26	Process	3	3	3	3	2	2
27	Outputs	2	2	2	2	1	2
28	Process	2	3	0	1	1	3
29	Input	3	3	3	3	2	3
30	Outcomes	2	2	2	1	2	3



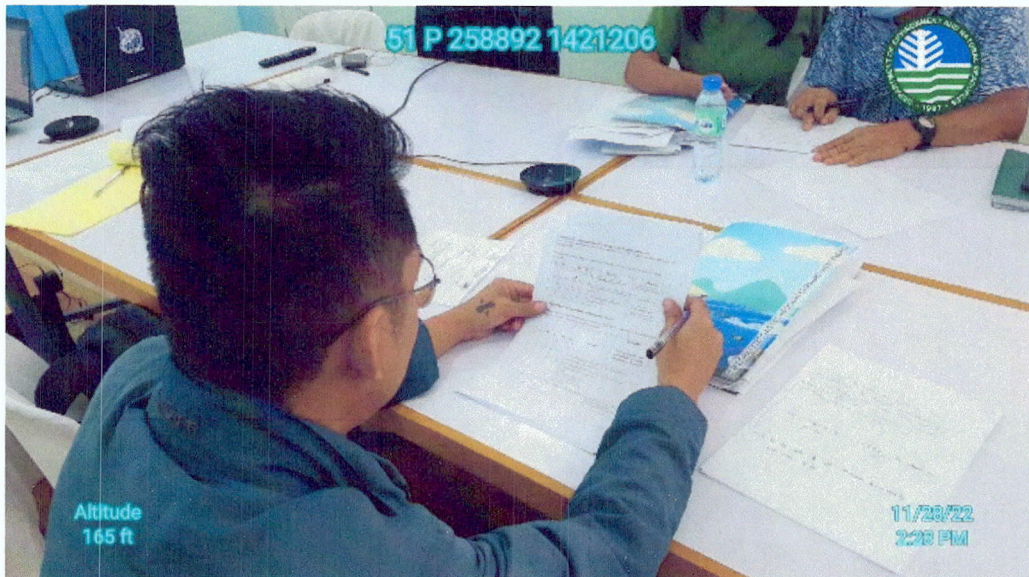
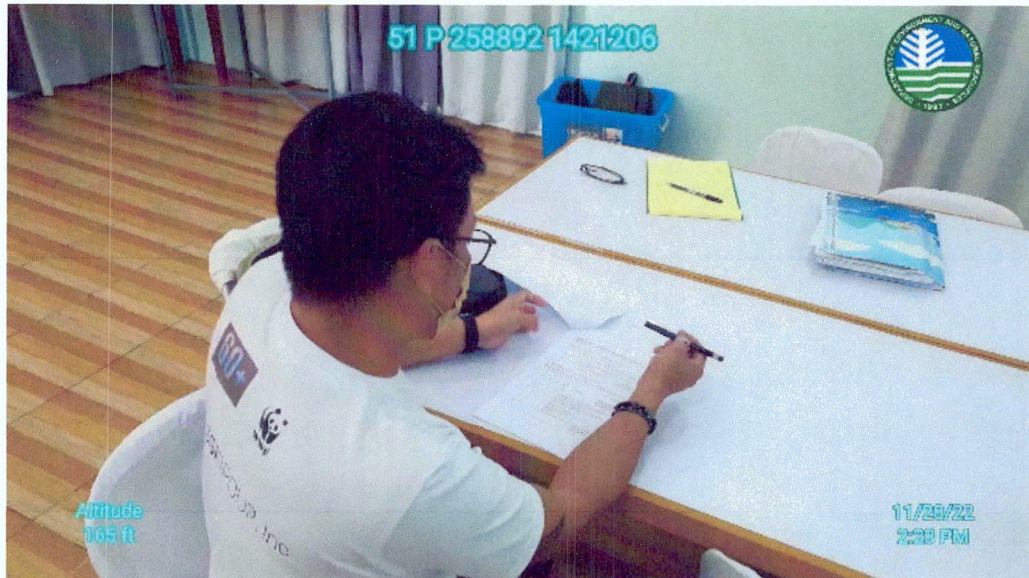
### Annex 3- Photo Documentation











# Annex 4- Attendance Sheet

## ATTENDANCE PROTECTED AREA MANAGEMENT BOARD REGULAR MEETING Palayok ni Jing Restaurant and Catering Services

NOVEMBER 28, 2022

NAME	OFFICE/ ORGANIZATION	REPRESENTATIVE	SEX		SIGNATURE
			Male	Female	
PROTECTED AREA MANAGEMENT BOARD					
1. RED Lormelyn E. Claudio	Regional Executive Director, Region IV - MIMAROPA - PAMB Chair				
2. Hon. Leody F. Tarruela	Office of the Representative, Lone District of Occidental Mindoro	Salita Lata			VIA ZOOM CONFERENCE
3. Mr. John Paul Aristotle C. Ramos	Office of the Provincial Government of Occidental Mindoro				
4. Hon. Walter B. Marquez	Local Government Unit of the Municipality of Sablayan, Occidental Mindoro	<del>Walter B. Marquez</del>			
5. Ms. Apolonia Marie Grace C. Diamante	Mindoro Biodiversity Conservation Foundation Inc. - NGO				
6. Mr. David N. David	World Wide Fund for Nature - NGO		✓		
7. Mr. Algene Edward M. Francisco	Polytechnic University of the Philippines - Sablayan Campus - Academe	pus	✓		
8. Capt. Roberto S. Rodil PCGA	Philippine Coast Guard Auxiliary (PCGA) 506.2 Divisions, Sablayan				
9. Mirabelle Lanuza	NEDA-MIMAROPA	Jobelle Cruzado			



## **Annex 5- Data Sheet 1: PA Information**

## Data Sheet 1: Reporting Progress at Protected Area Site

Name, affiliation and contact details of person responsible for completing the METT		Krystal Dayne T. Villanada Protected Area Superintendent			
Date of assessment		November 28, 2022			
Name of protected area		Apo Reef Natural Park			
WDPA site code (codes can be found on <a href="http://www.unep-wcmc.org/wdpa/">www.unep-wcmc.org/wdpa/</a> )		5218			
Designations	National Natural Park	IUCN Category	II. National Park		
			International N/A		
Country	Philippines				
Location of protected area (province and if possible, add map reference)	Occidental Mindoro				
Date of establishment	September 6, 1996				
Ownership details (please check)	State ✓	Private	Community	Other	
Management Authority	Department of Environment and Natural Resources				
Size of protected area (ha)	15,799.23				
Number of staff	Permanent/ Protected Area 6	Permanent / Detailed	Casual or Contractual 12	Volunteer	TOTAL 18
Current annual budget excluding staff salary costs (PhP)	Recurrent (operational) funds GAA 3,947,000.00		Project or other supplementary funds IPAF PA - RIA 4,836,000.00		
Main values for which the area is designated (e.g. watershed, habitat of threatened species, impacts of climate change regulation, etc.)	Biodiversity maintenance and protection				
List the two primary protected area management objectives					
Management objective 1	The 15,799.23 ha. core zone of ARNP is protected from illegal activities				
Management objective 2	The status of ecosystems and biodiversity in ARNP are maintained/improved.				
No. of people involved in completing assessment	Six (6) PAMB Members				



Including: (please check)	PA manager <input checked="" type="checkbox"/>	PA staff <input checked="" type="checkbox"/>	Other PA agency staff <input type="checkbox"/>	NGO <input type="checkbox"/>
	Local community <input type="checkbox"/>	Donors <input type="checkbox"/>	External experts <input type="checkbox"/>	Other <input type="checkbox"/>

Information on International Designations			
UNESCO World Heritage site (see: <a href="http://whc.unesco.org/en/list">whc.unesco.org/en/list</a> )			N / A
Date listed	Site name	Site area	Geographical co-ordinates
Criteria for designation (i.e. criteria i to x)			
Statement of Outstanding Universal Value			
Ramsar site (see: <a href="http://www.wetlands.org/RSDB/">www.wetlands.org/RSDB/</a> )			N / A
Date listed	Site name	Site area	Geographical number
Reason for Designation (see Ramsar Information Sheet)			
UNESCO Man and Biosphere (MAB) Reserves (see: <a href="http://www.unesco.org/mab/wnbrs.shtml">www.unesco.org/mab/wnbrs.shtml</a> )			
Date listed	Site name	Site area Total: Core: Buffer: Transition:	Geographical co-ordinates
N / A			
Criteria for designation			
Fulfillment of three functions of MAB:			
Conservation			
Development			
Logistic Support			

Please list other designations (i.e. ASEAN Heritage, Natura 2000) and any supporting information below

Name:

Detail:

Name:

Detail:

Name:


Detail:



**Annex 6- Data Sheet 2: Protected Area Threats and  
Assessment Form**

## Data Sheet 2: Protected Area Threats

### Respondents Information:

Full Name: <u>ROBERTO S. RODIL</u>	Age: <u>79</u>
Address:	Sex: <u>MALE</u>
Office/Organization: <u>PHIL COAST GUARD AUXILIARY SOG. 2 REG. DIVISION</u>	
Designation/Position: <u>SOG. 2 DIVISION DIRECTOR</u>	
Length of involvement in the management of the protected area (No. of years/months): _____	
 _____ Signature	

### Instructions

Please check all relevant existing threats as either of high, medium, low significance, not applicable or no data based on the following parameters and qualifiers:

Rank and Corresponding Score	Parameters	Additional Qualifiers/Cut-Off (Note: to get percentages based on markers identified per threat)
High (H) - 3	Threats with seriously degrading values	>10% to 100%
Medium (M) - 2	Threats having some negative impact	>5% to 10%
Low (L) - 1	Threats that are present but with no serious impacting values	<5% to >0%
N/A (NA) - 0	Threat is not present nor applicable in the protected area	Zero or Not Applicable to site
No Data (ND)	No available information to rank threats	Should apply to: <ul style="list-style-type: none"> <li>Lack of knowledge on the presence or absence of the threat.</li> <li>Threat is known to exist but there is no possible quantification method (i.e., Data Deficient, needs more information).</li> </ul>



## 1. Residential and commercial development within a protected area

Note: PA refers to all zones: the strict protection zone (SPZ), multiple use zone (MUZ), and the buffer zone (BZ).

Threats from human settlements or other non-agricultural land uses with a substantial footprint)

H	M	L	NA	ND	Threats	Remarks
			✓		1.1 Housing and settlement	- % of total PA area
	✓		✓		1.2 Commercial and industrial areas	- % of total PA area
	✓				1.3 Tourism and recreation infrastructure	- % of total PA area (Also refer to 6.1)

## 2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

H	M	L	NA	ND	Threats	Remarks
			✓		2.1 Annual and perennial non-timber crop cultivation	- % of total PA area
			✓		2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	- % of total PA area
			✓		2.1b Illegal drug cultivation	- % of total PA area. (Note: N/A if not applicable. Also means absent in the PA).



			✓		2.2 Wood and pulp plantations	- % of total PA area
			✓		2.3 Livestock farming and grazing	- % of total PA area
			✓		2.4 Marine and freshwater aquaculture	- % of total PA area - % of marine and freshwater area

### 3. Energy production and mining within or outside a protected area

Threats from production of non-biological resources

H	M	L	NA	ND	Threats	Remarks
			✓		3.1 Oil and gas drilling	- Volume of production per unit time (e.g. barrels/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.2 Mining/quarrying	- Volume of production per unit time (e.g. tons/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.3 Energy generation, including from hydropower dams	- Volume of production per unit time (i.e., megawatt/year) - No. and name(s) of firms/groups of operators - No. of physical structures in place
			✓		3.4 Treasure Hunting/ship wreck recovery	- No. and frequency of activity (e.g., treasure hunting, wreck recovery - encircle which activity when applicable) - No. and name of groups of operators



#### 4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality

H	M	L	NA	ND	Threats	Remarks
			✓		4.1 Roads and railroads, include road-kill	- Roads and railroads: in Kilometers - Road-kill: No and frequency
			✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines)	- in Kilometers - Frequency
	✓				4.3 Shipping lanes and canals	- No. and frequency of vessels (commercial only) <i>(Note: artisanal fishing vessels not addressed here. Refer to 5.4 below)</i>
			✓		4.4 Flight paths	- No. and frequency of aircraft

#### 5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources, including both deliberate and unintentional harvesting effects; also persecution or control of specific *species* (Note: This includes hunting and killing of animals)

H	M	L	NA	ND	Threats	Remarks
				✓	5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)	- No. of hunters (to qualify type of hunters) - Frequency of hunting
				✓	5.2 Gathering terrestrial plants or plant products (non-timber)	- No. of gatherers (to qualify type of gatherers) - Frequency of gathering/collecting
				✓	5.3 Logging and wood harvesting	- Volume of product harvested



H	M	L	NA	ND	Threats	Remarks
						<ul style="list-style-type: none"> <li>- No. of people involved in logging/wood harvests</li> <li>- No. of apprehensions</li> </ul>
		✓			5.4 Fishing, killing and harvesting aquatic resources	<ul style="list-style-type: none"> <li>- Volume of product harvested</li> <li>- No. of fishers</li> <li>- No. of apprehensions</li> </ul>
				✓	5.5 Trawling, blast and poison fishing	<ul style="list-style-type: none"> <li>- Volume of product harvested from activities</li> <li>- No. of trawlers, fishers using blast/poison</li> <li>- No. of apprehensions</li> </ul>

#### 6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

H	M	L	NA	ND	Threats	Remarks
		✓			6.1 Recreational activities and tourism	<ul style="list-style-type: none"> <li>- No. of tourists/year</li> </ul> <p><i>(Note: Also Refer to 1.3, on spatial concerns).</i></p>
			✓		6.2 War, civil unrest and military exercises	<ul style="list-style-type: none"> <li>- % area damaged by military activities</li> </ul>
	✓				6.3 Research, education and other work-related activities in protected areas	<ul style="list-style-type: none"> <li>- No. of people/ groups/ activities per year</li> <li>- % of area impacted by these activities</li> </ul>
		✓	✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>
	✓				6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>



## 7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

H	M	L	NA	ND	Threats	Remarks
		✓			7.1 Fire including arson	- % of area impacted by these activities
		✓			7.2 Dams, hydrological modification and water management/use	- % of area impacted by these activities
		✓			7.3a Increased fragmentation within protected area (“Fragmentation” - division of habitats by various causes)	- % of area impacted by these activities
			✓		7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	- % of area impacted by these activities
				✓	7.3c Other ‘edge effects’ on park values	- % of area impacted by these activities
		✓			7.3d Loss of keystone species (e.g. top predators, pollinators etc)  <i>(Note: Keystone species are those whose extinction would cause major changes in the broader ecosystem. Examples are habitat forming species (trees, corals, seagrasses and mangroves) and top predators (e.g., Phil Eagle, sharks).</i>	<ul style="list-style-type: none"> <li>- List and number of keystone species</li> <li>- Loss of species (site-specific extirpation)</li> <li>- % population decline (perceived increase or decrease)</li> </ul>



## 8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

H	M	L	NA	ND	Threats	Remarks
✓					8.1 Invasive non-native/alien plants (weeds)	- Kind and number of invasive/alien species - Area
		✓			8.1a Invasive non-native/alien animals	- Kind and number of invasive/alien species - Area
				✓	8.1b Pathogens (non-native or native but creating new/increased problems)	- Kind and number of invasive/alien species - Area
				✓	8.2 Introduced genetic material (e.g. genetically modified organisms)	- Kind and number of invasive/alien species - Area

## 9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

H	M	L	NA	ND	Threats	Remarks
			✓		9.1a Household sewage and urban waste water	- Population data - No. households
	✓				9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	- No. of people using PA facilities (if present)
			✓		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)	- No. of firms, structures - Volume if available



H	M	L	NA	ND	Threats	Remarks
				✓	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	- Area of plantation – qualify if organic or inorganic farming (Note: Also Refer to 2.1 and 2.3).
✓					9.4 Garbage and solid waste	- Volume
				✓	9.5 Air-borne pollutants	- No. and type of firms
		✓			9.6 Excess energy (e.g. heat pollution, lights etc)	- No. and type of firms

### 10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems, but they can be a threat, if a species or habitat is damaged and has lost its resilience and becomes vulnerable to disturbance. Management capacity to respond to some of these changes may be limited

H	M	L	NA	ND		Remarks
			✓		10.1 Volcanoes	- No. and frequency of events
			✓		10.2 Earthquakes/Tsunamis	- No. and frequency of events
			✓		10.3 Avalanches/Landslides	- No. and frequency of events
		✓			10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	- % area impacted - Severity

### 11. Climate change and severe weather

Threats from long-term climatic changes that may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

H	M	L	NA	ND	Threats	Remarks
✓					11.1 Habitat shifting and alteration	- % area impacted
				✓	11.2 Droughts	- % area impacted



						- Frequency and intensity
✓					11.3 Temperature extremes	- % area impacted - Frequency and intensity
		✓			11.4 Storms and flooding	- % area impacted - Frequency and intensity

## 12. Specific cultural and social threats

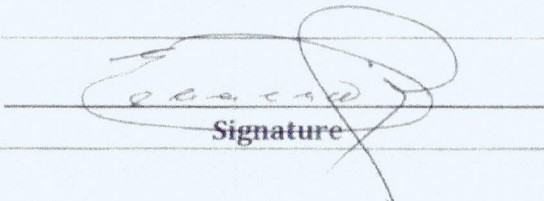
H	M	L	NA	ND	Threats	Remarks
			✓		12.1 Loss of cultural links, traditional knowledge and/or management practices	- Checklist of traditional practices and % loss of these practices from baseline
			✓		12.2 Natural deterioration of important cultural site values	- % of sites impacted (by deterioration)
			✓		12.3 Destruction of cultural heritage buildings, gardens, sites etc.	- % of sites impacted (by destruction)
			✓		12.4 Effect of Influence groups on IP values and freedom to decide	- No. of external groups (e.g., church, political parties, NGOs, NGAs)
		✓			12.5 Loss of support to communities and projects due to changes in political leadership <i>= possible impact in change of leadership</i>	- No. of projects implemented (and type of projects, budget)



2

## Data Sheet 2: Protected Area Threats

## Respondents Information:

Full Name:	Age:
JERONIMO B. DATAGIN	68
Address:	Sex:
Sablayan, Occ. Mindoro	male
Office/Organization:	
LGU - Sablayan, Occ. Mindoro	
Designation/Position:	
Length of involvement in the management of the protected area (No. of years/months): _____	
 Signature	

## Instructions

Please check all relevant existing threats as either of high, medium, low significance, not applicable or no data based on the following parameters and qualifiers:

Rank and Corresponding Score	Parameters	Additional Qualifiers/Cut-Off (Note: to get percentages based on markers identified per threat)
High (H) - 3	Threats with seriously degrading values	>10% to 100%
Medium (M) - 2	Threats having some negative impact	>5% to 10%
Low (L) - 1	Threats that are present but with no serious impacting values	<5% to >0%
N/A (NA) - 0	Threat is not present nor applicable in the protected area	Zero or Not Applicable to site
No Data (ND)	No available information to rank threats	Should apply to: <ul style="list-style-type: none"> <li>Lack of knowledge on the presence or absence of the threat.</li> <li>Threat is known to exist but there is no possible quantification method (i.e., Data Deficient, needs more information).</li> </ul>

## 1. Residential and commercial development within a protected area

Note: PA refers to all zones: the strict protection zone (SPZ), multiple use zone (MUZ), and the buffer zone (BZ).

Threats from human settlements or other non-agricultural land uses with a substantial footprint)

H	M	L	NA	ND	Threats	Remarks
			✓		1.1 Housing and settlement	- % of total PA area
			✓		1.2 Commercial and industrial areas	- % of total PA area
		✓	✓		1.3 Tourism and recreation infrastructure	- % of total PA area (Also refer to 6.1)

## 2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

H	M	L	NA	ND	Threats	Remarks  When possible, add perception on trends (based on a timeline)
			✓		2.1 Annual and perennial non-timber crop cultivation	- % of total PA area
			✓		2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	- % of total PA area
			✓		2.1b Illegal drug cultivation	- % of total PA area. (Note: N/A if not applicable. Also means absent in the PA).



			✓	2.2 Wood and pulp plantations	- % of total PA area
			✓	2.3 Livestock farming and grazing	- % of total PA area
			✓	2.4 Marine and freshwater aquaculture	- % of total PA area - % of marine and freshwater area

### 3. Energy production and mining within or outside a protected area

Threats from production of non-biological resources

H	M	L	NA	ND	Threats	Remarks
			✓		3.1 Oil and gas drilling	- Volume of production per unit time (e.g. barrels/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.2 Mining/quarrying	- Volume of production per unit time (e.g. tons/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.3 Energy generation, including from hydropower dams	- Volume of production per unit time (i.e., megawatt/year) - No. and name(s) of firms/groups of operators - No. of physical structures in place
				✓	3.4 Treasure Hunting/ship wreck recovery	- No. and frequency of activity (e.g., treasure hunting, wreck recovery - encircle which activity when applicable) - No. and name of groups of operators

#### 4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality

H	M	L	NA	ND	Threats	Remarks
			✓		4.1 Roads and railroads, include road-kill	- Roads and railroads: in Kilometers - Road-kill: No and frequency
			✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines)	- in Kilometers - Frequency
	✓				4.3 Shipping lanes and canals	- No. and frequency of vessels (commercial only) <i>(Note: artisanal fishing vessels not addressed here. Refer to 5.4 below)</i>
			✓		4.4 Flight paths	- No. and frequency of aircraft

#### 5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources, including both deliberate and unintentional harvesting effects; also persecution or control of specific *species* (Note: This includes hunting and killing of animals)

H	M	L	NA	ND	Threats	Remarks
			✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)	- No. of hunters (to qualify type of hunters) - Frequency of hunting
				✓	5.2 Gathering terrestrial plants or plant products (non-timber)	- No. of gatherers (to qualify type of gatherers) - Frequency of gathering/collecting
			✓		5.3 Logging and wood harvesting	- Volume of product harvested



H	M	L	NA	ND	Threats	Remarks
						<ul style="list-style-type: none"> <li>- No. of people involved in logging/wood harvests</li> <li>- No. of apprehensions</li> </ul>
		✓			5.4 Fishing, killing and harvesting aquatic resources	<ul style="list-style-type: none"> <li>- Volume of product harvested</li> <li>- No. of fishers</li> <li>- No. of apprehensions</li> </ul>
			✓		5.5 Trawling, blast and poison fishing	<ul style="list-style-type: none"> <li>- Volume of product harvested from activities</li> <li>- No. of trawlers, fishers using blast/poison</li> <li>- No. of apprehensions</li> </ul>

## 6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

H	M	L	NA	ND	Threats	Remarks
		✓			6.1 Recreational activities and tourism	<ul style="list-style-type: none"> <li>- No. of tourists/year</li> </ul> <p><i>(Note: Also Refer to 1.3, on spatial concerns).</i></p>
			✓		6.2 War, civil unrest and military exercises	<ul style="list-style-type: none"> <li>- % area damaged by military activities</li> </ul>
		✓			6.3 Research, education and other work-related activities in protected areas	<ul style="list-style-type: none"> <li>- No. of people/ groups/ activities per year</li> <li>- % of area impacted by these activities</li> </ul>
			✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>
		✓			6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>

## 7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

H	M	L	NA	ND	Threats	Remarks
			✓		7.1 Fire including arson	- % of area impacted by these activities
		✓			7.2 Dams, hydrological modification and water management/use	- % of area impacted by these activities
			✓		7.3a Increased fragmentation within protected area (“Fragmentation” - division of habitats by various causes)	- % of area impacted by these activities
			✓		7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	- % of area impacted by these activities
				✓	7.3c Other ‘edge effects’ on park values	- % of area impacted by these activities
			✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)  <i>(Note: Keystone species are those whose extinction would cause major changes in the broader ecosystem. Examples are habitat forming species (trees, corals, seagrasses and mangroves) and top predators (e.g., Phil Eagle, sharks).</i>	- List and number of keystone species - Loss of species (site-specific extirpation) - % population decline (perceived increase or decrease)



## 8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

H	M	L	NA	ND	Threats	Remarks
		✓			8.1 Invasive non-native/alien plants (weeds)	- Kind and number of invasive/alien species - Area
		✓			8.1a Invasive non-native/alien animals	- Kind and number of invasive/alien species - Area
				✓	8.1b Pathogens (non-native or native but creating new/increased problems)	- Kind and number of invasive/alien species - Area
				✓	8.2 Introduced genetic material (e.g. genetically modified organisms)	- Kind and number of invasive/alien species - Area

## 9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

H	M	L	NA	ND	Threats	Remarks
					9.1a Household sewage and urban waste water	- Population data - No. households
		✓			9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	- No. of people using PA facilities (if present)
			✓		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)	- No. of firms, structures - Volume if available

H	M	L	NA	ND	Threats	Remarks
			✓		9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	- Area of plantation – qualify if organic or inorganic farming (Note: Also Refer to 2.1 and 2.3).
		✓			9.4 Garbage and solid waste	- Volume
				✓	9.5 Air-borne pollutants	- No. and type of firms
			✓		9.6 Excess energy (e.g. heat pollution, lights etc)	- No. and type of firms

## 10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems, but they can be a threat, if a species or habitat is damaged and has lost its resilience and becomes vulnerable to disturbance. Management capacity to respond to some of these changes may be limited

H	M	L	NA	ND		Remarks
			✓		10.1 Volcanoes	- No. and frequency of events
			✓		10.2 Earthquakes/Tsunamis	- No. and frequency of events
			✓		10.3 Avalanches/Landslides	- No. and frequency of events
		✓			10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	- % area impacted - Severity

## 11. Climate change and severe weather

Threats from long-term climatic changes that may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

H	M	L	NA	ND	Threats	Remarks
			✓		11.1 Habitat shifting and alteration	- % area impacted
			✓		11.2 Droughts	- % area impacted



						- Frequency and intensity
		✓			11.3 Temperature extremes	- % area impacted - Frequency and intensity
			✓		11.4 Storms and flooding	- % area impacted - Frequency and intensity

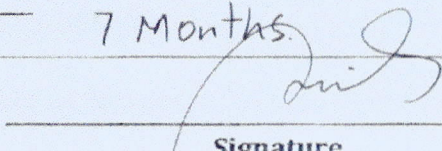
## 12. Specific cultural and social threats

H	M	L	NA	ND	Threats	Remarks
				✓	12.1 Loss of cultural links, traditional knowledge and/or management practices	- Checklist of traditional practices and % loss of these practices from baseline
			✓		12.2 Natural deterioration of important cultural site values	- % of sites impacted (by deterioration)
			✓		12.3 Destruction of cultural heritage buildings, gardens, sites etc.	- % of sites impacted (by destruction)
				✓	12.4 Effect of Influence groups on IP values and freedom to decide	- No. of external groups (e.g., church, political parties, NGOs, NGAs)
		✓			12.5 Loss of support to communities and projects due to changes in political leadership <i>= possible impact in change of leadership</i>	- No. of projects implemented (and type of projects, budget)



## Data Sheet 2: Protected Area Threats

### Respondents Information:

<b>Full Name:</b> DAVID N. DAYID	<b>Age:</b> 46
<b>Address:</b> Brig. 6, Mamburao, Occ. Mindoro	<b>Sex:</b> M
<b>Office/Organization:</b> WWF-Philippines	
<b>Designation/Position:</b> Project Site Manager for Mindoro Strait Sustainable Tuna Partnership-2	
<b>Length of involvement in the management of the protected area (No. of years/months):</b> 7 Months	
 _____ <b>Signature</b>	

### Instructions

Please check all relevant existing threats as either of high, medium, low significance, not applicable or no data based on the following parameters and qualifiers:

Rank and Corresponding Score	Parameters	Additional Qualifiers/Cut-Off (Note: to get percentages based on markers identified per threat)
High (H) - 3	Threats with seriously degrading values	>10% to 100%
Medium (M) - 2	Threats having some negative impact	>5% to 10%
Low (L) - 1	Threats that are present but with no serious impacting values	<5% to >0%
N/A (NA) - 0	Threat is not present nor applicable in the protected area	Zero or Not Applicable to site
No Data (ND)	No available information to rank threats	Should apply to: <ul style="list-style-type: none"> <li>Lack of knowledge on the presence or absence of the threat.</li> <li>Threat is known to exist but there is no possible quantification method (i.e., Data Deficient, needs more information).</li> </ul>



### 1. Residential and commercial development within a protected area

Note: PA refers to all zones: the strict protection zone (SPZ), multiple use zone (MUZ), and the buffer zone (BZ).

Threats from human settlements or other non-agricultural land uses with a substantial footprint)

H	M	L	NA	ND	Threats	Remarks
			✓		1.1 Housing and settlement	- % of total PA area
			✓		1.2 Commercial and industrial areas	- % of total PA area
		✓			1.3 Tourism and recreation infrastructure	- % of total PA area (Also refer to 6.1)

### 2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

H	M	L	NA	ND	Threats	Remarks  When possible, add perception on trends (based on a timeline)
			✓		2.1 Annual and perennial non-timber crop cultivation	- % of total PA area
			✓		2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	- % of total PA area
			✓		2.1b Illegal drug cultivation	- % of total PA area. (Note: N/A if not applicable. Also means absent in the PA).



			✓		2.2 Wood and pulp plantations	- % of total PA area
			✓		2.3 Livestock farming and grazing	- % of total PA area
			✓		2.4 Marine and freshwater aquaculture	- % of total PA area - % of marine and freshwater area

### 3. Energy production and mining within or outside a protected area

Threats from production of non-biological resources

H	M	L	NA	ND	Threats	Remarks
			✓		3.1 Oil and gas drilling	- Volume of production per unit time (e.g. barrels/year) - No. and name(s) of firms/groups - No. of physical structures in place
				✓	3.2 Mining/quarrying	- Volume of production per unit time (e.g. tons/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.3 Energy generation, including from hydropower dams	- Volume of production per unit time (i.e., megawatt/year) - No. and name(s) of firms/groups of operators - No. of physical structures in place
			✓		3.4 Treasure Hunting/ship wreck recovery	- No. and frequency of activity (e.g., treasure hunting, wreck recovery - encircle which activity when applicable) - No. and name of groups of operators



#### 4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality

H	M	L	NA	ND	Threats	Remarks
				✓	4.1 Roads and railroads, include road-kill	- Roads and railroads: in Kilometers - Road-kill: No and frequency
			✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines)	- in Kilometers - Frequency
✓					4.3 Shipping lanes and canals	- No. and frequency of vessels (commercial only) <i>(Note: artisanal fishing vessels not addressed here. Refer to 5.4 below)</i>
		✓			4.4 Flight paths	- No. and frequency of air craft

#### 5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources, including both deliberate and unintentional harvesting effects; also persecution or control of specific *species* (Note: This includes hunting and killing of animals)

H	M	L	NA	ND	Threats	Remarks
			✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)	- No. of hunters (to qualify type of hunters) - Frequency of hunting
			✓		5.2 Gathering terrestrial plants or plant products (non-timber)	- No. of gatherers (to qualify type of gatherers) - Frequency of gathering/collecting
			✓		5.3 Logging and wood harvesting	- Volume of product harvested



H	M	L	NA	ND	Threats	Remarks
						<ul style="list-style-type: none"> <li>- No. of people involved in logging/wood harvests</li> <li>- No. of apprehensions</li> </ul>
	✓				5.4 Fishing, killing and harvesting aquatic resources	<ul style="list-style-type: none"> <li>- Volume of product harvested</li> <li>- No. of fishers</li> <li>- No. of apprehensions</li> </ul>
		✓			5.5 Trawling, blast and poison fishing	<ul style="list-style-type: none"> <li>- Volume of product harvested from activities</li> <li>- No. of trawlers, fishers using blast/poison</li> <li>- No. of apprehensions</li> </ul>

#### 6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

H	M	L	NA	ND	Threats	Remarks
✓					6.1 Recreational activities and tourism	<ul style="list-style-type: none"> <li>- No. of tourists/year</li> </ul> <p>(Note: Also Refer to 1.3, on spatial concerns).</p>
	✓				6.2 War, civil unrest and military exercises	<ul style="list-style-type: none"> <li>- % area damaged by military activities</li> </ul>
			✓		6.3 Research, education and other work-related activities in protected areas	<ul style="list-style-type: none"> <li>- No. of people/ groups/ activities per year</li> <li>- % of area impacted by these activities</li> </ul>
		✓			6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>
		✓			6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>



## 7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

H	M	L	NA	ND	Threats	Remarks
		✓			7.1 Fire including arson	- % of area impacted by these activities
		✓			7.2 Dams, hydrological modification and water management/use	- % of area impacted by these activities
			✓		7.3a Increased fragmentation within protected area ("Fragmentation" - division of habitats by various causes)	- % of area impacted by these activities
			✓		7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	- % of area impacted by these activities
				✓	7.3c Other 'edge effects' on park values	- % of area impacted by these activities
			✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc) <i>(Note: Keystone species are those whose extinction would cause major changes in the broader ecosystem. Examples are habitat forming species (trees, corals, seagrasses and mangroves) and top predators (e.g., Phil Eagle, sharks).</i>	<ul style="list-style-type: none"> <li>- List and number of keystone species</li> <li>- Loss of species (site-specific extirpation)</li> <li>- % population decline (perceived increase or decrease)</li> </ul>



### 8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

H	M	L	NA	ND	Threats	Remarks
	✓				8.1 Invasive non-native/alien plants (weeds)	- Kind and number of invasive/alien species - Area
	✓				8.1a Invasive non-native/alien animals	- Kind and number of invasive/alien species - Area
				✓	8.1b Pathogens (non-native or native but creating new/increased problems)	- Kind and number of invasive/alien species - Area
			✓		8.2 Introduced genetic material (e.g. genetically modified organisms)	- Kind and number of invasive/alien species - Area

### 9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

H	M	L	NA	ND	Threats	Remarks
			✓		9.1a Household sewage and urban waste water	- Population data - No. households
		✓			9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	- No. of people using PA facilities (if present)
			✓		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)	- No. of firms, structures - Volume if available



H	M	L	NA	ND	Threats	Remarks
				✓	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	- Area of plantation – qualify if organic or inorganic farming (Note: Also Refer to 2.1 and 2.3).
	✓				9.4 Garbage and solid waste	- Volume
				✓	9.5 Air-borne pollutants	- No. and type of firms
	✓				9.6 Excess energy (e.g. heat pollution, lights etc)	- No. and type of firms

### 10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems, but they can be a threat, if a species or habitat is damaged and has lost its resilience and becomes vulnerable to disturbance. Management capacity to respond to some of these changes may be limited

H	M	L	NA	ND		Remarks
			✓		10.1 Volcanoes	- No. and frequency of events
			✓		10.2 Earthquakes/Tsunamis	- No. and frequency of events
			✓		10.3 Avalanches/Landslides	- No. and frequency of events
	✓				10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	- % area impacted - Severity

### 11. Climate change and severe weather

Threats from long-term climatic changes that may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

H	M	L	NA	ND	Threats	Remarks
✓					11.1 Habitat shifting and alteration	- % area impacted
				✓	11.2 Droughts	- % area impacted



						- Frequency and intensity
✓					11.3 Temperature extremes	- % area impacted - Frequency and intensity
	✓				11.4 Storms and flooding	- % area impacted - Frequency and intensity

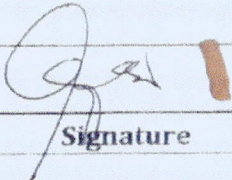
## 12. Specific cultural and social threats

H	M	L	NA	ND	Threats	Remarks
			✓		12.1 Loss of cultural links, traditional knowledge and/or management practices	- Checklist of traditional practices and % loss of these practices from baseline
			✓		12.2 Natural deterioration of important cultural site values	- % of sites impacted (by deterioration)
			✓		12.3 Destruction of cultural heritage buildings, gardens, sites etc.	- % of sites impacted (by destruction)
			✓		12.4 Effect of Influence groups on IP values and freedom to decide	- No. of external groups (e.g., church, political parties, NGOs, NGAs)
	✓				12.5 Loss of support to communities and projects due to changes in political leadership  = possible impact in change of leadership	- No. of projects implemented (and type of projects, budget)



## Data Sheet 2: Protected Area Threats

### Respondents Information:

<b>Full Name:</b> ALGENE EDWARD M. FRANCISCO	<b>Age:</b> 36
<b>Address:</b> BUENAVISTA, SABLAYAN CC. MINDORO	<b>Sex:</b> male
<b>Office/Organization:</b> POLYTECHNIC UNIVERSITY OF THE PHILIPPINES	
<b>Designation/Position:</b> ACADEMIC REP / COLLEGE INSTRUCTOR	
<b>Length of involvement in the management of the protected area (No. of years/months):</b> 4 years	
 _____ Signature	

### Instructions

Please check all relevant existing threats as either of high, medium, low significance, not applicable or no data based on the following parameters and qualifiers:

Rank and Corresponding Score	Parameters	Additional Qualifiers/Cut-Off (Note: to get percentages based on markers identified per threat)
High (H) - 3	Threats with seriously degrading values	>10% to 100%
Medium (M) - 2	Threats having some negative impact	>5% to 10%
Low (L) - 1	Threats that are present but with no serious impacting values	<5% to >0%
N/A (NA) - 0	Threat is not present nor applicable in the protected area	Zero or Not Applicable to site
No Data (ND)	No available information to rank threats	Should apply to: <ul style="list-style-type: none"> <li>Lack of knowledge on the presence or absence of the threat.</li> <li>Threat is known to exist but there is no possible quantification method (i.e., Data Deficient, needs more information).</li> </ul>



## 1. Residential and commercial development within a protected area

Note: PA refers to all zones: the strict protection zone (SPZ), multiple use zone (MUZ), and the buffer zone (BZ).

Threats from human settlements or other non-agricultural land uses with a substantial footprint)

H	M	L	NA	ND	Threats	Remarks
			X		1.1 Housing and settlement	- % of total PA area
			/		1.2 Commercial and industrial areas	- % of total PA area
			✓		1.3 Tourism and recreation infrastructure	- % of total PA area (Also refer to 6.1)

## 2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

H	M	L	NA	ND	Threats	Remarks  When possible, add perception on trends (based on a timeline)
			/		2.1 Annual and perennial non-timber crop cultivation	- % of total PA area
			/		2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	- % of total PA area
			/		2.1b Illegal drug cultivation	- % of total PA area. (Note: N/A if not applicable. Also means absent in the PA).



			/	2.2 Wood and pulp plantations	- % of total PA area
			/	2.3 Livestock farming and grazing	- % of total PA area
			/	2.4 Marine and freshwater aquaculture	- % of total PA area - % of marine and freshwater area

### 3. Energy production and mining within or outside a protected area

Threats from production of non-biological resources

H	M	L	NA	ND	Threats	Remarks
			/		3.1 Oil and gas drilling	- Volume of production per unit time (e.g. barrels/year) - No. and name(s) of firms/groups - No. of physical structures in place
			/		3.2 Mining/quarrying	- Volume of production per unit time (e.g. tons/year) - No. and name(s) of firms/groups - No. of physical structures in place
			/		3.3 Energy generation, including from hydropower dams	- Volume of production per unit time (i.e., megawatt/year) - No. and name(s) of firms/groups of operators - No. of physical structures in place
			/		3.4 Treasure Hunting/ship wreck recovery	- No. and frequency of activity (e.g., treasure hunting, wreck recovery - encircle which activity when applicable) - No. and name of groups of operators



#### 4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality

H	M	L	NA	ND	Threats	Remarks
			/		4.1 Roads and railroads, include road-kill	- Roads and railroads: in Kilometers - Road-kill: No and frequency
			/		4.2 Utility and service lines (e.g. electricity cables, telephone lines)	- in Kilometers - Frequency
	/				4.3 Shipping lanes and canals	- No. and frequency of vessels (commercial only) <i>(Note: artisanal fishing vessels not addressed here. Refer to 5.4 below)</i>
			/		4.4 Flight paths	- No. and frequency of air craft

#### 5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources, including both deliberate and unintentional harvesting effects; also persecution or control of specific *species* (Note: This includes hunting and killing of animals)

H	M	L	NA	ND	Threats	Remarks
			/		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)	- No. of hunters (to qualify type of hunters) - Frequency of hunting
			/		5.2 Gathering terrestrial plants or plant products (non-timber)	- No. of gatherers (to qualify type of gatherers) - Frequency of gathering/collecting
			/		5.3 Logging and wood harvesting	- Volume of product harvested



H	M	L	NA	ND	Threats	Remarks
						<ul style="list-style-type: none"> <li>- No. of people involved in logging/wood harvests</li> <li>- No. of apprehensions</li> </ul>
		/			5.4 Fishing, killing and harvesting aquatic resources	<ul style="list-style-type: none"> <li>- Volume of product harvested</li> <li>- No. of fishers</li> <li>- No. of apprehensions</li> </ul>
				/	5.5 Trawling, blast and poison fishing	<ul style="list-style-type: none"> <li>- Volume of product harvested from activities</li> <li>- No. of trawlers, fishers using blast/poison</li> <li>- No. of apprehensions</li> </ul>

#### 6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

H	M	L	NA	ND	Threats	Remarks
	/				6.1 Recreational activities and tourism	<ul style="list-style-type: none"> <li>- No. of tourists/year</li> </ul> <p><i>(Note: Also Refer to 1.3, on spatial concerns).</i></p>
		/			6.2 War, civil unrest and military exercises	<ul style="list-style-type: none"> <li>- % area damaged by military activities</li> </ul>
			/		6.3 Research, education and other work-related activities in protected areas	<ul style="list-style-type: none"> <li>- No. of people/ groups/ activities per year</li> <li>- % of area impacted by these activities</li> </ul>
		/			6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>
		/			6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>



## 7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

H	M	L	NA	ND	Threats	Remarks
		/			7.1 Fire including arson	- % of area impacted by these activities
		/			7.2 Dams, hydrological modification and water management/use	- % of area impacted by these activities
			/		7.3a Increased fragmentation within protected area (“Fragmentation” - division of habitats by various causes)	- % of area impacted by these activities
				/	7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	- % of area impacted by these activities
				/	7.3c Other ‘edge effects’ on park values	- % of area impacted by these activities
		/			7.3d Loss of keystone species (e.g. top predators, pollinators etc)  <i>(Note: Keystone species are those whose extinction would cause major changes in the broader ecosystem. Examples are habitat forming species (trees, corals, seagrasses and mangroves) and top predators (e.g., Phil Eagle, sharks).</i>	<ul style="list-style-type: none"> <li>- List and number of keystone species</li> <li>- Loss of species (site-specific extirpation)</li> <li>- % population decline (perceived increase or decrease)</li> </ul>



## 8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

H	M	L	NA	ND	Threats	Remarks
/					8.1 Invasive non-native/alien plants (weeds)	- Kind and number of invasive/alien species - Area
		/			8.1a Invasive non-native/alien animals	- Kind and number of invasive/alien species - Area
				/	8.1b Pathogens (non-native or native but creating new/increased problems)	- Kind and number of invasive/alien species - Area
				/	8.2 Introduced genetic material (e.g. genetically modified organisms)	- Kind and number of invasive/alien species - Area

## 9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

H	M	L	NA	ND	Threats	Remarks
			/		9.1a Household sewage and urban waste water	- Population data - No. households
	/				9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	- No. of people using PA facilities (if present)
			/		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)	- No. of firms, structures - Volume if available



H	M	L	NA	ND	Threats	Remarks
			/		9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	- Area of plantation – qualify if organic or inorganic farming (Note: Also Refer to 2.1 and 2.3).
	/				9.4 Garbage and solid waste	- Volume
		/			9.5 Air-borne pollutants	- No. and type of firms
		/			9.6 Excess energy (e.g. heat pollution, lights etc)	- No. and type of firms

## 10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems, but they can be a threat, if a species or habitat is damaged and has lost its resilience and becomes vulnerable to disturbance. Management capacity to respond to some of these changes may be limited

H	M	L	NA	ND		Remarks
			/		10.1 Volcanoes	- No. and frequency of events
		X	/		10.2 Earthquakes/Tsunamis	- No. and frequency of events
			/		10.3 Avalanches/Landslides	- No. and frequency of events
	/				10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	- % area impacted - Severity

## 11. Climate change and severe weather

Threats from long-term climatic changes that may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

H	M	L	NA	ND	Threats	Remarks
/					11.1 Habitat shifting and alteration	- % area impacted
				/	11.2 Droughts	- % area impacted



						- Frequency and intensity
/					11.3 Temperature extremes	- % area impacted - Frequency and intensity
/		/			11.4 Storms and flooding	- % area impacted - Frequency and intensity


## 12. Specific cultural and social threats

H	M	L	NA	ND	Threats	Remarks
			/		12.1 Loss of cultural links, traditional knowledge and/or management practices	- Checklist of traditional practices and % loss of these practices from baseline
			/		12.2 Natural deterioration of important cultural site values	- % of sites impacted (by deterioration)
			/		12.3 Destruction of cultural heritage buildings, gardens, sites etc.	- % of sites impacted (by destruction)
			/		12.4 Effect of Influence groups on IP values and freedom to decide	- No. of external groups (e.g., church, political parties, NGOs, NGAs)
/					12.5 Loss of support to communities and projects due to changes in political leadership  = possible impact in change of leadership	- No. of projects implemented (and type of projects, budget)



## Data Sheet 2: Protected Area Threats

### Respondents Information:

Full Name: <b>GRACE C. DIAMANTE</b>	Age: <b>46</b>
Address: <b>CALAPAN CITY</b>	Sex: <b>F</b>
Office/Organization: <b>MBCFI</b>	
Designation/Position: <b>EXECUTIVE DIRECTOR</b>	
Length of involvement in the management of the protected area (No. of years/months): <b>6 years</b>	
 Signature	

### Instructions

Please check all relevant existing threats as either of high, medium, low significance, not applicable or no data based on the following parameters and qualifiers:

Rank and Corresponding Score	Parameters	Additional Qualifiers/Cut-Off (Note: to get percentages based on markers identified per threat)
High (H) - 3	Threats with seriously degrading values	>10% to 100%
Medium (M) - 2	Threats having some negative impact	>5% to 10%
Low (L) - 1	Threats that are present but with no serious impacting values	<5% to >0%
N/A (NA) - 0	Threat is not present nor applicable in the protected area	Zero or Not Applicable to site
No Data (ND)	No available information to rank threats	Should apply to: <ul style="list-style-type: none"> <li>Lack of knowledge on the presence or absence of the threat.</li> <li>Threat is known to exist but there is no possible quantification method (i.e., Data Deficient, needs more information).</li> </ul>



## 1. Residential and commercial development within a protected area

Note: PA refers to all zones: the strict protection zone (SPZ), multiple use zone (MUZ), and the buffer zone (BZ).

Threats from human settlements or other non-agricultural land uses with a substantial footprint)

H	M	L	NA	ND	Threats	Remarks
			✓		1.1 Housing and settlement	- % of total PA area
			✓		1.2 Commercial and industrial areas	- % of total PA area
			✓		1.3 Tourism and recreation infrastructure	- % of total PA area (Also refer to 6.1)

## 2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and *aquaculture*

H	M	L	NA	ND	Threats	Remarks  When possible, add perception on trends (based on a timeline)
			✓		2.1 Annual and perennial non-timber crop cultivation	- % of total PA area
			✓		2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	- % of total PA area
			✓		2.1b Illegal drug cultivation	- % of total PA area. (Note: N/A if not applicable. Also means absent in the PA).



			✓	2.2 Wood and pulp plantations	- % of total PA area
			✓	2.3 Livestock farming and grazing	- % of total PA area
			✓	2.4 Marine and freshwater aquaculture	- % of total PA area - % of marine and freshwater area

### 3. Energy production and mining within or outside a protected area

Threats from production of non-biological resources

H	M	L	NA	ND	Threats	Remarks
			✓		3.1 Oil and gas drilling	- Volume of production per unit time (e.g. barrels/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.2 Mining/quarrying	- Volume of production per unit time (e.g. tons/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.3 Energy generation, including from hydropower dams	- Volume of production per unit time (i.e., megawatt/year) - No. and name(s) of firms/groups of operators - No. of physical structures in place
			✓		3.4 Treasure Hunting/ship wreck recovery	- No. and frequency of activity (e.g., treasure hunting, wreck recovery - encircle which activity when applicable) - No. and name of groups of operators

#### 4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality

H	M	L	NA	ND	Threats	Remarks
			✓		4.1 Roads and railroads, include road-kill	- Roads and railroads: in Kilometers - Road-kill: No and frequency
			✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines)	- in Kilometers - Frequency
			✓		4.3 Shipping lanes and canals	- No. and frequency of vessels (commercial only) <i>(Note: artisanal fishing vessels not addressed here. Refer to 5.4 below)</i>
			✓		4.4 Flight paths	- No. and frequency of air craft

#### 5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources, including both deliberate and unintentional harvesting effects; also persecution or control of specific *species* (Note: This includes hunting and killing of animals)

H	M	L	NA	ND	Threats	Remarks
			✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)	- No. of hunters (to qualify type of hunters) - Frequency of hunting
			✓		5.2 Gathering terrestrial plants or plant products (non-timber)	- No. of gatherers (to qualify type of gatherers) - Frequency of gathering/collecting
			✓		5.3 Logging and wood harvesting	- Volume of product harvested



H	M	L	NA	ND	Threats	Remarks
						<ul style="list-style-type: none"> <li>- No. of people involved in logging/wood harvests</li> <li>- No. of apprehensions</li> </ul>
		✓			5.4 Fishing, killing and harvesting aquatic resources	<ul style="list-style-type: none"> <li>- Volume of product harvested</li> <li>- No. of fishers</li> <li>- No. of apprehensions</li> </ul>
		✓			5.5 Trawling, blast and poison fishing <i>uncollected data</i>	<ul style="list-style-type: none"> <li>- Volume of product harvested from activities</li> <li>- No. of trawlers, fishers using blast/poison</li> <li>- No. of apprehensions</li> </ul>

#### 6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

H	M	L	NA	ND	Threats	Remarks
		✓			6.1 Recreational activities and tourism	<ul style="list-style-type: none"> <li>- No. of tourists/year</li> </ul> <p><i>(Note: Also Refer to 1.3, on spatial concerns).</i></p>
			✓		6.2 War, civil unrest and military exercises	<ul style="list-style-type: none"> <li>- % area damaged by military activities</li> </ul>
			✓		6.3 Research, education and other work-related activities in protected areas	<ul style="list-style-type: none"> <li>- No. of people/ groups/ activities per year</li> <li>- % of area impacted by these activities</li> </ul>
			✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>
			✓		6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>

## 7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

H	M	L	NA	ND	Threats	Remarks
			✓		7.1 Fire including arson	- % of area impacted by these activities
			✓		7.2 Dams, hydrological modification and water management/use	- % of area impacted by these activities
			✓		7.3a Increased fragmentation within protected area (“Fragmentation” - division of habitats by various causes)	- % of area impacted by these activities
			✓		7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	- % of area impacted by these activities
			✓		7.3c Other ‘edge effects’ on park values	- % of area impacted by these activities
			✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)  <i>(Note: Keystone species are those whose extinction would cause major changes in the broader ecosystem. Examples are habitat forming species (trees, corals, seagrasses and mangroves) and top predators (e.g., Phil Eagle, sharks).</i>	<ul style="list-style-type: none"> <li>- List and number of keystone species</li> <li>- Loss of species (site-specific extirpation)</li> <li>- % population decline (perceived increase or decrease)</li> </ul>



## 8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

H	M	L	NA	ND	Threats	Remarks
			✓		8.1 Invasive non-native/alien plants (weeds)	- Kind and number of invasive/alien species - Area
	✓				8.1a Invasive non-native/alien animals <i>rodents</i>	- Kind and number of invasive/alien species - Area
		✓			8.1b Pathogens (non-native or native but creating new/increased problems)	- Kind and number of invasive/alien species - Area
			✓		8.2 Introduced genetic material (e.g. genetically modified organisms)	- Kind and number of invasive/alien species - Area

## 9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

H	M	L	NA	ND	Threats	Remarks
			✓		9.1a Household sewage and urban waste water	- Population data - No. households
			✓		9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	- No. of people using PA facilities (if present)
			✓		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)	- No. of firms, structures - Volume if available

H	M	L	NA	ND	Threats	Remarks
			✓		9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	- Area of plantation – qualify if organic or inorganic farming (Note: Also Refer to 2.1 and 2.3).
		✓			9.4 Garbage and solid waste	- Volume <i>we need to conduct monthly clean-up to get data</i>
			✓		9.5 Air-borne pollutants	- No. and type of firms
			✓		9.6 Excess energy (e.g. heat pollution, lights etc)	- No. and type of firms

#### 10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems, but they can be a threat, if a species or habitat is damaged and has lost its resilience and becomes vulnerable to disturbance. Management capacity to respond to some of these changes may be limited

H	M	L	NA	ND		Remarks
			✓		10.1 Volcanoes	- No. and frequency of events
			✓		10.2 Earthquakes/Tsunamis	- No. and frequency of events
			✓		10.3 Avalanches/Landslides	- No. and frequency of events
			✓		10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	- % area impacted - Severity

#### 11. Climate change and severe weather

Threats from long-term climatic changes that may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

H	M	L	NA	ND	Threats	Remarks
			✓		11.1 Habitat shifting and alteration	- % area impacted
			✓		11.2 Droughts	- % area impacted



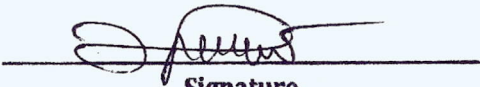
					- Frequency and intensity
		✓		11.3 Temperature extremes	- % area impacted - Frequency and intensity
			✓	11.4 Storms and flooding	- % area impacted - Frequency and intensity

## 12. Specific cultural and social threats

H	M	L	NA	ND	Threats	Remarks
			✓		12.1 Loss of cultural links, traditional knowledge and/or management practices	- Checklist of traditional practices and % loss of these practices from baseline
			✓		12.2 Natural deterioration of important cultural site values	- % of sites impacted (by deterioration)
			✓		12.3 Destruction of cultural heritage buildings, gardens, sites etc.	- % of sites impacted (by destruction)
			✓		12.4 Effect of Influence groups on IP values and freedom to decide	- No. of external groups (e.g., church, political parties, NGOs, NGAs)
			✓		12.5 Loss of support to communities and projects due to changes in political leadership  = possible impact in change of leadership	- No. of projects implemented (and type of projects, budget)

## Data Sheet 2: Protected Area Threats

### Respondents Information:

<b>Full Name:</b> John Paul Aristote Ramos	<b>Age:</b> 35
<b>Address:</b> Mamburac, Occidental Mindoro	<b>Sex:</b> Male
<b>Office/Organization:</b> Provincial Planning and Dev't office, Provincial Gov't of Occidental Mindoro	
<b>Designation/Position:</b> Planning Officer IV	
<b>Length of involvement in the management of the protected area (No. of years/months):</b> 6 years	
 <b>Signature</b>	

### Instructions

Please check all relevant existing threats as either of high, medium, low significance, not applicable or no data based on the following parameters and qualifiers:

Rank and Corresponding Score	Parameters	Additional Qualifiers/Cut-Off (Note: to get percentages based on markers identified per threat)
High (H) - 3	Threats with seriously degrading values	>10% to 100%
Medium (M) - 2	Threats having some negative impact	>5% to 10%
Low (L) - 1	Threats that are present but with no serious impacting values	<5% to >0%
N/A (NA) - 0	Threat is not present nor applicable in the protected area	Zero or Not Applicable to site
No Data (ND)	No available information to rank threats	Should apply to: <ul style="list-style-type: none"> <li>Lack of knowledge on the presence or absence of the threat.</li> <li>Threat is known to exist but there is no possible quantification method (i.e., Data Deficient, needs more information).</li> </ul>



## 1. Residential and commercial development within a protected area

Note: PA refers to all zones: the strict protection zone (SPZ), multiple use zone (MUZ), and the buffer zone (BZ).

Threats from human settlements or other non-agricultural land uses with a substantial footprint)

H	M	L	NA	ND	Threats	Remarks
			✓		1.1 Housing and settlement	- % of total PA area
			✓		1.2 Commercial and industrial areas	- % of total PA area
		✓			1.3 Tourism and recreation infrastructure	- % of total PA area (Also refer to 6.1)

## 2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

H	M	L	NA	ND	Threats	Remarks  When possible, add perception on trends (based on a timeline)
			✓		2.1 Annual and perennial non-timber crop cultivation	- % of total PA area
			✓		2.1a Utilization of portions of PA to upland vegetable & other agricultural/plantation crop farms (pollutive inputs, e.g. insecticides, pesticides)	- % of total PA area
			✓		2.1b Illegal drug cultivation	- % of total PA area. (Note: N/A if not applicable. Also means absent in the PA).

			✓	2.2 Wood and pulp plantations	- % of total PA area
			✓	2.3 Livestock farming and grazing	- % of total PA area
			✓	2.4 Marine and freshwater aquaculture	- % of total PA area - % of marine and freshwater area

### 3. Energy production and mining within or outside a protected area

Threats from production of non-biological resources

H	M	L	NA	ND	Threats	Remarks
			✓		3.1 Oil and gas drilling	- Volume of production per unit time (e.g. barrels/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.2 Mining/quarrying	- Volume of production per unit time (e.g. tons/year) - No. and name(s) of firms/groups - No. of physical structures in place
			✓		3.3 Energy generation, including from hydropower dams	- Volume of production per unit time (i.e., megawatt/year) - No. and name(s) of firms/groups of operators - No. of physical structures in place
			✓		3.4 Treasure Hunting/ship wreck recovery	- No. and frequency of activity (e.g., treasure hunting, wreck recovery - encircle which activity when applicable) - No. and name of groups of operators



#### 4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality

H	M	L	NA	ND	Threats	Remarks
			✓		4.1 Roads and railroads, include road-kill	- Roads and railroads: in Kilometers - Road-kill: No and frequency
			✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines)	- in Kilometers - Frequency
		✓			4.3 Shipping lanes and canals	- No. and frequency of vessels (commercial only) <i>(Note: artisanal fishing vessels not addressed here. Refer to 5.4 below)</i>
			✓		4.4 Flight paths	- No. and frequency of air craft

#### 5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources, including both deliberate and unintentional harvesting effects; also persecution or control of specific *species* (Note: This includes hunting and killing of animals)

H	M	L	NA	ND	Threats	Remarks
			✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)	- No. of hunters (to qualify type of hunters) - Frequency of hunting
			✓		5.2 Gathering terrestrial plants or plant products (non-timber)	- No. of gatherers (to qualify type of gatherers) - Frequency of gathering/collecting
			✓		5.3 Logging and wood harvesting	- Volume of product harvested

H	M	L	NA	ND	Threats	Remarks
						<ul style="list-style-type: none"> <li>- No. of people involved in logging/wood harvests</li> <li>- No. of apprehensions</li> </ul>
			✓		5.4 Fishing, killing and harvesting aquatic resources	<ul style="list-style-type: none"> <li>- Volume of product harvested</li> <li>- No. of fishers</li> <li>- No. of apprehensions</li> </ul>
			✓		5.5 Trawling, blast and poison fishing	<ul style="list-style-type: none"> <li>- Volume of product harvested from activities</li> <li>- No. of trawlers, fishers using blast/poison</li> <li>- No. of apprehensions</li> </ul>

## 6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

H	M	L	NA	ND	Threats	Remarks
		✓			6.1 Recreational activities and tourism	<ul style="list-style-type: none"> <li>- No. of tourists/year</li> </ul> <p><i>(Note: Also Refer to 1.3, on spatial concerns).</i></p>
			✓		6.2 War, civil unrest and military exercises	<ul style="list-style-type: none"> <li>- % area damaged by military activities</li> </ul>
		✓			6.3 Research, education and other work-related activities in protected areas	<ul style="list-style-type: none"> <li>- No. of people/ groups/ activities per year</li> <li>- % of area impacted by these activities</li> </ul>
		✓			6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>
			✓		6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors	<ul style="list-style-type: none"> <li>- % of area impacted by these activities</li> </ul>



## 7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

H	M	L	NA	ND	Threats	Remarks
			✓		7.1 Fire including arson	- % of area impacted by these activities
			✓		7.2 Dams, hydrological modification and water management/use	- % of area impacted by these activities
			✓		7.3a Increased fragmentation within protected area ("Fragmentation" - division of habitats by various causes)	- % of area impacted by these activities
			✓		7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	- % of area impacted by these activities
			✓		7.3c Other 'edge effects' on park values	- % of area impacted by these activities
			✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)  <i>(Note: Keystone species are those whose extinction would cause major changes in the broader ecosystem. Examples are habitat forming species (trees, corals, seagrasses and mangroves) and top predators (e.g., Phil Eagle, sharks).</i>	<ul style="list-style-type: none"> <li>- List and number of keystone species</li> <li>- Loss of species (site-specific extirpation)</li> <li>- % population decline (perceived increase or decrease)</li> </ul>

## 8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

H	M	L	NA	ND	Threats	Remarks
			✓		8.1 Invasive non-native/alien plants (weeds)	- Kind and number of invasive/alien species - Area
			✓		8.1a Invasive non-native/alien animals	- Kind and number of invasive/alien species - Area
			✓		8.1b Pathogens (non-native or native but creating new/increased problems)	- Kind and number of invasive/alien species - Area
			✓		8.2 Introduced genetic material (e.g. genetically modified organisms)	- Kind and number of invasive/alien species - Area

## 9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

H	M	L	NA	ND	Threats	Remarks
			✓		9.1a Household sewage and urban waste water	- Population data - No. households
		✓			9.1b Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)	- No. of people using PA facilities (if present)
			✓		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)	- No. of firms, structures - Volume if available



H	M	L	NA	ND	Threats	Remarks
			✓		9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)	- Area of plantation - qualify if organic or inorganic farming (Note: Also Refer to 2.1 and 2.3).
		✓			9.4 Garbage and solid waste	- Volume
			✓		9.5 Air-borne pollutants	- No. and type of firms
			✓		9.6 Excess energy (e.g. heat pollution, lights etc)	- No. and type of firms

## 10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems, but they can be a threat, if a species or habitat is damaged and has lost its resilience and becomes vulnerable to disturbance. Management capacity to respond to some of these changes may be limited

H	M	L	NA	ND		Remarks
			✓		10.1 Volcanoes	- No. and frequency of events
			✓		10.2 Earthquakes/Tsunamis	- No. and frequency of events
			✓		10.3 Avalanches/Landslides	- No. and frequency of events
		✓			10.4 Erosion and siltation/deposition (e.g. shoreline or riverbed changes)	- % area impacted - Severity

## 11. Climate change and severe weather

Threats from long-term climatic changes that may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

H	M	L	NA	ND	Threats	Remarks
			✓		11.1 Habitat shifting and alteration	- % area impacted
			✓		11.2 Droughts	- % area impacted

						- Frequency and intensity
			✓		11.3 Temperature extremes	- % area impacted - Frequency and intensity
			✓		11.4 Storms and flooding	- % area impacted - Frequency and intensity

## 12. Specific cultural and social threats

H	M	L	NA	ND	Threats	Remarks
			✓		12.1 Loss of cultural links, traditional knowledge and/or management practices	- Checklist of traditional practices and % loss of these practices from baseline
			✓		12.2 Natural deterioration of important cultural site values	- % of sites impacted (by deterioration)
			✓		12.3 Destruction of cultural heritage buildings, gardens, sites etc.	- % of sites impacted (by destruction)
			✓		12.4 Effect of Influence groups on IP values and freedom to decide	- No. of external groups (e.g., church, political parties, NGOs, NGAs)
		✓			12.5 Loss of support to communities and projects due to changes in political leadership <i>= possible impact in change of leadership</i>	- No. of projects implemented (and type of projects, budget)



# ASSESSMENT FORM

Issue	Criteria	Score	Justification / Explanation / Remarks
<b>1. Legal status</b>	The protected area is not gazetted/covenanted.	0	
Does the protected area have legal status?	There is agreement that the protected area should be gazetted/ covenanted but the process has not yet begun. Key features (e.g. Key Biodiversity Area trigger species) to be protected, identified and agreed upon by local government and/or DENR.	1	
<b>CONTEXT</b>	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant). Presidential Proclamation or local (municipal/provincial) ordinance. <i>Note: PAs which have not passed through public consultation can only score a maximum of 2.</i>	2	
	The protected area has been formally gazetted/covenanted. Republic Act.	3	
<b>2. Protected area regulations</b>	There are no regulations for controlling land use and activities in the protected area. Only laws are those generally applicable throughout the country	0	
Are appropriate regulations in place to control land use and activities (e.g. hunting)?	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses. Regulations specific for the area but these do not address the key threats to PA key features.	1	
<b>PLANNING</b>	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps. Regulations specific for the area, and key threats to its key features but are not based upon carrying capacity for extraction & pollution.	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management. Regulations specific for the area, and key threats to its key features and based upon carrying capacity (e.g. extraction, pollution, habitat destruction).	3	
<b>3. Law enforcement</b>	The staff has no effective capacity/resources to enforce protected area legislation and regulations No staff other than PASu, no training, and/or no budget.	0	
Can staff (i.e.			



<p>those with responsibility for managing the site) enforce protected area rules well enough?</p> <p><b>INPUT</b></p>	<p>There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support). In addition to PASu, presence of full time PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p>	1	
	<p>The staff has acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain.</p> <p>Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p> <p>(Note: An updated deputization order/ paper should be provided).</p>	2	
	<p>The staff has excellent capacity/resources to enforce protected area legislation and regulations.</p> <p>Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p> <p>(Note: An updated deputization order/ paper should be provided).</p>	3	
<p><b>4. Protected area objectives</b></p> <p>Is management undertaken according to agreed objectives?</p> <p><b>PLANNING</b></p>	<p>No firm objectives have been agreed for the protected area.</p>	0	
	<p>The protected area has agreed objectives, but is not managed according to these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. Less than 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	1	
	<p>The protected area has agreed objectives, but is only partially managed according to these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	2	
	<p>The protected area has agreed objectives and is managed to meet these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 70% of WFP and available staff and budget addressing the key priorities of the PAMP/IPAP.</p>	3	
<p><b>5. Protected Area Management</b></p>	<p>Management Zones are not defined and not reflected on the PA Management Plan.</p>	0	



<b>Zone</b>  Are the protected area management zones established in appropriate areas and are known by communities?  <b>PLANNING</b>	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS but are not translated on maps and not reflected on the PA Management Plan.	1	
	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	2	
	Management Zones are defined, designated and marked on the ground following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	3	
<b>6. Protected area boundary demarcation</b> Is the boundary known and demarcated?  <b>PROCESS</b>	The boundary of the protected area is not known by the management authority or local residents/neighboring land users.	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighboring land users. Managers can describe the boundary landmarks in the field (i.e., terrestrial: landmarks; marine: technical description)	1	
	The boundary of the protected area is known by both the management authority and local residents/neighboring land users but is not appropriately demarcated. Signs exist at major entry points and boundaries are based upon landmarks in the field (i.e., terrestrial: landmarks; marine: technical description).	2	
	The boundary of the protected area is known by the management authority and local residents/neighboring land users and is appropriately demarcated. Perimeter is clearly demarcated (i.e., for marine, technical descriptions are visible from jump-off points/landward side).	3	
<b>7. Management Plan</b>  Is there a management plan and is it being implemented?  <b>PLANNING</b>	There is no management plan for the protected area. The management plan is still being prepared.	0	
	A management plan has been prepared but is not being implemented. Management plan has been officially adopted.	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems. The highest priority activities of the official management plan are being implemented.	2	
	A management plan exists and is being implemented. At least 70% of the activities (including all high priority activities) of the official management plan are being implemented.	3	



7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan.	(+1)	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan.	(+1)	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning.	(+1)	
7d. Operations Manual		(+1)	
<b>8. Regular work plan (Annual WFP)</b>  Is there regular work plan and is it being implemented?  <b>PLANNING</b>	No regular work plan exists	0	
	A regular work plan exists but few of the activities are implemented. Less than 50% of WFP is implemented.	1	
	A regular work plan exists and many activities are implemented. At least 50% of WFP activities (including priority activities) is implemented.	(2)	
	A regular work plan exists and all activities are implemented. At least 70% of WFP activities (including priority activities) is implemented.	3	
<b>9. Resource inventory</b>  Do you have enough information to manage the area?  <b>INPUT</b>	There is little or no information available on the critical habitats, species and cultural values of the protected area. <i>If information is more than 10 years and have not been updated.</i>	0	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making.	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making.	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making.	(3)	
<b>10. Protection systems</b>  Are systems in	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use. Score is also 0 if there is inadequate systematic monitoring and reporting of violations.	0	



<p>place to control access/resource use in the protected area?</p> <p><b>PROCESS</b></p>	<p>Protection systems are only partially effective in controlling access/resource use. At least 70% of reported violations were apprehended based upon systematic monitoring.</p>	1	
	<p>Protection systems are moderately effective in controlling access/resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring.</p>	2	
	<p>Protection systems are largely or wholly effective in controlling access/ resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring. Moreover, systematic monitoring indicates that violations are decreasing.</p>	3	
<p><b>11. Research</b></p> <p>Is there a programme of management-orientated survey and research work?</p> <p>Please attach results of studies</p> <p><b>PROCESS</b></p>	<p>There is no survey or research work taking place in the protected area.</p>	0	
	<p>There is a small amount of survey and research work but it is not directed towards the needs of protected area management.</p>	1	
	<p>There is considerable survey and research work but it is not directed towards the needs of protected area management.</p>	2	
	<p>There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs.</p>	3	
<p><b>12. Resource management</b></p> <p>Is active resource management being undertaken?</p> <p><b>PROCESS</b></p>	<p>Active resource management is not being undertaken. No annual WFP.</p>	0	
	<p>Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented. Presence of a WFP and less than 50% of the requirements for resource management is implemented.</p>	1	
	<p>Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed. Presence of a WFP and 50-70% of the requirements for resource management is implemented.</p>	2	
	<p>Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented. Presence of a WFP and 100% of the requirements for resource management is implemented.</p>	3	
<b>13. Staff</b>	<p>There is no staff. Only the PASu.</p>	0	



<b>numbers</b>  Are there enough people employed to manage the protected area?  <b>INPUTS</b>	Staff numbers are inadequate for critical management activities.  Staffing below minimum requirements under the PAMP.	1	
	Staff numbers are below optimum level for critical management activities.  Staffing meets minimum requirements under the PAMP.	2	
	Staff numbers are adequate for the management needs of the protected area.  <i>All staffing requirement in the PAMPs Organization Chart filled.</i>	3	
<b>14. Staff training</b>  Are staff adequately trained to fulfil management objectives?  <b>INPUTS</b>	Staff lack the skills needed for protected area management.	0	
	Staff training and skills are low relative to the needs of the protected area. Technical staff (volunteers are not included in this requirement) can identify the specific features being conserved and can explain their benefits to key stakeholders.	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management. Each staff has at least a general education and one (1) training that specifically directly matches his/her primary role in PA management. Technical staff can identify the specific features being conserved and can explain their benefits to key stakeholders.	2	
	Staff training and skills are aligned with the management needs of the protected area. This should not be based upon perception but on actual capability compared to competency standards. That is, you may think you know but you don't. Or you may think you don't know enough, but you actually know enough.	3	
<b>15. Current budget</b>  Is the current budget sufficient?  <b>INPUTS</b>	There is no budget for management of the protected area. No WFP.	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage. Less than 50% of WFP is implemented.	1	
	The available budget is acceptable but could be further improved to fully achieve effective management. At least 50% of WFP activities (including priority activities) is implemented.	2	
	The available budget is enough and meets the full management needs of the protected area. At least 70% of WFP activities (including priority activities) is implemented.	3	



<b>16. Security of budget</b>  Is the budget secure?  <b>INPUTS</b>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding.	0	
	There is very little secure budget and the protected area could not function adequately without outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 2 years.	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 5 years.	2	
	There is a secure budget for the protected area and its management needs. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 7 years. In addition, user fees have provided at least 30% of the budget in the last 5 years.	3	
<b>17. Management of budget</b>  Is the budget managed to meet critical management needs?  <b>PROCESS</b>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year).	0	
	Budget management is poor and constraints effectiveness. At least 60% of the planned annual budget was actually spent for the purpose it was intended.	1	
	Budget management is adequate but could be improved. At least 70% of the planned annual budget was actually spent for the purpose it was intended.	2	
	Budget management is excellent and meets management needs. At least 80% of the planned annual budget was actually spent for the purpose it was intended.	3	
<b>18. Equipment</b>  Is equipment sufficient for management needs?  <b>INPUT</b>	There are little or no equipment and facilities for management needs.	0	
	There are some equipment and facilities but these are inadequate for most management needs. There is capability to communicate among all key stakeholders (PAMB ExeCom and PA staff) and enforcers located in any point of the protected area within 1 hour.	1	
	There are equipment and facilities, but still some gaps that constrain management. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach any point of the protected area within 8 hours.	2	
	There are adequate equipment and facilities. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach	3	



	any point of the protected area within 8 hours. There is adequate equipment such that the safety of enforcers in arresting major violators is ensured.		
<b>19. Maintenance of equipment</b>  Is equipment adequately maintained?  <b>PROCESS</b>	There is little or no maintenance of equipment and facilities.	0	
	There is some <i>ad hoc</i> maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 5 years.	1	
	There is basic maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 10 years.	2	
	Equipment and facilities are well maintained. Communication and transportation equipment have been maintained for at least 10 years. In addition, adequate financial resources are pro-actively being set aside to replace equipment in line with their depreciation rate.	3	
<b>20. Education and awareness</b>  Is there a planned education programme linked to the objectives and needs?  <b>PROCESS</b>	There is no education and awareness programme.	0	
	There is a limited and <i>ad hoc</i> education and awareness programme.	1	
	There is an education and awareness programme but it only partly meets needs and could be improved.	2	
	There is an appropriate and fully implemented education and awareness programme.	3	
<b>21. Planning for adjacent land and water use</b>  Does land and water use planning recognise the protected area and aid the achievement of objectives?  <b>PLANNING</b>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area.	0	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area. Existing Comprehensive Development Plan (CDP), Comprehensive Land Use Plan (CLUP), Forest Land Use Plan (FLUP), and Integrated Coastal Management Plan (ICM), if any, do not conflict with the PA plan (even if it was not explicitly intended as such).	1	
	Adjacent land and water use planning partially <u>takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, and ICM incorporate or is intentionally consistent with the Protected Area plan.	2	
	Adjacent land and water use planning <u>fully takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, ICM and Provincial Development Plan(s)	3	



	incorporate or is intentionally consistent with the Protected Area Plan and directly contributes to Protected Area management.		
<b>22. State and commercial neighbors</b>  Is there co-operation with adjacent land and water users?  <b>PROCESS</b>	There is no contact between managers and neighboring official or corporate land and water users.	0	
	There is contact between managers and neighboring official or corporate land and water users but little or no cooperation.	1	
	There is contact between managers and neighboring official or corporate land and water users, but only some co-operation. There are MOAs/agreements with at least 20% of LGUs and 1 of the top 5 corporate users.	2	
	There is regular contact between managers and neighboring official or corporate land and water users, and substantial co-operation on management. There are MOAs/agreements with at least 50% of LGUs and 2 of the top 5 corporate users and priority activities of the agreements are being implemented.	3	
<b>23. Indigenous people</b>  Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?  <b>PROCESS</b>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area. Indigenous and traditional peoples are in the area but are not represented in the PAMB.	0	
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management. Indigenous and traditional peoples are in the area and are represented in the PAMB but do not actually participate in the meetings	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved. Indigenous and traditional peoples are in the area and are represented in the PAMB and actually participate in the meetings and in field activities	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management. Indigenous and traditional peoples are in the area and are represented in the PAMB, actually participate in the meetings and lead some field activities.	3	
<b>24. Local communities</b>  Do local communities resident or near the protected area	Local communities have no input into decisions relating to the management of the protected area. Local communities are not represented in the PAMB	0	
	Local communities have some input into discussions relating to management but no direct role in management. Local communities are represented in the PAMB but do not actually participate in the meetings.	1	



<p>have input to management decisions?</p> <p><b>PROCESS</b></p>	<p>Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved.</p> <p>Local communities are represented in the PAMB and actually participate in the meetings and in field activities.</p>	2	
	<p>Local communities directly participate in all relevant decisions relating to management, e.g. co-management.</p> <p>Local communities are represented in the PAMB, actually participate in the meetings and lead some field activities.</p>	3	
Additional points <i>Local communities/indigenous peoples</i>			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers.	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented.	+1	
24c. Impact on communities	Local and/or indigenous people actively support the protected area.	+1	
<p><b>25. Economic benefit (Ecosystem Services)</b></p> <p>Is the protected area providing economic benefits (ecosystem services) to local communities, e.g. income, employment, payment for environmental services?</p> <p><b>OUTCOMES</b></p>	The protected area does not deliver any economic benefits (ecosystem services) to local communities.	0	
	Potential economic benefits (ecosystem services) are recognised and plans to realise these have been developed.	1	
	There is some flow of economic benefits (ecosystem services) to local communities.	2	
	<p>There is a major flow of economic benefits to local communities from activities associated with the protected area.</p> <p>At least 10% of households are receiving economic benefits. (This should not include direct employment by the protected area management.).</p>	3	
<p><b>26. Monitoring and evaluation</b></p> <p>Are management activities monitored against</p>	There is no monitoring and evaluation in the protected area.	0	
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results.	1	
	<p>There is an agreed and implemented monitoring and evaluation system but results do not feed back into management.</p> <p>Governance, bio-physical and socio-economic parameters were regularly monitored over the last 3 years.</p>	2	



performance? <b>PROCESS</b>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management.	3	
<b>27. Visitor facilities</b>	There are no visitor facilities and services despite an identified need.	0	
Are visitor facilities adequate? <b>OUTPUTS</b>	Visitor facilities and services are inappropriate for current levels of visitation. Access trails, toilet(s) and shelters are inadequate.	1	
	Visitor facilities and services are adequate for current levels of visitation but could be improved. Access trails, toilet(s) and shelters are adequate to meet the needs of 80% of the peak level of visitors	2	
	Visitor facilities and services are excellent for current levels of visitation. Access trails, toilet(s), shelters and a visitor center are adequate to meet the needs of 100% of the peak level of visitors and there is an emergency response team and mechanism.	3	
<b>28. Commercial tourism operators</b>	There is little or no contact between managers and tourism operators using the protected area.	0	
Do commercial tour operators contribute to protected area management? <b>PROCESS</b>	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters.	1	
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values. There is a signed agreement between managers and tourism operators.	2	
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values. Tourism operators actually lead relevant elements of implementation including maintenance of key features (PA values).	3	
<b>29. Fees</b>	Although fees are theoretically applied, they are not collected.	0	
If fees (i.e. entry fees or fines) are applied, do they help protected area management? <b>INPUTS</b>	Fees are collected, but make no contribution to the protected area or its environs	1	
	Fees are collected, and make some contribution to the protected area and its environs. Established IPAF.	2	
	Fees are collected and make a substantial contribution to the protected area and its environs. IPAF contribute at least 30% of management expenses.	3	



<b>(a) 29a. Additional Points</b>	At least 20% of IPAF is allocated to support sustainable financing activities.	(+1)	
<b>30. Condition of values</b> What is the condition of the important values of the protected area as compared to when it was first designated? <b>OUTCOMES</b>	Many important biodiversity, ecological or cultural values are being severely degraded.	0	
	Some biodiversity, ecological or cultural values are being severely degraded.	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted.	(2)	
	Biodiversity, ecological and cultural values are predominantly intact.	3	
30a: Condition of value	The assessment of the condition of values is based on research and/or monitoring	(+1)	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	(+1)	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	(+1)	
<b>TOTAL SCORE</b>			



# ASSESSMENT FORM

Issue	Criteria	Score	Justification / Explanation / Remarks
<b>1. Legal status</b>	The protected area is not gazetted/covenanted.	0	
Does the protected area have legal status?	There is agreement that the protected area should be gazetted/ covenanted but the process has not yet begun. Key features (e.g. Key Biodiversity Area trigger species) to be protected, identified and agreed upon by local government and/or DENR.	1	
<b>CONTEXT</b>	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant). Presidential Proclamation or local (municipal/provincial) ordinance. <i>Note: PAs which have not passed through public consultation can only score a maximum of 2.</i>	2	
	The protected area has been formally gazetted/covenanted. Republic Act.	3	
<b>2. Protected area regulations</b>	There are no regulations for controlling land use and activities in the protected area. Only laws are those generally applicable throughout the country	0	
Are appropriate regulations in place to control land use and activities (e.g. hunting)?	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses. Regulations specific for the area but these do not address the key threats to PA key features.	1	
<b>PLANNING</b>	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps. Regulations specific for the area, and key threats to its key features but are not based upon carrying capacity for extraction & pollution.	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management. Regulations specific for the area, and key threats to its key features and based upon carrying capacity (e.g. extraction, pollution, habitat destruction).	3	
<b>3. Law enforcement</b>	The staff has no effective capacity/resources to enforce protected area legislation and regulations	0	
Can staff (i.e.	No staff other than PASu, no training, and/or no budget.		



<p>those with responsibility for managing the site) enforce protected area rules well enough?</p> <p><b>INPUT</b></p>	<p>There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support). In addition to PASu, presence of full time PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p>	1	
	<p>The staff has acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain.</p> <p>Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p> <p>(Note: An updated deputization order/ paper should be provided).</p>	2	
	<p>The staff has excellent capacity/resources to enforce protected area legislation and regulations.</p> <p>Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p> <p>(Note: An updated deputization order/ paper should be provided).</p>	3	
<p><b>4. Protected area objectives</b></p> <p>Is management undertaken according to agreed objectives?</p> <p><b>PLANNING</b></p>	<p>No firm objectives have been agreed for the protected area.</p>	0	
	<p>The protected area has agreed objectives, but is not managed according to these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. Less than 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	1	
	<p>The protected area has agreed objectives, but is only partially managed according to these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	2	
	<p>The protected area has agreed objectives and is managed to meet these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 70% of WFP and available staff and budget addressing the key priorities of the PAMP/IPAP.</p>	3	
<p><b>5. Protected Area Management</b></p>	<p>Management Zones are not defined and not reflected on the PA Management Plan.</p>	0	



<b>Zone</b>  Are the protected area management zones established in appropriate areas and are known by communities?  <b>PLANNING</b>	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS but are not translated on maps and not reflected on the PA Management Plan.	1	
	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	2	
	Management Zones are defined, designated and marked on the ground following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	3	
<b>6. Protected area boundary demarcation</b> Is the boundary known and demarcated?  <b>PROCESS</b>	The boundary of the protected area is not known by the management authority or local residents/neighboring land users.	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighboring land users. Managers can describe the boundary landmarks in the field (i.e., terrestrial: landmarks; marine: technical description)	1	
	The boundary of the protected area is known by both the management authority and local residents/neighboring land users but is not appropriately demarcated. Signs exist at major entry points and boundaries are based upon landmarks in the field (i.e., terrestrial: landmarks; marine: technical description).	2	
	The boundary of the protected area is known by the management authority and local residents/neighboring land users and is appropriately demarcated. Perimeter is clearly demarcated (i.e., for marine, technical descriptions are visible from jump-off points/landward side).	3	
<b>7. Management Plan</b>  Is there a management plan and is it being implemented?  <b>PLANNING</b>	There is no management plan for the protected area. The management plan is still being prepared.	0	
	A management plan has been prepared but is not being implemented. Management plan has been officially adopted.	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems. The highest priority activities of the official management plan are being implemented.	2	
	A management plan exists and is being implemented. At least 70% of the activities (including all high priority activities) of the official management plan are being implemented.	3	



7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan.	(+1)	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan.	(+1)	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning.	(+1)	
7d. Operations Manual		(+1)	
<b>8. Regular work plan (Annual WFP)</b>  Is there a regular work plan and is it being implemented?  <b>PLANNING</b>	No regular work plan exists	0	
	A regular work plan exists but few of the activities are implemented. Less than 50% of WFP is implemented.	1	
	A regular work plan exists and many activities are implemented. At least 50% of WFP activities (including priority activities) is implemented.	2	
	A regular work plan exists and all activities are implemented. At least 70% of WFP activities (including priority activities) is implemented.	(3)	
<b>9. Resource inventory</b>  Do you have enough information to manage the area?  <b>INPUT</b>	There is little or no information available on the critical habitats, species and cultural values of the protected area. <i>If information is more than 10 years and have not been updated.</i>	0	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making.	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making.	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making.	(3)	
<b>10. Protection systems</b>  Are systems in	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use. Score is also 0 if there is inadequate systematic monitoring and reporting of violations.	0	



<p>place to control access/resource use in the protected area?</p> <p><b>PROCESS</b></p>	<p>Protection systems are only partially effective in controlling access/resource use. At least 70% of reported violations were apprehended based upon systematic monitoring.</p>	1	
	<p>Protection systems are moderately effective in controlling access/resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring.</p>	②	
	<p>Protection systems are largely or wholly effective in controlling access/ resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring. Moreover, systematic monitoring indicates that violations are decreasing.</p>	3	
<p><b>11. Research</b></p> <p>Is there a programme of management-orientated survey and research work? Please attach results of studies</p> <p><b>PROCESS</b></p>	<p>There is no survey or research work taking place in the protected area.</p>	0	
	<p>There is a small amount of survey and research work but it is not directed towards the needs of protected area management.</p>	1	
	<p>There is considerable survey and research work but it is not directed towards the needs of protected area management.</p>	2	
	<p>There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs.</p>	③	
<p><b>12. Resource management</b></p> <p>Is active resource management being undertaken?</p> <p><b>PROCESS</b></p>	<p>Active resource management is not being undertaken. No annual WFP.</p>	0	
	<p>Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented. Presence of a WFP and less than 50% of the requirements for resource management is implemented.</p>	1	
	<p>Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed. Presence of a WFP and 50-70% of the requirements for resource management is implemented.</p>	2	
	<p>Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented. Presence of a WFP and 100% of the requirements for resource management is implemented.</p>	③	
<b>13. Staff</b>	<p>There is no staff. Only the PASu.</p>	0	



<b>numbers</b>  Are there enough people employed to manage the protected area?  <b>INPUTS</b>	Staff numbers are inadequate for critical management activities.  Staffing below minimum requirements under the PAMP.	1	
	Staff numbers are below optimum level for critical management activities.  Staffing meets minimum requirements under the PAMP.	2	
	Staff numbers are adequate for the management needs of the protected area.  <i>All staffing requirement in the PAMPs Organization Chart filled.</i>	3	
<b>14. Staff training</b>  Are staff adequately trained to fulfil management objectives?  <b>INPUTS</b>	Staff lack the skills needed for protected area management.	0	
	Staff training and skills are low relative to the needs of the protected area. Technical staff (volunteers are not included in this requirement) can identify the specific features being conserved and can explain their benefits to key stakeholders.	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management. Each staff has at least a general education and one (1) training that specifically directly matches his/her primary role in PA management. Technical staff can identify the specific features being conserved and can explain their benefits to key stakeholders.	2	
	Staff training and skills are aligned with the management needs of the protected area. This should not be based upon perception but on actual capability compared to competency standards. That is, you may think you know but you don't. Or you may think you don't know enough, but you actually know enough.	3	
<b>15. Current budget</b>  Is the current budget sufficient?  <b>INPUTS</b>	There is no budget for management of the protected area. No WFP.	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage. Less than 50% of WFP is implemented.	1	
	The available budget is acceptable but could be further improved to fully achieve effective management. At least 50% of WFP activities (including priority activities) is implemented.	2	
	The available budget is enough and meets the full management needs of the protected area. At least 70% of WFP activities (including priority activities) is implemented.	3	



<b>16. Security of budget</b>  Is the budget secure?  <b>INPUTS</b>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding.	0	
	There is very little secure budget and the protected area could not function adequately without outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 2 years.	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 5 years.	2	
	There is a secure budget for the protected area and its management needs. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 7 years. In addition, user fees have provided at least 30% of the budget in the last 5 years.	③	
<b>17. Management of budget</b>  Is the budget managed to meet critical management needs?  <b>PROCESS</b>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year).	0	
	Budget management is poor and constraints effectiveness. At least 60% of the planned annual budget was actually spent for the purpose it was intended.	1	
	Budget management is adequate but could be improved. At least 70% of the planned annual budget was actually spent for the purpose it was intended.	2	
	Budget management is excellent and meets management needs. At least 80% of the planned annual budget was actually spent for the purpose it was intended.	③	
<b>18. Equipment</b>  Is equipment sufficient for management needs?  <b>INPUT</b>	There are little or no equipment and facilities for management needs.	0	
	There are some equipment and facilities but these are inadequate for most management needs. There is capability to communicate among all key stakeholders (PAMB ExeCom and PA staff) and enforcers located in any point of the protected area within 1 hour.	1	
	There are equipment and facilities, but still some gaps that constrain management. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach any point of the protected area within 8 hours.	②	
	There are adequate equipment and facilities. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach	3	



	any point of the protected area within 8 hours. There is adequate equipment such that the safety of enforcers in arresting major violators is ensured.		
<b>19. Maintenance of equipment</b>  Is equipment adequately maintained?  <b>PROCESS</b>	There is little or no maintenance of equipment and facilities.	0	
	There is some <i>ad hoc</i> maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 5 years.	1	
	There is basic maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 10 years.	2	
	Equipment and facilities are well maintained. Communication and transportation equipment have been maintained for at least 10 years. In addition, adequate financial resources are pro-actively being set aside to replace equipment in line with their depreciation rate.	3	
<b>20. Education and awareness</b>  Is there a planned education programme linked to the objectives and needs?  <b>PROCESS</b>	There is no education and awareness programme.	0	
	There is a limited and <i>ad hoc</i> education and awareness programme.	1	
	There is an education and awareness programme but it only partly meets needs and could be improved.	2	
	There is an appropriate and fully implemented education and awareness programme.	3	
<b>21. Planning for adjacent land and water use</b>  Does land and water use planning recognise the protected area and aid the achievement of objectives?  <b>PLANNING</b>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area.	0	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area. Existing Comprehensive Development Plan (CDP), Comprehensive Land Use Plan (CLUP), Forest Land Use Plan (FLUP), and Integrated Coastal Management Plan (ICM), if any, do not conflict with the PA plan (even if it was not explicitly intended as such).	1	
	Adjacent land and water use planning partially <u>takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, and ICM incorporate or is intentionally consistent with the Protected Area plan.	2	
	Adjacent land and water use planning <u>fully takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, ICM and Provincial Development Plan(s)	3	



	incorporate or is intentionally consistent with the Protected Area Plan and directly contributes to Protected Area management.		
<b>22. State and commercial neighbors</b>  Is there co-operation with adjacent land and water users?  <b>PROCESS</b>	There is no contact between managers and neighboring official or corporate land and water users.	0	
	There is contact between managers and neighboring official or corporate land and water users but little or no cooperation.	1	
	There is contact between managers and neighboring official or corporate land and water users, but only some co-operation. There are MOAs/agreements with at least 20% of LGUs and 1 of the top 5 corporate users.	2	
	There is regular contact between managers and neighboring official or corporate land and water users, and substantial co-operation on management. There are MOAs/agreements with at least 50% of LGUs and 2 of the top 5 corporate users and priority activities of the agreements are being implemented.	3	
<b>23. Indigenous people</b>  Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?  <b>PROCESS</b>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area. Indigenous and traditional peoples are in the area but are not represented in the PAMB.	0	
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management. Indigenous and traditional peoples are in the area and are represented in the PAMB but do not actually participate in the meetings	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved. Indigenous and traditional peoples are in the area and are represented in the PAMB and actually participate in the meetings and in field activities	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management. Indigenous and traditional peoples are in the area and are represented in the PAMB, actually participate in the meetings and lead some field activities.	3	
<b>24. Local communities</b>  Do local communities resident or near the protected area	Local communities have no input into decisions relating to the management of the protected area. Local communities are not represented in the PAMB	0	
	Local communities have some input into discussions relating to management but no direct role in management. Local communities are represented in the PAMB but do not actually participate in the meetings.	1	



<p>have input to management decisions?</p> <p><b>PROCESS</b></p>	<p>Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved.</p> <p>Local communities are represented in the PAMB and actually participate in the meetings and in field activities.</p>	2	
	<p>Local communities directly participate in all relevant decisions relating to management, e.g. co-management.</p> <p>Local communities are represented in the PAMB, actually participate in the meetings and lead some field activities.</p>	3	
Additional points <i>Local communities/indigenous peoples</i>			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers.	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented.	+1	
24c. Impact on communities	Local and/or indigenous people actively support the protected area.	+1	
<p><b>25. Economic benefit (Ecosystem Services)</b></p> <p>Is the protected area providing economic benefits (ecosystem services) to local communities, e.g. income, employment, payment for environmental services?</p> <p><b>OUTCOMES</b></p>	The protected area does not deliver any economic benefits (ecosystem services) to local communities.	0	
	Potential economic benefits (ecosystem services) are recognised and plans to realise these have been developed.	1	
	There is some flow of economic benefits (ecosystem services) to local communities.	2	
	<p>There is a major flow of economic benefits to local communities from activities associated with the protected area.</p> <p>At least 10% of households are receiving economic benefits. (This should not include direct employment by the protected area management.).</p>	3	
<p><b>26. Monitoring and evaluation</b></p> <p>Are management activities monitored against</p>	There is no monitoring and evaluation in the protected area.	0	
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results.	1	
	<p>There is an agreed and implemented monitoring and evaluation system but results do not feed back into management.</p> <p>Governance, bio-physical and socio-economic parameters were regularly monitored over the last 3 years.</p>	2	



performance? <b>PROCESS</b>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management.	3	
<b>27. Visitor facilities</b>	There are no visitor facilities and services despite an identified need.	0	
Are visitor facilities adequate?	Visitor facilities and services are inappropriate for current levels of visitation. Access trails, toilet(s) and shelters are inadequate.	1	
<b>OUTPUTS</b>	Visitor facilities and services are adequate for current levels of visitation but could be improved. Access trails, toilet(s) and shelters are adequate to meet the needs of 80% of the peak level of visitors	2	
	Visitor facilities and services are excellent for current levels of visitation. Access trails, toilet(s), shelters and a visitor center are adequate to meet the needs of 100% of the peak level of visitors and there is an emergency response team and mechanism.	3	
<b>28. Commercial tourism operators</b>	There is little or no contact between managers and tourism operators using the protected area.	0	
Do commercial tour operators contribute to protected area management?	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters.	1	
<b>PROCESS</b>	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values. There is a signed agreement between managers and tourism operators.	2	
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values. Tourism operators actually lead relevant elements of implementation including maintenance of key features (PA values).	3	
<b>29. Fees</b>	Although fees are theoretically applied, they are not collected.	0	
If fees (i.e. entry fees or fines) are applied, do they help protected area management?	Fees are collected, but make no contribution to the protected area or its environs	1	
<b>INPUTS</b>	Fees are collected, and make some contribution to the protected area and its environs. Established IPAF.	2	
	Fees are collected and make a substantial contribution to the protected area and its environs.  IPAF contribute at least 30% of management expenses.	3	



<b>(a) 29a. Additional Points</b>	At least 20% of IPAF is allocated to support sustainable financing activities.	(+1)	
<b>30. Condition of values</b> What is the condition of the important values of the protected area as compared to when it was first designated? <b>OUTCOMES</b>	Many important biodiversity, ecological or cultural values are being severely degraded.	0	
	Some biodiversity, ecological or cultural values are being severely degraded.	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted.	(2)	
	Biodiversity, ecological and cultural values are predominantly intact.	3	
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	(+1)	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	(+1)	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	(+1)	
<b>TOTAL SCORE</b>			



# ASSESSMENT FORM

Issue	Criteria	Score	Justification / Explanation / Remarks
<b>1. Legal status</b>	The protected area is not gazetted/covenanted.	0	
Does the protected area have legal status?	There is agreement that the protected area should be gazetted/ covenanted but the process has not yet begun. Key features (e.g. Key Biodiversity Area trigger species) to be protected, identified and agreed upon by local government and/or DENR.	1	
<b>CONTEXT</b>	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant). Presidential Proclamation or local (municipal/provincial) ordinance. <i>Note: PAs which have not passed through public consultation can only score a maximum of 2.</i>	2	
	The protected area has been formally gazetted/covenanted. Republic Act.	3	
<b>2. Protected area regulations</b>	There are no regulations for controlling land use and activities in the protected area. Only laws are those generally applicable throughout the country	0	
Are appropriate regulations in place to control land use and activities (e.g. hunting)?	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses. Regulations specific for the area but these do not address the key threats to PA key features.	1	
<b>PLANNING</b>	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps. Regulations specific for the area, and key threats to its key features but are not based upon carrying capacity for extraction & pollution.	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management. Regulations specific for the area, and key threats to its key features and based upon carrying capacity (e.g. extraction, pollution, habitat destruction).	3	
<b>3. Law enforcement</b>	The staff has no effective capacity/resources to enforce protected area legislation and regulations No staff other than PASu, no training, and/or no budget.	0	
Can staff (i.e.			



<p>those with responsibility for managing the site) enforce protected area rules well enough?</p> <p><b>INPUT</b></p>	<p>There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support). In addition to PASu, presence of full time PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p>	1	
	<p>The staff has acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain.</p> <p>Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p> <p>(Note: An updated deputization order/ paper should be provided).</p>	2	
	<p>The staff has excellent capacity/resources to enforce protected area legislation and regulations.</p> <p>Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p> <p>(Note: An updated deputization order/ paper should be provided).</p>	3	
<p><b>4. Protected area objectives</b></p> <p>Is management undertaken according to agreed objectives?</p> <p><b>PLANNING</b></p>	<p>No firm objectives have been agreed for the protected area.</p>	0	
	<p>The protected area has agreed objectives, but is not managed according to these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. Less than 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	1	
	<p>The protected area has agreed objectives, but is only partially managed according to these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	2	
	<p>The protected area has agreed objectives and is managed to meet these objectives.</p> <p>The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 70% of WFP and available staff and budget addressing the key priorities of the PAMP/IPAP.</p>	3	
<p><b>5. Protected Area Management</b></p>	<p>Management Zones are not defined and not reflected on the PA Management Plan.</p>	0	



<b>Zone</b>  Are the protected area management zones established in appropriate areas and are known by communities?  <b>PLANNING</b>	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS but are not translated on maps and not reflected on the PA Management Plan.	1	
	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	2	
	Management Zones are defined, designated and marked on the ground following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	(3)	
<b>6. Protected area boundary demarcation</b> Is the boundary known and demarcated?  <b>PROCESS</b>	The boundary of the protected area is not known by the management authority or local residents/neighboring land users.	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighboring land users. Managers can describe the boundary landmarks in the field (i.e., terrestrial: landmarks; marine: technical description)	(1)	
	The boundary of the protected area is known by both the management authority and local residents/neighboring land users but is not appropriately demarcated. Signs exist at major entry points and boundaries are based upon landmarks in the field (i.e., terrestrial: landmarks; marine: technical description).	2	
	The boundary of the protected area is known by the management authority and local residents/neighboring land users and is appropriately demarcated. Perimeter is clearly demarcated (i.e., for marine, technical descriptions are visible from jump-off points/landward side).	3	
<b>7. Management Plan</b>  Is there a management plan and is it being implemented?  <b>PLANNING</b>	There is no management plan for the protected area. The management plan is still being prepared.	0	
	A management plan has been prepared but is not being implemented. Management plan has been officially adopted.	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems. The highest priority activities of the official management plan are being implemented.	2	
	A management plan exists and is being implemented. At least 70% of the activities (including all high priority activities) of the official management plan are being implemented.	(3)	



7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan.	(+1)	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan.	(+1)	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning.	(+1)	
7d. Operations Manual		(+1)	
<b>8. Regular work plan (Annual WFP)</b>	No regular work plan exists	0	
Is there a regular work plan and is it being implemented? <b>PLANNING</b>	A regular work plan exists but few of the activities are implemented. Less than 50% of WFP is implemented.	1	
	A regular work plan exists and many activities are implemented. At least 50% of WFP activities (including priority activities) is implemented.	2	
	A regular work plan exists and all activities are implemented. At least 70% of WFP activities (including priority activities) is implemented.	(3)	
<b>9. Resource inventory</b>	There is little or no information available on the critical habitats, species and cultural values of the protected area. <i>If information is more than 10 years and have not been updated.</i>	0	
Do you have enough information to manage the area? <b>INPUT</b>	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making.	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making.	(2)	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making.	3	
<b>10. Protection systems</b> Are systems in	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use. Score is also 0 if there is inadequate systematic monitoring and reporting of violations.	0	



<p>place to control access/resource use in the protected area?</p> <p><b>PROCESS</b></p>	<p>Protection systems are only partially effective in controlling access/resource use.</p> <p>At least 70% of reported violations were apprehended based upon systematic monitoring.</p>	1	<p>With enough personnel but lacking resources.</p>
	<p>Protection systems are moderately effective in controlling access/resource use.</p> <p>At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring.</p>	(2)	
	<p>Protection systems are largely or wholly effective in controlling access/ resource use.</p> <p>At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring. Moreover, systematic monitoring indicates that violations are decreasing.</p>	3	
<p><b>11. Research</b></p> <p>Is there a programme of management-orientated survey and research work?</p> <p>Please attach results of studies</p> <p><b>PROCESS</b></p>	<p>There is no survey or research work taking place in the protected area.</p>	0	
	<p>There is a small amount of survey and research work but it is not directed towards the needs of protected area management.</p>	1	
	<p>There is considerable survey and research work but it is not directed towards the needs of protected area management.</p>	2	
	<p>There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs.</p>	(3)	
<p><b>12. Resource management</b></p> <p>Is active resource management being undertaken?</p> <p><b>PROCESS</b></p>	<p>Active resource management is not being undertaken.</p> <p>No annual WFP.</p>	0	<p>Limited budget.</p>
	<p>Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented.</p> <p>Presence of a WFP and less than 50% of the requirements for resource management is implemented.</p>	1	
	<p>Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed.</p> <p>Presence of a WFP and 50-70% of the requirements for resource management is implemented.</p>	(2)	
	<p>Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented.</p> <p>Presence of a WFP and 100% of the requirements for resource management is implemented.</p>	3	
<b>13. Staff</b>	<p>There is no staff. Only the PASu.</p>	0	



<b>numbers</b>  Are there enough people employed to manage the protected area?  <b>INPUTS</b>	Staff numbers are inadequate for critical management activities.  Staffing below minimum requirements under the PAMP.	1	
	Staff numbers are below optimum level for critical management activities.  Staffing meets minimum requirements under the PAMP.	(2)	
	Staff numbers are adequate for the management needs of the protected area.  <i>All staffing requirement in the PAMPs Organization Chart filled.</i>	<del>3</del>	
<b>14. Staff training</b>  Are staff adequately trained to fulfil management objectives?  <b>INPUTS</b>	Staff lack the skills needed for protected area management.	0	
	Staff training and skills are low relative to the needs of the protected area. Technical staff (volunteers are not included in this requirement) can identify the specific features being conserved and can explain their benefits to key stakeholders.	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management. Each staff has at least a general education and one (1) training that specifically directly matches his/her primary role in PA management. Technical staff can identify the specific features being conserved and can explain their benefits to key stakeholders.	(2)	
	Staff training and skills are aligned with the management needs of the protected area. This should not be based upon perception but on actual capability compared to competency standards. That is, you may think you know but you don't. Or you may think you don't know enough, but you actually know enough.	3	
<b>15. Current budget</b>  Is the current budget sufficient?  <b>INPUTS</b>	There is no budget for management of the protected area. No WFP.	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage. Less than 50% of WFP is implemented.	1	
	The available budget is acceptable but could be further improved to fully achieve effective management. At least 50% of WFP activities (including priority activities) is implemented.	(2)	
	The available budget is enough and meets the full management needs of the protected area. At least 70% of WFP activities (including priority activities) is implemented.	3	



<b>16. Security of budget</b>  Is the budget secure?  <b>INPUTS</b>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding.	0	
	There is very little secure budget and the protected area could not function adequately without outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 2 years.	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 5 years.	(2)	
	There is a secure budget for the protected area and its management needs. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 7 years. In addition, user fees have provided at least 30% of the budget in the last 5 years.	3	
<b>17. Management of budget</b>  Is the budget managed to meet critical management needs?  <b>PROCESS</b>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year).	0	
	Budget management is poor and constraints effectiveness. At least 60% of the planned annual budget was actually spent for the purpose it was intended.	1	
	Budget management is adequate but could be improved. At least 70% of the planned annual budget was actually spent for the purpose it was intended.	2	
	Budget management is excellent and meets management needs. At least 80% of the planned annual budget was actually spent for the purpose it was intended.	(3)	
<b>18. Equipment</b>  Is equipment sufficient for management needs?  <b>INPUT</b>	There are little or no equipment and facilities for management needs.	0	
	There are some equipment and facilities but these are inadequate for most management needs. There is capability to communicate among all key stakeholders (PAMB ExeCom and PA staff) and enforcers located in any point of the protected area within 1 hour.	1	
	There are equipment and facilities, but still some gaps that constrain management. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach any point of the protected area within 8 hours.	(2)	
	There are adequate equipment and facilities. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach	3	



	any point of the protected area within 8 hours. There is adequate equipment such that the safety of enforcers in arresting major violators is ensured.		
<b>19. Maintenance of equipment</b>	There is little or no maintenance of equipment and facilities.	0	
Is equipment adequately maintained?	There is some <i>ad hoc</i> maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 5 years.	(1)	
<b>PROCESS</b>	There is basic maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 10 years.	2	
	Equipment and facilities are well maintained. Communication and transportation equipment have been maintained for at least 10 years. In addition, adequate financial resources are pro-actively being set aside to replace equipment in line with their depreciation rate.	3	
<b>20. Education and awareness</b>	There is no education and awareness programme.	0	
Is there a planned education programme linked to the objectives and needs?	There is a limited and <i>ad hoc</i> education and awareness programme.	1	
	There is an education and awareness programme but it only partly meets needs and could be improved.	2	
<b>PROCESS</b>	There is an appropriate and fully implemented education and awareness programme.	(3)	
<b>21. Planning for adjacent land and water use</b>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area.	<del>0</del>	Included in the CLUP of Subayan according to memo.
Does land and water use planning recognise the protected area and aid the achievement of objectives?	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area. Existing Comprehensive Development Plan (CDP), Comprehensive Land Use Plan (CLUP), Forest Land Use Plan (FLUP), and Integrated Coastal Management Plan (ICM), if any, do not conflict with the PA plan (even if it was not explicitly intended as such).	(1)	
<b>PLANNING</b>	Adjacent land and water use planning partially <u>takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, and ICM incorporate or is intentionally consistent with the Protected Area plan.	2	
	Adjacent land and water use planning <u>fully takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, ICM and Provincial Development Plan(s)	3	



	incorporate or is intentionally consistent with the Protected Area Plan and directly contributes to Protected Area management.		
<b>22. State and commercial neighbors</b>  Is there co-operation with adjacent land and water users?  <b>PROCESS</b>	There is no contact between managers and neighboring official or corporate land and water users.	0	
	There is contact between managers and neighboring official or corporate land and water users but little or no cooperation.	1	
	There is contact between managers and neighboring official or corporate land and water users, but only some co-operation. There are MOAs/agreements with at least 20% of LGUs and 1 of the top 5 corporate users.	2	
	There is regular contact between managers and neighboring official or corporate land and water users, and substantial co-operation on management. There are MOAs/agreements with at least 50% of LGUs and 2 of the top 5 corporate users and priority activities of the agreements are being implemented.	3	
<b>23. Indigenous people</b>  Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?  <b>PROCESS</b>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area. Indigenous and traditional peoples are in the area but are not represented in the PAMB.	0	N/A
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management. Indigenous and traditional peoples are in the area and are represented in the PAMB but do not actually participate in the meetings	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved. Indigenous and traditional peoples are in the area and are represented in the PAMB and actually participate in the meetings and in field activities	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management. Indigenous and traditional peoples are in the area and are represented in the PAMB, actually participate in the meetings and lead some field activities.	3	
<b>24. Local communities</b>  Do local communities resident or near the protected area	Local communities have no input into decisions relating to the management of the protected area. Local communities are not represented in the PAMB	0	
	Local communities have some input into discussions relating to management but no direct role in management. Local communities are represented in the PAMB but do not actually participate in the meetings.	1	



<p>have input to management decisions?</p> <p><b>PROCESS</b></p>	<p>Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved.</p> <p>Local communities are represented in the PAMB and actually participate in the meetings and in field activities.</p>	2	<p><del>Public consultation</del></p> <p>Public consultation in crafting the Mgmt. Plan.</p>
	<p>Local communities directly participate in all relevant decisions relating to management, e.g. co-management.</p> <p>Local communities are represented in the PAMB, actually participate in the meetings and lead some field activities.</p>	3	
Additional points <i>Local communities/indigenous peoples</i>			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers.	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented.	+1	
24c. Impact on communities	Local and/or indigenous people actively support the protected area.	+1	
<p><b>25. Economic benefit (Ecosystem Services)</b></p> <p>Is the protected area providing economic benefits (ecosystem services) to local communities, e.g. income, employment, payment for environmental services?</p> <p><b>OUTCOMES</b></p>	The protected area does not deliver any economic benefits (ecosystem services) to local communities.	0	<p>Ecosystem services to fisheries w/n Mindoro Strait.</p>
	Potential economic benefits (ecosystem services) are recognised and plans to realise these have been developed.	1	
	There is some flow of economic benefits (ecosystem services) to local communities.	2	
	There is a major flow of economic benefits to local communities from activities associated with the protected area. At least 10% of households are receiving economic benefits. (This should not include direct employment by the protected area management.).	3	
<p><b>26. Monitoring and evaluation</b></p> <p>Are management activities monitored against</p>	There is no monitoring and evaluation in the protected area.	0	
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results.	1	
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management. Governance, bio-physical and socio-economic parameters were regularly monitored over the last 3 years.	2	



performance? <b>PROCESS</b>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management.	3	
<b>27. Visitor facilities</b>	There are no visitor facilities and services despite an identified need.	0	
Are visitor facilities adequate?	Visitor facilities and services are inappropriate for current levels of visitation. Access trails, toilet(s) and shelters are inadequate.	1	
<b>OUTPUTS</b>	Visitor facilities and services are adequate for current levels of visitation but could be improved. Access trails, toilet(s) and shelters are adequate to meet the needs of 80% of the peak level of visitors	2	
	Visitor facilities and services are excellent for current levels of visitation. Access trails, toilet(s), shelters and a visitor center are adequate to meet the needs of 100% of the peak level of visitors and there is an emergency response team and mechanism.	3	
<b>28. Commercial tourism operators</b>	There is little or no contact between managers and tourism operators using the protected area.	0	Not yet involve in the creation of Mngt. Plan.
Do commercial tour operators contribute to protected area management?	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters.	1	
<b>PROCESS</b>	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values. There is a signed agreement between managers and tourism operators.	2	
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values. Tourism operators actually lead relevant elements of implementation including maintenance of key features (PA values).	3	
<b>29. Fees</b>	Although fees are theoretically applied, they are not collected.	0	
If fees (i.e. entry fees or fines) are applied, do they help protected area management?	Fees are collected, but make no contribution to the protected area or its environs	1	
<b>INPUTS</b>	Fees are collected, and make some contribution to the protected area and its environs. Established IPAF.	2	
	Fees are collected and make a substantial contribution to the protected area and its environs. IPAF contribute at least 30% of management expenses.	3	



<b>(a) 29a. Additional Points</b>	At least 20% of IPAF is allocated to support sustainable financing activities.	(+1)	
<b>30. Condition of values</b> What is the condition of the important values of the protected area as compared to when it was first designated? <b>OUTCOMES</b>	Many important biodiversity, ecological or cultural values are being severely degraded.	0	
	Some biodiversity, ecological or cultural values are being severely degraded.	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted.	(2)	
	Biodiversity, ecological and cultural values are predominantly intact.	3	
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	(+1)	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	(+1)	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	(+1)	
<b>TOTAL SCORE</b>			



# ASSESSMENT FORM

Issue	Criteria	Score	Justification / Explanation / Remarks
<b>1. Legal status</b>  Does the protected area have legal status?  <b>CONTEXT</b>	The protected area is not gazetted/covenanted.	0	
	There is agreement that the protected area should be gazetted/ covenanted but the process has not yet begun. Key features (e.g. Key Biodiversity Area trigger species) to be protected, identified and agreed upon by local government and/or DENR.	1	
	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant). Presidential Proclamation or local (municipal/provincial) ordinance. <i>Note: PAs which have not passed through public consultation can only score a maximum of 2.</i>	2	
	The protected area has been formally gazetted/covenanted. Republic Act.	3	
<b>2. Protected area regulations</b>  Are appropriate regulations in place to control land use and activities (e.g. hunting)?  <b>PLANNING</b>	There are no regulations for controlling land use and activities in the protected area. Only laws are those generally applicable throughout the country	0	
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses. Regulations specific for the area but these do not address the key threats to PA key features.	1	
	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps. Regulations specific for the area, and key threats to its key features but are not based upon carrying capacity for extraction & pollution.	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management. Regulations specific for the area, and key threats to its key features and based upon carrying capacity (e.g. extraction, pollution, habitat destruction).	3	
<b>3. Law enforcement</b>  Can staff (i.e.	The staff has no effective capacity/resources to enforce protected area legislation and regulations No staff other than PASu, no training, and/or no budget.	0	



<p>those with responsibility for managing the site) enforce protected area rules well enough?</p> <p><b>INPUT</b></p>	<p>There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support). In addition to PASu, presence of full time PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p>	1	
	<p>The staff has acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain. Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting. (Note: An updated deputization order/ paper should be provided).</p>	2	
	<p>The staff has excellent capacity/resources to enforce protected area legislation and regulations. Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting. (Note: An updated deputization order/ paper should be provided).</p>	3	
<p><b>4. Protected area objectives</b></p> <p>Is management undertaken according to agreed objectives?</p> <p><b>PLANNING</b></p>	<p>No firm objectives have been agreed for the protected area.</p>	0	
	<p>The protected area has agreed objectives, but is not managed according to these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. Less than 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	1	
	<p>The protected area has agreed objectives, but is only partially managed according to these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	2	
	<p>The protected area has agreed objectives and is managed to meet these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 70% of WFP and available staff and budget addressing the key priorities of the PAMP/IPAP.</p>	3	
<p><b>5. Protected Area Management</b></p>	<p>Management Zones are not defined and not reflected on the PA Management Plan.</p>	0	



<b>Zone</b>  Are the protected area management zones established in appropriate areas and are known by communities?  <b>PLANNING</b>	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS but are not translated on maps and not reflected on the PA Management Plan.	1	
	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	2	
	Management Zones are defined, designated and marked on the ground following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	3	
<b>6. Protected area boundary demarcation</b> Is the boundary known and demarcated?  <b>PROCESS</b>	The boundary of the protected area is not known by the management authority or local residents/neighboring land users.	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighboring land users. Managers can describe the boundary landmarks in the field (i.e., terrestrial: landmarks; marine: technical description)	1	
	The boundary of the protected area is known by both the management authority and local residents/neighboring land users but is not appropriately demarcated. Signs exist at major entry points and boundaries are based upon landmarks in the field (i.e., terrestrial: landmarks; marine: technical description).	2	
	The boundary of the protected area is known by the management authority and local residents/neighboring land users and is appropriately demarcated. Perimeter is clearly demarcated (i.e., for marine, technical descriptions are visible from jump-off points/landward side).	3	
<b>7. Management Plan</b>  Is there a management plan and is it being implemented?  <b>PLANNING</b>	There is no management plan for the protected area. The management plan is still being prepared.	0	
	A management plan has been prepared but is not being implemented. Management plan has been officially adopted.	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems. The highest priority activities of the official management plan are being implemented.	2	
	A management plan exists and is being implemented. At least 70% of the activities (including all high priority activities) of the official management plan are being implemented.	3	



7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan.	+1	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan.	+1	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning.	+1	
7d. Operations Manual		+1	
<b>8. Regular work plan (Annual WFP)</b>	No regular work plan exists	0	
Is there a regular work plan and is it being implemented? <b>PLANNING</b>	A regular work plan exists but few of the activities are implemented. Less than 50% of WFP is implemented.	1	
	A regular work plan exists and many activities are implemented. At least 50% of WFP activities (including priority activities) is implemented.	2	
	A regular work plan exists and all activities are implemented. At least 70% of WFP activities (including priority activities) is implemented.	3	
<b>9. Resource inventory</b>	There is little or no information available on the critical habitats, species and cultural values of the protected area. <i>If information is more than 10 years and have not been updated.</i>	0	
Do you have enough information to manage the area? <b>INPUT</b>	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making.	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making.	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making.	3	
<b>10. Protection systems</b>	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use. Score is also 0 if there is inadequate systematic monitoring and reporting of violations.	0	



<p>place to control access/resource use in the protected area?</p> <p><b>PROCESS</b></p>	<p>Protection systems are only partially effective in controlling access/resource use.</p> <p>At least 70% of reported violations were apprehended based upon systematic monitoring.</p>	1	
	<p>Protection systems are moderately effective in controlling access/resource use.</p> <p>At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring.</p>	2	
	<p>Protection systems are largely or wholly effective in controlling access/ resource use.</p> <p>At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring. Moreover, systematic monitoring indicates that violations are decreasing.</p>	3	
<p><b>11. Research</b></p> <p>Is there a programme of management-orientated survey and research work?</p> <p>Please attach results of studies</p> <p><b>PROCESS</b></p>	<p>There is no survey or research work taking place in the protected area.</p>	0	
	<p>There is a small amount of survey and research work but it is not directed towards the needs of protected area management.</p>	1	
	<p>There is considerable survey and research work but it is not directed towards the needs of protected area management.</p>	2	
	<p>There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs.</p>	3	
<p><b>12. Resource management</b></p> <p>Is active resource management being undertaken?</p> <p><b>PROCESS</b></p>	<p>Active resource management is not being undertaken.</p> <p>No annual WFP.</p>	0	
	<p>Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented.</p> <p>Presence of a WFP and less than 50% of the requirements for resource management is implemented.</p>	1	
	<p>Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed.</p> <p>Presence of a WFP and 50-70% of the requirements for resource management is implemented.</p>	2	
	<p>Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented.</p> <p>Presence of a WFP and 100% of the requirements for resource management is implemented.</p>	3	
<b>13. Staff</b>	<p>There is no staff. Only the PASu.</p>	0	



<b>numbers</b>  Are there enough people employed to manage the protected area?  <b>INPUTS</b>	Staff numbers are inadequate for critical management activities.  Staffing below minimum requirements under the PAMP.	1	
	Staff numbers are below optimum level for critical management activities.  Staffing meets minimum requirements under the PAMP.	2	
	Staff numbers are adequate for the management needs of the protected area.  <i>All staffing requirement in the PAMPs Organization Chart filled.</i>	3	
<b>14. Staff training</b>  Are staff adequately trained to fulfil management objectives?  <b>INPUTS</b>	Staff lack the skills needed for protected area management.	0	
	Staff training and skills are low relative to the needs of the protected area. Technical staff (volunteers are not included in this requirement) can identify the specific features being conserved and can explain their benefits to key stakeholders.	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management. Each staff has at least a general education and one (1) training that specifically directly matches his/her primary role in PA management. Technical staff can identify the specific features being conserved and can explain their benefits to key stakeholders.	2	
	Staff training and skills are aligned with the management needs of the protected area. This should not be based upon perception but on actual capability compared to competency standards. That is, you may think you know but you don't. Or you may think you don't know enough, but you actually know enough.	3	
<b>15. Current budget</b>  Is the current budget sufficient?  <b>INPUTS</b>	There is no budget for management of the protected area. No WFP.	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage. Less than 50% of WFP is implemented.	1	
	The available budget is acceptable but could be further improved to fully achieve effective management. At least 50% of WFP activities (including priority activities) is implemented.	2	
	The available budget is enough and meets the full management needs of the protected area. At least 70% of WFP activities (including priority activities) is implemented.	3	



<b>16. Security of budget</b>  Is the budget secure?  <b>INPUTS</b>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding.	0	
	There is very little secure budget and the protected area could not function adequately without outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 2 years.	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 5 years.	2	
	There is a secure budget for the protected area and its management needs. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 7 years. In addition, user fees have provided at least 30% of the budget in the last 5 years.	3	
<b>17. Management of budget</b>  Is the budget managed to meet critical management needs?  <b>PROCESS</b>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year).	0	
	Budget management is poor and constraints effectiveness. At least 60% of the planned annual budget was actually spent for the purpose it was intended.	1	
	Budget management is adequate but could be improved. At least 70% of the planned annual budget was actually spent for the purpose it was intended.	2	
	Budget management is excellent and meets management needs. At least 80% of the planned annual budget was actually spent for the purpose it was intended.	3	
<b>18. Equipment</b>  Is equipment sufficient for management needs?  <b>INPUT</b>	There are little or no equipment and facilities for management needs.	0	
	There are some equipment and facilities but these are inadequate for most management needs. There is capability to communicate among all key stakeholders (PAMB ExeCom and PA staff) and enforcers located in any point of the protected area within 1 hour.	1	
	There are equipment and facilities, but still some gaps that constrain management. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach any point of the protected area within 8 hours.	2	
	There are adequate equipment and facilities. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach	<del>3</del>	



	any point of the protected area within 8 hours. There is adequate equipment such that the safety of enforcers in arresting major violators is ensured.		
<b>19. Maintenance of equipment</b>	There is little or no maintenance of equipment and facilities.	0	
Is equipment adequately maintained?	There is some <i>ad hoc</i> maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 5 years.	1	
<b>PROCESS</b>	There is basic maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 10 years.	2	
	Equipment and facilities are well maintained. Communication and transportation equipment have been maintained for at least 10 years. In addition, adequate financial resources are pro-actively being set aside to replace equipment in line with their depreciation rate.	3	
<b>20. Education and awareness</b>	There is no education and awareness programme.	0	
Is there a planned education programme linked to the objectives and needs?	There is a limited and <i>ad hoc</i> education and awareness programme.	1	
	There is an education and awareness programme but it only partly meets needs and could be improved.	2	
<b>PROCESS</b>	There is an appropriate and fully implemented education and awareness programme.	3	
<b>21. Planning for adjacent land and water use</b>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area.	0	
Does land and water use planning recognise the protected area and aid the achievement of objectives?	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area. Existing Comprehensive Development Plan (CDP), Comprehensive Land Use Plan (CLUP), Forest Land Use Plan (FLUP), and Integrated Coastal Management Plan (ICM), if any, do not conflict with the PA plan (even if it was not explicitly intended as such).	1	
<b>PLANNING</b>	Adjacent land and water use planning partially <u>takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, and ICM incorporate or is intentionally consistent with the Protected Area plan.	2	
	Adjacent land and water use planning <u>fully takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, ICM and Provincial Development Plan(s)	3	



	incorporate or is intentionally consistent with the Protected Area Plan and directly contributes to Protected Area management.		
<b>22. State and commercial neighbors</b>  Is there co-operation with adjacent land and water users?  <b>PROCESS</b>	There is no contact between managers and neighboring official or corporate land and water users.	0	
	There is contact between managers and neighboring official or corporate land and water users but little or no cooperation.	1	
	There is contact between managers and neighboring official or corporate land and water users, but only some co-operation. There are MOAs/agreements with at least 20% of LGUs and 1 of the top 5 corporate users.	2	
	There is regular contact between managers and neighboring official or corporate land and water users, and substantial co-operation on management. There are MOAs/agreements with at least 50% of LGUs and 2 of the top 5 corporate users and priority activities of the agreements are being implemented.	3	
<b>23. Indigenous people</b>  Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?  <b>PROCESS</b>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area. Indigenous and traditional peoples are in the area but are not represented in the PAMB.	0	N/A
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management. Indigenous and traditional peoples are in the area and are represented in the PAMB but do not actually participate in the meetings	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved. Indigenous and traditional peoples are in the area and are represented in the PAMB and actually participate in the meetings and in field activities	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management. Indigenous and traditional peoples are in the area and are represented in the PAMB, actually participate in the meetings and lead some field activities.	3	
<b>24. Local communities</b>  Do local communities resident or near the protected area	Local communities have no input into decisions relating to the management of the protected area. Local communities are not represented in the PAMB	0	
	Local communities have some input into discussions relating to management but no direct role in management. Local communities are represented in the PAMB but do not actually participate in the meetings.	1	



<p>have input to management decisions?</p> <p><b>PROCESS</b></p>	<p>Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved.</p> <p>Local communities are represented in the PAMB and actually participate in the meetings and in field activities.</p>	2	
	<p>Local communities directly participate in all relevant decisions relating to management, e.g. co-management.</p> <p>Local communities are represented in the PAMB, actually participate in the meetings and lead some field activities.</p>	3	
Additional points <i>Local communities/indigenous peoples</i>			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers.	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented.	+1	
24c. Impact on communities	Local and/or indigenous people actively support the protected area.	+1	
<p><b>25. Economic benefit (Ecosystem Services)</b></p> <p>Is the protected area providing economic benefits (ecosystem services) to local communities, e.g. income, employment, payment for environmental services?</p> <p><b>OUTCOMES</b></p>	The protected area does not deliver any economic benefits (ecosystem services) to local communities.	0	Two production
	Potential economic benefits (ecosystem services) are recognised and plans to realise these have been developed.	1	
	There is some flow of economic benefits (ecosystem services) to local communities.	2	
	<p>There is a major flow of economic benefits to local communities from activities associated with the protected area.</p> <p>At least 10% of households are receiving economic benefits. (This should not include direct employment by the protected area management.).</p>	3	
<p><b>26. Monitoring and evaluation</b></p> <p>Are management activities monitored against</p>	There is no monitoring and evaluation in the protected area.	0	
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results.	1	
	<p>There is an agreed and implemented monitoring and evaluation system but results do not feed back into management.</p> <p>Governance, bio-physical and socio-economic parameters were regularly monitored over the last 3 years.</p>	2	



performance? <b>PROCESS</b>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management.	3	
<b>27. Visitor facilities</b>	There are no visitor facilities and services despite an identified need.	0	
Are visitor facilities adequate?	Visitor facilities and services are inappropriate for current levels of visitation. Access trails, toilet(s) and shelters are inadequate.	1	
<b>OUTPUTS</b>	Visitor facilities and services are adequate for current levels of visitation but could be improved. Access trails, toilet(s) and shelters are adequate to meet the needs of 80% of the peak level of visitors	2	
	Visitor facilities and services are excellent for current levels of visitation. Access trails, toilet(s), shelters and a visitor center are adequate to meet the needs of 100% of the peak level of visitors and there is an emergency response team and mechanism.	3	
<b>28. Commercial tourism operators</b>	There is little or no contact between managers and tourism operators using the protected area.	0	
Do commercial tour operators contribute to protected area management?	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters.	1	
<b>PROCESS</b>	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values. There is a signed agreement between managers and tourism operators.	2	
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values. Tourism operators actually lead relevant elements of implementation including maintenance of key features (PA values).	3	
<b>29. Fees</b>	Although fees are theoretically applied, they are not collected.	0	
If fees (i.e. entry fees or fines) are applied, do they help protected area management?	Fees are collected, but make no contribution to the protected area or its environs	1	
<b>INPUTS</b>	Fees are collected, and make some contribution to the protected area and its environs. Established IPAF.	2	
	Fees are collected and make a substantial contribution to the protected area and its environs.  IPAF contribute at least 30% of management expenses.	3	



<b>(a) 29a. Additional Points</b>	At least 20% of IPAF is allocated to support sustainable financing activities.	+1	
<b>30. Condition of values</b> What is the condition of the important values of the protected area as compared to when it was first designated? <b>OUTCOMES</b>	Many important biodiversity, ecological or cultural values are being severely degraded.	0	
	Some biodiversity, ecological or cultural values are being severely degraded.	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted.	2	
	Biodiversity, ecological and cultural values are predominantly intact.	3	
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1	
<b>TOTAL SCORE</b>			



# ASSESSMENT FORM

Issue	Criteria	Score	Justification / Explanation / Remarks
<b>1. Legal status</b>	The protected area is not gazetted/covenanted.	0	
Does the protected area have legal status?	There is agreement that the protected area should be gazetted/ covenanted but the process has not yet begun. Key features (e.g. Key Biodiversity Area trigger species) to be protected, identified and agreed upon by local government and/or DENR.	1	
<b>CONTEXT</b>	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant). Presidential Proclamation or local (municipal/provincial) ordinance. <i>Note: PAs which have not passed through public consultation can only score a maximum of 2.</i>	2	
	The protected area has been formally gazetted/covenanted. Republic Act.	3	
<b>2. Protected area regulations</b>	There are no regulations for controlling land use and activities in the protected area. Only laws are those generally applicable throughout the country	0	
Are appropriate regulations in place to control land use and activities (e.g. hunting)?	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses. Regulations specific for the area but these do not address the key threats to PA key features.	1	
<b>PLANNING</b>	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps. Regulations specific for the area, and key threats to its key features but are not based upon carrying capacity for extraction & pollution.	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management. Regulations specific for the area, and key threats to its key features and based upon carrying capacity (e.g. extraction, pollution, habitat destruction).	3	
<b>3. Law enforcement</b>	The staff has no effective capacity/resources to enforce protected area legislation and regulations No staff other than PASu, no training, and/or no budget.	0	
Can staff (i.e.			



<p>those with responsibility for managing the site) enforce protected area rules well enough?</p> <p><b>INPUT</b></p>	<p>There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support). In addition to PASu, presence of full time PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p>	1	
	<p>The staff has acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain. Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting. (Note: An updated deputization order/ paper should be provided).</p>	2	
	<p>The staff has excellent capacity/resources to enforce protected area legislation and regulations. Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting. (Note: An updated deputization order/ paper should be provided).</p>	3	
<p><b>4. Protected area objectives</b></p> <p>Is management undertaken according to agreed objectives?</p> <p><b>PLANNING</b></p>	<p>No firm objectives have been agreed for the protected area.</p>	0	
	<p>The protected area has agreed objectives, but is not managed according to these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. Less than 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	1	
	<p>The protected area has agreed objectives, but is only partially managed according to these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	2	
	<p>The protected area has agreed objectives and is managed to meet these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 70% of WFP and available staff and budget addressing the key priorities of the PAMP/IPAP.</p>	3	
<p><b>5. Protected Area Management</b></p>	<p>Management Zones are not defined and not reflected on the PA Management Plan.</p>	0	



<b>Zone</b>  Are the protected area management zones established in appropriate areas and are known by communities?  <b>PLANNING</b>	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS but are not translated on maps and not reflected on the PA Management Plan.	1	
	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	2	
	Management Zones are defined, designated and marked on the ground following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	3	
<b>6. Protected area boundary demarcation</b> Is the boundary known and demarcated?  <b>PROCESS</b>	The boundary of the protected area is not known by the management authority or local residents/neighboring land users.	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighboring land users. Managers can describe the boundary landmarks in the field (i.e., terrestrial: landmarks; marine: technical description)	1	
	The boundary of the protected area is known by both the management authority and local residents/neighboring land users but is not appropriately demarcated. Signs exist at major entry points and boundaries are based upon landmarks in the field (i.e., terrestrial: landmarks; marine: technical description).	2	
	The boundary of the protected area is known by the management authority and local residents/neighboring land users and is appropriately demarcated. Perimeter is clearly demarcated (i.e., for marine, technical descriptions are visible from jump-off points/landward side).	3	
<b>7. Management Plan</b>  Is there a management plan and is it being implemented?  <b>PLANNING</b>	There is no management plan for the protected area. The management plan is still being prepared.	0	
	A management plan has been prepared but is not being implemented. Management plan has been officially adopted.	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems. The highest priority activities of the official management plan are being implemented.	2	
	A management plan exists and is being implemented. At least 70% of the activities (including all high priority activities) of the official management plan are being implemented.	3	



7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan.	+1	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan.	+1	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning.	+1	
7d. Operations Manual		+1	
<b>8. Regular work plan (Annual WFP)</b>  Is there a regular work plan and is it being implemented?  <b>PLANNING</b>	No regular work plan exists	0	
	A regular work plan exists but few of the activities are implemented. Less than 50% of WFP is implemented.	1	
	A regular work plan exists and many activities are implemented. At least 50% of WFP activities (including priority activities) is implemented.	2	
	A regular work plan exists and all activities are implemented. At least 70% of WFP activities (including priority activities) is implemented.	3	
<b>9. Resource inventory</b>  Do you have enough information to manage the area?  <b>INPUT</b>	There is little or no information available on the critical habitats, species and cultural values of the protected area. <i>If information is more than 10 years and have not been updated.</i>	0	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making.	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making. <i>Identify research gaps</i>	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making.	3	
<b>10. Protection systems</b>  Are systems in	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use. Score is also 0 if there is inadequate systematic monitoring and reporting of violations.	0	



place to control access/resource use in the protected area?	Protection systems are only partially effective in controlling access/resource use. At least 70% of reported violations were apprehended based upon systematic monitoring.	1	
<b>PROCESS</b>	Protection systems are moderately effective in controlling access/resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring.	2	
	Protection systems are largely or wholly effective in controlling access/ resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring. Moreover, systematic monitoring indicates that violations are decreasing.	3	
<b>11. Research</b>	There is no survey or research work taking place in the protected area.	0	
Is there a programme of management-orientated survey and research work?	There is a small amount of survey and research work but it is not directed towards the needs of protected area management.	1	
Please attach results of studies	There is considerable survey and research work but it is not directed towards the needs of protected area management.	2	
<b>PROCESS</b>	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs.	3	
<b>12. Resource management</b>	Active resource management is not being undertaken. No annual WFP.	0	
Is active resource management being undertaken?	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented. Presence of a WFP and less than 50% of the requirements for resource management is implemented.	1	
<b>PROCESS</b>	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed. Presence of a WFP and 50-70% of the requirements for resource management is implemented.	2	
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented. Presence of a WFP and 100% of the requirements for resource management is implemented.	3	
<b>13. Staff</b>	There is no staff. Only the PASu.	0	



<b>numbers</b>  Are there enough people employed to manage the protected area?  <b>INPUTS</b>	Staff numbers are inadequate for critical management activities.  Staffing below minimum requirements under the PAMP.	1	
	Staff numbers are below optimum level for critical management activities.  Staffing meets minimum requirements under the PAMP.	2	
	Staff numbers are adequate for the management needs of the protected area.  <i>All staffing requirement in the PAMPs Organization Chart filled.</i>	3	
<b>14. Staff training</b>  Are staff adequately trained to fulfil management objectives?  <b>INPUTS</b>	Staff lack the skills needed for protected area management.	0	
	Staff training and skills are low relative to the needs of the protected area. Technical staff (volunteers are not included in this requirement) can identify the specific features being conserved and can explain their benefits to key stakeholders.	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management. Each staff has at least a general education and one (1) training that specifically directly matches his/her primary role in PA management. Technical staff can identify the specific features being conserved and can explain their benefits to key stakeholders.	2	
	Staff training and skills are aligned with the management needs of the protected area. This should not be based upon perception but on actual capability compared to competency standards. That is, you may think you know but you don't. Or you may think you don't know enough, but you actually know enough.	3	
<b>15. Current budget</b>  Is the current budget sufficient?  <b>INPUTS</b>	There is no budget for management of the protected area. No WFP.	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage. Less than 50% of WFP is implemented.	1	
	The available budget is acceptable but could be further improved to fully achieve effective management. At least 50% of WFP activities (including priority activities) is implemented.	2	
	The available budget is enough and meets the full management needs of the protected area. At least 70% of WFP activities (including priority activities) is implemented.	3	



<b>16. Security of budget</b>  Is the budget secure?  <b>INPUTS</b>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding.	0	
	There is very little secure budget and the protected area could not function adequately without outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 2 years.	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 5 years.	2	
	There is a secure budget for the protected area and its management needs. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 7 years. In addition, user fees have provided at least 30% of the budget in the last 5 years.	3	
<b>17. Management of budget</b>  Is the budget managed to meet critical management needs?  <b>PROCESS</b>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year).	0	
	Budget management is poor and constraints effectiveness. At least 60% of the planned annual budget was actually spent for the purpose it was intended.	1	
	Budget management is adequate but could be improved. At least 70% of the planned annual budget was actually spent for the purpose it was intended.	2	
	Budget management is excellent and meets management needs. At least 80% of the planned annual budget was actually spent for the purpose it was intended.	3	
<b>18. Equipment</b>  Is equipment sufficient for management needs?  <b>INPUT</b>	There are little or no equipment and facilities for management needs.	0	
	There are some equipment and facilities but these are inadequate for most management needs. There is capability to communicate among all key stakeholders (PAMB ExeCom and PA staff) and enforcers located in any point of the protected area within 1 hour.	1	
	There are equipment and facilities, but still some gaps that constrain management. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach any point of the protected area within 8 hours.	2	
	There are adequate equipment and facilities. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach	3	



	any point of the protected area within 8 hours. There is adequate equipment such that the safety of enforcers in arresting major violators is ensured.		
<b>19. Maintenance of equipment</b>  Is equipment adequately maintained?  <b>PROCESS</b>	There is little or no maintenance of equipment and facilities.	0	
	There is some <i>ad hoc</i> maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 5 years.	1	
	There is basic maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 10 years.	2	
	Equipment and facilities are well maintained. Communication and transportation equipment have been maintained for at least 10 years. In addition, adequate financial resources are pro-actively being set aside to replace equipment in line with their depreciation rate.	3	
<b>20. Education and awareness</b>  Is there a planned education programme linked to the objectives and needs?  <b>PROCESS</b>	There is no education and awareness programme.	0	
	There is a limited and <i>ad hoc</i> education and awareness programme.	1	
	There is an education and awareness programme but it only partly meets needs and could be improved.	2	
	There is an appropriate and fully implemented education and awareness programme.	3	
<b>21. Planning for adjacent land and water use</b>  Does land and water use planning recognise the protected area and aid the achievement of objectives?  <b>PLANNING</b>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area.	0	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area. Existing Comprehensive Development Plan (CDP), Comprehensive Land Use Plan (CLUP), Forest Land Use Plan (FLUP), and Integrated Coastal Management Plan (ICM), if any, do not conflict with the PA plan (even if it was not explicitly intended as such).	1	
	Adjacent land and water use planning partially <u>takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, and ICM incorporate or is intentionally consistent with the Protected Area plan.	2	
	Adjacent land and water use planning <u>fully takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, ICM and Provincial Development Plan(s)	3	



	incorporate or is intentionally consistent with the Protected Area Plan and directly contributes to Protected Area management.		
<b>22. State and commercial neighbors</b>  Is there co-operation with adjacent land and water users?  <b>PROCESS</b>	There is no contact between managers and neighboring official or corporate land and water users.	0	
	There is contact between managers and neighboring official or corporate land and water users but little or no cooperation.	1	
	There is contact between managers and neighboring official or corporate land and water users, but only some co-operation. There are MOAs/agreements with at least 20% of LGUs and 1 of the top 5 corporate users.	2	
	There is regular contact between managers and neighboring official or corporate land and water users, and substantial co-operation on management. There are MOAs/agreements with at least 50% of LGUs and 2 of the top 5 corporate users and priority activities of the agreements are being implemented.	3	
<b>23. Indigenous people</b>  Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?  <b>PROCESS</b>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area. Indigenous and traditional peoples are in the area but are not represented in the PAMB.	0	NA
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management. Indigenous and traditional peoples are in the area and are represented in the PAMB but do not actually participate in the meetings	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved. Indigenous and traditional peoples are in the area and are represented in the PAMB and actually participate in the meetings and in field activities	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management. Indigenous and traditional peoples are in the area and are represented in the PAMB, actually participate in the meetings and lead some field activities.	3	
<b>24. Local communities</b>  Do local communities resident or near the protected area	Local communities have no input into decisions relating to the management of the protected area. Local communities are not represented in the PAMB	0	
	Local communities have some input into discussions relating to management but no direct role in management. Local communities are represented in the PAMB but do not actually participate in the meetings.	1	



<p>have input to management decisions?</p> <p><b>PROCESS</b></p>	<p>Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved.</p> <p>Local communities are represented in the PAMB and actually participate in the meetings and in field activities.</p>	2	
	<p>Local communities directly participate in all relevant decisions relating to management, e.g. co-management.</p> <p>Local communities are represented in the PAMB, actually participate in the meetings and lead some field activities.</p>	3	
Additional points <i>Local communities/indigenous peoples</i>			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers.	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented.	+1	
24c. Impact on communities	Local and/or indigenous people actively support the protected area.	+1	NA
<p><b>25. Economic benefit (Ecosystem Services)</b></p> <p>Is the protected area providing economic benefits (ecosystem services) to local communities, e.g. income, employment, payment for environmental services?</p> <p><b>OUTCOMES</b></p>	The protected area does not deliver any economic benefits (ecosystem services) to local communities.	0	
	Potential economic benefits (ecosystem services) are recognised and plans to realise these have been developed.	1	
	There is some flow of economic benefits (ecosystem services) to local communities.	2	
	<p>There is a major flow of economic benefits to local communities from activities associated with the protected area.</p> <p>At least 10% of households are receiving economic benefits. (This should not include direct employment by the protected area management.).</p>	3	
<p><b>26. Monitoring and evaluation</b></p> <p>Are management activities monitored against</p>	There is no monitoring and evaluation in the protected area.	0	
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results.	1	
	<p>There is an agreed and implemented monitoring and evaluation system but results do not feed back into management.</p> <p>Governance, bio-physical and socio-economic parameters were regularly monitored over the last 3 years.</p>	2	



performance? <b>PROCESS</b>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management.	3	
<b>27. Visitor facilities</b>	There are no visitor facilities and services despite an identified need.	0	
Are visitor facilities adequate? <b>OUTPUTS</b>	Visitor facilities and services are inappropriate for current levels of visitation. Access trails, toilet(s) and shelters are inadequate.	1	
	Visitor facilities and services are adequate for current levels of visitation but could be improved. Access trails, toilet(s) and shelters are adequate to meet the needs of 80% of the peak level of visitors	2	
	Visitor facilities and services are excellent for current levels of visitation. Access trails, toilet(s), shelters and a visitor center are adequate to meet the needs of 100% of the peak level of visitors and there is an emergency response team and mechanism.	3	
<b>28. Commercial tourism operators</b>	There is little or no contact between managers and tourism operators using the protected area.	0	
Do commercial tour operators contribute to protected area management? <b>PROCESS</b>	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters.	1	
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values. There is a signed agreement between managers and tourism operators.	2	
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values. Tourism operators actually lead relevant elements of implementation including maintenance of key features (PA values).	3	
<b>29. Fees</b>	Although fees are theoretically applied, they are not collected.	0	
If fees (i.e. entry fees or fines) are applied, do they help protected area management? <b>INPUTS</b>	Fees are collected, but make no contribution to the protected area or its environs	1	
	Fees are collected, and make some contribution to the protected area and its environs. Established IPAF.	2	
	Fees are collected and make a substantial contribution to the protected area and its environs.  IPAF contribute at least 30% of management expenses.	3	



<b>(a) 29a. Additional Points</b>	At least 20% of IPAF is allocated to support sustainable financing activities.	+1	
<b>30. Condition of values</b> What is the condition of the important values of the protected area as compared to when it was first designated? <b>OUTCOMES</b>	Many important biodiversity, ecological or cultural values are being severely degraded.	0	
	Some biodiversity, ecological or cultural values are being severely degraded.	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted.	2	
	Biodiversity, ecological and cultural values are predominantly intact.	3	
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1	
<b>TOTAL SCORE</b>			





# ASSESSMENT FORM

Issue	Criteria	Score	Justification / Explanation / Remarks
<b>1. Legal status</b>	The protected area is not gazetted/covenanted.	0	
Does the protected area have legal status?	There is agreement that the protected area should be gazetted/ covenanted but the process has not yet begun. Key features (e.g. Key Biodiversity Area trigger species) to be protected, identified and agreed upon by local government and/or DENR.	1	
<b>CONTEXT</b>	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant). Presidential Proclamation or local (municipal/provincial) ordinance. <i>Note: PAs which have not passed through public consultation can only score a maximum of 2.</i>	2	
	The protected area has been formally gazetted/covenanted. Republic Act.	3	
<b>2. Protected area regulations</b>	There are no regulations for controlling land use and activities in the protected area. Only laws are those generally applicable throughout the country	0	
Are appropriate regulations in place to control land use and activities (e.g. hunting)?	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses. Regulations specific for the area but these do not address the key threats to PA key features.	1	
<b>PLANNING</b>	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps. Regulations specific for the area, and key threats to its key features but are not based upon carrying capacity for extraction & pollution.	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management. Regulations specific for the area, and key threats to its key features and based upon carrying capacity (e.g. extraction, pollution, habitat destruction).	3	
<b>3. Law enforcement</b>	The staff has no effective capacity/resources to enforce protected area legislation and regulations No staff other than PASu, no training, and/or no budget.	0	
Can staff (i.e.			



<p>those with responsibility for managing the site) enforce protected area rules well enough?</p> <p><b>INPUT</b></p>	<p>There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support). In addition to PASu, presence of full time PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting.</p>	1	
	<p>The staff has acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain. Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting. (Note: An updated deputization order/ paper should be provided).</p>	2	
	<p>The staff has excellent capacity/resources to enforce protected area legislation and regulations. Presence of trained fulltime PA staff, an enforcement plan, budget and equipment, systematic monitoring and reporting. (Note: An updated deputization order/ paper should be provided).</p>	3	
<p><b>4. Protected area objectives</b></p> <p>Is management undertaken according to agreed objectives?</p> <p><b>PLANNING</b></p>	<p>No firm objectives have been agreed for the protected area.</p>	0	
	<p>The protected area has agreed objectives, but is not managed according to these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. Less than 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	1	
	<p>The protected area has agreed objectives, but is only partially managed according to these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 50% of WFP and available staff and budget are addressing the key priorities of the PAMP/IPAP.</p>	2	
	<p>The protected area has agreed objectives and is managed to meet these objectives. The objectives in the PAMP/IPAP are specific and quantified in terms of special features, biophysical (species populations/ecosystem benefits), and socio-economic outcomes as appropriate. At least 70% of WFP and available staff and budget addressing the key priorities of the PAMP/IPAP.</p>	3	
<p><b>5. Protected Area Management</b></p>	<p>Management Zones are not defined and not reflected on the PA Management Plan.</p>	0	



<b>Zone</b>  Are the protected area management zones established in appropriate areas and are known by communities?  <b>PLANNING</b>	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS but are not translated on maps and not reflected on the PA Management Plan.	1	
	Management Zones are defined and designated following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	2	
	Management Zones are defined, designated and marked on the ground following the existing guidelines on the management zoning of protected areas under NIPAS and are translated on maps and reflected on the PA Management Plan.	3	
<b>6. Protected area boundary demarcation</b> Is the boundary known and demarcated?  <b>PROCESS</b>	The boundary of the protected area is not known by the management authority or local residents/neighboring land users.	0	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighboring land users. Managers can describe the boundary landmarks in the field (i.e., terrestrial: landmarks; marine: technical description)	1	
	The boundary of the protected area is known by both the management authority and local residents/neighboring land users but is not appropriately demarcated. Signs exist at major entry points and boundaries are based upon landmarks in the field (i.e., terrestrial: landmarks; marine: technical description).	2	
	The boundary of the protected area is known by the management authority and local residents/neighboring land users and is appropriately demarcated. Perimeter is clearly demarcated (i.e., for marine, technical descriptions are visible from jump-off points/landward side).	3	
<b>7. Management Plan</b>  Is there a management plan and is it being implemented?  <b>PLANNING</b>	There is no management plan for the protected area. The management plan is still being prepared.	0	
	A management plan has been prepared but is not being implemented. Management plan has been officially adopted.	1	
	A management plan exists but it is only being partially implemented because of funding constraints or other problems. The highest priority activities of the official management plan are being implemented.	2	
	A management plan exists and is being implemented. At least 70% of the activities (including all high priority activities) of the official management plan are being implemented.	3	



7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan.	+1	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan.	+1	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning.	+1	
7d. Operations Manual		+1	
<b>8. Regular work plan (Annual WFP)</b>	No regular work plan exists	0	
Is there a regular work plan and is it being implemented? <b>PLANNING</b>	A regular work plan exists but few of the activities are implemented. Less than 50% of WFP is implemented.	1	
	A regular work plan exists and many activities are implemented. At least 50% of WFP activities (including priority activities) is implemented.	2	
	A regular work plan exists and all activities are implemented. At least 70% of WFP activities (including priority activities) is implemented.	3	
<b>9. Resource inventory</b>	There is little or no information available on the critical habitats, species and cultural values of the protected area. <i>If information is more than 10 years and have not been updated.</i>	0	
Do you have enough information to manage the area? <b>INPUT</b>	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making.	1	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making.	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making.	3	
<b>10. Protection systems</b> Are systems in	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use. Score is also 0 if there is inadequate systematic monitoring and reporting of violations.	0	



<p>place to control access/resource use in the protected area?</p> <p><b>PROCESS</b></p>	<p>Protection systems are only partially effective in controlling access/resource use. At least 70% of reported violations were apprehended based upon systematic monitoring.</p>	1	
	<p>Protection systems are moderately effective in controlling access/resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring.</p>	2	
	<p>Protection systems are largely or wholly effective in controlling access/ resource use. At least 70% of reported violations apprehended, and at least 70% of apprehensions administratively resolved or filed/resolved in court based upon systematic monitoring. Moreover, systematic monitoring indicates that violations are decreasing.</p>	3	
<p><b>11. Research</b></p> <p>Is there a programme of management-orientated survey and research work?</p> <p>Please attach results of studies</p> <p><b>PROCESS</b></p>	<p>There is no survey or research work taking place in the protected area.</p>	0	
	<p>There is a small amount of survey and research work but it is not directed towards the needs of protected area management.</p>	1	
	<p>There is considerable survey and research work but it is not directed towards the needs of protected area management.</p>	2	
	<p>There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs.</p>	3	
<p><b>12. Resource management</b></p> <p>Is active resource management being undertaken?</p> <p><b>PROCESS</b></p>	<p>Active resource management is not being undertaken. No annual WFP.</p>	0	
	<p>Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented. Presence of a WFP and less than 50% of the requirements for resource management is implemented.</p>	1	
	<p>Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed. Presence of a WFP and 50-70% of the requirements for resource management is implemented.</p>	2	
	<p>Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented. Presence of a WFP and 100% of the requirements for resource management is implemented.</p>	3	
<b>13. Staff</b>	<p>There is no staff. Only the PASu.</p>	0	



<b>numbers</b>  Are there enough people employed to manage the protected area?  <b>INPUTS</b>	Staff numbers are inadequate for critical management activities.  Staffing below minimum requirements under the PAMP.	1	
	Staff numbers are below optimum level for critical management activities.  Staffing meets minimum requirements under the PAMP.	2	
	Staff numbers are adequate for the management needs of the protected area.  <i>All staffing requirement in the PAMPs Organization Chart filled.</i>	3	
<b>14. Staff training</b>  Are staff adequately trained to fulfil management objectives?  <b>INPUTS</b>	Staff lack the skills needed for protected area management.	0	
	Staff training and skills are low relative to the needs of the protected area. Technical staff (volunteers are not included in this requirement) can identify the specific features being conserved and can explain their benefits to key stakeholders.	1	
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management. Each staff has at least a general education and one (1) training that specifically directly matches his/her primary role in PA management. Technical staff can identify the specific features being conserved and can explain their benefits to key stakeholders.	2	
	Staff training and skills are aligned with the management needs of the protected area. This should not be based upon perception but on actual capability compared to competency standards. That is, you may think you know but you don't. Or you may think you don't know enough, but you actually know enough.	3	
<b>15. Current budget</b>  Is the current budget sufficient?  <b>INPUTS</b>	There is no budget for management of the protected area. No WFP.	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage. Less than 50% of WFP is implemented.	1	
	The available budget is acceptable but could be further improved to fully achieve effective management. At least 50% of WFP activities (including priority activities) is implemented.	2	
	The available budget is enough and meets the full management needs of the protected area. At least 70% of WFP activities (including priority activities) is implemented.	3	



<b>16. Security of budget</b>  Is the budget secure?  <b>INPUTS</b>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding.	0	
	There is very little secure budget and the protected area could not function adequately without outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 2 years.	1	
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 5 years.	2	
	There is a secure budget for the protected area and its management needs. Both DENR and LGU have each provided budget (in cash or in kind) over each of the last 7 years. In addition, user fees have provided at least 30% of the budget in the last 5 years.	3	
<b>17. Management of budget</b>  Is the budget managed to meet critical management needs?  <b>PROCESS</b>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year).	0	
	Budget management is poor and constraints effectiveness. At least 60% of the planned annual budget was actually spent for the purpose it was intended.	1	
	Budget management is adequate but could be improved. At least 70% of the planned annual budget was actually spent for the purpose it was intended.	2	
	Budget management is excellent and meets management needs. At least 80% of the planned annual budget was actually spent for the purpose it was intended.	3	
<b>18. Equipment</b>  Is equipment sufficient for management needs?  <b>INPUT</b>	There are little or no equipment and facilities for management needs.	0	
	There are some equipment and facilities but these are inadequate for most management needs. There is capability to communicate among all key stakeholders (PAMB ExeCom and PA staff) and enforcers located in any point of the protected area within 1 hour.	1	
	There are equipment and facilities, but still some gaps that constrain management. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach any point of the protected area within 8 hours.	2	
	There are adequate equipment and facilities. There is capability to communicate among all key stakeholders and enforcers located in any point of the protected area within 1 hour. At least 2 enforcers can reach	3	



	any point of the protected area within 8 hours. There is adequate equipment such that the safety of enforcers in arresting major violators is ensured.		
<b>19. Maintenance of equipment</b>  Is equipment adequately maintained?  <b>PROCESS</b>	There is little or no maintenance of equipment and facilities.	0	
	There is some <i>ad hoc</i> maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 5 years.	1	
	There is basic maintenance of equipment and facilities. Communication and transportation equipment have been maintained for at least 10 years.	2	
	Equipment and facilities are well maintained. Communication and transportation equipment have been maintained for at least 10 years. In addition, adequate financial resources are pro-actively being set aside to replace equipment in line with their depreciation rate.	3	
<b>20. Education and awareness</b>  Is there a planned education programme linked to the objectives and needs?  <b>PROCESS</b>	There is no education and awareness programme.	0	
	There is a limited and <i>ad hoc</i> education and awareness programme.	1	
	There is an education and awareness programme but it only partly meets needs and could be improved.	2	
	There is an appropriate and fully implemented education and awareness programme.	3	
<b>21. Planning for adjacent land and water use</b>  Does land and water use planning recognise the protected area and aid the achievement of objectives?  <b>PLANNING</b>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area.	0	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area. Existing Comprehensive Development Plan (CDP), Comprehensive Land Use Plan (CLUP), Forest Land Use Plan (FLUP), and Integrated Coastal Management Plan (ICM), if any, do not conflict with the PA plan (even if it was not explicitly intended as such).	1	
	Adjacent land and water use planning partially <u>takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, and ICM incorporate or is intentionally consistent with the Protected Area plan.	2	
	Adjacent land and water use planning <u>fully takes into account</u> the long term needs of the protected area. CDP, CLUP, FLUP, ICM and Provincial Development Plan(s)	3	



	incorporate or is intentionally consistent with the Protected Area Plan and directly contributes to Protected Area management.		
<b>22. State and commercial neighbors</b>  Is there co-operation with adjacent land and water users?  <b>PROCESS</b>	There is no contact between managers and neighboring official or corporate land and water users.	0	
	There is contact between managers and neighboring official or corporate land and water users but little or no cooperation.	1	
	There is contact between managers and neighboring official or corporate land and water users, but only some co-operation. There are MOAs/agreements with at least 20% of LGUs and 1 of the top 5 corporate users.	2	
	There is regular contact between managers and neighboring official or corporate land and water users, and substantial co-operation on management. There are MOAs/agreements with at least 50% of LGUs and 2 of the top 5 corporate users and priority activities of the agreements are being implemented.	3	
<b>23. Indigenous people</b>  Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions?  <b>PROCESS</b>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area. Indigenous and traditional peoples are in the area but are not represented in the PAMB.	0	No IPs present in the PA
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management. Indigenous and traditional peoples are in the area and are represented in the PAMB but do not actually participate in the meetings	1	
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved. Indigenous and traditional peoples are in the area and are represented in the PAMB and actually participate in the meetings and in field activities	2	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management. Indigenous and traditional peoples are in the area and are represented in the PAMB, actually participate in the meetings and lead some field activities.	3	
<b>24. Local communities</b>  Do local communities resident or near the protected area	Local communities have no input into decisions relating to the management of the protected area. Local communities are not represented in the PAMB	0	
	Local communities have some input into discussions relating to management but no direct role in management. Local communities are represented in the PAMB but do not actually participate in the meetings.	1	



<p>have input to management decisions?</p> <p><b>PROCESS</b></p>	<p>Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved.</p> <p>Local communities are represented in the PAMB and actually participate in the meetings and in field activities.</p>	2	
	<p>Local communities directly participate in all relevant decisions relating to management, e.g. co-management.</p> <p>Local communities are represented in the PAMB, actually participate in the meetings and lead some field activities.</p>	3	
Additional points <i>Local communities/indigenous peoples</i>			
24a. Impact on communities	There is open communication and trust between local and/or indigenous people, <u>stakeholders</u> and protected area managers.	+1	
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented.	+1	
24c. Impact on communities	<u>Local</u> and/or indigenous people actively support the protected area.	+1	
<p><b>25. Economic benefit (Ecosystem Services)</b></p> <p>Is the protected area providing economic benefits (ecosystem services) to local communities, e.g. income, employment, payment for environmental services?</p> <p><b>OUTCOMES</b></p>	The protected area does not deliver any economic benefits (ecosystem services) to local communities.	0	
	Potential economic benefits (ecosystem services) are recognised and plans to realise these have been developed.	1	
	There is some flow of economic benefits (ecosystem services) to local communities.	2	
	<p>There is a major flow of economic benefits to local communities from activities associated with the protected area.</p> <p>At least 10% of households are receiving economic benefits. (This should not include direct employment by the protected area management.).</p>	3	
<p><b>26. Monitoring and evaluation</b></p> <p>Are management activities monitored against</p>	There is no monitoring and evaluation in the protected area.	0	
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results.	1	
	<p>There is an agreed and implemented monitoring and evaluation system but results do not feed back into management.</p> <p>Governance, bio-physical and socio-economic parameters were regularly monitored over the last 3 years.</p>	2	



performance? <b>PROCESS</b>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management.	3	
<b>27. Visitor facilities</b>	There are no visitor facilities and services despite an identified need.	0	
Are visitor facilities adequate? <b>OUTPUTS</b>	Visitor facilities and services are inappropriate for current levels of visitation. Access trails, toilet(s) and shelters are inadequate.	1	
	Visitor facilities and services are adequate for current levels of visitation but could be improved. Access trails, toilet(s) and shelters are adequate to meet the needs of 80% of the peak level of visitors	2	
	Visitor facilities and services are excellent for current levels of visitation. Access trails, toilet(s), shelters and a visitor center are adequate to meet the needs of 100% of the peak level of visitors and there is an <u>emergency response team</u> and mechanism.	3	
<b>28. Commercial tourism operators</b>	There is little or no contact between managers and tourism operators using the protected area.	0	
Do commercial tour operators contribute to protected area management? <b>PROCESS</b>	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters.	1	
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values. There is a signed agreement between managers and tourism operators.	2	
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values. Tourism operators actually lead relevant elements of implementation including maintenance of key features (PA values).	3	
<b>29. Fees</b>	Although fees are theoretically applied, they are not collected.	0	
If fees (i.e. entry fees or fines) are applied, do they help protected area management? <b>INPUTS</b>	Fees are collected, but make no contribution to the protected area or its environs	1	
	Fees are collected, and make some contribution to the protected area and its environs. Established IPAF.	2	
	Fees are collected and make a substantial contribution to the protected area and its environs.  IPAF contribute at least 30% of management expenses.	3	



<b>(a) 29a. Additional Points</b>	At least 20% of IPAF is allocated to support sustainable financing activities.	(+1)	
<b>30. Condition of values</b> What is the condition of the important values of the protected area as compared to when it was first designated? <b>OUTCOMES</b>	Many important biodiversity, ecological or cultural values are being severely degraded.	0	
	Some biodiversity, ecological or cultural values are being severely degraded.	1	
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted.	2	
	Biodiversity, ecological and cultural values are predominantly intact.	(3)	
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	(+1)	
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	(+1)	
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	(+1)	
<b>TOTAL SCORE</b>		78	