



Republic of the Philippines  
Department of Environment and Natural Resources  
**Provincial Environment and Natural Resources Office**  
**MIMAROPA Region**

Bgy. Sta. Monica, Puerto Princesa City, Palawan

E-mail: [penropalawan@denr.gov.ph](mailto:penropalawan@denr.gov.ph)

Telfax No. (048) 433-5638 / (048) 433-5638

Region

July 06, 2022

**MEMORANDUM**

**FOR :** The Regional Executive Director  
DENR MIMAROPA  
1515 L&S Bldg., Roxas Blvd.  
Ermita, Manila

**FROM :** The Provincial Environment and  
Natural Resources Officer

**SUBJECT :** **PROGRESS REPORT ON THE MONITORING OF  
MANGROVES FOR MALAMPAYA SOUND PROTECTED  
LANDSCAPE AND SEASCAPE (MSPLS), TAYTAY- SAN  
VICENTE, PALAWAN**



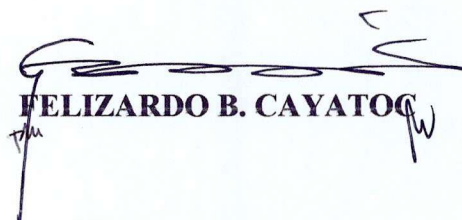
Forwarded is the memorandum dated June 26, 2022 of CENRO Taytay along with the progress report on the monitoring of mangroves within Malampaya Sound Protected Landscape and Seascape (MSPLS) pertaining to the target activity under Management of Coastal and Marine Resources/Areas of Malampaya Sound Protected Landscape and Seascape (MSPLS) – Monitoring of Mangroves.

Please be informed that the PAMO-MSPLS conducted initial mangrove assessment/monitoring within Sitio Balingbing, Barangay Alacalian, Taytay, Palawan and assessed a total of 31.87 hectares out of the estimated total land area of 70.00 hectares. Moreover, a total of thirteen (13) species were recorded as well as threats and pressures identified, such as sporadic mangrove cutting, domestic garbage, and fallen trees due to Typhoon Odette.

Attached are the report with maps and photo documentation during the conduct of the activity.

For information and record.



  
**FELIZARDO B. CAYATOC**

DENR-PALAWAN  
PENRO-RECORDS  
**RELEASED**

By \_\_\_\_\_  
Date: 08 JUL 2022 12-1666



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

**COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE**

By the National Highway, Poblacion, Taytay, Palawan 5312

Mobile: 0926-505-9335 TM 0912-171-3889 TNT

Email: cenrotaytay@denr.gov.ph

**RECEIVED**

June 20, 2022

**MEMORANDUM**

**FOR :** The Provincial Environment and Natural Resources Officer- Palawan  
Sta. Monica, Puerto Princesa City

**FROM :** The Community Environment and Natural Resources Officer  
This jurisdiction

**SUBJECT :** **PROGRESS REPORT ON THE MONITORING OF MANGROVES  
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND  
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN**

Respectfully forwarding is the memorandum dated June 16, 2022 of Protected Area Superintendent (PASu) Clarissa P. Pador being an accomplishment and **Means of Verification (MoV)** on the target activity of Monitoring of Corals, Mangroves and Seagrass under 001 Management of Coastal and Marine Resources/Areas of Malampaya Sound Protected Landscape and Seascape (MSPLS). Taytay-San Vicente, Palawan.

The undersigned concurred with the recommendation of PAMO-MSPLS to conduct the regular patrol and monitoring on the mangrove areas in coordination with the Barangay LGUs and other partner law enforcement agencies to prevent the illegal activities.

For his information and record.

**DENR CENRO  
TAYTAY, PALAWAN  
RELEASED**

BY: [Signature]  
DATE: 06-20-22 CN 1787

[Signature]  
**ALAN E. VALLE**

Cc: PAMO-MSPLS



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

**PROTECTED AREA MANAGEMENT OFFICE**  
**MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)**  
Taytay-San Vicente, Palawan  
Barangay Old Guinlo, Taytay, Palawan  
Email add: [pamomspls@gmail.com](mailto:pamomspls@gmail.com)/Contact #: 0938-786-3728 (SMART)



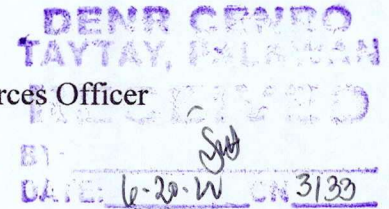
June 16, 2022

MEMORANDUM

FOR : The Community Environment and Natural Resources Officer  
Taytay, Palawan

FROM : Protected Area Superintendent  
Malampaya Sound Protected Landscape and Seascape (MSPLS)  
Taytay-San Vicente, Palawan

SUBJECT : **PROGRESS REPORT ON THE MONITORING OF MANGROVES  
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND  
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN**



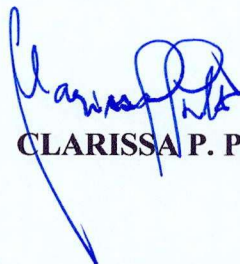
This pertains to the target activity on the Monitoring of Corals, Mangroves and Seagrass under 001 Management of Coastal and Marine Resources/Areas of Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay-San Vicente, Palawan.

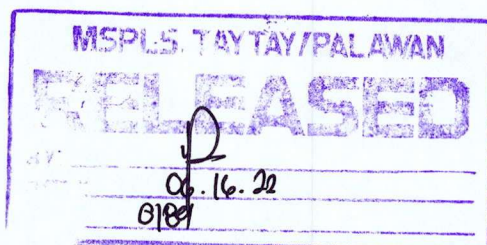
Respectfully forwarded is the memorandum dated June 16, 2022 of CMEMP Extension Officer Maria Lilibeth E. Arojo concerning the above subject. Please be informed that a total of 2,203.4 hectares was recorded during the conduct of ground truthing in the mangroves areas of Barangays Alacalian, Abongan, Bato and New Guinlo, Taytay, Palawan.

Be informed further that this Office conducted the initial mangrove assessment/monitoring within Sitio Balingbing, Barangay Alacalian, Taytay, Palawan and assessed a total of 31.87 hectares out of the estimated total land area of 70.00 hectares. Likewise, during the assessment, a total of thirteen (13) species were recorded as well as threats and pressures identified such as sporadic mangrove cutting, domestic garbage and fallen trees due to Typhoon Odette.

Hence, this Office recommends the regular patrol and monitoring on the mangrove areas in coordination with the Barangay LGUs and other partner law enforcement agencies to prevent the illegal activities.

For his information and record.

  
CLARISSA P. PADOR





Department of Environment and Natural Resources  
MIMAROPA Region

**PROTECTED AREA MANAGEMENT OFFICE**

**MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)**

Taytay-San Vicente, Palawan

Barangay Old Guinlo, Taytay, Palawan

Email add: [pamomspls@gmail.com](mailto:pamomspls@gmail.com)/Contact #: 0938-786-3728 (SMART)



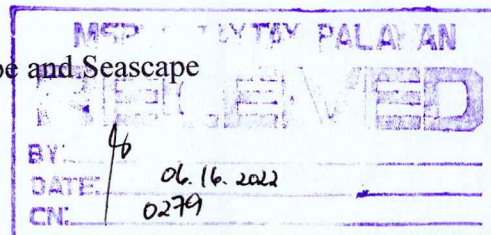
June 16, 2022

**MEMORANDUM**

FOR : The Protected Area Superintendent  
Malampaya Sound Protected Landscape and Seascape  
Taytay, Palawan

FROM : CMEMP Extension Officer  
MSPLS, Taytay, Palawan

SUBJECT : **PROGRESS REPORT ON THE MONITORING OF MANGROVES  
FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND  
SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN.**



This pertains to the target activity on the monitoring of corals, mangroves, and seagrass of Coastal and Marine Ecosystems Rehabilitation Sub-Program under Management of Coastal and Marine Resources/Areas for Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay, Palawan.

Please be informed that on April 8 to June 15, 2022 the undersigned together with Forest Ranger Ricardo S. Tandoc, FR Francis Abe G. Bose and PAMO-MSPLS personnel conducted ground truthing on mangrove areas of Barangays Alacalian, Abongan, Bato and New Guinlo, Taytay, Palawan which approximately have a total area of 2,203.4 hectares.

The team also conducted initial mangrove assessment/monitoring within Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan. The area has an estimated land area of 70 hectares of which a total of 31.87 hectares was assessed and monitored. The team laid out 100 meters transect line from the shoreline of the 1st plot to landward with 100 meters interval in every quadrat. A 10 x 10 meters dimension and 2 x 2 meters quadrat was established in every transect. All species of mangroves present inside the plots were identified and recorded. A total of thirteen (13) species were identified in the aforesaid area. During monitoring, sporadic of mangrove cutting, domestic garbage and fallen trees due to typhoon Ondette were also noted.

Global Positioning System (GPS) was also utilized to take readings otherwise note the points of the location of each corner of the plot in the Landsat imagery.

The undersigned recommends regular patrolling and monitoring in the area in coordination with BLGU's to prevent the illegal activities.

Attached are the copy of result and photos during the conduct of the activity.

For information and record.

  
**MARIA LILIBETH E. AROJO**

## I. RESULT AND DISCUSSION

### Mapping

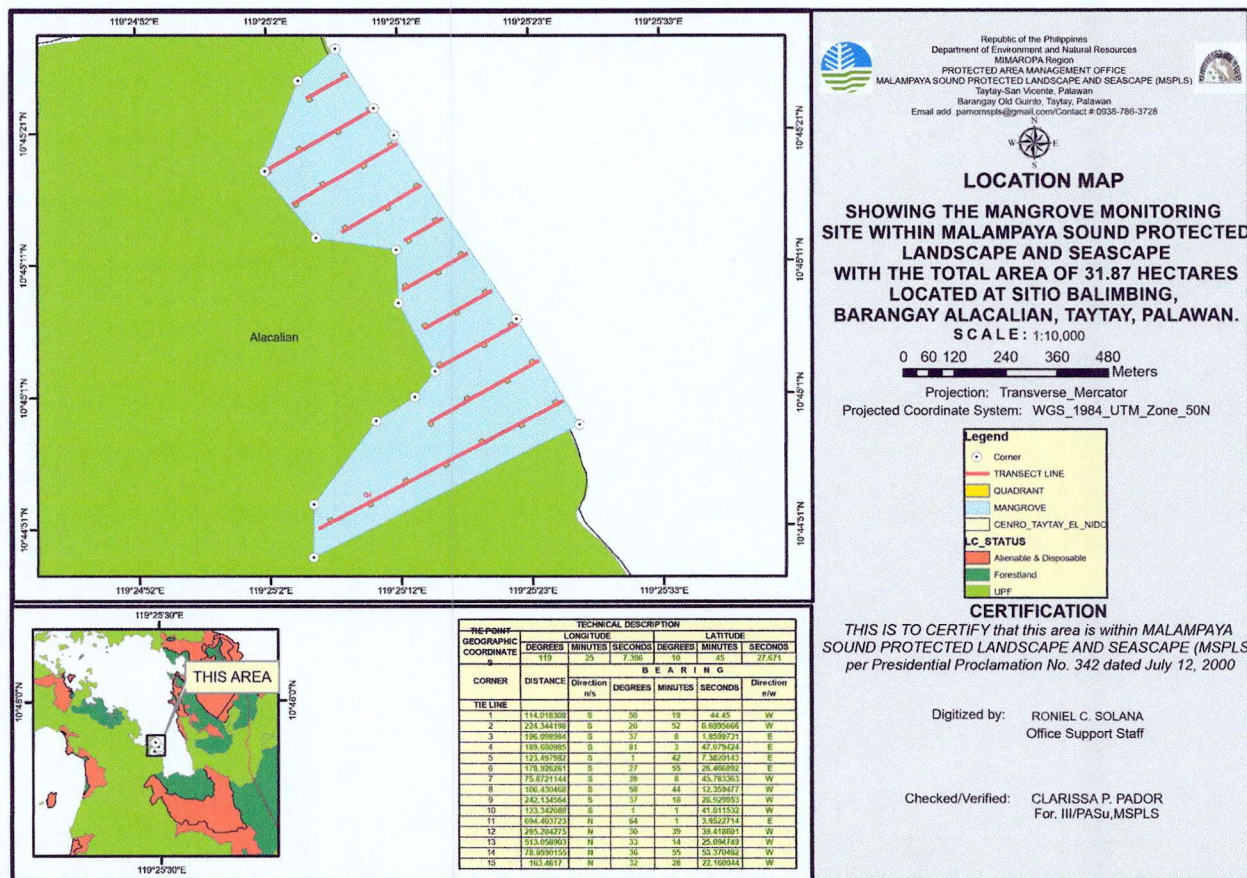


Figure I. The location of the sampling site at Sitio Balimbing, Bgy. Alacalian, Taytay, Palawan.

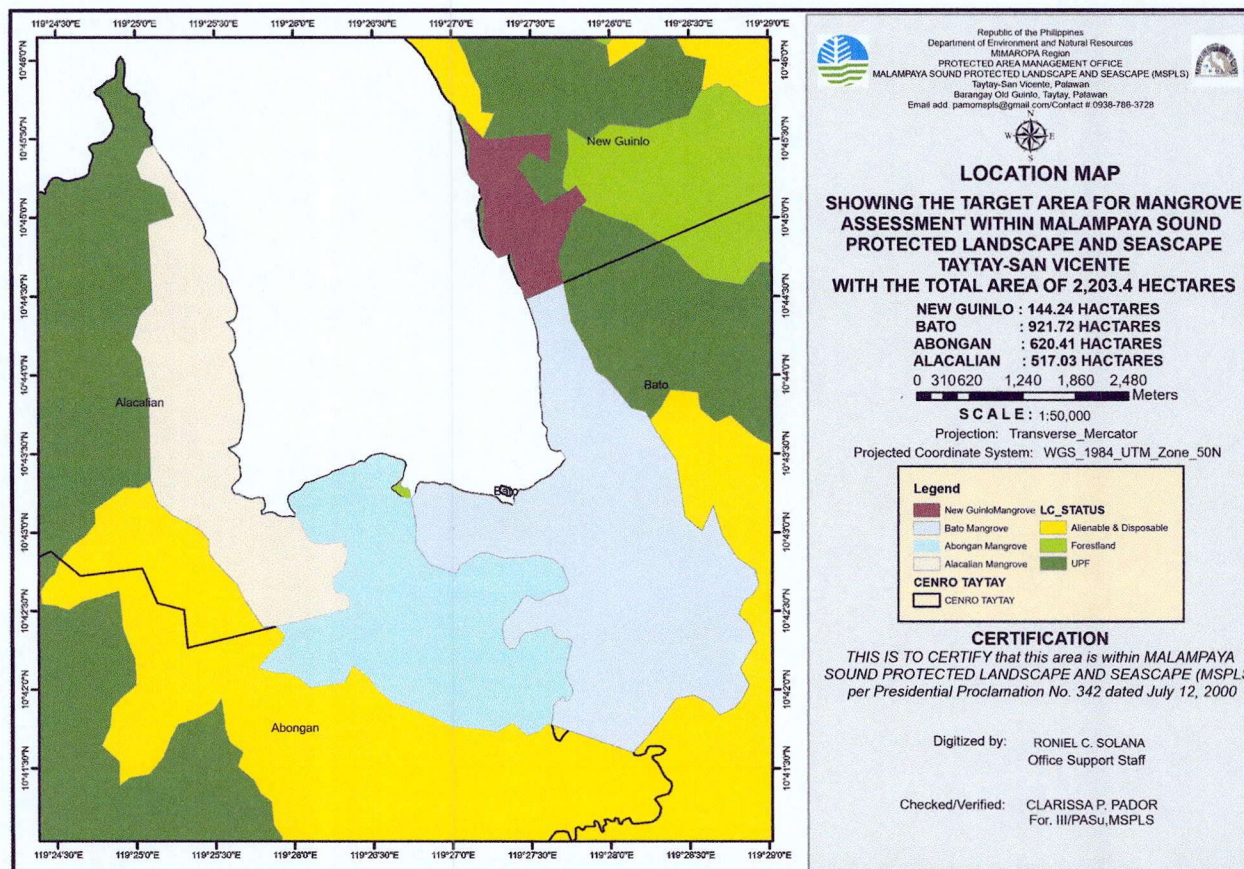


Figure II. The location of the mangrove areas in Bgys. New Guinlo, Bato, Abongan and Alacalian, Taytay, Palawan.

Mapping of mangrove was done through reading of GPS from way point and every mangrove inside the quadrant to end point of the area. The coordinates were recorded, ensuring a 3 to 9 meters accuracy. These coordinates was processed and analyzed using the works of Primavera et al.

### ***Assessment (Sampling site)***

The assessment was conducted in Sitio Pinagpala, Bgy. Alacalian, Taytay, Palawan situated at approximately 19°25'21" East Longitude and 10°44'58"N Latitude. It has an estimated land area of 70 hectares where 70% of the total land area are mangroves.



*Figure III. Mangrove area in Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan.*

### ***Data Analysis***

Table I. Mangrove species in Sitio Pinagpala, Bgy. Alacalian, Taytay, Palawan.

Scientific Name	Local Name
1. <i>Acanthus ebracteatus</i>	Lagiwliw
2. <i>Acrostichum speciosum</i>	Palaypay
3. <i>Bruguiera cylindrical</i>	Pototan
4. <i>Bruguiera gymnorrhiza</i>	Pototan
5. <i>Bruguiera sexangula</i>	Pototan
6. <i>Ceriops decandra</i>	Baras-baras
7. <i>Ceriops tangal</i>	Tangal
8. <i>Rhizophora apiculata</i>	Bakaw lalaki
9. <i>Rhizophora mucronata</i>	Bakaw babae
10. <i>Soneratia alba</i>	Pagatpat
11. <i>Xylocarpus granatum</i>	Tabigi
12. <i>Xylocarpus moluccensis</i>	Piag-ao
13. <i>Nypa fruticans</i>	Nipa

There are 13 species of mangroves were recorded during assessment/monitoring in the area of Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan.

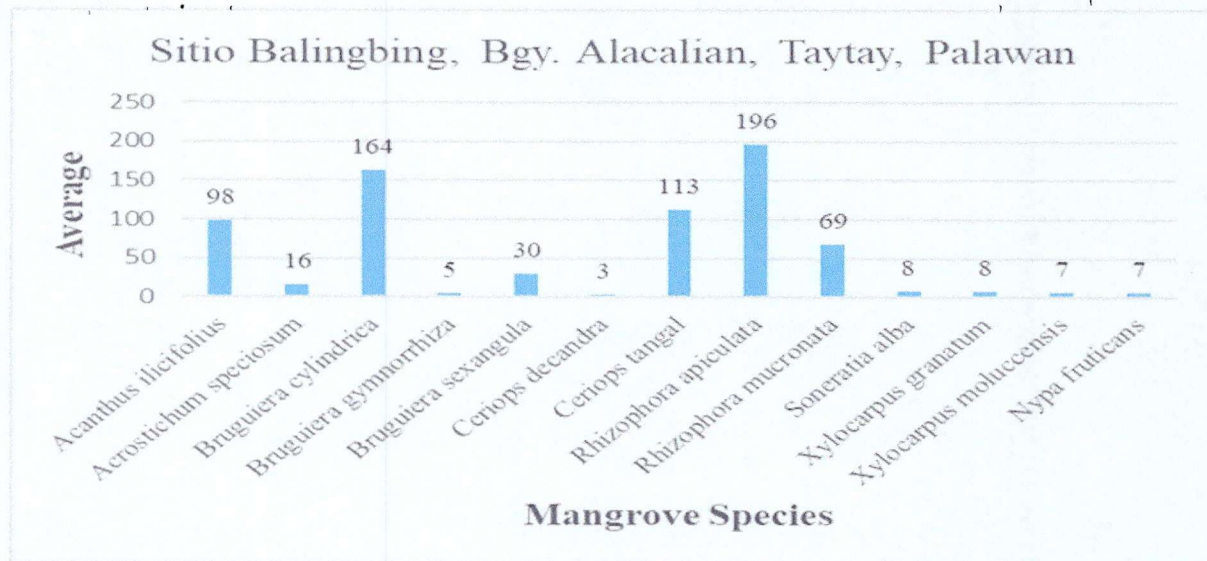


Figure IV. The average of mangrove species in Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan

Figure IV shows the computed average of the different mangrove species noted in Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan. The dominant mangrove species was *Rhizophora apiculata*, which had the highest average value of 196.

#### Photo Documentation

Based on the documentation conducted in the area the following are species found and recorded.



*Acanthus ebracteatus*



*Rhizophora mucronata*



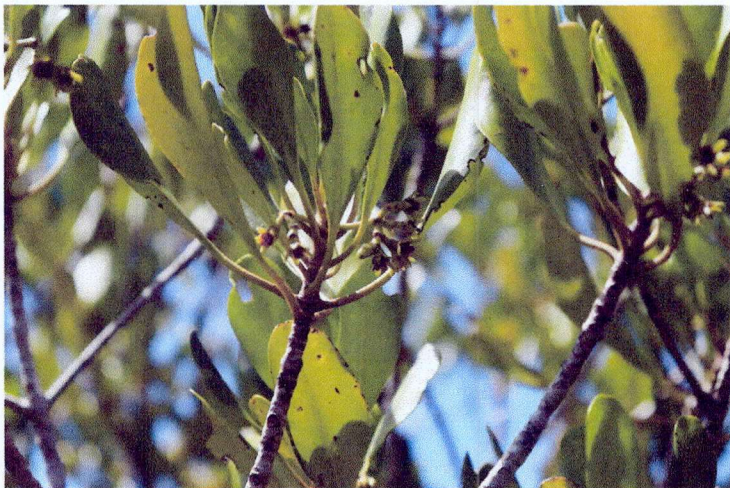
*Bruguiera cylindrica*



*Bruguiera gymnorrhiza*



*Bruguiera sexangula*



*Ceriops tangal*



*Xylocarpus granatum*



*Rhizophora apiculata*

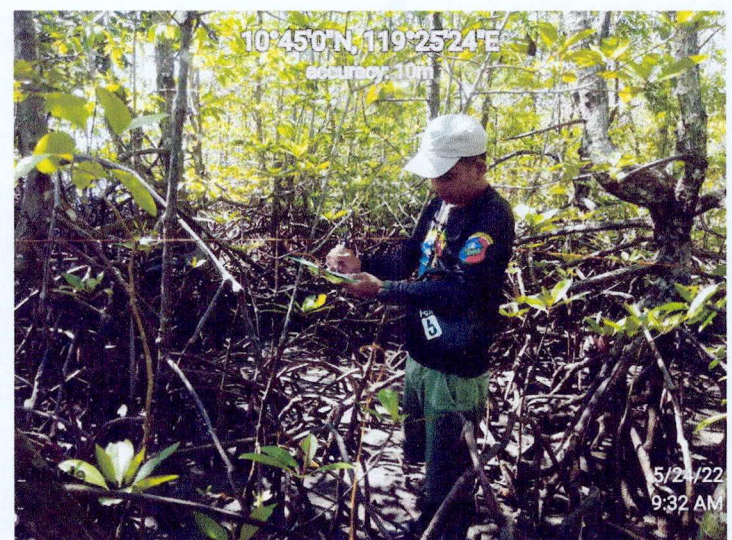
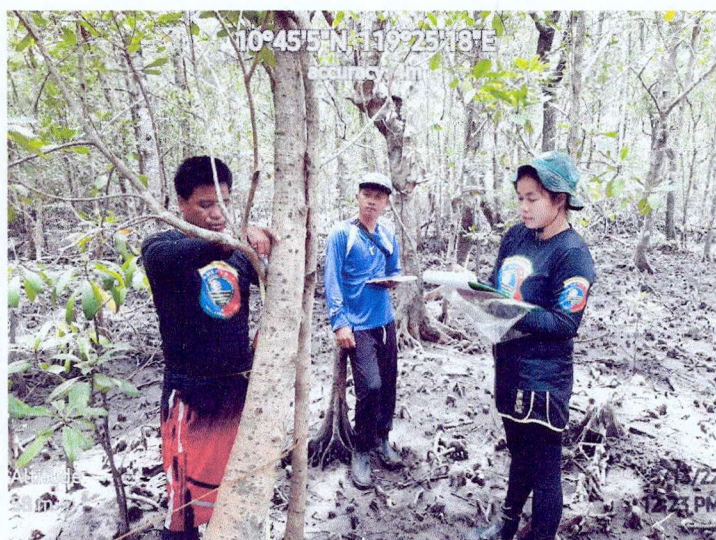
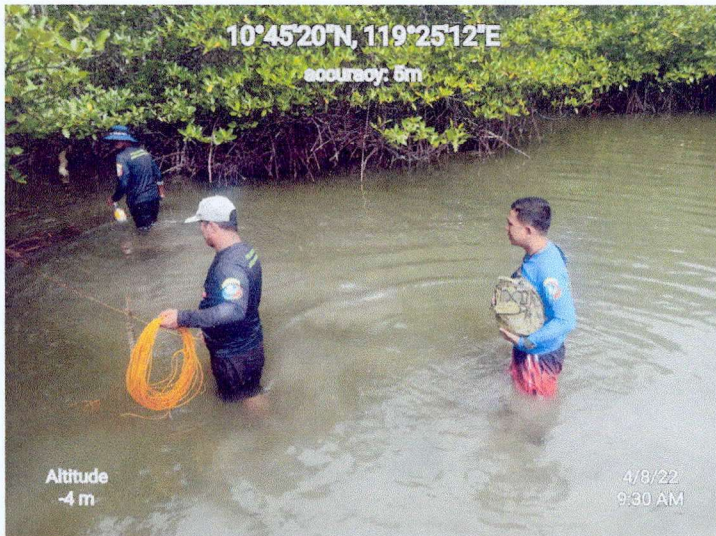


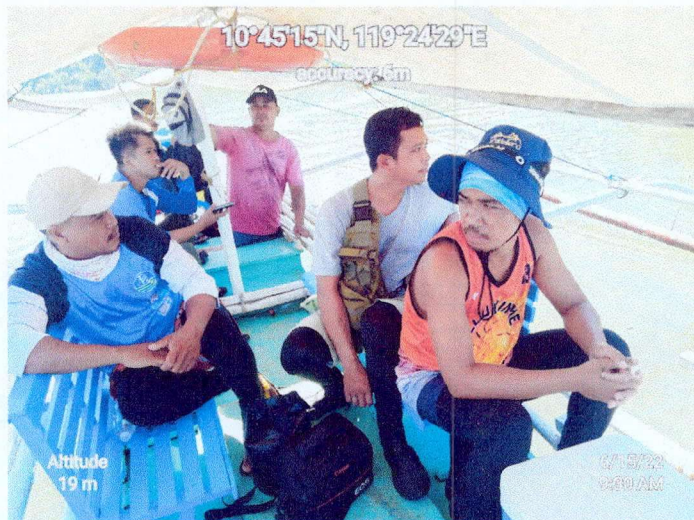
*Nypa fruticans*

### ***Conclusion and recommendation***

The mangrove area in Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan is considered healthy marine ecosystem with occurrence of 13 mangroves species identified. Based on the assessment, the undersigned recommends regular patrolling and monitoring in the area in coordination with BLGU's to prevent the illegal activities.

## Photo Documentation





I hereby certify that the above photos are true and correct and was taken during the ground truthing and monitoring of mangroves within Bgys. Alacalian, Abongan, Bato and New Guinlo, Taytay, Palawan.

  
MARIA LILIBETH E. AROJO