

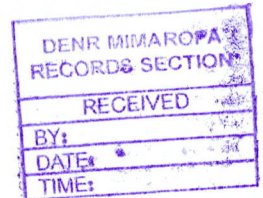


Republic of the Philippines
Department of Environment and Natural Resources
Provincial Environment and Natural Resources Office
MIMAROPA Region

Bgy. Sta. Monica, Puerto Princesa City, Palawan

E-mail: penropalawan@denr.gov.ph

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



April 12, 2023

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA
1515 DENR By the Bay Bldg., Roxas Boulevard,
Barangay 668, Ermita, Manila

THRU : The OIC, ARD for Technical Services

FROM : The Provincial Environment and
Natural Resources Officer

SUBJECT : **1ST QUARTER REPORT ON THE CONDUCTED
BIODIVERSITY ASSESSMENT AND MONITORING SYSTEM
(BAMS) FOR MALAMPAYA SOUND PROTECTED
LANDSCAPE AND SEASCAPE (MSPLS), TAYTAY-SAN
VICENTE, PALAWAN FOR CY 2023**

Respectfully forwarded is the memorandum dated March 22, 2023 of CENRO Taytay, Palawan along with the report on the conducted BAMS Flora and Fauna and Water Quality monitoring for MSPLS, Taytay-San Vicente, Palawan.

Please be informed that the said activity was conducted by the MSPLS-PAMO last March 17, 2023 at Bgy. Banbanan, Taytay, Palawan where a total of three (3) sites identified as the permanent sites for water quality monitoring within the stretch of two (2) kilometers BAMS area.

This serves as **Means of Verification (MoV)** for target activities under Management of Coastal and Marine Resources/Areas – Water Quality Monitoring within Legislated NIPAS PA CY 2023.

For information and record.



FELIZARDO B. CAYATOC





Republic of the Philippines
Department of Environment and Natural Resources
Region IV- MIMAROPA
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
by the National Highway, Poblacion, Taytay, Palawan 5312
Contact No.: 09265059335 (Globe) / 09121713889 (Smart)
Email address: cenrotaytay@denr.gov.ph

**DENR PENRO
PALAWAN RECORDS
RECEIVED**

March 22, 2023

MEMORANDUM

BY: [Signature]
DATE: 04-03-2023 CN 23-3055

FOR : The Provincial Environment and Natural Resources Officer- Palawan

FROM : The Community Environment and Natural Resources Officer

SUBJECT : **ACCOMPLISHMENT REPORT ON ACTIVITY PER WFP
Malampaya Sound Protected Landscape and Seascape (MSPLS)**

Activity: Biodiversity Assessment and Monitoring System (BAMS) Terrestrial				
Performance Indicator: Flora, Fauna and Water Quality monitoring conducted within the 2-Ha PBMA (Wet and Dry season)				
Frequency of submission: 1 st to 3 rd quarter				
Current submission: Memo report of Protected Area Superintendent/In Charge, CDS/For. III Clarissa P. Pador dated March 22, 2023 (CN 2105 in the eDATS) submitting the 1 st quarter report on the conducted water quality monitoring for dry season within BAMS area for Protected Area Management Office of Malampaya Sound Protected Landscape and Seascape (MSPLS).				
Attachment: 1. Comprehensive report 2. Water Quality Monitoring Field Data Form with photo documentation (4 pages)				
Gender & Development (GaD) data	Male = 3	Female = 2	LGBTQ+ = 0	Prefer not to say = 0
Age Grouping	60 and above	18-59	17 and below	TOTAL
	0	5	0	5
Environmental Management System (EMS Compliance)	<ul style="list-style-type: none">✓ Compliant to 5S organization techniques (SORT – keep only necessary items, SET IN ORDER – arrange items to promote efficient workflow, SHINE – clean the work area so it is neat and tidy, STANDARDIZE – set standards for a consistently organized workplace and SUSTAIN – maintain and review standard)✓ Organizing of travel to maximize conveyance and observance of speed limit to practice the minimized used of fuel✓ Carpooling✓ No single use of plastic✓ PENRO Memo No. 2023-001 dated February 21, 2023			

This is our **Means of Verification (MoV)** on the activity. Please confirm your receipt hereof. Thank you.

**DENR CENRO
TAYTAY, PALAWAN
RELEASED**

CONRADO M. CORPUZ

Copy furnished:
PAMO-MSPLS

BY: [Signature]
DATE: MAR 28 2023 CN 1251



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: pamomspls21@gmail.com / Mobile No. 0938-786-3728 (TNT)



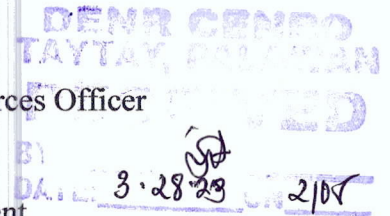
March 22, 2023

MEMORANDUM

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

FROM : The In Charge, CDS/Protected Area Superintendent
Malampaya Sound Protected Landscape and Seascape (MSPLS)
Taytay-San Vicente, Palawan

SUBJECT : **1ST QUARTER REPORT ON THE CONDUCTED BIODIVERSITY ASSESSMENT AND MONITORING SYSTEM (BAMS) FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN.**



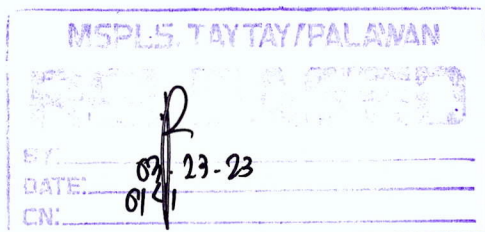
This pertains to the target activity on Biodiversity Assessment and Monitoring System (BAMS) Flora and Fauna and Water Quality monitoring within 2-Ha PBMA (Terrestrial) for dry season under Protected Area Management and Development Sub-Program of Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay-San Vicente, Palawan.

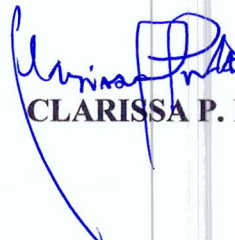
Please be informed that the undersigned together with Forest Rangers Ricardo S. Tandoc, Herson Y. Caliao, Administrative Assistant Irene C. Erbeté and GIS Specialist Roniel C. Solana conducted the above-mentioned activity on March 17, 2023. The activity is to conduct the water quality monitoring and documentation of threats in the established BAMS area of MSPLS located at Barangay Banbanan, Taytay, Palawan. Likewise, a total of three (3) sites was identified as the permanent site for water quality monitoring within the stretch of two (2) kilometers BAMS area. The team was composed of three (3) males and two (2) females.

Attached are the analyses of gathered data, and photo documentation.

This is our Means of Verification (MoV) on the said target activity.

For his information and record.




CLARISSA P. PADOR

Name of Protected Area - Malampaya Sound Protected Landscape and Seascape
Taytay-San Vicente, Palawan

Name of PAMB - Malampaya Sound Protected Landscape and Seascape
Taytay-San Vicente, Palawan

Dry Season of First Quarter CY 2023

I. Objectives:

The Biodiversity Assessment Monitoring System (BAMS) aims to provide the Protected Area Superintendent (PASu) and field implementers a standardized method of assessing and monitoring terrestrial ecosystem. The result will be used in implementing science-based management interventions and in the formulation or updating of the respective Protected Area Management Plan and other Conservation Plan. These will be also used in updating bio-physical profiles and development of relevant reports on the state of biodiversity and protected areas (Section 1. BMB Technical Bulletin No. 2016 – 05).

II. Introduction

A protected area refers to identified portion of land and/or water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation (ENIPAS Act of 2018-RA No. 11038).

IUCN defined as clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (Dudley 2008:8)

Thus, protected area aims to conserve nature and sustain ecosystem services though managing space, Managers of this area/space they are overseeing, but their abundance and distribution as well. Since many protected area areas are offer meant to serve as natural capital or reproductive stock to provide for the broader ecosystem (i.e., river basin and coastal/marine area) of which they are a part, then managers should know the types, abundance and distribution of ecosystem, species and ecosystem services both inside and outside the protected area.

The Biodiversity Assessment and Monitoring System (BAMS) is a tool for scientific assessment of the current status of terrestrial biodiversity, habitat quality and certain ecosystem services. It is used to establish a baseline for long-term monitoring and management and determine trends in ecosystem and species abundance and diversity (Section 3. BMB Technical Bulletin No. 2016-05).

The MSPLS BAMS site has a stretch of two (2) kilometers traversing the mountainous area of Mt. Capoas, Barangay Banbanan, Taytay, Palawan; and has a two (2) hectares permanent monitoring area consisted of fifty (50) plots and each plots have an area of four hundred square meters (20m x 20m) with regular monitoring of flora and fauna will be conducted.

III. Analyses of Gathered Data

- a. On-site Monitoring and Measurement using Water Quality Multiparameter (HORIBA U-5000G)

WATER QUALITY MONITORING
FIELD DATA FORM

SITE : MSPLS BAMS Site Sampling Team: PAMO-MSPLS
Date of Sampling : March 17, 2023

Parameter	Sampling Station		
	Station I	Station 2	Station 3
GPS Coordinates	10° 48' 34" N 199° 18' 10" E	10° 48' 34" N 199° 18' 05" E	10° 48' 35" N 199° 18' 36" E
Time of Sampling	9:05 AM	9:21 AM	10:22 AM
Cloud Cover (%)	27%	27%	80%
Weather Condition	Sunny, Partly cloudy	Sunny, Partly cloudy	Sunny
Visual Color of Water	Clear	Clear	Clear
Other Observations	Forest litter	Forest litter	Forest litter, presence of detergent soap, fresh water fish (paitan)
In situ Analysis (Multiparameter Checker)			
pH	6.0	6.5	6.4
Temperature (°C)	25.556	24.51	25.886
Dissolved Oxygen (mg/L)	7.158	6.916	5.942
Conductivity (µS/cm)	0.11	0.06	0.07
Turbidity (NTU)	0.00	13.62	0.00
Salinity (ppt)	0.05	0.03	0.03
Total Dissolved Solid (g/L)	0.07	0.04	0.04
Oxidation Reduction Potential or ORP (m/V)	354.60	347.40	369.00
Transparency (cm)			

Remarks: None

Figure I. Water Quality Monitoring Field Data Form

SITE	TEMPERATURE	Remarks (Class AA Criteria,26-30 Celsius)
BAMS1	25.556	Fail
BAMS2	24.51	Fail
BAMS3	25.886	Fail

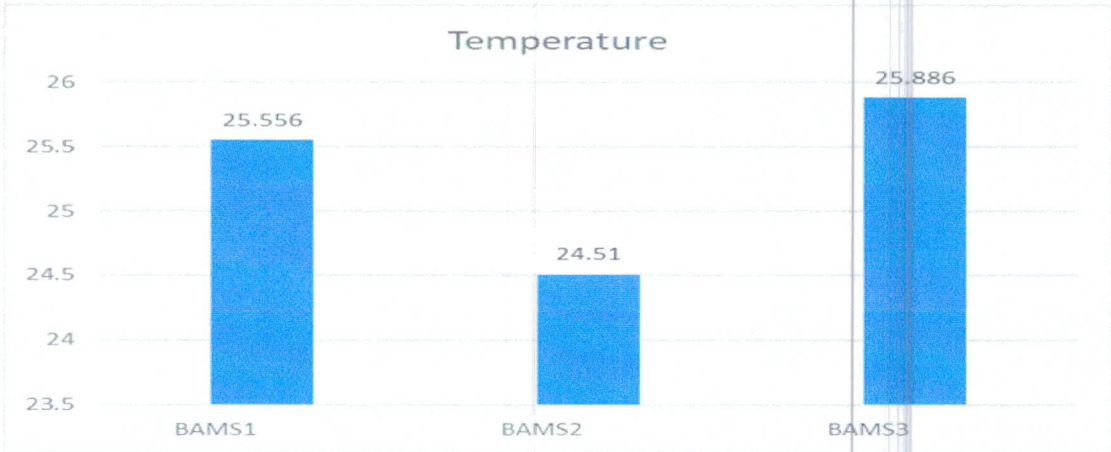


Figure II. Temperature of three (3) stations.

SITE	PH	Remarks (Class AA Criteria, 6.5 - 8.5")
BAMS1	6.0	Fail
BAMS2	6.5	Pass
BAMS3	6.4	Fail

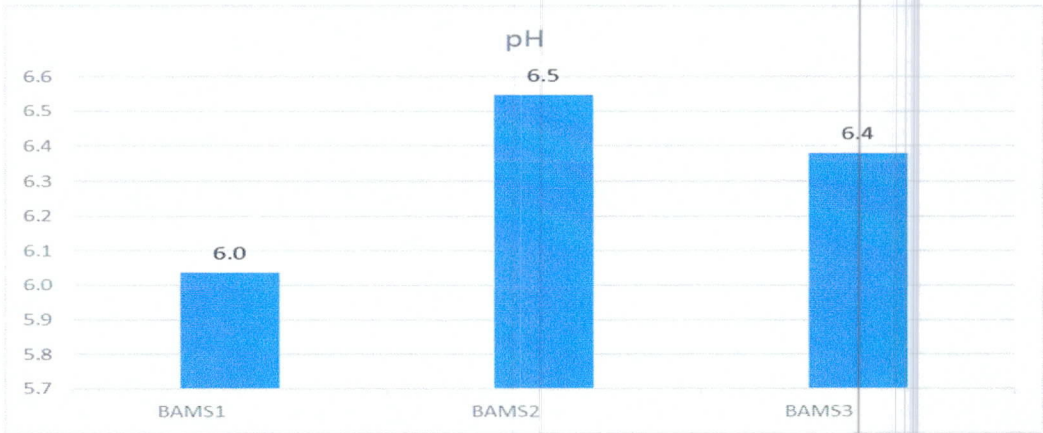


Figure III. pH of three (3) stations.

SITE	DISSOLVED OXYGEN	Remarks (Class AA Criteria, Minimum 5)
BAMS1	7.158	Pass
BAMS2	6.916	Pass
BAMS3	5.942	Pass

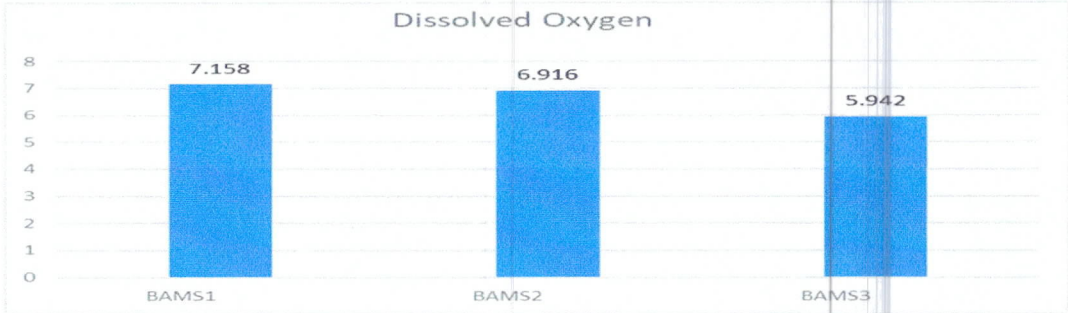


Figure IV. Dissolved Oxygen of three (3) stations.

SITE	TURBIDITY	ORP	CONDUCTIVITY	SALINITY	TDS
BAMS1	0.00	354.60	0.11	0.05	0.07
BAMS2	13.62	347.40	0.06	0.03	0.04
BAMS3	0.00	369.00	0.07	0.03	0.04



Figure V. Comparison of three (3) stations.

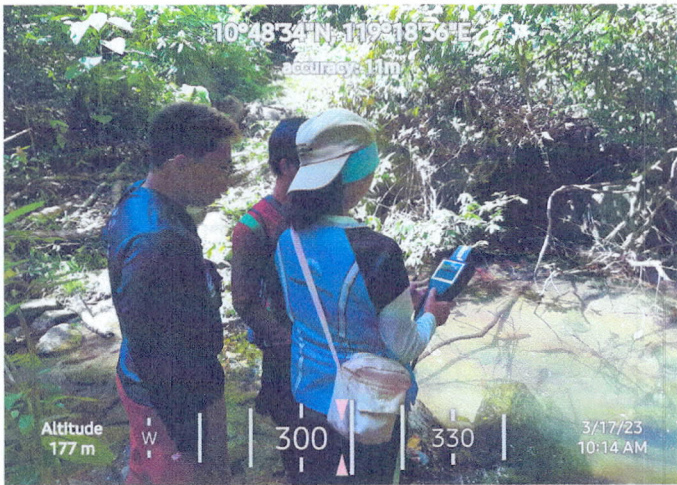
IV. Photo Documentation



The team during the 1st station Water Quality Monitoring at BAMS Area Barangay Banbanan, Taytay, Palawan.

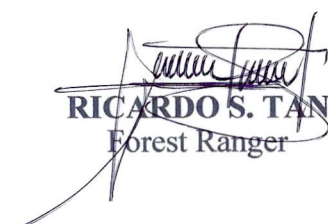


The team during the 2nd station Water Quality Monitoring at BAMS Area Barangay Banbanan, Taytay, Palawan.



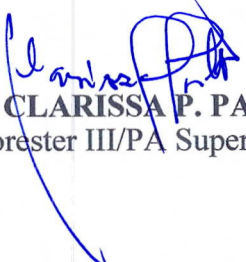
The team during the 3rd station Water Quality Monitoring at BAMS Area Barangay Banbanan, Taytay, Palawan.

Prepared by:


RICARDO S. TANDOC
Forest Ranger


RONEIL C. SOLANA
GIS Specialist

Noted by:


CLARISSA P. PADOR
Forester III/PA Superintendent