Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region 888

September 2, 2022

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MEMORANDUM

FOR : **The Regional Executive Director**
MIMAROPA Region

THRU : **The Assistant Regional Director**
for Technical Services

FROM : **The OIC, PENR Officer**
Odiongan, Romblon

SUBJECT : **HIGHLIGHTS OF THE PUBLIC CONSULTATION MEETING ON THE PROPOSED ESTABLISHMENT OF GINABLAN MANGROVE, WILDLIFE AND BIRD SANCTUARY AS CRITICAL HABITAT HELD AT DREAM PARADISE MOUNTAIN RESORT IN BARANGAY MAPULA, ROMBLON, ROMBLON ON AUGUST 25, 2022**

Respectfully submitting is the Highlights of Public Consultation Meeting on the Proposed Establishment of Ginablan Mangrove, Wildlife and Bird Sanctuary as Critical Habitat held at Dream Paradise Mountain Resort in Barangay Mapula, Romblon, Romblon on August 25, 2022.

Please see attached final report on the conduct of the said public consultation meeting that includes the presentation of assessment reports on mangrove, biodiversity and environment with highlights of discussion, agreements reached, recommendations, photo documentation and attendance sheet as a Means of Verification (MoV) in support to the establishment of the Critical Habitat (CH) located at Sitio Cahuyong, Barangay Ginablan, Romblon, Romblon.

For information and record.

ARNOLDO A. BLAZA, JR.
OIC, PENR Officer

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Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

September 1, 2022

MEMORANDUM

FOR : **The OIC, PENR Officer**

THRU : **The Chief, Technical Services Division**

FROM : **The Undersigned**

SUBJECT : **HIGHLIGHTS OF THE PUBLIC CONSULTATION MEETING ON THE PROPOSED ESTABLISHMENT OF GINABLAN MANGROVE, WILDLIFE AND BIRD SANCTUARY AS CRITICAL HABITAT HELD AT DREAM PARADISE MOUNTAIN RESORT IN BARANGAY MAPULA, ROMBLON, ROMBLON ON AUGUST 25, 2022**

Per DENR- PENRO Special Order No. 22-105, please be informed that we conducted Public Consultation Meeting on the Proposed Establishment of Ginablan Mangrove, Wildlife and Bird Sanctuary as Critical Habitat held at Dream Paradise Mountain Resort in Barangay Mapula, Romblon, Romblon on August 25, 2022.

Background/Rationale

The proposed establishment of Ginablan Mangrove, Wildlife and Bird Sanctuary as Critical Habitat is provided under Section 25 of Republic Act 9147 known as the Wildlife Resources Conservation and Protection Act of 2001.

Accordingly, the DENR Memorandum Circular No. 2007-02 with the subject "Guidelines on the Establishment and Management of Critical Habitat" enumerated the procedures in the establishment of critical habitat and one of these is the conduct of community consultation with the local stakeholders and concerned LGU's on the results of the assessment and ensure their support in case the area is found suitable for establishment as critical habitat.

Also in the same circular, it is said that the DENR Field Office shall prepare a consultation report to include highlights of discussion, agreements reached, and recommendations generated from the community, as appropriate. Such report must be supported by attendance sheet and photographs.

On July 12-15, 2022, the DENR-ERDB, EMB and PENRO-Romblon led in the conduct of the Assessment of Mangrove, Biodiversity, and Environment of the proposed area as a basis on the establishment of critical habitat. Likewise, the conduct of consultation meeting on the proposed establishment of critical habitat serves as crucial step towards the protection,

conservation and management of the duly assessed threatened wildlife species including its habitat found therein.

Highlights of the Activity

A.) Preliminaries

The public consultation meeting commenced about 9:00 in the morning facilitated by CDS Personnel held at Dream Paradise Mountain Resort in Barangay Mapula, Romblon, Romblon on August 25, 2022. Hon. Jose M. Muyo and Hon. Jocelyn Magay led opening prayer and the singing of the Phil. National Anthem respectively. Then, it was followed by acknowledgement of participants.

In behalf of OIC, PENR Officer Arnoldo A. Blaza, Jr., the Chief, MSD Thelmo S. Hernandez delivered his welcome remarks via Zoom. He extended his heartfelt thanks to all participants and urged everyone to have a sense of shared responsibility in the protection, conservation and management of the proposed Critical Habitat in Ginablan, Romblon, Romblon. Likewise, SB Member Fernando "Cabo" Faigao III, the Chairperson, Committee on Environment delivered the message of thanks and support of Atty. Gerard S. Montojo, Municipal Mayor of Romblon, Romblon on the said meeting.

After this, photo opportunity followed. There were thirty-seven (37) participants who actively participated in this meeting namely DENR-PENRO personnel, concerned Provincial LGU Official, Municipal LGU Officials of Romblon, Barangay Ginablan LGU Officials w/ representatives from the youth sector, and the CSO represented by Ginablan Fisherfolks Association, Inc. (GIFA).

B.) Presentation on the Results of Assessment

The presentation of the results of assessment as conducted by DENR-Ecosystems Research and Development Bureau and Environmental Management Bureau on July 12-15, 2022 was presented by ECOMS II Raymund G. Inocencio.

Before the presentation, he shared powerpoint of some notable background/milestones as well as the legal bases and processes/procedures in the establishment of critical habitat particularly Section 25 of Republic Act 9147 or "Wildlife Resources Conservation and Protection Act of 2001"and DENR Memorandum Circular No. 2007 – 02 dated Feb. 28, 2008 Subject: Guidelines on the Establishment and Management of Critical Habitat.

After these, lecture-presentation follows on the results of Assessment of Mangrove, Biodiversity, and Environment conducted at Ginablan Mangrove, Wildlife, and Bird Sanctuary, Sitio Cahuyong, Ginablan, Romblon on July 12-15, 2022.

The DENR-Ecosystems Research Development Bureau (DENR-ERDB) Assessment Team composed of For. Alvin Gestiada (Team Leader), For. John Rommel Manahan, Alon

Velasquez, Micah Marie Bernales, Sedric Efraim Caliwagan, and Renato Tanael conducted the said assessment with the participation of DENR PENRO CDS Personnel.

On the part of environment, Engr. Jackie Samino-Pamintuan, Engineer III of DENR-EMB MIMAROPA led the conduct of physico-chemical analysis of water on the coastal/wetland of the proposed critical habitat.

Based on the said presentation, the study site of Ginablan is a barangay in the municipality of Romblon, which is located in the province of Romblon. It is located on the island of Romblon at approximately 12.5323, 122.2576. At these coordinates, the elevation is estimated to be 30.0 meters (98.4 feet) above mean sea level. Romblon gets about 124.94 millimeters (4.92 inches) of rain per year and has 218.02 rainy days (59.73 percent of the time) (Lamotan, 2022).

Methodology

Accordingly, the methods applied on Vegetation covered a total of twelve (12) circular plots of 7-m radius (0.00154 ha or 154 m2) were established at an interval of 10–20m. All vegetation within each duly designated plot was measured, identified, and counted. Height and dbh were measured for species with at least a 5 mm diameter.

On the part of Fauna, the method used is Opportunistic sampling limited to 4 taxa: aves, mammalia (volant), reptilia, and amphibian limited to daytime surveys – from sunrise to sunset. Also, the Auditory and Visual Encounter Survey (AVES) Mobile and 15-minute stationary (AVES) were conducted. Then, Mist netting adopted using two (3 x 4 meters) separate mist nets were set-up.

Pertaining on Bird and Bat count, the one prioritized is the flagship species of the sanctuary, and it is conducted for the Philippine-endemic (*Anas luzonica*) to initially determine its population. For an acceptable estimate, three (3) observers were provided a counter to simultaneously count observable individuals of the species that are present in the lagoon at five (5) different times. After gathering all counts from the observers, the average estimated population was computed.

In terms of identification and data processing, the references for Birds are used like A Guide to the Birds of the Philippines (Kennedy et. al., 2000), All the Birds of the World (del Hoyo, 2021), The Cornell Lab of Ornithology: Birds of the World website, Herpetological data Siler et. al. (2012) and Leviton et. al. (2018), and lastly, Volant mammals (bats) Ingle and Heaney (1992 International Union for the Conservation of Nature (IUCN) and the Red List website (https://www.iucnredlist.org/).

On Macrobenthos, the Team conducted it within the established vegetation plot, plots for epifauna and infauna were established. For epifauna, a 1m x 1m quadrat was used for the demarcations of sample collection. For infauna, a soil corer (10 cm in depth) was used for the collection.

Then, for the Sediment, the Team has eleven composite samples for organic matter (OM) analysis was taken from the plots. Sediment samples for bulk density determination were collected using a soil corer of known volume at a depth of 0–15 cm and placed in a labeled paper cup ready for weighing and oven drying.

The collected sediment samples were transferred to zip locks and labeled and was delivered to the ERDB main office to undergo a pre-processing activity prior to submission to the ERDB Soils laboratory for further analysis.

Data Processing and Analyses

Vegetation

The collected data were analyzed for *abundance*, *dominance*, *diversity*, among other vegetation variables, as discussed in Kent and Coker (1992); Mueller-Dombois and Ellenberg (1971).

Fauna and macrobenthos

Species Richness, *Species Density*, *Shannon-Wiener diversity (H') index*, and *Pielou evenness (J') index* were determined using the program Paleontological Statistics/ PAST Volume 4.03 (Hammer et al., 2001).

Aboveground and Belowground Biomass

Published allometric equations for aboveground and belowground biomass of mangroves from Southeast Asian countries were used to calculate the tree biomass. The tree biomass data were converted to its C equivalent using C fraction value (47% for AGB and 39% for BGB) based on Kauffman and Donato (2012).

Results and Discussion

Vegetation

A total of 12 circular plots were laid on the study site. The Ginablan Mangrove and Bird Sanctuary is a protected mangrove wetland that provides habitat for a variety of local and migrating species, including the endemic and endangered Philippine Duck.

Vegetation Type and Composition

The area is covered with beach and mangrove strand vegetation. The common plants recorded are *Lumnitzera racemosa* and *Rhizophora stylosa*. A total of 28 species belonging to 17 families were recorded in the area. The analysis of the tree flora of the study showed that the families of Rhizophoraceae are the most represented, followed by Lamiaceae and Fabaceae, which recorded the highest number of species.

Species observed in the study site

Family	Common Name	Scientific name
Lamiaceae	Alagau Dagat	*Premna serratifolia Linn.*
Acanthaceae	Bungalon	*Avicennia marina (Forssk.) Vierh.*
Fabaceae	Bani	*Milletia pinnata (L.) Panigrahi*
Phyllanthaceae	Bayag usa	*Antidesma globosa Linn.*
Rhizophoraceae	Pototan lalaki	*Bruguiera cylindrica (L.) Bl.*
Lecythidaceae	Botong	*Barringtonia asiatica (L.) Kurz.*
Euphorbiaceae	Buta-buta	*Excoecaria agallocha (L.)*
Combretaceae	Culasi	*Lumnitzera racemosa Willd.*
Aizoaceae	Dampalit	*Sesuvium portulacastrum (L.) L.*
Convolvulaceae	Kamote kamotehan	*Ipomea pes-caprae (L.) R.Br.*
Pteridaceae	Lagolo	*Acrostichum aureum L.*
Lamiaceae	Lagunding dagat	*Vitex trifolia L.*
Boraginaceae	Malabanalo	*Cordia subcordata Lam.*
Malvaceae	Malubago	*Talipariti tiliaceum (L.) Fryxell*
Lythraceae	Pagatpat	*Sonneratia alba Sm.*
Pandanaceae	Pandan dagat	*Pandanus tectorius P.*
Rhizophoraceae	Bakauan lalaki	*Rhizophora apiculata Blume*
Rhizophoraceae	Bakauan bato	*Rhizophora stylosa (Griff.) Schimp.*
Rubiacea	Santan dagat	*Ixora philippinensis Merr.*
Combretaceae	Talisai	*Terminalia catappa L.*
Rhizophoraceae	Tangal	*Ceriops tagal (Perr.) C. B. Robinson*
Rubiaceae	Bangkoro	*Morinda citrifolia L.*
Fabaceae	Aroma	*Prosopis juliflora (Sw.) DC.*
Euphorbiaceae	Bignai	*Antidesma bunius L.*
Meliaceae	Malapiagao	*Xylocarpus rumphii (Kostel.) Mabb.*
Lamiaceae	Molave	*Vitex parviflora Juss.*
Lythraceae	Bantigi	*Pemphis acidula J.R. Forst. & G. Forst.*
Fabaceae	Narra	*Pterocarpus indicus Willd.*

Diameter-at-breast-Height (DBH), Height and Basal Area

It has been observed that *Milletia pinnata* and *Cordia subcordata* resulted in the species with the highest average DBH among others. In terms of the average height, *Cordia subcordata* , *Excoecaria agallocha*, and *Rhizophora apiculata* bore the highest among other species that can be found at the study site. *Lumnitzera racemosa* bore the highest average basal area.

Mean Basal Area, DBH and Height of species present in the area

Species	Mean Basal Area	Mean DBH (cm)	Mean Height (m)
Milletia pinnata	0.06	20.00	6.00
Cordia subcordata	0.05	17.70	7.00
Barringtonia asiatica	0.02	14.00	6.00
Excoecaria agallocha	0.02	14.00	7.00
Sonneratia alba	0.27	11.55	6.20
Rhizophora apiculata	0.20	11.47	6.19
Avicennia marina	0.44	11.31	5.97
Xylocarpus rumphii	0.30	11.29	5.96
Rhizophora stylosa	0.96	11.27	5.96
Lumnitzera racemosa	1.07	11.16	5.93
Talipariti tiliaceum	0.06	10.86	6.00
Terminalia catappa	0.06	10.82	5.55
Bruguiera cylindrica	0.01	7.00	5.00

Species Abundance and Diversity

In terms of species abundance, *Lumnitzera racemosa*; *Rhizophora stylosa*; and *Avicennia marina* bore the highest among other species. A total of 124 tree individuals *of Lumnitzera racemosa*, 90 tree individuals of *Rhizophora stylosa*, and 42 individuals of *Avicennia marina* were measured within the 12 plots. *Lumnitzera racemosa* is the most abundant mangrove species due to the presence of numerous mother trees, favorable environmental conditions, and a constant supply of freshwater from the lagoon, which facilitates its growth and survival.

Relative values and dominance of the species in the study site

Species	Relative Frequency	Relative Density	Relative Dominance	IV
Lumnitzera racemosa	83.33	39.49	30.46	153.28
Rhizophora stylosa	91.67	28.66	27.36	147.69
Avicennia marina	100.00	13.38	12.46	125.83
Rhizophora apiculata	41.67	5.10	5.81	52.58
Sonneratia alba	33.33	3.50	7.60	44.43
Xylocarpus rumphii	25.00	5.41	8.59	39.01
Milletia pinnata	16.67	0.64	1.80	19.10
Talipariti tiliaceum	8.33	1.27	1.58	11.19
Terminalia catappa	8.33	0.64	1.84	10.81
Cordia subcordata	8.33	0.64	1.39	10.36
Bruguiera cylindrica	8.33	0.64	0.22	9.19
Barringtonia asiatica	8.33	0.32	0.44	9.09
Excoecaria agallocha	8.33	0.32	0.44	9.09
Grand Total	100.00	100.00	100.00	300.00

The Shannon diversity index value obtained from all of the plots is 1.88. The evenness index resulted in 0.83 while species richness was 13. There are a total of 314 individuals in the plots, with an average population size of 3.49. The result revealed a low diversity index due to the dominance of fewer species. Only 3 species mostly dominate the area: *Lumnitzera racemosa, Rhizophora stylosa* and *Avicennia marina*.

Conservation Status

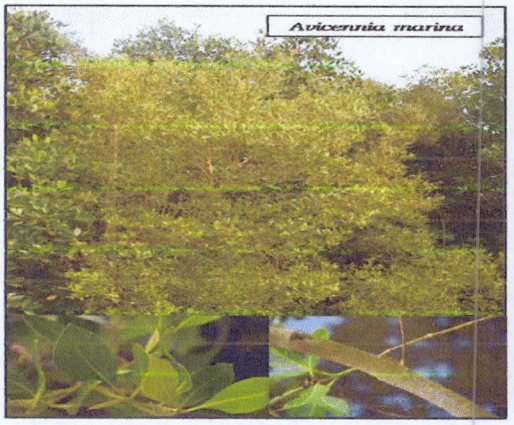
Xylocarpus rumphii, Vitex parviflora, Pemphis acidula, and *Pterocarpus indicus* are listed to be vulnerable and/or endangered species under the IUCN Red List and DENR DAO 2017-11.Some of these species have been suggested for the Philippines as a tall tree in shelterbelts (WAO, 2021). Some plantations have been established in reforestation schemes in the country. The population of these species is dwindling. Hence, there is an urgent need to conserve them.

Family	Common Name	Scientific name	Conservation Status		Observation	Habits
			IUCN/Nparks	DAO 2017-11		
Meliaceae	Malapiagao	*Xylocarpus rumphii*	Vulnerable		True mangrove	Tree
Lamiaceae	Molave	*Vitex parviflora*	Vulnerable	Endangered	Beach forest species	Tree
Lythraceae	Bantigi	*Pemphis acidula*	Vulnerable	Endangered	True mangrove	Shrub
Fabaceae	Narra	*Pterocarpus indicus*	Endangered	Vulnerable	Beach forest species	Tree

Trees Observed in the Area


Lumnitzera racemosa


Millettia pinnata


Avicennia marina

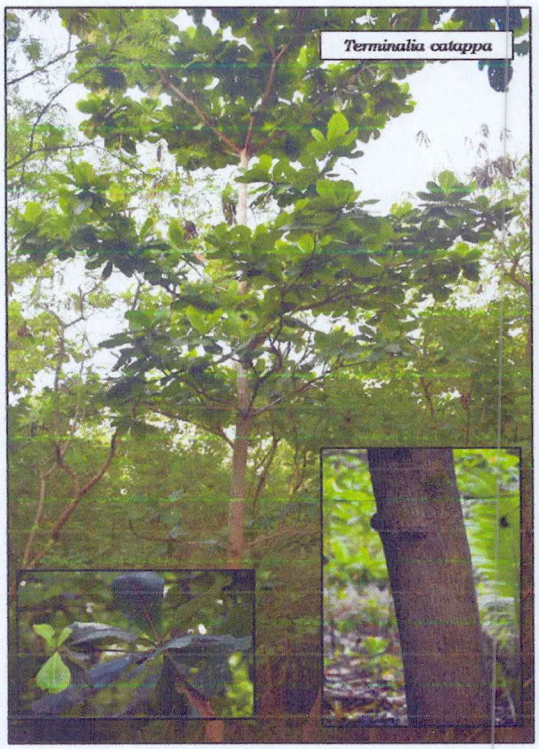

Rhizophora stylosa

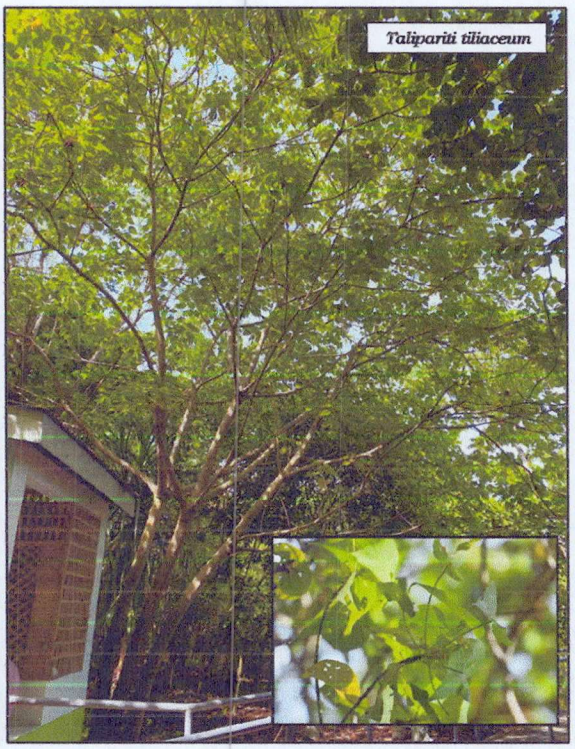

Xylocarpus rumphii

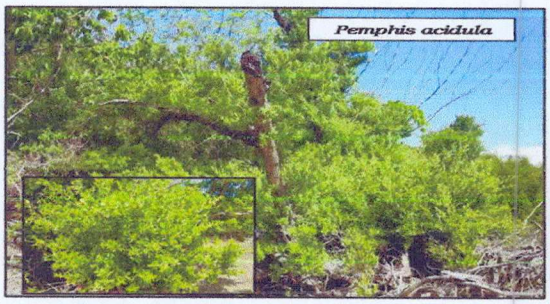

Rhizophora apiculata

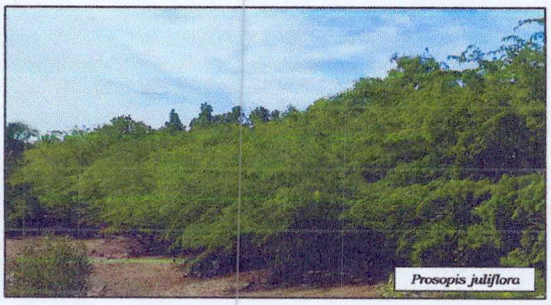

Excoecaria agallocha


Premna serratifolia


Terminalia catappa


Talipariti tiliaceum


Pemphis acidula

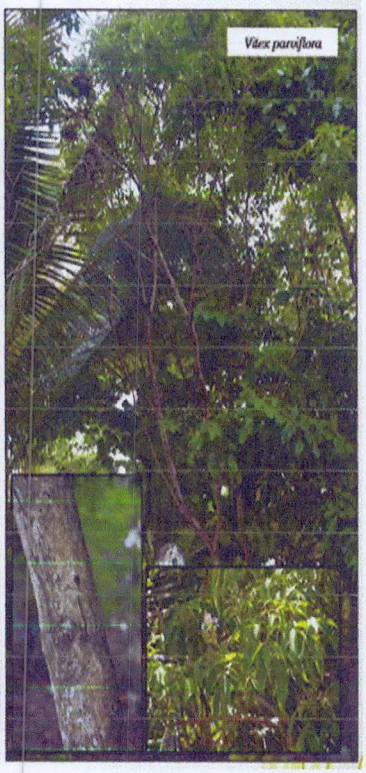

Prosopis juliflora


Sesuvium portulacastrum


Pandanus tectorius


Ipomea pes-caprae


Acrostichum aureum


Vitex parviflora

Avifaunal survey

There were 26 bird species observed within and in adjacent areas of the sanctuary. However, a sighting of a small flock of Ardea intermedia or Intermediate Egret was found to be hovering over Ginablan. A total of 5 individuals belonging to three (3) different bird species were mist netted.

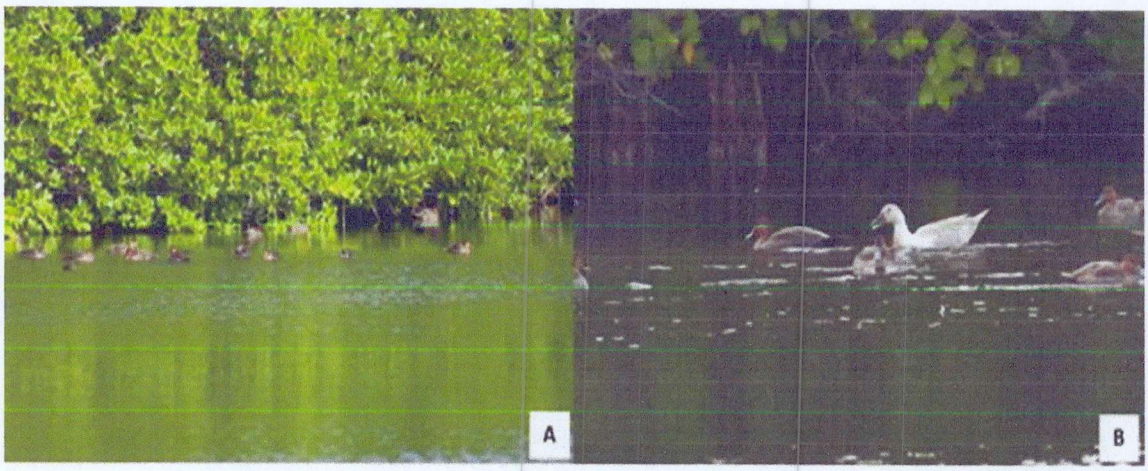
List of observed avifauna within and in adjacent areas of Ginablan Bird and Mangrove Sanctuary

Family	Scientific Name	Common Name	IUCN Status	DAO 2019-19	IUCN Global Population Trend
Acanthizidae	*Gerygone sulphurea*	Golden-bellied Gerygone	Least Concern	-	Decreasing
Accipitridae	*Haliastur indus*	Brahminy Kite	Least Concern	-	Decreasing
Alcedinidae	*Todiramphus chloris*	Collared Kingfisher	Least Concern	-	Decreasing
Anatidae	*Anas luzonica*	Philippine Duck	Vulnerable	Vulnerable	Decreasing
Ardeidae	*Nycticorax nycticorax*	Black-crowned Night Heron	Least Concern	-	Decreasing
Ardeidae	*Ardea intermedia*	Intermediate Egret	Least Concern	-	Decreasing
Artamidae	*Artamus leucorynchus*	White-breasted Woodswallow	Least Concern	-	Stable
Campephagidae	*Lalage nigra*	Pied Triller	Least Concern	-	Decreasing
Columbidae	*Geopelia striata*	Zebra Dove	Least Concern	-	Stable
Columbidae	*Treron vernans*	Pink-necked Green Pigeon	Least Concern	-	Stable
Columbidae	*Streptopelia* cf. *dusumieri*	Philippine Collared-Dove	Vulnerable	-	Decreasing
Corvidae	*Corvus macrorhynchos*	Large-billed Crow	Least Concern	-	Stable
Estrildidae	*Lonchura atricapilla*	Chestnut Munia	Least Concern	-	Stable
Hirundinidae	*Hirundo tahitica*	Pacific Swallow	Least Concern	-	Unknown
Meropidae	*Merops* sp.[1]	Bee-eater	Least Concern	-	Stable
Nectariniidae	*Cinnyris jugularis*	Olive-backed Sunbird	Least Concern	-	Stable
Oriolidae	*Oriolus chinensis*	Black-naped Oriole	Least Concern	-	Decreasing
Passeridae	*Passer montanus*	Eurasian Tree Sparrow	Least Concern	-	Decreasing
Pycnonotidae	*Pycnonotus goiavier*	Yellow-vented Bulbul	Least Concern	-	Increasing
Rallidae	*Amaurornis phoenicurus*	White Breasted Waterhen	Least Concern	-	Unknown
Rallidae	*Hypotaenidia torquata*	Barred Rail	Least Concern	-	Unknown
Rallidae	*Amaurornis olivacea*	Philippine Bush-hen	Least Concern	-	Unknown
Rhipidurudae	*Rhipidura nigritorquis*	Philippine Pied Fantail	Least Concern	-	Stable
Strigidae	*Ninox spilonotus*[2]	Romblon Boobook	Endangered	Endangered	Decreasing
Sturnidae	*Aplonis panayensis*	Asian Glossy Starling	Least Concern	-	Unknown
Zosteropidae	*Zosterops meyeni*	Lowland White-eye	Least Concern	-	Stable

[1]Needs further validation as it is possible to be either *M. americanus* or *M. philippinus*
[2]Listed as *Ninox spilonota* or Romblon hawk-owl in DENR DAO 2019-09

As for the flagship species of the sanctuary, the *Anas luzonica* or Philippine Duck, their presence in the lagoon varies depending on the time of the day. This species is frequently sighted in freshwater and saltwater habitats, including mangroves. Their diet includes crustaceans, mollusks, and sometimes fish and frogs.

Day	Time	Estimated Number of Observed Individuals			
		Observer 1	Observer 2	Observer 3	Average
1st	05:30AM	38	41	45	41
	10:00AM	23	22	29	25
	01:00PM	0	0	0	0
	05:00PM	26	25	21	24
2nd	05:30AM	46	46	54	49



Aside from the Philippine Duck, although no manual counting done, it is evident that there are other species that visibly have big flocks such as the Asian Glossy Starling, Black-naped Oriole, Golden-bellied Gerygone, Large-billed Crow, Lowland White-eye, Olive-backed Sunbird, Philippine Pied Fantail, Yellow-vented Bulbul, and Zebra Dove.

Avifaunal survey

The mist nets that were set-up were also used to validate the presence of bats in the area. However, among the two set-ups, only one (1) has a successful capture (12°31'26.7" N; 122°15'30.7" E). Captured Cynopterus brachyotis or the Lesser Dog-faced Fruit Bat. This species of fruit bat comes from the Pteropodidae family. Its conservation status is categorized as Least Concern, but its population trend is still unknown.

One notable species of mammal that was observed and verified was the presence of *Pteropus hypomelanus* or the Island Flying Fox belonging to the family Pteropodidae. Its conservation status is categorized as Near Threatened, and has a decreasing population trend. Two (2) roosting areas and one (1) foraging site were observed in areas adjacent to the sanctuary.

Location	Coordinates	Roost Tree Species	Estimated Number of Individuals Observed		
			1st Observer	2nd Observer	Average
Roosting Site 1	12°31'27.2" N; 122°15'34.0" E	*Pterocarpus indicus* *Terminalia catappa* *Vitex parviflora*	10	10	10
Roosting Site 2	12°31'09.1" N; 122°15'36.0" E	*Artocarpus altilis* *Terminalia catappa*	13	11	12
Foraging Site 1	12°31'32.1" N; 122°15'34.5" E	*Artocarpus altilis*	30	31	31
TOTAL NUMBER OF HEADS			**53**	**52**	**53**

Herpetological survey

Six (6) reptiles and one (1) amphibian were observed in the herpetofauna assessment. All species were sighted during casual encounters.

Taxa	Family	Scientific Name	Common Name	IUCN Status	DAO 2019-19	CITES	IUCN Global Population Trend
Reptilia	Agamidae	*Draco cf. spilopterus*	Philippine Flying Dragon	LC	-	-	Unknown
	Colubridae	*Lycodon capucinus*	Island Wolf Snake	LC	-	-	Stable
	Gekkonidae	*Hemidactylus frenatus*	Common House Gecko	LC	-	-	Stable
	Gekkonidae	*Gekko gecko*	Tokay Gecko	LC	OTS	II	Unknown
	Typhlopidae	*Indotyphops braminus*	Brahminy Blindsnake	LC	-	-	Increasing
	Varanidae	*Varanus nuchalis*	West Visayan Monitor Lizard	NT	OTS	II	Decreasing
Amphibia	Bufonidae	*Rhinella marina*	Cane Toad	LC	-	-	Increasing

Legend: LC = Least Concern; NT = Near Threatened; OTS = Other Threatened Species; II = CITES Appendix II

Snakes were also observed such as the *Lycodon capucinus* and *Indotyphlops braminus*. Sightings of the invasive *Rhinella marina* or Cane Toad was also documented in the assessment. About three (3) individuals were observed within the sanctuary.

Macrobenthos

Preliminary findings revealed that the study sites are home to nine common species of macrobenthos. Gelonia sp. as well as Batillaria sp. are the edible and abundant species found in the area. Other species are also seagrass associated species because the presence of seagrass was observed near the other plots laid for the assessment. The class gastropoda dominates the species found in the area. Although no threatened species were observed, the sanctuary should be preserved due to the presence of the noticed edible species. Post processing of macrobenthic samples is on-going.

Family of common species observed in the study site

Species	Family	Class
Gelonia expansa	Cyrenidae	Bivalvia
Batillaria sp.	Potamididae	Gastropoda
Strombus sp.	Strombidae	Gastropoda
Gafrarium sp.	Veneridae	Gastropoda
Balanus sp.	Balanidae	Arthropoda
Polinices sp.	Naticidae	Gastropoda
Nerita sp.	Neritidae	Gastropoda
Cypraea sp.	Cypraeidae	Gastropoda
Anadara sp.	Arcidae	Bivalvia

Biomass

The preliminary results revealed that the C stock biomass of all plots ranged from 49.2 to 153.8 MgC-1 ha. Plot 9 had the highest biomass C stock with a total of 153.8 MgC ha-1 probably because of higher mean DBH and stem density of 11.7cm and 3.3 respectively, as compared to the other sampling plots resulting in a bigger biomass. On the other hand, Plot 3 had the lowest biomass C stock contribution with only a total of 49.2 MgC ha-1 due to its lowest DBH mean of only 3.3cm among other plots, resulting in lower biomass. Of all the sampling plots, Plot 1, 2, 7, 9, 11 and 12 recorded a value higher than the average. Moreover,

Plot 3, 4, 6, 8 and 10 recorded a value lower than the average. DBH (Diameter breast height) is the main factor for the computation of biomass.

Total Biomass C stock of the study site

Plot	AGB	BGB	Total
1	70.7	26.2	96.9
2	94.9	31	125.9
3	35.7	13.5	49.2
4	47.8	17.4	65.2
5	68.8	23.3	92.1
6	57.6	20	77.6
7	69.5	26	95.5
8	41.2	14.4	55.6
9	113.6	40.3	153.8
10	47	16.3	63.3
11	89.2	33	122.1
12	90	30.5	120.5
Mean	71.3	25.1	96.4

Water Quality Analysis

Laboratory Sample Code	Station Number	Time of Collection	Station Identification
22-0126	1	1009H	Ginablan Lagoon (North)
22-0127	2	1016H	Ginablan Lagoon (West)
22-0128	3	1026H	Ginablan Lagoon (East)

CHARACTERISTIC	Method of Analysis	Date Analyzed	LABORATORY SAMPLE CODE		
			22-0126	22-0127	22-0128
Color, TCU	Visual Comparison; SMEWW 2120 B	15 July 2022	5	5	5
pH @ 25 °C	Electrometric Method; SMEWW 4500-H^+ B	15 July 2022	7.31	7.25	7.32
Dissolved Oxygen (DO), mg/L	Electrometric Method; SMEWW 4500-O^- G	15 July 2022	2.68	2.54	2.46
Phosphate (P-PO_4), mg/L	Colorimetric-Ascorbic Acid Method; SMEWW 4500-P E	15 July 2022	0.03	0.03	0.03
Total Suspended Solids, mg/L	Gravimetric Method- Dried at 103-105°C; SMEWW 2540 B	18 July 2022	26	6	29

Laboratory Sample Code	Station Number	Time of Collection	Station Identification
22-0129	4	1038H	Ginablan Lagoon (South)
22-0130	5	1055H	Station 1 Romblon Pass
22-0131	6	1050H	Station 2 Romblon Pass

CHARACTERISTIC	Method of Analysis	Date Analyzed	LABORATORY SAMPLE CODE		
			22-0129	22-0130	22-0131
Color, TCU	Visual Comparison; SMEWW 2120 B	15 July 2022	5	<5	<5
pH @ 25 °C	Electrometric Method; SMEWW 4500-H^+ B	15 July 2022	7.04	7.30	7.94
Dissolved Oxygen (DO), mg/L	Electrometric Method; SMEWW 4500-O^- G	15 July 2022	1.20	4.04	3.89
Phosphate (P-PO_4), mg/L	Colorimetric-Ascorbic Acid Method; SMEWW 4500-P E	15 July 2022	0.04	0.03	0.03
Total Suspended Solids, mg/L	Gravimetric Method- Dried at 103-105°C; SMEWW 2540 B	18 July 2022	20	23	40

DAO 2016-08 "Water Quality Guidelines and General Effluent Standards"

Table 3. Water Quality Guidelines for Primary Parameters

Parameter	Unit	Water Body Classification								
		AA	A	B	C	D	SA	SB	SC	SD
BOD	mg/L	1	3	5	7	15	n/a	n/a	n/a	n/a
Chloride	mg/L	250	250	250	350	400	n/a	n/a	n/a	n/a
Color	TCU	5	50	50	75	150	5	50	75	150
Dissolved Oxygen[a] (Minimum)	mg/L	5	5	5	5	2	6	6	5	2
Fecal Coliform	MPN/100mL	<1.1	<1.1	100	200	400	<1.1	100	200	400
Nitrate as NO_3-N	mg/L	7	7	7	7	15	10	10	10	15
pH (Range)		6.5-8.5	6.5-8.5	6.5-8.5	6.5-9.0	6.0-9.0	7.0-8.5	7.0-8.5	6.5-8.5	6.0-9.0
Phosphate	mg/L	<0.003	0.5	0.5	0.5	5	0.1	0.5	0.5	5
Temperature[b]	°C	26-30	26-30	26-30	25-31	25-32	26-30	26-30	25-31	25-32
Total Suspended Solids	mg/L	25	50	65	80	110	25	50	80	110

Notes:
MPN/100mL – Most Probable Number per 100 milliliter
n/a – Not Applicable
TCU – True Color Unit
(a) Samples shall be taken from 9:00 AM to 4:00 PM.
(b) The natural background temperature as determined by EMB shall prevail if the temperature is lower or higher than the WQG; provided that the maximum increase is only up to 10 percent and that it will not cause any risk to human health and the environment.

Based on the result, all parameters set under Class SA (Protected, Marine Waters, Fishery Water Class1) were substantially met from Stations 1 to 6 except on the parameter of Total Suspended Solids under Stations 1, 3 and 6 that somehow higher than 25 mg/L.

Conclusion and Recommendation per Results of Assessment

For the conservation of fauna, it is important to formulate mitigation strategies for invasive alien species such as the R. marina while too much infestation is not yet observed in the area.

At the same time, comprehensive management plans may be implemented to further protect threatened species that inhabit within and in adjacent areas of the sanctuary such as the Romblon Boobook, Philippine Duck, Philippine Collared Dove, Tokay Gecko, West Visayan Monitor Lizard, and Island Flying Fox.

The potential of the area to become an established eco-tourism spot may give way to the conservation of these species. Moreover, formally declaring these wildlife as flagship species of the locality could heighten awareness of locals and tourists alike.

Furthermore, promotion of the protection of the area may be done by strengthening information, education, and communication (IEC) campaigns in order to involve the locals in the preservation of the natural resources of Ginablan.

Name tagging should be done on tree species present in the area.

It is also important to capacitate or train the Bantay Bakawan on the importance of different flora species that may be used in the education and awareness component of ecotourism programs.

It is also necessary to explore opportunities to have replanting programs for the *Xylocarpus rumphii* as this is categorized as Vulnerable.

Preservation of macrobenthos should also be a priority as these are food sources of other organisms such as birds.

The area pegged to be protected should be expanded, and must include the seagrass beds in the coastal area adjacent to the sanctuary.

This assessment has demonstrated that the Ginablan Bird and Mangrove Sanctuary is an important habitat for flora, fauna, and other associated living organisms as they support the growth and development of the sanctuary as well as a number of species that are considered globally and nationally threatened by extinction due to anthropogenic causes, among many others. There are also species found that are endangered and vulnerable in the area.

Therefore, protection of this sanctuary is of utmost importance. Furthermore, with threats from a variety of sources, including climate change and human disturbance, monitoring of habitat formation in this area, particularly the recorded flora and fauna species, should be

done in order to obtain the necessary data for developing strategies to ensure their protection and survival.

Lastly, in terms of physico-chemical analysis of water on the coastal/wetland of the proposed critical habitat, all stations have met the required standards.

C.) Consultation Proper

Key Issues/Concerns, Agreements Reached and Recommendations

In the afternoon, consultation proper with the participants was conducted and facilitated by DENR PENRO CDS personnel. The participants identified key issues/concerns that have impact on the proposed Critical Habitat (CH) across various ecosystems like from upland to fishery and the management body. The key issues raised by the participants in the Upland ecosystem were the sustainability of protecting their watersheds, stabilization of riverbanks, siltation at the riverbed, and poor drainage or flood control system.

Agreements and recommendations made were the conduct of yearly tree planting of indigenous trees in the watershed and riverbanks, request to desilt the river and improvement of drainage or flood control system. Then, protection of the grassland that served as nesting sites of Phil. Wild Ducks.

For the Urban Ecosystem, issues raised were the improper wastes disposal of household solid and liquid wastes, poor sanitation and farm wastes from piggery near the lagoon of the proposed critical habitat.

It was agreed to intensify public awareness and strict implementation of pertinent national laws and local ordinances on wastes disposal, sanitation and to have a functional MRF within the barangay.

Another issue or concern discussed under Mangrove ecosystem were the settlement of Right of Way (ROW) issue between Montaña lot going to proposed Critical Habitat as well as the determination of boundaries of the proposed critical habitat.

Accordingly, the concerned LGU's will conduct coordination with the Heirs of Montaña to settle this concern and request DENR PENRO Romblon to relocate boundaries of the critical habitat.

On the part of Beach Ecosystem, issues raised were presence of some informal settlers, absence of Foreshore Lease of 2 private resorts and the massive beach erosion near the lagoon. The LGU's will initiate to formally settle the issue on ROW, address appropriately informal settlers near the critical habitat and the adoption of mitigation measure to minimize beach erosion though combination of natural and engineering interventions.

In terms of Seagrass ecosystem, the problem raised is about the wastes disposal that needs to be addressed at the household and community level.

The issue on Coral Ecosystem was the problems of Crown-of-Thorns Starfish (COTS) infestation. It was agreed to enhance awareness of the concerned coastal communities and organized volunteers on the removal of COTS.

On the fishery issue, the participants observed the low fish catch and agreed to request the Municipal LGU of Romblon to provide alternative livelihood like venturing on fish cages/aquaculture and ecotourism activities.

Likewise, the concerned Municipal LGU of Romblon, Romblon through its Sangguniang Bayan and Barangay Council of Ginablan, Romblon agreed to adopt a "Resolution Endorsing the Establishment of Ginablan Mangrove, Wildlife and Bird Sanctuary as Critical Habitat" located at Sitio Cahuyong, Ginablan, Romblon, Romblon.

On the part of the present Management Body of Ginablan Mangrove, Wildlife and Bird Sanctuary, it was agreed by the concerned participants to request the DENR-ERDB to facilitate the conduct of "Workshop on Ginablan Critical Habitat Management Plan" in order to ensure effective and efficient management of this area.

Prepared and submitted:

RAYMUND G. INOCENCIO
ECOMS II

ARLYN D. BALIBAG
Chief, CDS

Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

PHOTODOCUMENTATIONS

Public Consultation Meeting on Ginablan Critical Habitat* August 25, 2022

Photo opportunities with the guest and participants

Presentation on the results of assessment

Punong Brgy. Roger C. Oczon made commitment on the proposed Ginablan critical habitat

CDS Chief Arlyn D. Balibag shared on low-impact tourism

Participants actively participated in the consultation process

Photo opportunities after the Public Consultation Meeting

Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

PENRO SPECIAL ORDER NO. 22-105
Series of 2022

SUBJECT: **AUTHORIZING THE CONDUCT OF PUBLIC CONSULTATION MEETING ON THE PROPOSED ESTABLISHMENT OF CRITICAL HABITAT IN GINABLAN MANGROVE, WILDLIFE, AND BIRD SANCTUARY ON AUGUST 25, 2022**

In the interest of the service and in order to facilitate the conduct of Public Consultation Meeting on the Proposed Establishment of Critical Habitat in Ginablan Mangrove, Wildlife, and Bird Sanctuary, the selected personnel are hereby authorized to attend in the said activity on August 25, 2022 at Dream Paradise Mountain Resort, Romblon, Romblon, to wit;

1. ARNOLDO A. BLAZA, JR.	- OIC-PENR Officer
2. MALVIN R. ROCERO	- Chief, Technical Services Division
3. THELMO S. HERNANDEZ	- Chief, Management Services Division
4. ARLYN D. BALIBAG	- Chief, CDS
5. RAYMUND G. INOCENCIO	- PASu / ECOMS II
6. MARIELLE V. MAGALLANES	- Forester I
7. JANICE F. FORCADAS	- ECOMS I
8. PHILIPPE ZAR E. MEÑEZ	- ISA II
9. CARMELA F. ARQUERO	- AA VI / Inspection Committee

They shall coordinate with the concerned food caterer and assist in the preparation of the venue of the activity.

They shall prepare and distribute letter of invitation for the respective participants.

They shall submit report within seven (7) working days after the conduct of the activity.

Expenses incurred are chargeable against CDS fund subject to the existing COA laws, rules and regulations.

This order takes effect immediately.

ARNOLDO A. BLAZA, JR.

PROGRAM OF ACTIVITIES

Public Consultation on the Proposed Establishment of Critical Habitat (CH)
Ginablan Mangrove, Wildlife and Bird Sanctuary
Romblon, Romblon

DAY/TIME	ACTIVITIES/TOPICS	FOCAL PERSON
August 25, 2022		
7:00 – 8:30	Breakfast	
8:31 – 9:00	Registration	Secretariat
9:01 – 9:30	Opening Program	
	Prayer	Hon. Hose M. Muyo
	National Anthem	Hon. Joseline Maggay
	Acknowledgement of Participants	Secretariat
	Welcome Remarks	Mayor Gerard S. Montojo, LLB
	Message	OIC, PENR Officer Arnoldo A. Blaza, Jr.
	Photo Opportunity	
	Rationale of the Activity	CDS Chief Arlyn D. Balibag
9:31 – 12:00	Presentation of Scientific Results: 1.) Characterization and assessment of vegetation; 2.) Sediment samples, site characterization and spatial survey in location plots 3.) Characterization and assessment on macro benthos; 4.) Physico-chemical analysis of water on the coastal wetland	Engr. Raymund G. Inocencio
12:01 – 1:00	Lunch Break	
1:01 – 4:00	Public Consultation Proper	Participants
4:01– 5:00	Synthesis/ Way Forward	CDS
5:01- 5:30	Closing Program	CDS
Homebound		

Republic of the Philippines
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Provincial Environment and Natural Resources Office
Odiongan, Romblon

Public Consultation Meeting on the Proposed Establishment of Critical Habitat (CH)
Ginablan Mangrove, Wildlife, and Bird Sanctuary

August 25, 2022

ATTENDANCE SHEET

No.	NAME	AGE	SEX		OFFICE	DESIGNATION	CONTACT NUMBER(S)	SIGNATURE
			Male	Female				
1	FERNANDO MUYO	51	/		GINABLAN	KAGAWAD	09694191655	
2	RONNIE MAQUIRAN	44	/		GINABLAN	KAGAWAD	09511350078	
3.	RANIER MONTOJO	32	/		GINABLAN	S-BARANGAY	09982349889	
4.	ANTONIO M MAGO	68	/		BRGY GINABLAN	P.O CHAIRMAN		
5	Imelda M. Mazo	52		/	Gináblan	S.B.	09392059473	
6	Faith Laurente	29		/	Ginablan	B.T		
7	Mario Marielo	61	/		Ginablan	GIFA MEMBER		
8	Gina Mallorca	57		/	Ginablan	BCSF		
9	Jocelyn Magpay	36		/	GINABLAN	Kagawad	09300628995	
10.	Jeline M. Mercano	29		/	Ginablan	Brgy. Secretary	09070111733	
11.	Gerlyn M. Marino	23		/	Ginablan	SK Chairperson		
12	Jose M. Muyo	58	/		GINABLAN	S.B.		
13.	LETTY M. MARATON	37		/	GINABLAN	BHW	09076010578	
14.	Marichu B. Mercano	54		/	Ginablan	B.A.	09197487754	
15	Leabel Rogero	23		/	Ginablan (MAO)	AGRI-TECH (MAO)	09060292075	
16.	John Paul Mortos	23	/		Ginablan	SK. KAGAWAD		

Republic of the Philippines
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Provincial Environment and Natural Resources Office
Odiongan, Romblon

Public Consultation Meeting on the Proposed Establishment of Critical Habitat (CH)
Ginablan Mangrove, Wildlife, and Bird Sanctuary

August 25, 2022

ATTENDANCE SHEET

No.	NAME	AGE	SEX		OFFICE	DESIGNATION	CONTACT NUMBER(S)	SIGNATURE
			Male	Female				
17	Reynaldo Montojo	48	✓		Ginablan	S.B	09488911940	[signature]
18	Roger C. Oczon	48	✓		"	P.16	09460746809	[signature]
19	Sergio M. Mercano Jr.	59	✓		"	BFARMC	09197487757	[signature]
20	Ricardo M. Merano	64	✓		GINABLAN	GIFA MEMBER		[signature]
21	Delfin F. Mores	43	✓		PG-ENRO	Admin Aide II	09494101584	[signature]
22	Mark Allen M. Mercano	31	✓		Ginablan	Admin	0907[illegible]7583	[signature]
23	Elmo M. dela Cruz Sr.	69	✓		MFARMC	chairman	0946138628[illegible]	[signature]
24	Marilyn dela Cruz	65		✓	BFARMC	Secretary	09511351224	[signature]
25	Anita R. Morales	44		✓	Agriculture	Staff	09503223964	[signature]
26.	Maryterace Maaba	32	✗	✓	Solidwaste	Staff	093[illegible]5118	[signature]
27.	Krisanta Salac	25		✓	MSolidwaste	Staff	0907-922-5464	[signature]
28	Arlyn D. Balibag	48		✓	DENR Romblon	Chief, CDS	09391078554	[signature]
29	Sherwin Magbosos	24	✓		DOST MIMAROPA	Science Aide	09089671786	[signature]
30	Fernando R. Faigao	36	✓		~~SSU~~ U-Romblon	SD AGRI		[signature]
31	Psyche Mariño	24		✓	MSWMO	OIC	09157147249	[signature]
32	Miguel Cortez	49	✓		MAO	FARMO		[signature]

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Provincial Environment and Natural Resources Office
Odiongan, Romblon

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August 25, 2022

ATTENDANCE SHEET

No.	NAME	AGE	SEX		OFFICE	DESIGNATION	CONTACT NUMBER(S)	SIGNATURE
			Male	Female				
33	JOB V. MARTINEZ	62	✓		MAO	B. DAGAT.		
34	Raymund Jovian Montin	30	✓		MAO	Municipal Agriculturist	09768403490	
35	Marielle V. Magallanes	25		✓	PENR - PENRO	Forester I	09305853441	
36	RAYMUND G. INOCENCIO	44	✓		PENR-PENRO	ECOMSU	09475	
37.	JANICE F. FORCADAS	39		✓	DENR - PENRO	ecomsu	09394649530	