



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

MAR 24 2023

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| DENR MIMAROPA RECORDS SECTION RECEIVED | |
| APR 18 2023 | |
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| BY: _____ | DATE NO. _____ |
| TIME: _____ | _____ |

MEMORANDUM

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

THRU : The ARD for Technical Services

FROM : The OIC, PENR Officer

SUBJECT : **LIST OF INLAND WETLAND INVENTORIED WITHIN
THE PROVINCE OF OCCIDENTAL MINDORO FY 2022**

Respectfully submitted is the list of inland wetland inventoried and mapped within the of the Province of Occidental Mindoro for FY 2022.

Attached herewith the inventory report of two (2) CENRO's together with filled out Annex B. Form for Wetland Profiling (Wetland Information Sheet) map and geotagged pictures taken during conduct of the aforementioned activity.

For information and record.


ERNESTO E. TAÑADA

LIST OF INLAND WETLAND INVENTOR WITHIN THE PROVINCE OF OCCIDENTAL MINDORO FY 2022

| LIST OF INLAND WETLAND INVENTOR WITHIN THE PROVINCE OF OCCIDENTAL MINDORO FY 2022 | | | | | | | | |
|---|--------------------------|----------------|--------------------------|-----------------------------------|----------------------------------|-----------------------------------|--------------------|---|
| NO. | WETLAND SITE NAME | WETLAND TYPE/S | WATERBODY CLASSIFICATION | LOCATION/ ADMINISTRATIVE COVERAGE | NEAREST LARGE CITY/ MUNICIPALITY | CENTROID (LATITUDE AND LONGITUDE) | | REMARKS |
| | MIMAROPA REGION | | | | | | | |
| | CENRO SABLAYAN | | | | | | | |
| 1 | Halawhawan Lake | Inland wetland | Inland (Tp) | Sta. Lucia | Sablayan | 12° 45' 40.383" N | 120° 48' 46.887" E | Inventory report submitted last 2020 |
| 2 | Kapatid ni Cesar Pascual | Inland wetland | Inland (Tp) | San Francisco | Sablayan | 12° 53' 35.938" N | 120° 52' 39.065" E | Inventory report submitted last 2020 |
| 3 | Malapaga Lake | Inland wetland | Inland (Tp) | San Vicente | Sablayan | 12° 54' 0.156" N | 120° 49' 46.227" E | Inventory report submitted last 2020 |
| 4 | Marabong Lake | Inland wetland | Inland (O) | Batong Buhay | Sablayan | 12° 50' 33.094" N | 120° 53' 45.611" E | Inventory report submitted last 2020 |
| 5 | Cesar Pascual | Inland wetland | Inland (Tp) | San Francisco | Sablayan | 12° 53' 41.435" N | 120° 52' 34.946" E | Cesar Pascual, Report submitted last 2020 |
| 6 | Roben Fabra | Inland wetland | Inland (Tp) | San Francisco | Sablayan | 12° 53' 39.848" N | 120° 52' 37.903" E | Ruben Fabra, Report submitted last 2020 |
| 7 | Tabtaban Lake | Inland wetland | Inland (O) | Tuban | Sablayan | 12° 49' 28.300" N | 120° 50' 6.266" E | Inventory report submitted last 2020 |
| 8 | Sahing Lake | Inland wetland | Inland (O) | Sta. Lucia | Sablayan | 12° 47' 3.821" N | 120° 49' 4.073" E | Cesar Pascual, Report submitted last 2020 |
| 9 | Mara Lake | Inland wetland | Inland (Tp) | San Francisco | Sablayan | 12° 53' 2.757" N | 120° 52' 35.635" E | Additional. Identified this 2022 |
| 10 | Libuao Lake | Inland wetland | Inland (O) | Malisbong | Sablayan | 12° 49' 3.681" N | 120° 54' 0.377" E | Report submitted last 2020 |
| 11 | Cabacungan Lake | Inland wetland | Inland (Tp) | San Francisco | Sablayan | 12° 53' 33.396" N | 120° 53' 15.228" E | Report submitted last 2020 |
| 12 | Tadeo Lake | Inland wetland | Inland (Tp) | San Agustin | Sablayan | 12° 54' 38.559" N | 120° 54' 22.645" E | Additional. Identified this 2022 |
| 13 | Buladlad Lake | Inland wetland | Inland (Tp) | San Agustin | Sablayan | 12° 54' 45.696" N | 120° 54' 22.356" E | Additional. Identified this 2022 |
| 14 | Paragrasan Lake | Inland wetland | Inland (Tp) | San Agustin | Sablayan | 12° 55' 42.679" N | 120° 53' 22.892" E | Additional. Identified this 2022 |
| 15 | Panikian Lake | Inland wetland | Inland (Tp) | San Agustin | Sablayan | 12° 55' 37.906" N | 120° 53' 41.142" E | Inventory report submitted last 2020 |
| 16 | Malatongtong | Inland wetland | M | Brgy. Burgos | Sablayan | | | Additional. Identified this 2022 |

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|-----|-------------------|----------------|--------------------------|-----------------------------------|----------------------------------|-----------------------------------|--------------------|--|
| 17 | Palangan_Lake | Inland wetland | Inland (Tp) | Pinagturilan | Sta. Cruz | 13° 0' 8.434" N | 120° 50' 21.040" E | Report submitted last 2020 Other name Kapalangan Lake |
| 18 | Lanas Lalaki | Inland wetland | Inland (Tp) | Kurtinganan | Sta. Cruz | 13° 7' 11.043" N | 120° 45' 27.989" E | Report submitted last 2020 |
| 19 | Lanas Babae | Inland wetland | Inland (O) | Kurtinganan | Sta. Cruz | 13° 7' 36.085" N | 120° 46' 20.847" E | Report submitted last 2020 |
| 20 | Lanas Manggahan | Inland wetland | Inland (Tp) | Kurtinganan | Sta. Cruz | 13° 7' 4.717" N | 120° 45' 15.416" E | Report submitted last 2020 |
| 21 | Laud | Inland wetland | Inland (O) | Brgy. Pinagturilan | Sta. Cruz | 13° 0' 17.507" N | 120° 49' 15.684" E | Merge three (3) inlands wetlands the Lalaguna lake, Lalaguna extension and Kamatis lake with report submitted last 2020. |
| 22 | Carindan | Inland wetland | O | Brgy. Pinagturilan | Sta. Cruz | 12° 59' 7.154" N | 120° 51' 22.594" E | Report submitted last 2020 |
| 23 | Ambulan | Inland wetland | Tp | Brgy. Pinagturilan | Sta. Cruz | 12° 59' 57.875" N | 120° 50' 3.491" E | Report submitted last 2020 |
| 24 | Sawalian Lake | Inland wetland | Inland (Tp) | Pinagturilan | Sta. Cruz | 12° 59' 33.448" N | 120° 49' 17.954" E | Additional. Identified this 2022 |
| 25 | Suksuk Lake | Inland wetland | Inland (Tp) | Lumangbayan | Sta. Cruz | 13° 5' 38.083" N | 120° 46' 56.180" E | Additional. Identified this 2022 |
| 26 | Tilago | Inland wetland | M | Brgy. Kurtinganan | Sta. Cruz | | | Data from LGU Sta. Cruz as per letter of Mayor Ernesto P. Torreliza |
| 27 | Bisay | Inland wetland | M | Brgy. Alacaak | Sta. Cruz | | | Data from LGU Sta. Cruz as per letter of Mayor Ernesto P. Torreliza |
| 28 | Lamesang bato | | M | Brgy. Kurtinganan | Sta. Cruz | | | |
| 29 | Alyangan | Inland wetland | M | Brgy. Casague | Sta. Cruz | | | Data from LGU Sta. Cruz as per letter of Mayor Ernesto P. Torreliza |
| 30 | Mendiola 1 | Inland wetland | M | Brgy. Pinagturilan | Sta. Cruz | | | Data from the submitted Forest Land Use Plan of Sta. Cruz |
| 31 | Mendiola 2 | Inland wetland | M | Brgy. Pinagturilan | Sta. Cruz | | | Data from the submitted Forest Land Use Plan of Sta. Cruz |

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| 32 | Lanas | Inland wetland | Tp | Brgy. Balansay | Mamburao | 13° 12' 33.680" N | 120° 40' 27.804" E | Report submitted last 2020 |
| 33 | Kuhulan | Inland wetland | O | Brgy. Tangkalan | Mamburao | 13° 16' 53.789" N | 120° 37' 42.222" E | Report submitted last 2020 |
| 34 | Gumaer | Inland wetland | M | Brgy. Tangkalan | Mamburao | | | Data from the submitted Forest Land Use Plan of Mamburao |
| 35 | Bakong 1 | Inland wetland | M | Brgy. Balansay | Mamburao | | | Data from the submitted Forest Land Use Plan of Mamburao |
| 36 | Bakong 2 | Inland wetland | M | Brgy. Balansay | Mamburao | | | Data from the submitted Forest Land Use Plan of Mamburao |
| 37 | Igmanukan | Inland wetland | Tp | Brgy. Harrison | Paluan | 13° 24' 34.340" N | 120° 22' 38.453" E | Report submitted last 2020. Several inland wetlands particularly falls are within the Mt. Calavite Wildlife Sanctuary. |
| 38 | Lanas | Inland wetland | Tp | Brgy. Cabacao | Abra de Ilog | 13° 20' 11.148" N | 120° 40' 14.208" E | Merge two (2) inlands wetland namely Lanas and Lanas ulohan with report submitted last 2020 |
| 39 | Kabayag | Inland wetland | Tp | Brgy. Cabacao | Abra de Ilog | 13° 20' 40.479" N | 120° 39' 31.441" E | Report submitted last 2020 |
| 40 | Bakong | Inland wetland | Tp | Brgy. Cabacao | Abra de Ilog | 13° 20' 39.002" N | 120° 39' 55.168" E | Report submitted last 2020 |
| 41 | Agbalala 1 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 42 | Agbalala 2 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 43 | Aglaon | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |


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| 44 | Kobi | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 45 | Kuli-kuli | Inland wetland | M | Brgy. Armado | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 46 | Mamara | Inland wetland | M | Brgy. San Vicente | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 47 | Matugdan | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 48 | Mayaas | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 49 | Nangka | Inland wetland | M | Brgy. Balao | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 50 | Papali 1 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 51 | Papali 2 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 52 | Sto Tomas | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 53 | Tambarikay | Inland wetland | M | Brgy. Balao | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 54 | Tara | Inland wetland | M | Brgy. San Vicente | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |

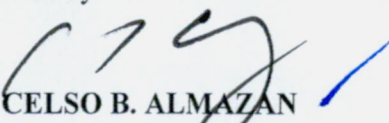
LIS F INLAND WETLAND INVENTORY WITHIN THE PROVINCE OF OCCIDENTAL MINDORO FY 2022

| NO. | WETLAND SITE NAME | WETLAND TYPE/S | WATERBODY CLASSIFICATION | LOCATION/ ADMINISTRATIVE COVERAGE | NEAREST LARGE CITY/ MUNICIPALITY | CENTROID (LATITUDE AND LONGITUDE) | | REMARKS |
|-----------------------|---------------------------------|----------------------------------|--------------------------|-----------------------------------|----------------------------------|-----------------------------------|--------------------|--|
| 55 | Kalong | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| 56 | Tagbac Lake | Inland wetland | Marine Wetland (J) | Tagbac | Lubang | 13° 50' 27.360" N | 120° 5' 50.969" E | Additional. Identified this 2022 |
| 57 | Hulagaan Falls | Inland wetland | M | Brgy. Binacas | Lubang | | | Additional. Identified this 2022 |
| 58 | Lalaguna Lagoon | Inland wetland | Marine Wetland (J) | Bulacan | Looc | 13° 39' 56.889" N | 120° 20' 29.952" E | Additional. Identified this 2022 |
| CENRO SAN JOSE | | | | | | | | |
| 59 | Bukal Spring and Mangrove Area | River | | Brgy. Nicolas | Magsaysay | 1389213 | 275738 | |
| 60 | Minanga Cove | Marine/Coastal | | Ambulong Island | San Jose | 1349697 | 283636 | |
| 61 | Niyayos River and Mangrove Area | Marine/Coastal | | So. Niyayos I, brgy. Poblacion | Calintaan | 1389264 | 275764 | |
| 62 | Marumbol Wetland Area | Marine/Coastal | | So. Marumbol, Brgy. New Dagupan | Calintaan | 1388234 | 274850 | |
| 63 | Sto. Niño Wetland Area | Permanent Fresh Water Marsh/Pool | | So. Candague, Brgy. Sto. Niño | Rizal | 1380188 | 287623 | Wetland Profiling not yet done |

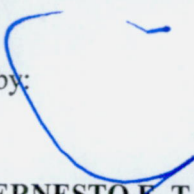
Consolidated by:


EMILIZA A. CALABIO
 Chief, CDS

Reviewed by:


CELSO B. ALMAZAN
 In-Charge, TSD

Attested by:


ERNESTO E. TAÑADA
 OIC, PENR Officer



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

DEC 06 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

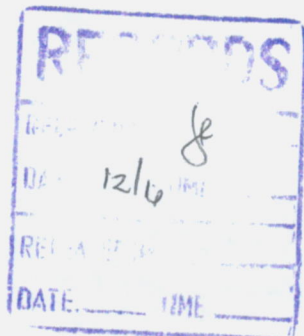
SUBJECT : **ACCOMPLISHMENT REPORT ON THE CONDUCTED
INVENTORY INLAND WETLANDS**

Forwarded is the memorandum dated November 25, 2022 of CENRO Sablayan regarding Accomplishment Report on the conducted Inventory of Inland Wetlands within their area of jurisdiction. The list includes those that were submitted last 2020 with minor corrections and newly identified inland wetlands.

Based on their report a letter request was sent to all the LGU's requesting for the list of inland wetland within their respective jurisdiction but only the municipality of Sta. Cruz responded to their request. Likewise, the listed inland wetlands were based on the tourism site and Forest Land Use Plans (FLUPs).

Attached herewith are the Annex A. Form for the Inventory of Inland Wetland as well as Wetland Information Sheet (WIS) of the Suksuk lake, Sawalian lake in Sta. Cruz, Occidental Mindoro and the updated WIS of Lalaguna lake in Loo, Occidental Mindoro, communication letters sent to the Local Government Units (LGUs), GIS generated maps and geotagged photos during the site verification. Copy of the MOV's can be access on the provided link (bit.ly/CSby-CDS-IIW).

For information and record.



ERNESTO E. TAÑADA

TSD-CDS12/02/2022

Copy furnished:

1. Planning
2. File

So. Pag-asa, Brgy. Payompon, Mamburao, Occidental Mindoro
Email: penroccemin@denr.gov.ph



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

November 25, 2022

MEMORANDUM

FOR : The OIC, PENR Officer
Mamburao, Occidental Mindoro

THRU : The Chief, Technical Services Division

FROM : The CENR Officer

SUBJECT : ACCOMPLISHMENT REPORT ON THE CONDUCTED
INVENTORY OF INLAND WETLANDS

RECORDED
Date: 11-27-22
By: [Signature]

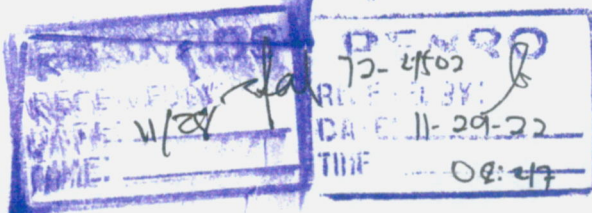
Respectfully submitted herewith is the final list of all the inland wetlands within the area of CENRO Sablayan jurisdiction. The list includes those that were submitted last 2020 with minor corrections and newly identified inland wetlands.

Please be informed that letters of communication were sent to all the Local Government Units (LGUs) requesting for the list of the said inland wetlands within their respective municipalities but only the LGU of Sta. Cruz responded to the request. The listed inland wetlands were based on the tourism sites identified in their Forest Land Use Plans (FLUPs). On the part of the Mt. Calavite Wildlife Sanctuary, the Protected Area Management has committed to submit the inventory of the said inland wetlands upon the consultation with the indigenous communities within the PA.

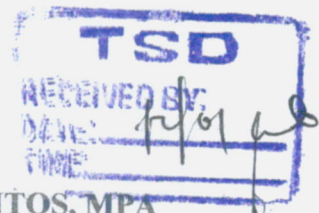
Attached herewith are the Annex A. Form for the Inventory of Inland Wetland as well as Wetland Information sheet (WIS) of the Suksuk lake, Sawalian lake in Sta. Cruz, Occidental Mindoro, Tadeo lake, Buladlad lake, Paragasan lake, Cabakungan lake, Mara lake in Sablayan, Occidental Mindoro, Tagbak lake in Lubang, Occidental Mindoro and the updated WIS of Lalaguna lake in Looc, Occidental Mindoro, communication letters sent to the Local Government Units (LGUs), GIS generated maps and geo-tagged photos during the site verification.

To access the electronic copies of our Means of Verifications (MOVs) for the Inventory of Inland Wetlands kindly visit the following link (bit.ly/CSby-CDS-IIW).

For information, evaluation and record.



FOR: ANASTACIO A. SANTOS, MPA



Annex A. FORM FOR INVENTORY OF INLAND WETLANDS IN THE REGION

MIMAROPA REGION

CENRO SABLAYAN

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| | | | | | | | |
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| STA. CRUZ | | | | | | | |
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| | | | | | | | |
|---------------------|----------------|----|-------------------|--------------|-------------------|--------------------|--|
| Bakong 2 | Inland wetland | M | Brgy. Balansay | Mamburao | | | Data from the submitted Forest Land Use Plan of Mamburao |
| | | | | | | | |
| PALUAN | | | | | | | |
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| Lanas | Inland wetland | Tp | Brgy. Cabacao | Abra de Ilog | 13° 20' 11.148" N | 120° 40' 14.208" E | Merge two (2) inland wetland namely Lanas and Lanas ulohan with report submitted last 2020 |
| Kabayag | Inland wetland | Tp | Brgy. Cabacao | Abra de Ilog | 13° 20' 40.479" N | 120° 39' 31.441" E | Report submitted last 2020 |
| Bakong | Inland wetland | Tp | Brgy. Cabacao | Abra de Ilog | 13° 20' 39.002" N | 120° 39' 55.168" E | Report submitted last 2020 |
| Agbalala 1 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Agbalala 2 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Aglaon | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Kobi | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Kuli-kuli | Inland wetland | M | Brgy. Armado | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Mamara | Inland wetland | M | Brgy. San Vicente | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Matugdan | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Mayaas | Inland wetland | M | Brgy. Udalo | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Nangka | Inland wetland | M | Brgy. Balao | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Papali 1 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Papali 2 | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Sto Tomas | Inland wetland | M | Brgy. Wawa | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |
| Tambarikay | Inland wetland | M | Brgy. Balao | Abra de Ilog | | | Data from the submitted Forest Land Use Plan of Abra de Ilog |

[illegible]

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Suksuk Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|------------------------------|---|
| <p><i>Hand-drawn map</i></p> | <p><i>Geotagged photograph</i></p> <p>> PLEASE SEE ATTACHED GEOTAGGED PHOTOS</p> |
|------------------------------|---|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • (Tp) • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|---------------|-----------------|---------------|---------------|
| Brgy. Casiguc | Brgy. Pagasinan | Brgy. Casiguc | Brgy. Barahan |

Area (total size in hectares, seasonal max/ min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|------|
| | Min | Max | Min | Max |
| Including watershed : | | | 7.00 | 7.53 |
| Area of water/wet area : (river/creek not included) | | | 1.42 | 3.29 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | 354 | 427 |
| Width : | | | 66 | 380 |
| Depth : | | | | |

Elevation (in meters above sea level) : 17

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|--------------|--------------|--------------------|
| | Lumang Bayan | Sta Cruz | Occidental Mindoro |
| | | | |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|--------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Sta Cruz | Lumang Bayan | | | | Farming | Landlocked |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 3556 | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc.):

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|-------------------|---------------|
| Centroid | : 12°46'56.180" E | 13°5'38.043 N |
| *Upstream | : | |
| *Midstream | : | |
| *Downstream | : | |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE 1

Climatic Type Description:

TWO DROUGHT SEASON, DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|-------|-------|-------|-------|-------|--------|-------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 11.3 | 5.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 290.5 | 144.9 | 1605.2 | 155.5 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.0 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED: 2-4, WIND DIRECTION: 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 50, 50

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

ALFISOL, INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : clayey

Wetland/aquatic area : clayey

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☒ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Pola river

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

irrigation with the adjacent rice fields

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

Shallow and deep wells

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends if there is typhoon

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

No data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | no data | no data | no data | no data |
| Chlorine (mg/L) | no data | no data | no data | no data |
| Color (TCU) | no data | no data | no data | no data |
| Dissolved Oxygen (mg/L) | no data | no data | no data | no data |
| Fecal coliform (MPN/100mL) | no data | no data | no data | no data |
| Nitrate as NO ₃ -N (mg/L) | no data | no data | no data | no data |
| pH (range) | no data | no data | no data | no data |
| Phosphate (mg/L) | no data | no data | no data | no data |
| Temperature (°C) | no data | no data | no data | no data |
| Total suspended solid (mg/L) | no data | no data | no data | no data |
| Turbidity (NTU) | no data | no data | no data | no data |
| Salinity | no data | no data | no data | no data |
| Conductivity | no data | no data | no data | no data |
| Other: _____ | no data | no data | no data | no data |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

: N/A

Year Data Collected

: N/A

Sampling Frequency (annual or monthly)

: N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|-----------------------------|----------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | kakawate napier tampo | | | | | | |
| | | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | kangkang | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|--------------------|--------------------|--------------|------------------------|---|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | tagak, hiklong | | | | | | | |
| Mammals | daga | | | | | | | |
| Herpetofauna | sawa, pilaten | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | tilapia, daga, kito, | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | kukol | | | | | | | |
| Others | | | | | | | | |

C WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| Key | How important? |
|-----|--|
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | | Scale of benefit | | |
|-----------------------|--|----------------|---------------------|------------------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | + | | / | | |
| | Food | + | | / | | |
| | Fuel | + | | / | | |
| | Fibre | + | timber for building | / | | |
| | Genetic resources | 0 | | | | |
| | Natural medicines or pharmaceuticals | + | herbal medicines | / | | |
| | Ornamental resources | 0 | | | | |
| | Clay, mineral, aggregate harvesting | 0 | | | | |
| | Waste disposal | 0 | | | | |
| | Energy harvesting from natural air and water flows | 0 | | | | |
| | | | | | | |
| | | | | | | |
| Regulatory Services | Air quality regulation | + | | / | | |
| | Local climate regulation | + | | / | | |
| | Global climate regulation | + | | / | | |
| | Water regulation | + | | / | | |
| | Flood hazard regulation | + | | / | | |
| | Storm hazard regulation | + | | / | | |
| | Pest regulation | - | mosquitos | | | |
| | Disease regulation - human | 0 | | | | |
| | Disease regulation - livestock | 0 | | | | |
| | Erosion regulation | + | | / | | |
| | Water purification | + | | / | | |
| | Pollination | + | | / | | |
| | Salinity regulation | 0 | | | | |
| | | | | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | / | | |
| | Noise and visual buffering | + | / | | |
| | | | | | |
| Cultural Services | Cultural heritage | + | / | | |
| | Recreation and tourism | + | / | | |
| | Aesthetic value | 0 | | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | / | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | / | | |
| | Primary production | + | / | | |
| | Nutrient cycling | + | | | |
| | Water recycling | + | / | | |
| | Provision of habitat | + | / | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): pasture areas for livestock

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): Agricultural

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

Overfishing

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|-----------------------------|-------------|--------------------------------|----------------|-------|
| LGU Lumbay Bayan, Iloilo | | BLGU Lumbay - Bayan, Iloilo | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

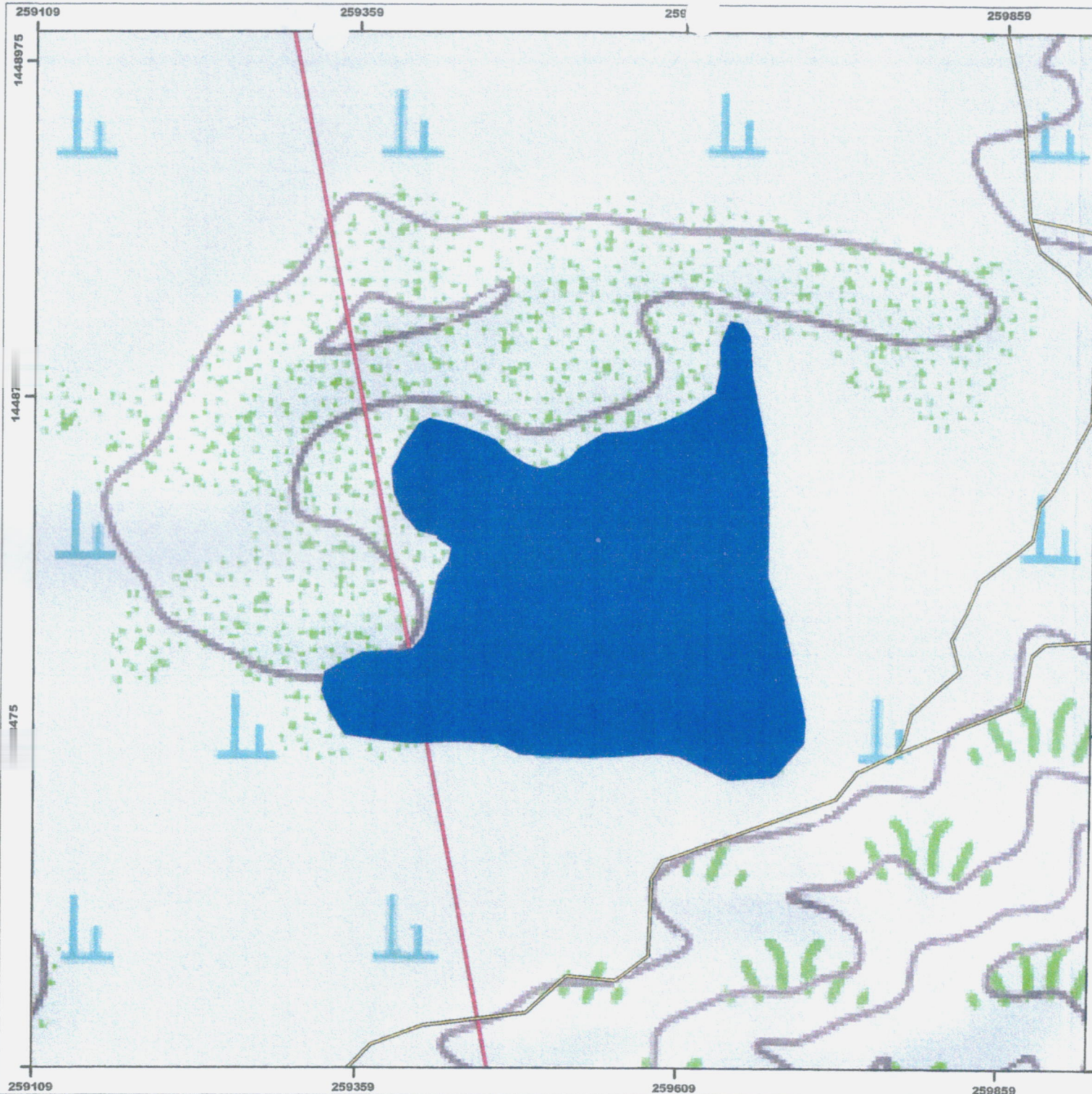
Natural Calamities

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

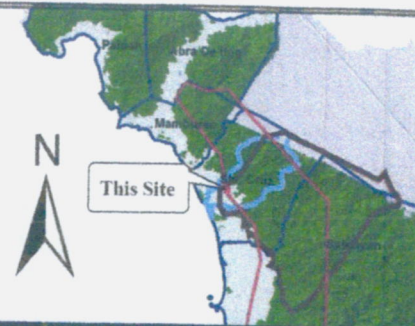
| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



Inland Wetland Inventory

SUKLUK LAKE



LOCATION MAP

SCALE : 1:4,000



Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : Lumangbayan
Municipality : Sta. Cruz
Province : Occidental Mindoro
AREA : 7.5 ha

LEGEND

- Inland_Humanmade_Wetland
- RIVER_CREEK
- Pula-Satagan Watershed
- Road
- FB_HARRISON_OBRS_BOUNDARY
- LAND CLASSIFICATION**
- STATUS_1**
- Alienable and Disposable
- Forestland
- CADT



Republic of the Philippines
Department of Environment and Natural Resources
CAGAYAN Region
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
Narvac Highway, San Jose, Marikina City
Email Address: denr1012@denr.gov.ph

CERTIFICATION

This is to certify that this is the true and correct map.
This map was prepared based on submitted data, maps, and other documents available from the editor.

Prepared by

EDUARDO
ECONOMICS Unit Chief

Reviewed by

JOYCE SANRO
Assistant CDS Chief

Verified by

EDUARDO
Technical Services Supervisor
CDS Unit Chief

PHOTO DOCUMENTATION



Suksuk Lake

Area (total size in hectares, seasonal max/ min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|------|
| | Min | Max | Min | Max |
| Including watershed : | | | 0.4 | 6.52 |
| Area of water/wet area : (river/creek not included) | | | 0.35 | 0.4 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | 10.0 | 118 |
| Width : | | | 5.0 | 5.7 |
| Depth : | | | | |

Elevation (in meters above sea level) : 15

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|--------------|--------------|-----------------|
| LAUD | PINAGTUBILAN | STA. CRUZ | OC. MAD. |
| | | | |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|--------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| STA. CRUZ | PINAGTUBILAN | - | - | 8,053 | FARMING | LANDLOCKED |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 8,053 | | |

Source and Date of Information : PSA 2000

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

N/A

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc.):

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): SAWAHAN LAKE

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

USUHAN LAKE

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|--|--|
| <p><i>high-resolution photograph</i></p> | <p><i>geotagged photograph</i></p> <p>> PLEASE SEE ATTACHED GEOTAGGED PHOTOS</p> |
|--|--|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • TP • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|--------------|-----------------|---------------|------------------------------|
| Brgy. Dargan | Brgy. Pagsanjan | Brgy. Barahan | Brgy. Claudio Alvaro Salgado |

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|----------------------|-------------------|
| Centroid | : 120° 49' 17.954" E | 12° 59' 33.448" N |
| *Upstream | : | : |
| *Midstream | : | : |
| *Downstream | : | : |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE I

Climatic Type Description:

TWO PRONOUNCED SEASON, DRY FROM NOVEMBER TO APRIL, NET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|------|-----|-----|-------|-------|-------|-------|-----|-------|-------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 14.3 | 15.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 240.5 | 444 | 605.2 | 155.5 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.4 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED : 2-4 , WIND DIRECTION : 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 90, 90

B. BIO-CHEMICO-PHYSICAL INFORMATION**5. Soils:**

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

forces of nature

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

ALFISOL, INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : CLAYEY

Wetland/aquatic area : CLAYEY

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

N/A

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

N/A

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

SHALLOW AND DEEP WELLS

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): NO ERDB ASSESSMENT CONDUCTED

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): 1 A YEAR

Flooding seasonality (in what month/s does flooding usually occur?): DEPENDENT IF THERE IS TYPHOON

Flooding duration (for how long does floodwater usually stay within each season?): 1 DAY

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

Np DATA

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): NO WATER QUALIFICATION CONDUCTED

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Chlorine (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Color (TCU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Dissolved Oxygen (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Fecal coliform (MPN/100mL) | NO DATA | NO DATA | NO DATA | NO DATA |
| Nitrate as NO ₃ -N (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| pH (range) | NO DATA | NO DATA | NO DATA | NO DATA |
| Phosphate (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Temperature (°C) | NO DATA | NO DATA | NO DATA | NO DATA |
| Total suspended solid (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Turbidity (NTU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Salinity | NO DATA | NO DATA | NO DATA | NO DATA |
| Conductivity | NO DATA | NO DATA | NO DATA | NO DATA |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

Year Data Collected

Sampling Frequency (annual or monthly)

: _____ N/A
 : _____ N/A
 : _____ N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

SECONDARY FOREST / OPEN AREA

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--------------------------------------|--------------------------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | BANOKAL MOLANG LOKAWAN BANY | DUMET TABAR CARPOM WELAS | | | | | |
| | DUMET KAWANAN | PANDAN | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|--------------------------|---------------------------|-------------|-----------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | TRUK, | | | | | | | |
| Mammals | daga | | | | | | | |
| Herpetofauna | saluq | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | Tilapia, daga, kito, igat | | | | | | | |
| Mammals | daga | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | kukol | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. Ecosystem services: (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| Key | How important? |
|-----|--|
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | Scale of benefit | | |
|-----------------------|----------------|--|------------------|----------|--------|
| | | | Local | Regional | Global |
| Provisioning Services | How important? | Describe benefit | | | |
| | + | Fresh water | / | | |
| | ++ | Food | / | | |
| | + | Fuel | / | | |
| | + | Fibre | / | | |
| | 0 | Genetic resources | | | |
| | + | Natural medicines or pharmaceuticals | / | | |
| | 0 | Ornamental resources | | | |
| | 0 | Clay, mineral, aggregate harvesting | | | |
| | 0 | Waste disposal | | | |
| | 0 | Energy harvesting from natural air and water flows | | | |
| | | | | | |
| Regulatory Services | + | Air quality regulation | / | | |
| | + | Local climate regulation | / | | |
| | + | Global climate regulation | | | / |
| | + | Water regulation | / | | |
| | + | Flood hazard regulation | / | | |
| | + | Storm hazard regulation | / | | |
| | - | Pest regulation | / | | |
| | 0 | Disease regulation - human | | | |
| | 0 | Disease regulation - livestock | | | |
| | + | Erosion regulation | / | | |
| | + | Water purification | / | | |
| | + | Pollination | / | | |
| | 0 | Salinity regulation | | | |
| | | | | | |
| | | | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | / | | |
| | Noise and visual buffering | + | / | | |
| | | | | | |
| Cultural Services | Cultural heritage | + | / | | |
| | Recreation and tourism | + | / | | |
| | Aesthetic value | 0 | | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | / | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | / | | |
| | Primary production | + | / | | |
| | Nutrient cycling | + | / | | |
| | Water recycling | + | / | | |
| | Provision of habitat | + | / | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): pasture areas for livestock

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): agricultural

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

Overfishing

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|-----------------|-------------|-----------------|----------------|-------|
| BLGU Pangasinan | | BLGU Pangasinan | | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

Natural Calamities (Typhoon, earthquake)

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.

Inland Wetland Inventory SAWALIAN LAKE



SCALE : 1:3,000



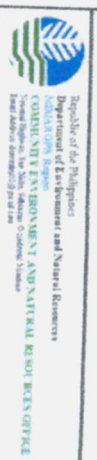
Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : Pinagturan
Municipality : Sta. Cruz
Province : Occidental Mindoro
AREA : 0.55 ha

LEGEND

- Inland_Humanned_Wetland
- Road



CERTIFICATION

This is to certify that this map and contents are true and correct as submitted.

Prepared by:
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Bureau of Wetland Conservation and Management
DENR-DO-100
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Verified by:
JOSEPH M. LACOR
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Cebu City

PHOTO DOCUMENTATION



Sawalian Lake

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Tadeo Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|-----------------------------------|---|
| <p>High-resolution photograph</p> | <p>Geotagged photograph</p> <p>7 PLEASE SEE ATTACHED GEOTAGGED PHOTOS</p> |
|-----------------------------------|---|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Wd • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|---------------|---------------|-------------|---------------|
| Brgy. Pag-Asa | Brgy. Pag-Asa | Brgy. Paeta | San Francisco |

Area (total size in hectares, seasonal max/ min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|------|
| | Min | Max | Min | Max |
| Including watershed : | | | 1.0 | 1.55 |
| Area of water/wet area : (river/creek not included) | | | 0.7 | 0.9 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-------|
| | Min | Max | Min | Max |
| Length : | | | 145 | 175 |
| Width : | | | 89 | 93.80 |
| Depth : | | | | |

Elevation (in meters above sea level) : 42 m

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|-------------|--------------|--------------------|
| | San Agustin | Sablayan | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|-------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Sablayan | San Agustin | | | 2490 | Farming | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|---------------------------|-------------------------|
| Centroid | : <u>12° 54' 22.645 E</u> | <u>12° 54' 38.559 N</u> |
| *Upstream | : | |
| *Midstream | : | |
| *Downstream | : | |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE 1

Climatic Type Description:

TWO PROMINENT SEASON, DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|-------|-------|-------|-------|-----|-------|------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 14.3 | 5.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 290.5 | 444 | 605.5 | 65.5 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 36.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED: 2-4, WIND DIRECTION: 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 90, 60

B. BIO-CHEMICO-PHYSICAL INFORMATION**5. Soils:**

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

ALFISOL, INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : CLAYEY

Wetland/aquatic area : CLAYEY

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

N/A

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

seasonal water source of 3 has rice field

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

Shallow and Deep wells

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): once a year depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends if there is typhoon

Flooding duration (for how long does floodwater usually stay within each season?): 1-2 days

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

NO Data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | no data | no data | no data | no data |
| Chlorine (mg/L) | no data | no data | no data | no data |
| Color (TCU) | no data | no data | no data | no data |
| Dissolved Oxygen (mg/L) | no data | no data | no data | no data |
| Fecal coliform (MPN/100mL) | no data | no data | no data | no data |
| Nitrate as NO ₃ -N (mg/L) | no data | no data | no data | no data |
| pH (range) | no data | no data | no data | no data |
| Phosphate (mg/L) | no data | no data | no data | no data |
| Temperature (°C) | no data | no data | no data | no data |
| Total suspended solid (mg/L) | no data | no data | no data | no data |
| Turbidity (NTU) | no data | no data | no data | no data |
| Salinity | no data | no data | no data | no data |
| Conductivity | no data | no data | no data | no data |
| Other: _____ | no data | no data | no data | no data |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

: N/A

Year Data Collected

: N/A

Sampling Frequency (annual or monthly)

: N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|---|-------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Bangkai Mangrove Sabitka tambao | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | Water lettuce floating heart qungin kangkong | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|--------------------------|-----------------------------------|-------------|-----------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | tagay | | | | | | | |
| Mammals | dag | | | | | | | |
| Herpetofauna | palaka, akas | | | | | | | |
| Invertebrates | totubi | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | gorami, dala, tilapia, igat, hito | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | Kubol | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| Key | How important? |
|-----|--|
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | Scale of benefit | | |
|-----------------------|----------------|---------------------|------------------|----------|--------|
| | | | Local | Regional | Global |
| Provisioning Services | How important? | Describe benefit | | | |
| | + | irrigation | / | | |
| | ++ | fish | / | | |
| | + | fuel wood | / | | |
| | + | timber for building | / | | |
| | 0 | | | | |
| | + | | / | | |
| | 0 | | | | |
| | 0 | | | | |
| | 0 | | | | |
| | 0 | | | | |
| | 0 | | | | |
| Regulatory Services | + | | / | | |
| | + | | / | | |
| | + | | | | / |
| | + | | / | | |
| | + | | / | | |
| | + | | / | | |
| | + | | / | | |
| | - | mosquitos | / | | |
| | 0 | | | | |
| | 0 | | | | |
| | + | | / | | |
| | + | | / | | |
| | + | | / | | |
| | + | | / | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | / | | |
| | Noise and visual buffering | + | / | | |
| | | | | | |
| Cultural Services | Cultural heritage | + | / | | |
| | Recreation and tourism | + | / | | |
| | Aesthetic value | 0 | / | | |
| | Spiritual and religious value | + | / | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | / | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | / | | |
| | Primary production | + | / | | |
| | Nutrient cycling | + | / | | |
| | Water recycling | + | / | | |
| | Provision of habitat | + | / | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): pasture area for livestock (cattle, chickens, geese)

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): _____

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

Overfishing, overpopulation of water lettuce

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

(maintenance of the cleanliness of lake, control of invasive species like, water lettuce, water weed)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|-----------------|-------------|--------|----------------|-------|
| Roosevelt Pamor | Core taker | | 09056206693 | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

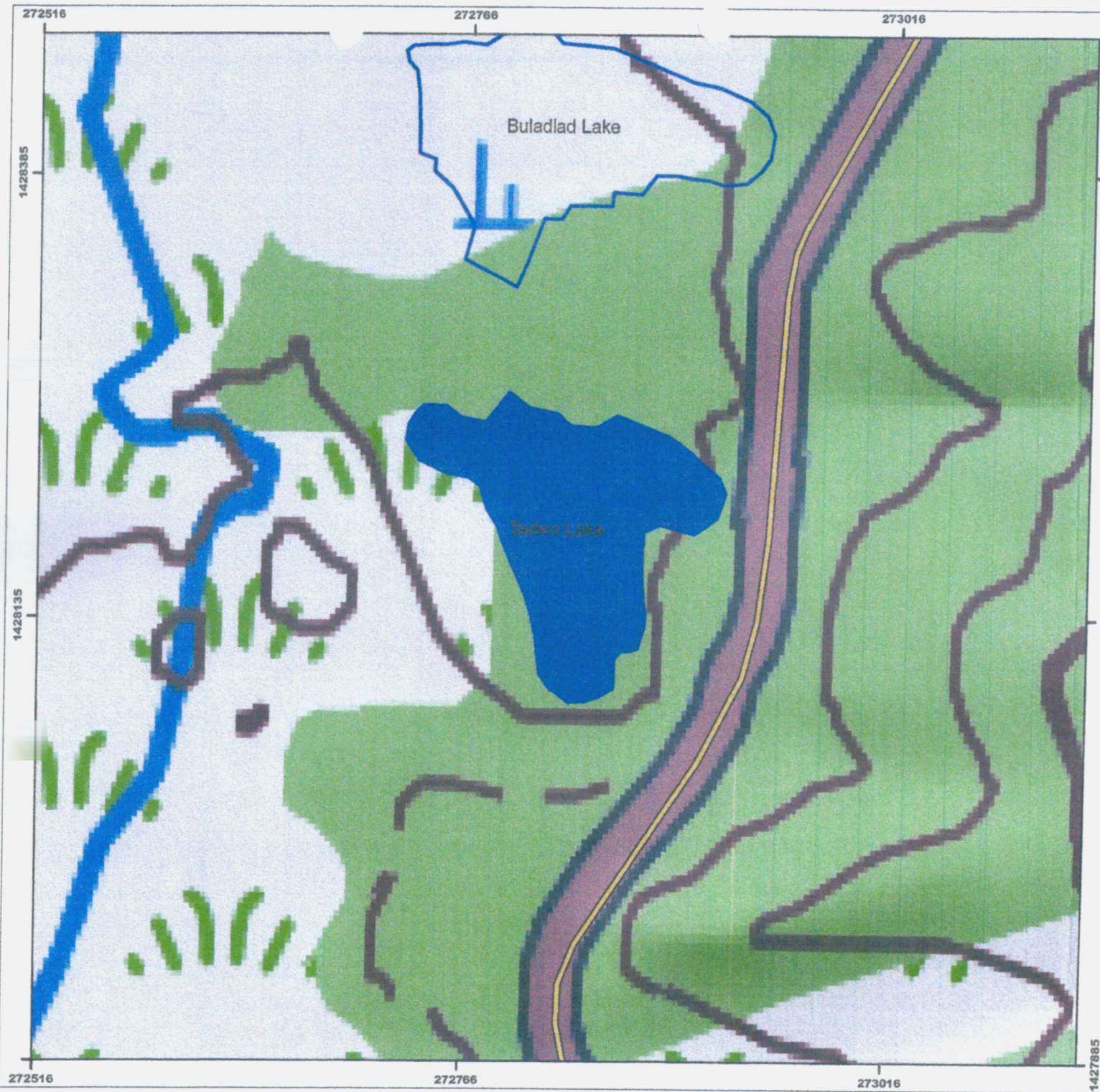
Natural calamities

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



Inland Wetland Inventory

TADEO LAKE



LOCATION MAP

SCALE : 1:3,000



Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : San Agustin
Municipality : Sablayan
Province : Occidental Mindoro
AREA : 1.54 ha

LEGEND

- Tadeo_Lake
- Inland_Humanmade_Wetland
- Road



Republic of the Philippines
Department of Environment and Natural Resources
Bureau of Wetlands and Ecosystems
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
Ternate Highway, San Jose, Sablayan, Occidental Mindoro
Email Address: denrsmo@denr.gov.ph

CERTIFICATION

This is to certify that this is the true and correct map.
This map was prepared based on information of data, maps, and other documents available from this office.

Prepared by:
JOSEPH M. MARTIN
COMMO GIS Unit Asst. Chief

Reviewed by:
ALYCE SANICO
Technical Services Supervisor
GIS Unit Chief

Verified by:
EDUARDO D. DOD
Technical Services Supervisor
GIS Unit Chief

PHOTO DOCUMENTATION



Tadeo Lake

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Buladlad Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|-----------------------|--|
| <p><i>Diagram</i></p> | <p><i>Geotagged photograph</i></p> <p>> PLEASE SEE ATTACHED UNEDITED PHOTOS</p> |
|-----------------------|--|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Ip • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|---------------|---------------|-------------|---------------------|
| Brgy. Pag-asa | Brgy. Pag-asa | Brgy. Pagan | Brgy. San Francisco |

Area (total size in hectares, seasonal max/ min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|------|
| | Min | Max | Min | Max |
| Including watershed : | | | 1.7 | 1.80 |
| Area of water/wet area : (river/creek not included) | | | 1.3 | 1.4 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | 160 | 207 |
| Width : | | | 38 | 107 |
| Depth : | | | | |

Elevation (in meters above sea level) : 44

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|--------|-------------|--------------|-------------------|
| Proper | San Agustin | Sablayan | Ocidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|-------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Sablayan | San Agustin | | | 2490 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 2490 | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|--------------------|------------------|
| Centroid | : 12° 54' 22.756 E | 12° 54' 45.696 N |
| *Upstream | : | : |
| *Midstream | : | : |
| *Downstream | : | : |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CUANATIC TYPE 1

Climatic Type Description:

TWO PROMINENT SEASON, DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|-------|-------|-------|-------|-----|-------|-------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 14.3 | 5.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 290.5 | 444 | 605.2 | 155.5 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED: 2-4, WIND DIRECTION: 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 50, 50

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

Alfisol, Inceptisol

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : Clayey, sandy

Wetland/aquatic area : Clayey, sandy

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Spring

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

Shallow and deep wells

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): once a year depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends on the weather condition

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

No data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Chlorine (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Color (TCU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Dissolved Oxygen (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Fecal coliform (MPN/100mL) | NO DATA | NO DATA | NO DATA | NO DATA |
| Nitrate as NO ₃ -N (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| pH (range) | NO DATA | NO DATA | NO DATA | NO DATA |
| Phosphate (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Temperature (°C) | NO DATA | NO DATA | NO DATA | NO DATA |
| Total suspended solid (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Turbidity (NTU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Salinity | NO DATA | NO DATA | NO DATA | NO DATA |
| Conductivity | NO DATA | NO DATA | NO DATA | NO DATA |
| Other: _____ | NO DATA | NO DATA | NO DATA | NO DATA |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

: No data

Year Data Collected

: No data

Sampling Frequency (annual or monthly)

: No data

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|------------------------------|-------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Bangka Kauayan slangga | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | Kangkang Tambo | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|--------------------------|----------------------------------|-------------|-----------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | tagak, t. t. ng, papon | | | | | | | |
| Mammals | dag | | | | | | | |
| Herpetofauna | palaka, anas | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | tilapia, carp, igat, delag, into | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | snake | | | | | | | |
| Invertebrates | Kuloi bilad | | | | | | | |
| Others | snake burth | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| Key | How important? |
|-----|--|
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | | Scale of benefit | | |
|-----------------------|--|----------------|------------------|------------------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | + | | / | | |
| | Food | + | | / | | |
| | Fuel | + | | / | | |
| | Fibre | + | | / | | |
| | Genetic resources | 0 | | | | |
| | Natural medicines or pharmaceuticals | + | | / | | |
| | Ornamental resources | 0 | | | | |
| | Clay, mineral, aggregate harvesting | 0 | | | | |
| | Waste disposal | 0 | | | | |
| | Energy harvesting from natural air and water flows | 0 | | | | |
| | | | | | | |
| | | | | | | |
| Regulatory Services | Air quality regulation | + | | / | | |
| | Local climate regulation | + | | / | | |
| | Global climate regulation | + | | / | | |
| | Water regulation | + | | / | | |
| | Flood hazard regulation | + | | / | | |
| | Storm hazard regulation | + | | / | | |
| | Pest regulation | + | | / | | |
| | Disease regulation - human | 0 | | | | |
| | Disease regulation - livestock | 0 | | | | |
| | Erosion regulation | + | | / | | |
| | Water purification | + | | / | | |
| | Pollination | + | | / | | |
| | Salinity regulation | 0 | | | | |
| | | | | | | |
| | | | | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | / | | |
| | Noise and visual buffering | + | / | | |
| | | | | | |
| Cultural Services | Cultural heritage | 0 | | | |
| | Recreation and tourism | + | / | | |
| | Aesthetic value | 0 | | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | 0 | | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | / | | |
| | Primary production | + | / | | |
| | Nutrient cycling | + | / | | |
| | Water recycling | + | / | | |
| | Provision of habitat | + | / | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): pasture area for livestock

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): _____

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

overfishing

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|---------------|-------------|----------------------------|----------------|-------|
| Salvo Batista | Caretaker | 09550222565 09924260326 | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

natural calamities

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification (*which portions are relevant or critical for management for*)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.

272578

272828

273078

1428405

1428405

272578

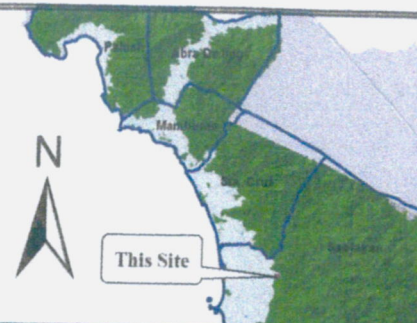
272828

273078

1428155

Inland Wetland Inventory

BULADLAD LAKE



LOCATION MAP

SCALE : 1:2,500



Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : San Agustin
Municipality : Sablayan
Province : Occidental Mindoro
AREA : 1.71 ha

LEGEND

- Buladlad_Lake
- Inland_Humanmade_Wetland
- Road



Republic of the Philippines
Department of Environment and Natural Resources
NABALUP, Region
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
National Highway, 5th Floor, Sablayan Division Office
Email Address: denr103@gmail.com

CERTIFICATION

This is to certify that this is the true and correct map.
This map was prepared based on submitted data maps and other documents available from this office.

Prepared by:
JOSEPH M. MATEO
DENR GIS Unit Chief

Reviewed by:
JAY E. SANICO
DENR GIS Unit Chief

Verified by:
MARCEL M. MENDOZA
Technical Reviewer
DENR GIS Unit Chief

PHOTO DOCUMENTATION



Buladlad Lake

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition, 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Paragrasan Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Previously part of the Panikian Lake

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|-----------------------------------|--|
| <p>High-resolution photograph</p> | <p>Geotagged photograph</p> <p>> PLEASE SEE ATTACHED GEOTAGGED PHOTOS</p> |
|-----------------------------------|--|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • (Tp) • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|--------------|---------------|--------------|--------------|
| Brgy. Pagasa | San Francisco | Brgy. Pagasa | Brgy. Paetan |

Area (total size in hectares, seasonal max/min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|------|
| | Min | Max | Min | Max |
| Including watershed : | | | 1.35 | 1.6 |
| Area of water/wet area : (river/creek not included) | | | 1.20 | 1.34 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | 125 | 150 |
| Width : | | | 91 | 106 |
| Depth : | | | | |

Elevation (in meters above sea level) : 32

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|-------------|--------------|--------------------|
| | San Agustin | Sablayan | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|-------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Sablayan | San Agustin | | | 2490 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|---------------------|-------------------|
| Centroid | : 120°53' 22.892" E | 126°55' 42.679" N |
| *Upstream | : | : |
| *Midstream | : | : |
| *Downstream | : | : |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE I

Climatic Type Description:

TWO PRONOUNCED SEASON, DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|-------|-----|-----|-----|-------|-------|-------|-------|-----|-------|------|-------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 114.3 | 52 | 24 | 24 | 103.5 | 185.3 | 354.6 | 290.5 | 444 | 605.2 | 1555 | 141.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 20.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.4 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED: 24 WIND DIRECTION: 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 50, 50

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):
ALFISOL , INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : CLAYEY

Wetland/aquatic area : CLAYEY

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):
N/A

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):
Parik River (when there is typhoon)

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):
SHALLOW and DEEP WELLS

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): NO ERDB ASSESSMENT CONDUCTED

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): once a year and depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends if there is typhoon

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

NO DATA

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): NO WATER CLASSIFICATION CONDUCTED

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Chlorine (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Color (TCU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Dissolved Oxygen (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Fecal coliform (MPN/100mL) | NO DATA | NO DATA | NO DATA | NO DATA |
| Nitrate as NO ₃ -N (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| pH (range) | NO DATA | NO DATA | NO DATA | NO DATA |
| Phosphate (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Temperature (°C) | NO DATA | NO DATA | NO DATA | NO DATA |
| Total suspended solid (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Turbidity (NTU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Salinity | NO DATA | NO DATA | NO DATA | NO DATA |
| Conductivity | NO DATA | NO DATA | NO DATA | NO DATA |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

Year Data Collected

Sampling Frequency (annual or monthly)

: N/A
: N/A
: N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

SECONDARY FOREST / OPEN AREA

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--------------------------------------|-------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Bangka Potat Kawayan tambon | | | | | | |
| | | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | aragan kangkang | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|--------------------------|----------------------------|-------------|-----------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | tagak | | | | | | | |
| Mammals | daga | | | | | | | |
| Herpetofauna | sawa, palaka | | | | | | | |
| Invertebrates | kuhol | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | tilapia, dalag, hito, cara | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | kuhol | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | | Scale of benefit | | |
|-----------------------|--|----------------|------------------------------|------------------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | + | drinking water for livestock | / | | |
| | Food | ++ | fish, fruits | / | | |
| | Fuel | + | fuelwood | / | | |
| | Fibre | + | timber for building | / | | |
| | Genetic resources | 0 | | | | |
| | Natural medicines or pharmaceuticals | + | herbal medicine | / | | |
| | Ornamental resources | 0 | | | | |
| | Clay, mineral, aggregate harvesting | 0 | | | | |
| | Waste disposal | 0 | | | | |
| | Energy harvesting from natural air and water flows | 0 | | | | |
| | | | | | | |
| Regulatory Services | Air quality regulation | + | | / | | |
| | Local climate regulation | + | | / | | |
| | Global climate regulation | + | | | | / |
| | Water regulation | + | | / | | |
| | Flood hazard regulation | + | | / | | |
| | Storm hazard regulation | + | | / | | |
| | Pest regulation | - | rats and mosquitos | / | | |
| | Disease regulation - human | - | mosquitos | / | | |
| | Disease regulation - livestock | 0 | | | | |
| | Erosion regulation | + | | / | | |
| | Water purification | + | | / | | |
| | Pollination | + | | / | | |
| | Salinity regulation | 0 | | 0 | | |
| | | | | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | / | | |
| | Noise and visual buffering | + | / | | |
| | | | | | |
| Cultural Services | Cultural heritage | 0 | | | |
| | Recreation and tourism | + | / | | |
| | Aesthetic value | 0 | | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | / | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | / | | |
| | Primary production | + | / | | |
| | Nutrient cycling | + | / | | |
| | Water recycling | + | / | | |
| | Provision of habitat | + | / | | |
| Notes: | | | | | |

Remarks/Other information (on the importance of the particular wetland): Pasture Area

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): _____

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

overfishing, overpopulation of water lettuce

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|------------|------------------------------|--------|----------------|-------|
| Rose Pajas | Caretaker, Representative | | 09364578230 | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

Natural Calamities (Typhoon)

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



Inland Wetland Inventory PARAGRASAN LAKE



LOCATION MAP

SCALE : 1:4,000

0 60 120 240
Meters

Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : San Agustin
Municipality : Sablayan
Province : Occidental Mindoro
AREA : 1.34 ha

LEGEND

- Paragrasan_Lake
- Inland_Humanmade_Wetland
- Road



Republic of the Philippines
Department of Environment and Natural Resources
NATIONAL OFFICE
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
Tarlac Office: San Nito, Sablayan, Occidental Mindoro
Email Address: denrnatnco@gmail.com

CERTIFICATION

This is to certify that this is the true and correct map.
This map was prepared based on submitted data, maps, and other documents available from this office.

Prepared by:
JOSEPH M. MATEO
ECOSOC GIS User Assoc. Chief

Reviewed by:
BLANCA SANICO
Training & CDS Chief

Verified by:
ISAAC A. DE ANTONIO
Technical Services Supervisor
GIS User Chief

PHOTO DOCUMENTATION



Paragrasan Lake

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Cabakungan Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|---|-----------------------------|
| <p>un-tagged photo</p> | <p>geotagged photograph</p> |
| <p>PLEASE SEE ATTACHED GEOTAGGED PHOTOS</p> | |

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • TP • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|--------------|-------------------|-------------------|-------------------|
| Brgy. Paetan | Brgy. San Agustin | Brgy. San Vicente | Brgy. Batong Buan |

Area (total size in hectares, seasonal max/min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Including watershed : | | | 2.0 | 2.0 |
| Area of water/wet area : (river/creek not included) | | | 1.4 | 2.0 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | 250 | 284 |
| Width : | | | 65 | 120 |
| Depth : | | | | |

Elevation (in meters above sea level) : 52

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|---------------|--------------|--------------------|
| | San Francisco | Sablayan | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|---------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Sablayan | San Francisco | | | 3,485 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|---------------|--------------------|-------------------|
| Centroid : | 120° 53' 15.228" E | 12° 53' 33.396" N |
| *Upstream : | | |
| *Midstream : | | |
| *Downstream : | | |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE I

Climatic Type Description:

TOO PROLONGED SEASON, DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|------|------|------|------|------|------|-------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 11.3 | 5.2 | 2.4 | 2.4 | 13.5 | 18.5 | 35.4 | 29.5 | 44.4 | 61.5 | 155.3 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED: 2-4, DIRT DIRECTION: 60, 60, 70, 60, 70, 640, 10, 270, 10, 270, 210, 50, 50

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):
ALFISOL, INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : CLAYEY, SANDY

Wetland/aquatic area : CLAYEY, SANDY

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☒ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):
irrigation Spring

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):
irrigation

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depend if there is typhoon

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):
No data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | no data | no data | no data | no data |
| Chlorine (mg/L) | no data | no data | no data | no data |
| Color (TCU) | no data | no data | no data | no data |
| Dissolved Oxygen (mg/L) | no data | no data | no data | no data |
| Fecal coliform (MPN/100mL) | no data | no data | no data | no data |
| Nitrate as NO ₃ -N (mg/L) | no data | no data | no data | no data |
| pH (range) | no data | no data | no data | no data |
| Phosphate (mg/L) | no data | no data | no data | no data |
| Temperature (°C) | no data | no data | no data | no data |
| Total suspended solid (mg/L) | no data | no data | no data | no data |
| Turbidity (NTU) | no data | no data | no data | no data |
| Salinity | no data | no data | no data | no data |
| Conductivity | no data | no data | no data | no data |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

: N/A

Year Data Collected

: N/A

Sampling Frequency (annual or monthly)

: N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|----------------------------------|-------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Bangka, Saging, kalumpang, tambo | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | Kangkang, plecton, heart | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|--------------------------|--|-------------|-----------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | wild duck, tikling, eagle, wild duck | | | | | | | |
| Mammals | wild rat | | | | | | | |
| Herpetofauna | Snake, frog, monitor lizard | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | Iga, kito, tilapia, banggai, giant gourami, carp, dala, fresh water turtle | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | kukoi | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. Ecosystem services: (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| Key | How important? |
|-----|--|
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | Scale of benefit | | | | |
|-----------------------|--|------------------|------------------|-------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | + | | / | | |
| | Food | + | fish | / | | |
| | Fuel | + | fire wood | / | | |
| | Fibre | + | lumber | / | | |
| | Genetic resources | 0 | | | | |
| | Natural medicines or pharmaceuticals | + | herbal medicine | / | | |
| | Ornamental resources | 0 | | | | |
| | Clay, mineral, aggregate harvesting | 0 | | | | |
| | Waste disposal | 0 | | | | |
| | Energy harvesting from natural air and water flows | 0 | | | | |
| | | | | | | |
| Regulatory Services | Air quality regulation | + | | / | | |
| | Local climate regulation | + | | / | | |
| | Global climate regulation | + | | / | | |
| | Water regulation | + | | / | | |
| | Flood hazard regulation | + | | / | | |
| | Storm hazard regulation | + | | / | | |
| | Pest regulation | + | | / | | |
| | Disease regulation - human | 0 | | | | |
| | Disease regulation - livestock | 0 | | | | |
| | Erosion regulation | + | | / | | |
| | Water purification | + | | / | | |
| | Pollination | + | | / | | |
| | Salinity regulation | 0 | | | | |
| | | | | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | ✓ | | |
| | Noise and visual buffering | + | ✓ | | |
| | | | | | |
| Cultural Services | Cultural heritage | + | ✓ | | |
| | Recreation and tourism | + | ✓ | | |
| | Aesthetic value | 0 | | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | ✓ | | |
| | Educational and research | + | ✓ | | |
| | | | | | |
| Supporting Services | Soil formation | + | ✓ | | |
| | Primary production | + | ✓ | | |
| | Nutrient cycling | + | ✓ | | |
| | Water recycling | + | ✓ | | |
| | Provision of habitat | + | ✓ | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): pasture area, proposed site for TESDA and ATI certified, proposed tourist spot

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): Agriculture

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

overpopulation of water lotus, kaityin near the area

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|---------------|-------------|--------|----------------|-------|
| CELSO SALGADO | owner | | 09178532047 | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

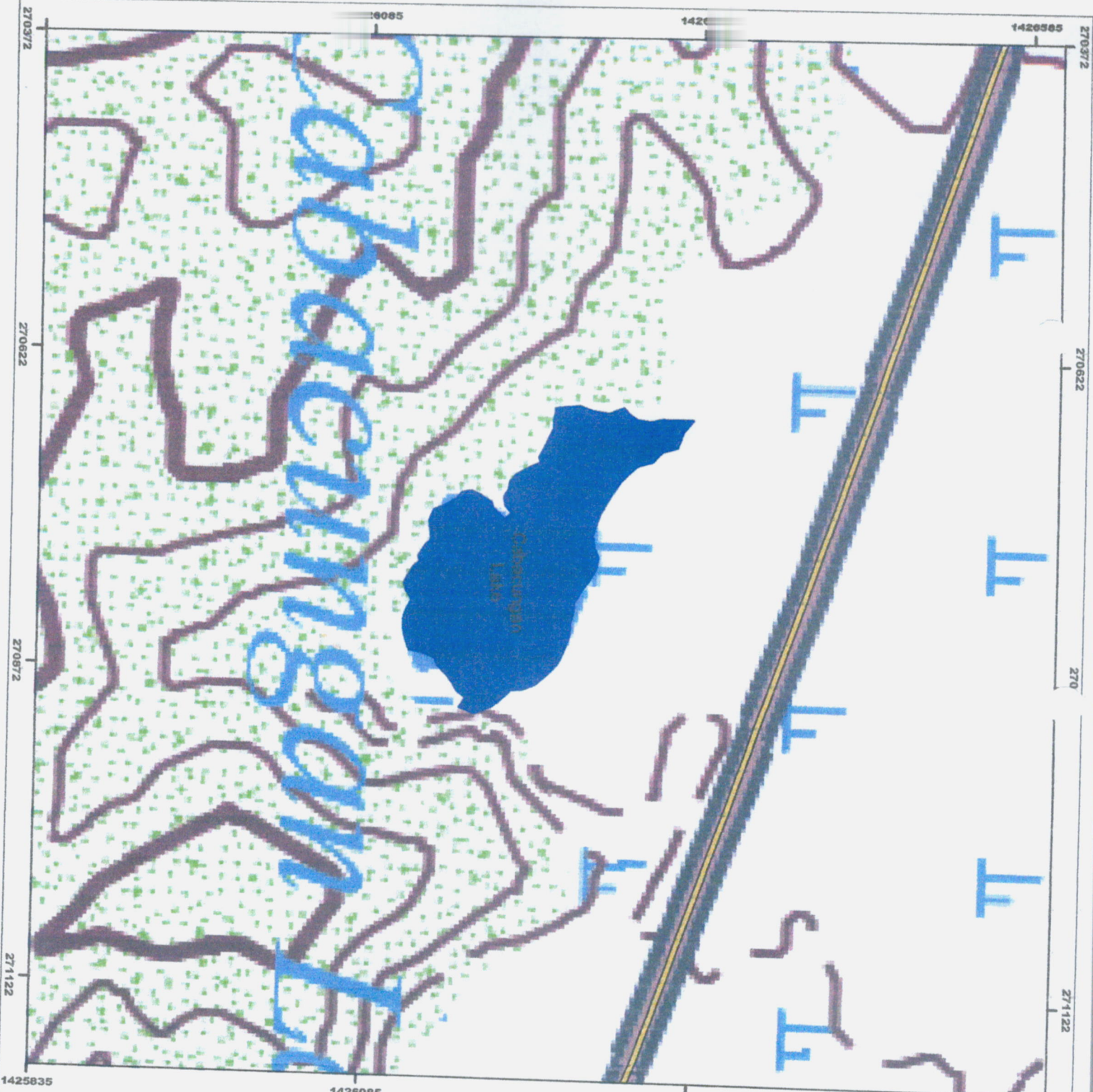
Natural calamities

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



Inland Wetland Inventory CABACUNGAN LAKE



SCALE : 1:4,000



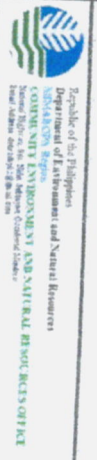
Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : San Francisco
Municipality : Sablayan
Province : Occidental Mindoro
AREA : 2.45 ha

LEGEND

- Inland_Humannade_Wetland
- Road



CERTIFICATION

This is to certify that the map and report are true and correct as shown on the map and report.

Prepared by:

Project Officer:

Field Officer:

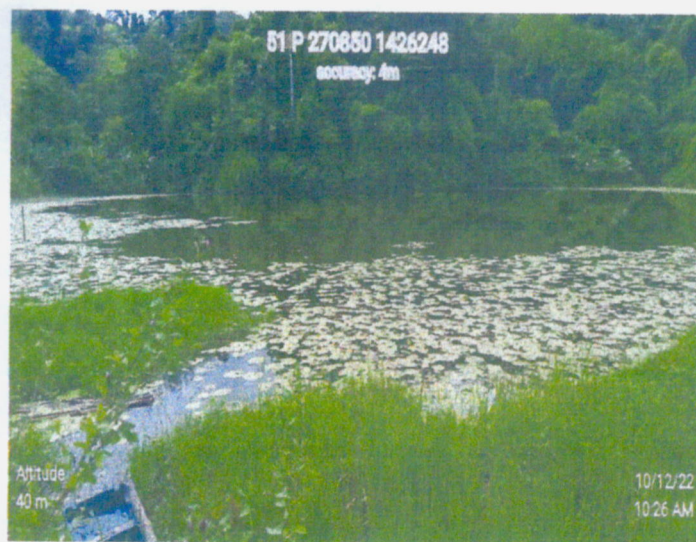
Checked by:

Approved by:

Witnessed by:

[Signatures]
Project Officer: *[Signature]*
Field Officer: *[Signature]*
Checked by: *[Signature]*
Approved by: *[Signature]*
Witnessed by: *[Signature]*

PHOTO DOCUMENTATION



Cabakungan Lake

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Mara Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|--|---|
| | <p>PLEASE SEE ATTACHED GEOTAGGED PHOTOS</p> |
|--|---|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • TP • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

elongated

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|--------------|-------------------|-------------------|--------------------|
| Brgy. Paetan | Brgy. San Agustin | Brgy. San Vicente | Brgy. Batong Buhag |

Area (total size in hectares, seasonal max/min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|---------|
| | Min | Max | Min | Max |
| Including watershed : | | | 2 ha | 3 ha |
| Area of water/wet area : (river/creek not included) | | | 1.7 ha | 2.79 ha |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|------------|
| | Min | Max | Min | Max |
| Length : | | | 350 | 400 meters |
| Width : | | | 16 | 150 m |
| Depth : | | | | |

Elevation (in meters above sea level) : 30 m

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|---------------|--------------|--------------------|
| | SAN FRANCISCO | SABLAYAN | OCCIDENTAL MINDORO |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|---------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| SABLAYAN | SAN FRANCISCO | | | 3,485 | FARMING | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 3,485 | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc.):

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | | | |
|-------------|---|-----------------|-----------------|
| | | Latitude | Longitude |
| Centroid | : | 120° 52' 35.635 | 12° 53' 2.757"N |
| *Upstream | : | | |
| *Midstream | : | | |
| *Downstream | : | | |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE 1

Climatic Type Description:

Two PEAK MOON SEASON, DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|-------|-------|-------|-------|-----|-------|-------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 19.3 | 5.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 290.5 | 444 | 605.2 | 155.5 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.9 | 31.9 | 31.9 | 33 | 33.4 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED: 2-4, WIND DIRECTION: 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 50, 50

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):
ALFISOL, INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : Clay, loam

Wetland/aquatic area : Clay, loam

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):
irrigation up to 10 hectares of ricefield

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB Assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): once a year depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends if there is typhoon

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):
No data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Chlorine (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Color (TCU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Dissolved Oxygen (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Fecal coliform (MPN/100mL) | NO DATA | NO DATA | NO DATA | NO DATA |
| Nitrate as NO ₃ -N (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| pH (range) | NO DATA | NO DATA | NO DATA | NO DATA |
| Phosphate (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Temperature (°C) | NO DATA | NO DATA | NO DATA | NO DATA |
| Total suspended solid (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Turbidity (NTU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Salinity | NO DATA | NO DATA | NO DATA | NO DATA |
| Conductivity | NO DATA | NO DATA | NO DATA | NO DATA |
| Other: _____ | NO DATA | NO DATA | NO DATA | NO DATA |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

: N/A

Year Data Collected

: N/A

Sampling Frequency (annual or monthly)

: N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--------------------------------------|----------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Tagak, Bolele Bongkal Mabegang | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | water hyacinth | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|------------------------------------|----------------|--------------------|--------------------|--------------|------------------------|---|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | Tagak | | | | | | | |
| Mammals | dog | | | | | | | |
| Herpetofauna | snake, palaka | | | | | | | |
| Invertebrates | Kuhoi | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | tilapia, de la, nito, igat, carpa | | | | | | | |
| Fish | | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | snakehead turtle, asian box turtle | | | | | | | |

C. WETLAND BENEFITS

11. Ecosystem services: (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | Scale of benefit | | |
|-----------------------|--|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | + | / | | |
| | Food | ++ | / | | |
| | Fuel | + | / | | |
| | Fibre | + | source of timber | / | |
| | Genetic resources | 0 | | | |
| | Natural medicines or pharmaceuticals | + | / | | |
| | Ornamental resources | 0 | | | |
| | Clay, mineral, aggregate harvesting | 0 | | | |
| | Waste disposal | 0 | | | |
| | Energy harvesting from natural air and water flows | 0 | | | |
| | | | | | |
| Regulatory Services | Air quality regulation | + | / | | |
| | Local climate regulation | + | / | | |
| | Global climate regulation | + | / | | |
| | Water regulation | + | / | | |
| | Flood hazard regulation | + | / | | |
| | Storm hazard regulation | + | / | | |
| | Pest regulation | + | / | | |
| | Disease regulation - human | 0 | | | |
| | Disease regulation - livestock | 0 | | | |
| | Erosion regulation | + | / | | |
| | Water purification | + | / | | |
| | Pollination | + | / | | |
| | Salinity regulation | 0 | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | ✓ | | |
| | Noise and visual buffering | + | ✓ | | |
| | | | | | |
| Cultural Services | Cultural heritage | 0 | | | |
| | Recreation and tourism | + | | | |
| | Aesthetic value | 0 | ✓ | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | ✓ | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | ✓ | | |
| | Primary production | + | ✓ | | |
| | Nutrient cycling | + | ✓ | | |
| | Water recycling | + | ✓ | | |
| | Provision of habitat | + | ✓ | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): _____

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): _____

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. **Existing pressures/threats and trends** (concerning any of the features listed above, and/or concerning ecosystem integrity):

14. **Conservation and management status of the wetland** (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. **Existing Management plans and monitoring programs:** (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. **References** (Full citation)

17. **Compiler/Contact/Focal person** (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|--------------|-----------------|--------|----------------|-------|
| Raymond Mann | Owner Caretaker | | 09359248230 | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. **Potential Threats:**

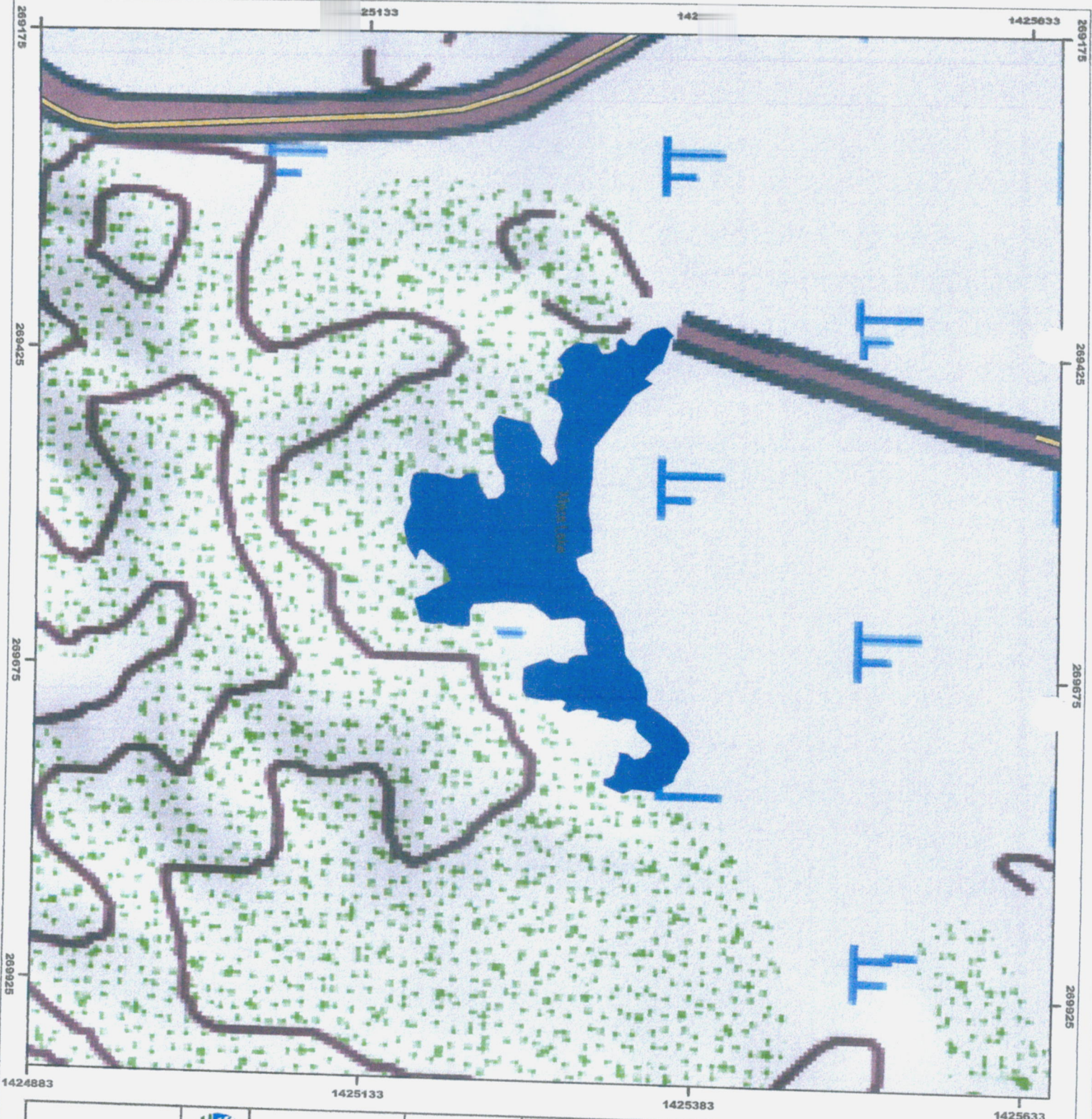
Overpopulation of water hyacinth, natural calamities

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification (which portions are relevant or critical for management for)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



Inland Wetland Inventory

MARA LAKE



SCALE : 1:4,000

Meters

Coordinate System: WGS 1984 UTM, Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : San Francisco
Municipality : Sablayan
Province : Occidental Mindoro
AREA : 2.78 ha

LEGEND

- Inland_Humanned_Wetland
- Road



Republic of the Philippines
Department of Environment and Natural Resources
COASTAL AND WETLANDS DIVISION
BUREAU OF WETLANDS AND WATER RESOURCES MANAGEMENT

DECLARATION

This is to certify that the data and information herein were obtained from field surveys and are true and correct.

Prepared by:

PROJECT LEADER

COORDINATOR

REVIEWER

APPROVER

DATE

TIME

PLACE

SIGNATURE

DATE

PHOTO DOCUMENTATION



Mara Lake

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition.2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): TAGBAK LAKE

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

TAGBAK MARINE WOOD (LC 631)

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|----------------------------|----------------------|
| High-resolution photograph | Geotagged photograph |
|----------------------------|----------------------|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|--------------|--------------|--------------|--------------|
| Brgy. Tagbal | Brgy. Tagbal | Brgy. Tagbac | Brgy. Tagbal |

Area (total size in hectares, seasonal max/ min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|-------|
| | Min | Max | Min | Max |
| Including watershed : | | | | |
| Area of water/wet area : (river/creek not included) | | | 66.97 | 70.00 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|---------|
| | Min | Max | Min | Max |
| Length : | | | 1,180 | 1,261 m |
| Width : | | | 716 | 763 m |
| Depth : | | | | |

Elevation (in meters above sea level) : _____

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|----------|--------------|--------------------|
| | Tagbac | Lubang | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|----------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Lubang | Tagbac | | | 2,550 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 2,550 | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located): _____

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).: _____

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|---------------------|------------------|
| Centroid | : 13° 50' 27.360" N | 120° 5' 50.969 E |
| *Upstream | : | |
| *Midstream | : | |
| *Downstream | : | |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): CLIMATIC TYPE I

Climatic Type Description:

TWO PRONOUNCED SEASON DRY FROM NOVEMBER TO APRIL, WET DURING THE REST OF THE YEAR.

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|-------|-------|-------|-------|-----|-------|-------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 14.3 | 5.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 290.5 | 444 | 605.2 | 155.5 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 21.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 20.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

WIND SPEED - 2-4, WIND DIRECTION: 60, 60, 60, 70, 60, 70, 340, 10, 270, 210, 50, 50

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

NATURAL

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

Alfisol, Inceptisol

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : Clayey

Wetland/aquatic area : Clayey

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☒ Surface source

☐ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

RIVER

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

RIVER

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

N/A

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends if there is typhoon

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

No data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): NOT CLASSIFIED BY EMB

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Chlorine (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Color (TCU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Dissolved Oxygen (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Fecal coliform (MPN/100mL) | NO DATA | NO DATA | NO DATA | NO DATA |
| Nitrate as NO ₃ -N (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| pH (range) | NA DATA | NO DATA | NO DATA | NO DATA |
| Phosphate (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Temperature (°C) | NO DATA | NO DATA | NO DATA | NO DATA |
| Total suspended solid (mg/L) | NO DATA | NO DATA | NO DATA | NO DATA |
| Turbidity (NTU) | NO DATA | NO DATA | NO DATA | NO DATA |
| Salinity | NO DATA | NO DATA | NO DATA | NO DATA |
| Conductivity | NO DATA | NO DATA | NO DATA | NO DATA |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

Year Data Collected

Sampling Frequency (annual or monthly)

: N/A
 : N/A
 : N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

MANGROVE AND BEACH FOREST SPECIES

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--------------------|-------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | NIPB MANGROVE | | | | | | |
| | | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|--------------------------|--------------------|-------------|-----------------|-----------------|--------------|---------------------|---|--|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | Tigak | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | Bangus | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | ahas | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|------------|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | Scale of benefit | | |
|-----------------------|--|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | 0 | / | | |
| | Food | + | / | | |
| | Fuel | 0 | / | | |
| | Fibre | 0 | / | | |
| | Genetic resources | 0 | / | | |
| | Natural medicines or pharmaceuticals | 0 | / | | |
| | Ornamental resources | 0 | / | | |
| | Clay, mineral, aggregate harvesting | 0 | / | | |
| | Waste disposal | 0 | / | | |
| | Energy harvesting from natural air and water flows | 0 | / | | |
| | | | | | |
| | | | | | |
| Regulatory Services | Air quality regulation | + | / | | |
| | Local climate regulation | + | / | | |
| | Global climate regulation | 0 | / | | |
| | Water regulation | - | / | | |
| | Flood hazard regulation | - | / | | |
| | Storm hazard regulation | - | / | | |
| | Pest regulation | 0 | / | | |
| | Disease regulation - human | 0 | / | | |
| | Disease regulation - livestock | 0 | / | | |
| | Erosion regulation | 0 | / | | |
| | Water purification | + | / | | |
| | Pollination | | | | |
| | Salinity regulation | 0 | | | |
| | | | | | |
| | | | | | |

| | | | | Scale of benefit | | |
|---------------------|-------------------------------|----------------|------------------|------------------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | 0 | | | | |
| | Noise and visual buffering | 0 | | | | |
| | | | | | | |
| Cultural Services | Cultural heritage | 0 | | | | |
| | Recreation and tourism | 0 | | | | |
| | Aesthetic value | 0 | | | | |
| | Spiritual and religious value | 0 | | | | |
| | Inspiration value | 0 | | | | |
| | Social relations | 0 | | | | |
| | Educational and research | 0 | | | | |
| | | | | | | |
| Supporting Services | Soil formation | + | | | | |
| | Primary production | ++ | | | | |
| | Nutrient cycling | + | | | | |
| | Water recycling | -- | | | | |
| | Provision of habitat | + | | | | |
| Notes: | | | | | | |

Remarks/Other Information (on the importance of the particular wetland): _____

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): fishpond

Land use in the river basin : fishpond and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

- cutting/ clearing, natural plan rahalangan vs status

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

- may titled property and existing FUA's yang ada

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

- N/A

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|------|-------------|--------|----------------|-------|
| | | | | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

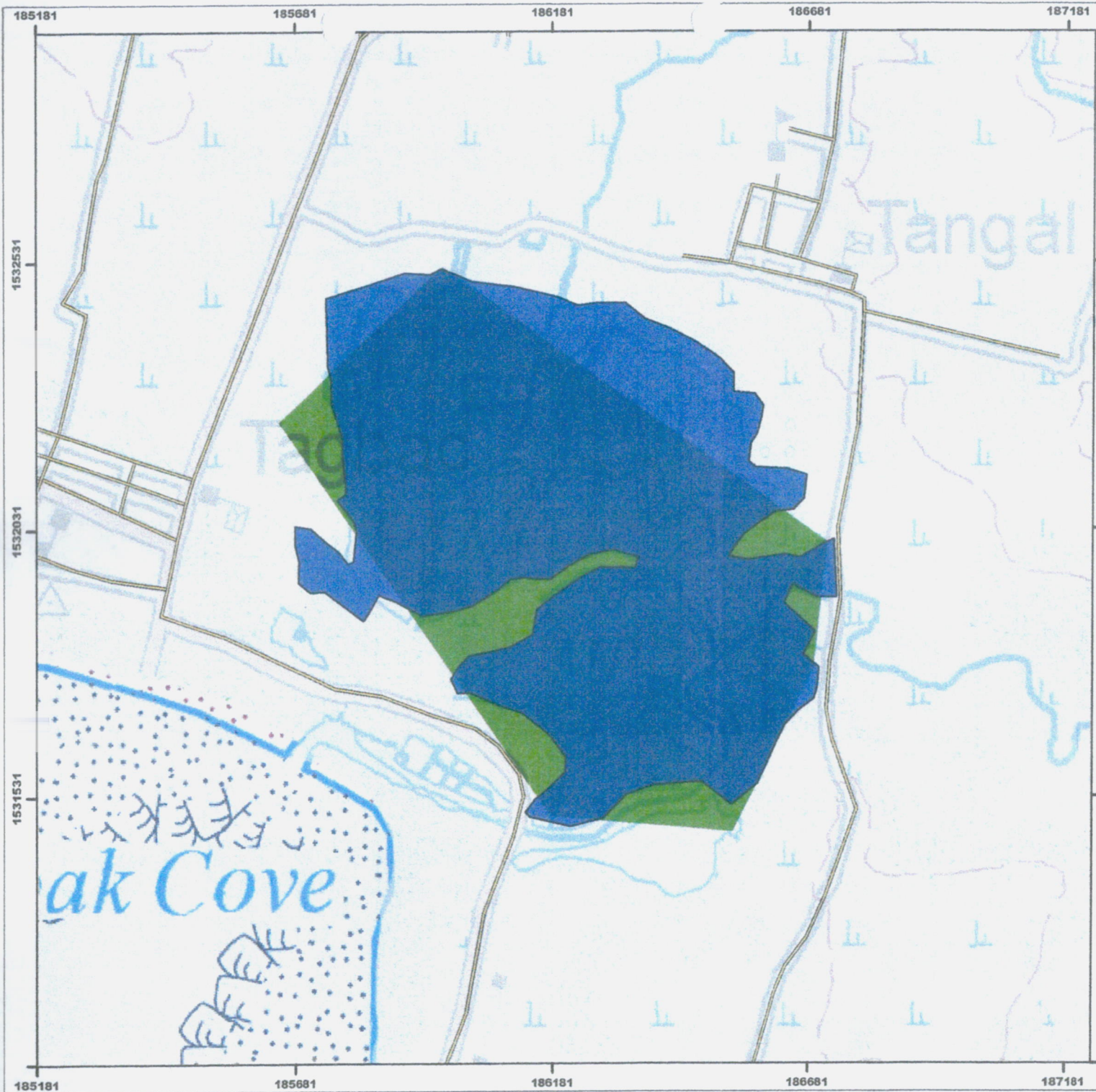
Area conversion

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification (*which portions are relevant or critical for management for*)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



TAGBAC LAKE



LOCATION MAP

SCALE : 1:10,000



Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : Tagbac
Municipality : Lubang
Province : Occidental Mindoro
AREA : 66.98 ha

LEGEND

- Inland_Humanmade_Welland
- LAND_CLASSIFICATION
- STATUS_1
- Alienable and Disposable
- Forestland
- Road



CERTIFICATION

This is to certify that this is the true and correct map.
This map was prepared based on submitted data maps and other documents available from this office.

Prepared by:
JOSEPH M. SANICO
ECONOMIC UNIT ASST. CHIEF

Reviewed by:
MARIN E. SANICO
ECONOMIC UNIT CHIEF

Verified by:
JAMES M. SANICO
Technical Services Supervisor
ECONOMIC UNIT

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): Lalaguna Lake

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|--|--|
| | |
|--|--|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):
Oval

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|---------------|---------------|---------------|---------------|
| Brgy. Bulacan | Brgy. Bulacan | Brgy. Bulacan | Brgy. Bulacan |

Area (total size in hectares, seasonal max/min, where relevant)

| | Dry Season | | Wet Season | |
|--|------------|-----|------------|-------|
| | Min | Max | Min | Max |
| Including watershed : | | | | |
| Area of water/wet area : (river/creek not included) | | | 16.82 | 17.33 |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | 430 | 479 |
| Width : | | | 340 | 351 |
| Depth : | | | | |

Elevation (in meters above sea level) :

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|----------|--------------|--------------------|
| | Bulacan | Looc | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|----------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Looc | Bulacan | | | 687 | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 587 | | |

Source and Date of Information : PSA 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc):

Catchment basin during rainy season

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|----------------------------|---------------------------|
| Centroid | : <u>13° 35' 56.889" N</u> | <u>120° 20' 29.952" E</u> |
| *Upstream | : _____ | _____ |
| *Midstream | : _____ | _____ |
| *Downstream | : _____ | _____ |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): Climatic Type 1

Climatic Type Description:

Two pronounced season, Dry from November to April, wet during the rest of the year

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|------|-----|-----|-----|-------|-------|-------|-------|-----|-------|------|------|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | 14.3 | 5.2 | 2.4 | 2.4 | 103.5 | 185.3 | 354.6 | 290.5 | 444 | 605.2 | 1553 | 44.1 | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Minimum (°C) | 20.9 | 20.9 | 21.3 | 22.2 | 22.7 | 21.7 | 21.3 | 20.1 | 20.9 | 20.9 | 20.8 | 21.0 |
| Maximum (°C) | 32.9 | 33.7 | 35.1 | 36.6 | 35.2 | 34.0 | 33.3 | 32.4 | 31.9 | 31.9 | 33 | 33.6 |
| Average (°C) | 26.7 | 27.3 | 28.2 | 29.4 | 28.9 | 27.9 | 27.3 | 26.8 | 26.8 | 26.4 | 26.9 | 27.3 |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity):

Wind Speed - 2-4 Wind Direction - 6°, 6°, 60, 70, 60, 70, 340, 10, 270, 210, 50, 50

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

ALFISOL, INCEPTISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : CLAYEY

Wetland/aquatic area : CLAYEY

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : N/A

Wetland/aquatic area : N/A

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☒ Surface source

☐ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

Shallow and deep wells

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): No ERDB Assessment conducted

Flooding susceptibility (rain-induced flooding susceptibility based on MGB):

Flooding frequency (how often does flooding occur within a year?): depends if there is typhoon

Flooding seasonality (in what month/s does flooding usually occur?): depends on the weather condition

Flooding duration (for how long does floodwater usually stay within each season?): 1 day

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

No data

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | No data | No data | No data | No data |
| Chlorine (mg/L) | No data | No data | No data | No data |
| Color (TCU) | No data | No data | No data | No data |
| Dissolved Oxygen (mg/L) | No data | No data | No data | No data |
| Fecal coliform (MPN/100mL) | No data | No data | No data | No data |
| Nitrate as NO ₃ -N (mg/L) | No data | No data | No data | No data |
| pH (range) | No data | No data | No data | No data |
| Phosphate (mg/L) | No data | No data | No data | No data |
| Temperature (°C) | No data | No data | No data | No data |
| Total suspended solid (mg/L) | No data | No data | No data | No data |
| Turbidity (NTU) | No data | No data | No data | No data |
| Salinity | No data | No data | No data | No data |
| Conductivity | No data | No data | No data | No data |
| Other: _____ | No data | No data | No data | No data |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?)

: N/A

Year Data Collected

: N/A

Sampling Frequency (annual or monthly)

: N/A

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--------------------------|----------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | mangrove | | | | | | |
| | | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | sea grass | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|--------------------|--------------------|--------------|------------------------|---|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | Kilyawan, kingfisher | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | banak, siharid, bangus | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | alimango, hipon | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | Scale of benefit | | | |
|-----------------------|--|----------------|---------------------|-------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | + | | / | | |
| | Food | ++ | fish source | / | | |
| | Fuel | + | | / | | |
| | Fibre | + | timber for building | / | | |
| | Genetic resources | 0 | | | | |
| | Natural medicines or pharmaceuticals | + | herbal medicines | / | | |
| | Ornamental resources | 0 | | | | |
| | Clay, mineral, aggregate harvesting | 0 | | | | |
| | Waste disposal | 0 | | | | |
| | Energy harvesting from natural air and water flows | 0 | | | | |
| | | | | | | |
| | | | | | | |
| Regulatory Services | Air quality regulation | + | | / | | |
| | Local climate regulation | + | | / | | |
| | Global climate regulation | + | | / | | |
| | Water regulation | + | | / | | |
| | Flood hazard regulation | + | | / | | |
| | Storm hazard regulation | + | | / | | |
| | Pest regulation | + | | / | | |
| | Disease regulation - human | 0 | | | | |
| | Disease regulation - livestock | 0 | | | | |
| | Erosion regulation | + | | / | | |
| | Water purification | + | | / | | |
| | Pollination | + | | / | | |
| | Salinity regulation | 0 | | / | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | + | / | | |
| | Noise and visual buffering | + | / | | |
| | | | | | |
| Cultural Services | Cultural heritage | + | / | | |
| | Recreation and tourism | + | / | | |
| | Aesthetic value | 0 | | | |
| | Spiritual and religious value | 0 | | | |
| | Inspiration value | 0 | | | |
| | Social relations | + | / | | |
| | Educational and research | 0 | | | |
| | | | | | |
| Supporting Services | Soil formation | + | / | | |
| | Primary production | + | / | | |
| | Nutrient cycling | + | / | | |
| | Water recycling | + | / | | |
| | Provision of habitat | + | / | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): _____

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): Agricultural

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

Overfishing

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. References (Full citation)

17. Compiler/Contact/Focal person (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|-----------------|-------------|----------|----------------|-------|
| Zaldy Villerosa | MAD | LGU Lobo | | |
| | | | | |
| | | | | |

Date Accomplished: April 22, 2022

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

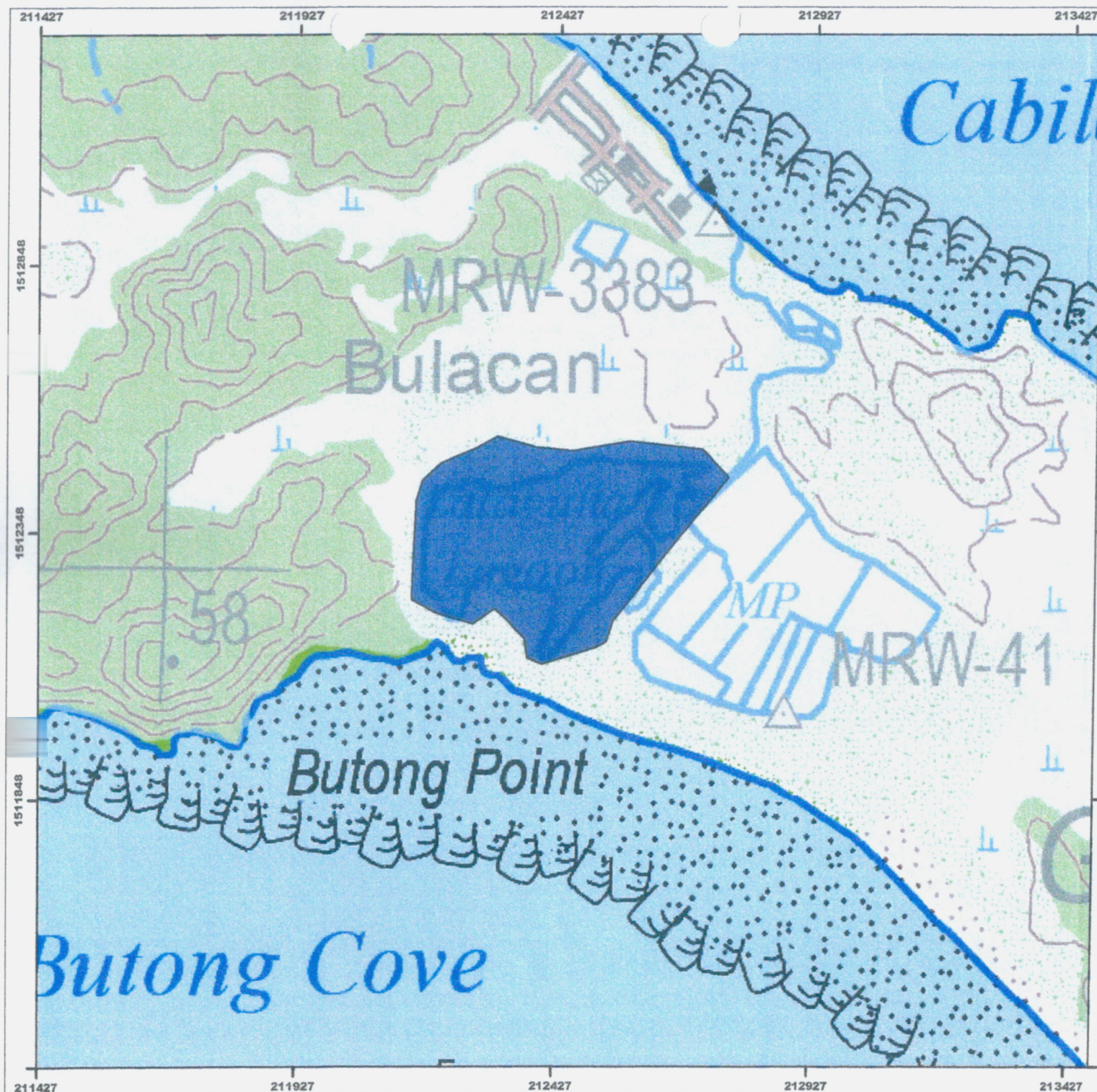
Natural calamities.

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input checked="" type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



LALAGUNA LAGOON



LOCATION MAP

SCALE : 1:10,000



Coordinate System: WGS 1984 UTM Zone 51N
Projection: Transverse Mercator
Datum: WGS 1984

LOCATION

Barangay : Bulacan
Municipality : Lobo
Province : Occidental Mindoro
AREA : 17.33 ha

LEGEND

Inland_Humanmade_Wetland

Road

LAND_CLASSIFICATION

STATUS_1

Alienable and Disposable

Forestland



Republic of the Philippines
Department of Environment and Natural Resources
Office of the Secretary

COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
National Office, 1000 National Highway, Quezon City
Email Address: ceon@denr.gov.ph

CERTIFICATION

This is to certify that this is the true and correct map.
This map was prepared based on submitted data, maps, and other documents available from the office.

Prepared by:

JOSEPH M. LITO
ECONOMICS Unit Asst. Chief

Reviewed by:

ALYSSA A. SANICO
Former ICDS Chief

Verified by:

MARY ANN LITO
Technical Services Supervisor
GIS Unit Chief



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

July 29, 2022

HON. WALTER B. MARQUEZ
Municipal Mayor
Sablayan, Occidental Mindoro

ATTN: **MR. ROBERT P. DUQUIL**
MENR Officer

Dear Mayor Marquez,

Greetings of Peace!

This is in relation to our letter dated April 27, 2022 regarding our target activity on the inventory of all inland wetlands within our area of jurisdiction. The inland wetlands listed in the table below were initially identified in 2020 and they have been submitted to the Biodiversity Management Bureau (BMB) for inclusion in the Atlas Inland Wetlands in the Philippines.

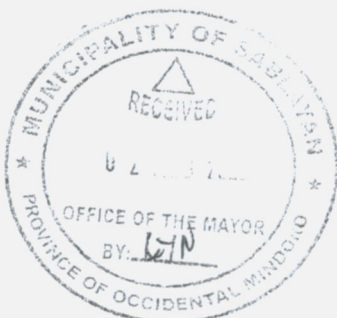
| Barangay | Name of Inland Wetland |
|---------------|---|
| Sta. Lucia | Halawhawan |
| | Sahing |
| Tuban | Tabtaban |
| Malisbong | Libuao |
| Batong-buhay | Marabong |
| San Agustin | Panikian |
| San Francisco | Within the titled property of Cesar Pascual |
| | Within the titled property of Cesar Pascual |
| | Within the titled property of Ruben Fabra |
| | Kabakungan |
| San Vicente | Malapaga |

In this regard, we are respectfully requesting your good office to review the list above and inform of us any additional inland wetland that you have identified and wish to be included in the Atlas.

Thank you very much. More power and God bless.

Very truly yours,


FOR. ANASTACIO A. SANTOS, MPA
CENR Officer





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

July 29, 2022

HON. MARIA GLORIA MONTENEGRO-CONSTANTINO

Municipal Mayor

Abra de Ilog, Occidental Mindoro

RECORDED

Date: 7-29-22

By: [Signature]

ATTN: **MR. EMERITO CRISTALINO**
MPD Coordinator/ MENR Officer

Dear Mayor Montenegro-Constantino,

Greetings of Peace!

This is in relation to our letter dated April 27, 2022 regarding our target activity on the inventory of all inland wetlands within our area of jurisdiction. The inland wetlands listed in the table below were initially identified in 2020 and they have been submitted to the Biodiversity Management Bureau (BMB) for inclusion in the Atlas Inland Wetlands in the Philippines.

| Barangay | Name of Inland Wetland |
|----------|------------------------|
| Cabacao | Lanas ulohan |
| | Lanas |

In this regard, we are respectfully requesting your good office to review the list above and inform of us any additional inland wetland that you have identified and wish to be included in the Atlas.

Thank you very much. More power and God bless.

Very truly yours,

FOR. ANASTACIO A. SANTOS, MPA
CENR Officer

RECEIVED:

August 16, 2022

[Signature]
MPD



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

July 29, 2022

HON. ANGELINA TRIA
Municipal Mayor
Mamburao, Occidental Mindoro

ATTN: **MS. SHELLA S. CABRERA**
MENR Officer

Dear Mayor Tria,

Greetings of Peace!

This is in relation to our letter dated April 27, 2022 regarding our target activity on the inventory of all inland wetlands within our area of jurisdiction. The inland wetlands listed in the table below were initially identified in 2020 and they have been submitted to the Biodiversity Management Bureau (BMB) for inclusion in the Atlas Inland Wetlands in the Philippines.

| Barangay | Name of Inland Wetland |
|-----------|------------------------|
| Balansay | Lanas |
| Tangkalan | Kuhulan |

In this regard, we are respectfully requesting your good office to review the list above and inform of us any additional inland wetland that you have identified and wish to be included in the Atlas.

Thank you very much. More power and God bless.

Very truly yours,

FOR. ANASTACIO A. SANTOS, MPA
CENR Officer



OFFICE OF THE MUNICIPAL MAYOR

July 11, 2022

To : **ANASTACIO A. SANTOS, MPA**
CENRO
Department of Environment and Natural Resources
Sablayan, Occidental Mindoro

From : **Ernesto P. Torreliza,**
Municipal Mayor

9/7-13-22

Greetings.

This is relative to your letter dated July 5, 2022 received by this Office on July 7, 2022 regarding the final list of the inventoried inland wetlands submitted to BMB.

Please be informed that there are other prematurely identified inland wetland areas within this municipality as listed below:

ALACAAK

1. Bisay Falls
2. Pagbahan River
3. Alitungan River
4. Ramayan River

LUMANGBAYAN

1. Suksok Lake

BARAHAN

1. Dulisan River
2. Pola River
3. Himamali River
4. Bato River

PINAGTURILAN

1. Pintin River
2. Usigan Lake
3. Camatis Lake
4. Amnay River
5. An-an River
6. Mendiola falls

CASAGUE

1. Salagan River
2. Alyangan Falls

POBLACION 1

1. Urabugan River

KURTINGANAN

1. Tilago Falls
2. Kapalangan

Please be informed that the above-cited additional list of inland wetland areas identified in this municipality is subjected for your confirmation and finalization based on your guidelines.

Thank you very much for your usual support.

SANTA CRUZ
tunaw na malasakit



R4B CENRO Sablayan <cenrosablayan@denr.gov.ph>

List of Inland Wetlands

R4B CENRO Sablayan <cenrosablayan@denr.gov.ph>

Thu, Jul 7, 2022 at 2:14 PM

To: Ohdee Tapales <ohdeetapales@yahoo.com>

Ma'am/ Sir,

Good afternoon.

Kindly see attached file.

Thank you.



Letter to LGU Sta. Cruz_ List of Inland Wetlands.pdf

410K



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

July 5, 2022

HON. ERNESTO P. TORRELIZA
Municipal Mayor
Sta. Cruz, Occidental Mindoro

RECORDED
Date: 7-5-22
By: [Signature]

ATTN: **MR. RODRITO TAPALES**
MPD Coordinator/ MENR Officer

Dear Mayor Torreliza,

Greetings of Peace!

This DENR CENRO Sablayan has a target activity on the inventory of all inland wetlands within our area of jurisdiction wherein a final list of which will be submitted to the Biodiversity Management Bureau (BMB) for the finalization of the Atlas of all the Inland Wetland in the Philippines.

In this connection, this office provides the list of Inland wetlands that are already inventoried submitted last 2020 to the BMB;

| Barangay | Name of Inland Wetland |
|--------------|------------------------|
| Pinagturilan | Palangan |
| | Carindan |
| | Laud |
| | Ambulan |
| Kurtinganan | Lanas Babae |
| | Lanas Lalaki |
| | Lanas Manggahan |

Should there be Inland Wetlands within this municipality that is/ are not included on the table above, kindly communicate with us thru writing so as to be included for the purpose.

Thank you very much. More power and God bless.

Very truly yours,

[Signature]
KOR. ANASTACIO A. SANTOS, MPA
CENR Officer

Inland Wetland Information Sheet

1 message

CDS Sablayan <cenrosablayan.cds@gmail.com>

Thu, May 5, 2022 at 4:20 PM

To: MARK LANCELOT Mendoza <marklancelotmendoza@gmail.com>

Sir,

Good afternoon.

Kindly see attached file.

Also, we have provided you with a copy of the BMB Technical Bulletin No. 2018-05 for your reference.

Thank you.

-ALVIN E. SANICO**Conservation and Development Section**

DENR- CENRO Sablayan

National Rd., Brgy. Sto. Nino, Sablayan, Occidental Mindoro

Virus-free. www.avast.com**2 attachments****Letter to Mayor and Wetland Information Sheet.PDF**

3250K

**BMB Technical Bulletin No. 2018-05.PDF**

8600K



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

May 5, 2022

HON. MICHAEL L. ORAYANI
Municipal Mayor
Lubang, Occidental Mindoro

Attn: **MR. MARK LANCELOT MENDOZA**
MENR Officer

Dear Mayor Orayani,

Greetings of Peace!

This pertains to our target activity on the Inventory of Inland Wetlands by some of the DENR CENRO Sablayan personnel who have conducted initial data gathering and interview with the MENRO. Accordingly, they are not aware of inland wetland in the municipality, however upon verification based on LC Map No. 631 there is an Inland Wetland specifically within the vicinities of Brgy. Tangal and Tagbak.

In this connection, we are providing herewith a copy of the Wetland Information Sheet in which we would request you to provide us the necessary data/ information.

Your utmost consideration on this matter is very much appreciated. Thank you very much. More power and God bless.

Very truly yours,


FOR. ANASTACIO A. SANTOS, MPA
CENR Officer

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling



(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition. 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): _____

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here: _____)

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).

| | |
|---|--|
|  |  |
|---|--|

2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|-------|------|------|-------|
| | | | |

Area (total size in hectares, seasonal max/ min, where relevant)

| | Dry Season | | Wet Season | |
|----------------------------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Including watershed : | | | | |
| Area of water/wet area : | | | | |
| (river/creek not included) | | | | |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | | Dry Season | | Wet Season | |
|--------|---|------------|-----|------------|-----|
| | | Min | Max | Min | Max |
| Length | : | | | | |
| Width | : | | | | |
| Depth | : | | | | |
| | : | | | | |

Elevation (in meters above sea level) :

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------|----------|--------------|-----------------|
| | | | |
| | | | |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|----------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | | | |

Source and Date of Information : _____

River Basin/Watershed Name (name of river basin/watershed where the wetland is located): _____

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc.):

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|---------------|----------|-----------|
| Centroid : | _____ | _____ |
| *Upstream : | _____ | _____ |
| *Midstream : | _____ | _____ |
| *Downstream : | _____ | _____ |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): _____

Climatic Type Description:

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Minimum (mm) | | | | | | | | | | | | | |
| Maximum (mm) | | | | | | | | | | | | | |
| Average (mm) | | | | | | | | | | | | | |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity): _____

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : _____

Wetland/aquatic area : _____

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : _____

Wetland/aquatic area : _____

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☐ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): _____

Flooding susceptibility (rain-induced flooding susceptibility based on MGB): _____

Flooding frequency (how often does flooding occur within a year?): _____

Flooding seasonality (in what month/s does flooding usually occur?): _____

Flooding duration (for how long does floodwater usually stay within each season?): _____

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?): _____

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | | | | |
| Chlorine (mg/L) | | | | |
| Color (TCU) | | | | |
| Dissolved Oxygen (mg/L) | | | | |
| Fecal coliform (MPN/100mL) | | | | |
| Nitrate as NO ₃ -N (mg/L) | | | | |
| pH (range) | | | | |
| Phosphate (mg/L) | | | | |
| Temperature (°C) | | | | |
| Total suspended solid (mg/L) | | | | |
| Turbidity (NTU) | | | | |
| Salinity | | | | |
| Conductivity | | | | |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?) _____

Year Data Collected _____

Sampling Frequency (annual or monthly) _____

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--------------------------|----------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | | | | | | | |
| | | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|--------------------|--------------------|--------------|------------------------|---|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | | Scale of benefit | | |
|-----------------------|--|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | | | | |
| | Food | | | | |
| | Fuel | | | | |
| | Fibre | | | | |
| | Genetic resources | | | | |
| | Natural medicines or pharmaceuticals | | | | |
| | Ornamental resources | | | | |
| | Clay, mineral, aggregate harvesting | | | | |
| | Waste disposal | | | | |
| | Energy harvesting from natural air and water flows | | | | |
| | | | | | |
| Regulatory Services | Air quality regulation | | | | |
| | Local climate regulation | | | | |
| | Global climate regulation | | | | |
| | Water regulation | | | | |
| | Flood hazard regulation | | | | |
| | Storm hazard regulation | | | | |
| | Pest regulation | | | | |
| | Disease regulation - human | | | | |
| | Disease regulation - livestock | | | | |
| | Erosion regulation | | | | |
| | Water purification | | | | |
| | Pollination | | | | |
| | Salinity regulation | | | | |
| | | | | | |

| | | | Scale of benefit | | |
|---------------------|-------------------------------|------------------|------------------|----------|--------|
| | How important? | Describe benefit | Local | Regional | Global |
| | Fire regulation | | | | |
| | Noise and visual buffering | | | | |
| | | | | | |
| Cultural Services | Cultural heritage | | | | |
| | Recreation and tourism | | | | |
| | Aesthetic value | | | | |
| | Spiritual and religious value | | | | |
| | Inspiration value | | | | |
| | Social relations | | | | |
| | Educational and research | | | | |
| | | | | | |
| Supporting Services | Soil formation | | | | |
| | Primary production | | | | |
| | Nutrient cycling | | | | |
| | Water recycling | | | | |
| | Provision of habitat | | | | |
| Notes: | | | | | |

Remarks/Other Information (on the importance of the particular wetland): _____

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): _____

Land use in the river basin : _____ and/or

Land use in the coastal zone : _____

13. **Existing pressures/threats and trends** (concerning any of the features listed above, and/or concerning ecosystem integrity):

14. **Conservation and management status of the wetland** (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

15. **Existing Management plans and monitoring programs:** (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

16. **References** (Full citation)

17. **Compiler/Contact/Focal person** (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|------|-------------|--------|----------------|-------|
| | | | | |
| | | | | |
| | | | | |

Date Accomplished: _____

E. ASSESSMENT AND RECOMMENDATIONS

18. **Potential Threats:**

19. Management Prescriptions/Proposed Management Interventions:

20. Proposed Classification *(which portions are relevant or critical for management for)*

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.



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

April 27, 2022

HON. ANGELINA TRIA
Municipal Mayor
Mamburao, Occidental Mindoro

RECORDED

Date: 4-27-22
By: [Signature]

ATTN: MS. SHELLA S. CABRERA
MENR Officer

Dear Mayor Tria,

Greetings of Peace!

This DENR CENRO Sablayan has a target activity on the inventory of all inland wetlands within our area of jurisdiction wherein a final list of which will be submitted to the Biodiversity Management Bureau (BMB) for the finalization of the Atlas of all the Inland Wetland in the Philippines.

In this connection, this office provides the list of Inland wetlands that are already inventoried submitted last 2020 to the BMB;

| Barangay | Name of Inland Wetland |
|-----------|------------------------|
| Balansay | Lanas |
| Tangkalan | Kuhulan |

Should there be Inland Wetlands within this municipality that is/ are not included on the table above, kindly communicate with us thru writing so as to be included for the purpose.

Thank you very much. More power and God bless.

Very truly yours,


FOR ANASTACIO A. SANTOS, MPA
CENR Officer



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

April 27, 2022

HON. ANDRES D. DANGEROUS

Municipal Mayor
Sablayan, Occidental Mindoro

ATTN: **MR. ROBERT P. DUQUIL**
MENR Officer

RECORDED

Date: 4-27-22
By: [Signature]

Dear Mayor Dangerous,

Greetings of Peace!

This DENR CENRO Sablayan has a target activity on the inventory of all inland wetlands within our area of jurisdiction wherein a final list of which will be submitted to the Biodiversity Management Bureau (BMB) for the finalization of the Atlas of all the Inland Wetland in the Philippines.

In this connection, this office provides the list of Inland wetlands that are already inventoried submitted last 2020 to the BMB;

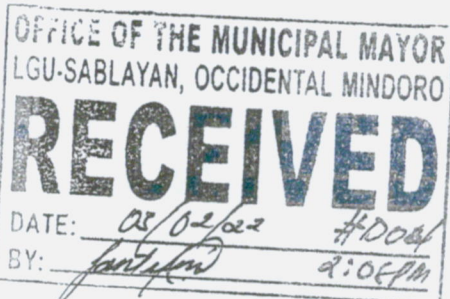
| Barangay | Name of Inland Wetland |
|---------------|--|
| Sta. Lucia | Halawhawan |
| | Sahing |
| Tuban | Tabtaban |
| Malisbong | Libuao |
| Batong-buhay | Marabong |
| San Agustin | Panikian |
| San Francisco | Within the titled property of Cesar Pascual |
| | Within the titled property of Cesar Pascual |
| | Within the titled property of Ruben Fabra |
| | Kabakungan |
| | Within the titled property of Cesar Pascuals brother |
| San Vicente | Malapaga |

Should there be Inland Wetlands within this municipality that is/ are not included on the table above, kindly communicate with us thru writing so as to be included for the purpose.

Thank you very much. More power and God bless.

Very truly yours,

FOR. ANASTACIO A. SANTOS, MPA
CENR Officer



National Road, Brgy. Sto. Niño, Sablayan, Occidental Mindoro
E-mail: cenrosablayan@denr.gov.ph



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

JUL 25 2022

MEMORANDUM

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

THRU : The ARD for Technical Services

FROM : The OIC, PENR Officer

SUBJECT : **SUBMISSION OF ACCOMPLISHMENT REPORTS FOR
CONSERVATION OF INLAND WETLANDS WITHIN THE
ADMINISTRATIVE JURISDICTION OF PENRO
OCCIDENTAL MINDORO**

Respectfully submitting is the accomplishment reports of Conservation of Inland Wetlands within the administrative jurisdiction of PENRO Occidental Mindoro. The said activity is a target per Work and Financial Plan FY 2022.

Attached are the reports with its annexes.

For your information and record.


ERNESTO E. TAÑADA



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

COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE

Brgy. Labangan, San Jose, Occidental Mindoro

Tel. Number (043) 457- 0236 / (043) 742-6627

Email: cenro-stajose@denr.gov.ph

JUN 20 2022

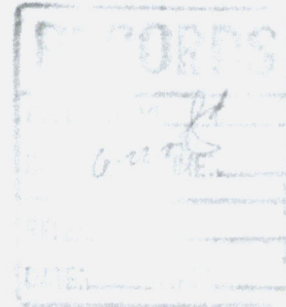
MEMORANDUM

FOR : The Regional Executive Director
DENR - MIMAROPA Region
Roxas Blvd., Ermita, Manila

THRU : The OIC, PENR Officer
Mamburao, Occidental Mindoro

FROM : The CENR Officer

SUBJECT : **SUBMISSION OF LIST OF INVENTORIED AND
MAPPED INLAND WETLANDS IN SAMARICA**



Respectfully submitted is the list of inventoried and mapped inland wetlands within the administrative jurisdiction of CENRO-San Jose.

Please be informed that this office has initially identified five (5) inland wetland areas in the Municipalities of San Jose, Magsaysay, Rizal and Calintaan (SAMARICA) for CY 2022, as follows:

| NAME OF WETLAND AREA/ LOCATION | TYPE OF WETLAND | OBSERVATION/ REMARKS |
|--|--------------------|--|
| I. Bukal Spring and Mangrove Area Brgy. Nicolas, Magsaysay, Occidental Mindoro Coordinates: UTM <u>51 P 275738 1389213</u> <i>W E N W</i> | River | Considered to be one of the tributaries to Tadlok River with mouth in Alibog Coast. It has a total land area of 21.49 hectares. Bukal Spring derived its name from the name of the community/ Sitio where the wetland is located, due to many springs present in the area. <i>Bukal</i> (or spring in English translation) spring is one of the eco-tourism spots in the Municipality of Magsaysay, providing income and revenue to adjacent community and BLGU of Nicolas. One of the springs in the area provides potable water to the |

150 09-05
2
06-24-22
11:23

| | |
|-------------------------|--------------------------------|
| CDS | |
| RECEIVED BY: <i>NO</i> | DATE: 6-27 TIME: <i>3-9</i> |
| RECEIVED BY: <i>TSO</i> | DATE: 6-24-22 TIME: <i>3-9</i> |

| | | |
|--|--|--|
| | | community of Sitio Bukal. It was within the CADT of HAGURA of Mangyan Tribe |
| 2. Minanga Cove Ambulong Island, San Jose, Occidental Mindoro Coordinates: UTM 51 P 283636 1349697 E D | Marine/Coastal | A marine subtidal aquatic bed with presence of seagrass beds and mangroves such as <i>Rhizophora</i> and <i>Avicenia spp.</i> It has a total land area of 61.89 hectares. The cove provides livelihood to the fisherfolks members of Sitio Minanga community. |
| 3. Niyayos River and Mangrove Area So. Niyayos I, Brgy. Poblacion, Calintaan, Occidental Mindoro Coordinates: UTM 51 P 275764 1389264 | Marine/Coastal | Intertidal forested wetlands with mangrove species such as <i>Nypa</i> and <i>Rhizophora spp.</i> are thriving in the area. The total land area is 1.30 hectares. The area is the source of seafoods such as crabs and shrimps in the locality. |
| 4. Marumbol Wetland Area So. Marumbol, Brgy. New Dagupan, Calintaan, Occidental Mindoro Coordinates: UTM 51 P 274850 1388234 | Marine/Coastal | An intertidal forested wetlands with mangrove species (<i>Rhizophora</i> , <i>Avicenia</i> and <i>Sonneratia spp.</i>) thriving in the area. It has a total land area of 5.62 hectares. Source of food for the adjacent community and serves as nursery for fishes and other marine life. |
| 5. Sto. Niño Wetland Area So. Candague, Brgy. Sto. Niño, Rizal, Occidental Mindoro Coordinates: UTM 51 P 287623 1380188 | Permanent Freshwater Marsh/ Pool | A freshwater marsh that serves as habitat and feeding area of wild ducks such as Philippine Ducks (<i>Anas luzonica</i>) and Wandering Whistling Ducks (<i>Dendrocygna arcuata</i>) and other waterbirds. It has an approximate land area of 4.15 hectares and within a titled property. |

Also attached are the prescribed Inland Wetland Assessment Forms in accordance to BMB Technical Bulletin No. 2018-06, location maps of the above listed inland wetlands and a map showing the inland wetlands identified in 2020 together with the areas mapped this year.

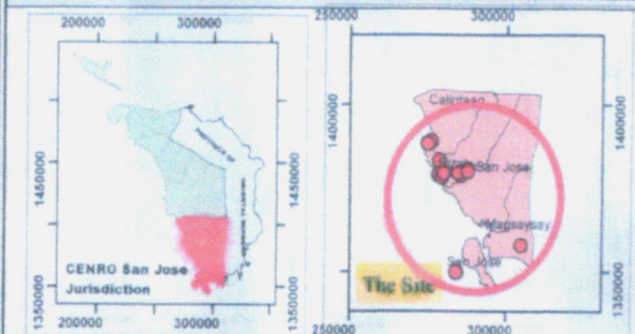
For your information and record.


EFREN L. DELOS REYES

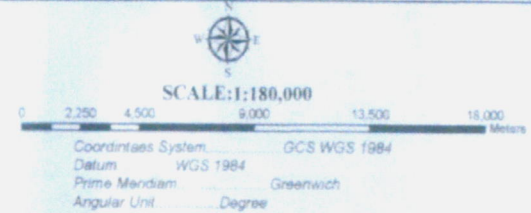
| WETLAND SITE NAME | WETLAND TYPE/S | WATERBODY CLASSIFI- CATION | LOCATION / ADMINIS- TRATIVE COVERAG | NEAREST LARGE CITY/ MUNICIPALITY | CENTROID (LATITUDE AND LONGITUDE) | REMARKS |
|---|---|---|--|--|---|--|
| | <i>Include component types of a wetland complex (e.g. lake, swamp, marsh, peatland, etc.)</i> | <i>EMB - Water Body Classification and Usage of Freshwater (Class AA, A, B, C, D)</i> | <i>Mention the Purok, Sitio or at Least the Barangay or Municipal level, if possible</i> | | <i>Provide the coordinates of the approximate center of the site and/or the limits of the site. Indicate the latitude/ longitude, in degrees and minutes; to be used for mapping</i> <i>For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel</i> | <i>Mention whether assessed, date assessed, whether with management plan; whether with management body; conservation measures e.g. within Protected Area, within Key Biodiversity Area, within Major River Basin, established local conservation area, critical habitat, Asian Waterfowl Census site, Ramsar site, EAAFP site etc.</i> |
| Province: Occidental Mindoro | | | | | | |
| 1. Bukal Spring and Mangrove Area | River | | Brgy. Nicolas | Magsaysay | 51 P 275738 1389213 | |
| 2. Minanga Cove | Marine/ Coastal | | Ambulong Island | San Jose | 51 P 283636 1349697 | |
| 3. Niyayos River and Mangrove Area | Marine/ Coastal | | Sitio Niyayos, Brgy. Poblacion | Calintaan | 51 P 275764 1389264 | |
| 4. Marumbol Wetland Area | Marine/ Coastal | | Sitio Marumbol, Brgy. New Dagupan | Calintaan | 51 P 274850 1388234 | |
| 5. Sto. Niño Wetland Area | Permanent Freshwater Marsh/ Pool | | Brgy. Sto. Niño | Rizal | 51 P 287623 1380188 | |



Republic of the Philippines
Department of Environment and Natural Resources
Region IV-MIMAROPA
Community Environment and Natural Resources Office
San Jose, Occidental Mindoro



LOCATION MAP OF IDENTIFIED AND MAPPED INLAND WETLANDS WITHIN JURISDICTION OF CENRO SAN JOSE, OCCIDENTAL MINDORO



LEGEND

- ▲ Calintaan (2022)
- ▲ Magsaysay (2022)
- ▲ Rizal (2020)
- ▲ Rizal (2022)
- ▲ San Jose (2022)
- Barangay Boundary

Prepared by:
[Signature]
LUCILLE CASTICIMO
Forest Ranger/GS Operator

Verified by:
[Signature]
JIMMY D. DEKUN
Forester II/Forest GS Operator

Reviewed by:
[Signature]
NICO M. VARGAS
DFO II, Deputy CENRO

Attested:
[Signature]
ORLINE SACUAN
SENIOR GS Operator

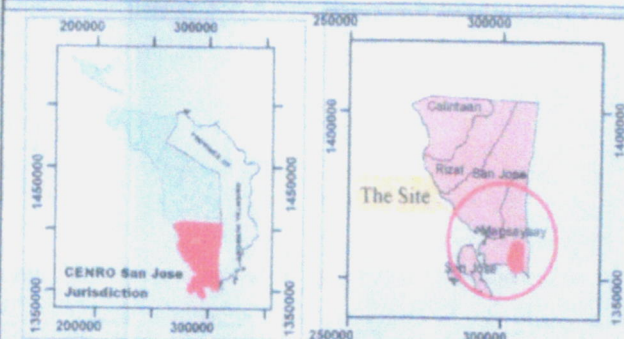
EFRENT L. DELA CRUZ
CENRO Officer

NOTE:

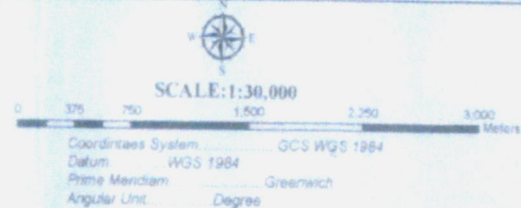
1. All information in this Map is strictly for Planning Use Only. No inference on Claims shall be made as to the extent of Political Boundary or Jurisdictional Boundaries.



Republic of the Philippines
Region IV-MIMAROPA
Community Environment and Natural Resource Office
San Jose, Occidental Mindoro



LOCATION MAP OF INLAND WETLANDS IN SO. TADLOK BARANGAY ALIBOG, MAGSAYSAY, OCCIDENTAL MINDORO



APPROXIMATE AREA: 21.49 ha.

- LEGEND
- Geo-tagged Photos
 - Bukal Spring/Tadlok River
 - Existing NGP Sites
 - Municipal Boundary

Prepared by
LUCILLE B. CASTICIMO
Senior Ranger/CEN Operator

Verified by
JIMMY B. BACALAN
Commander of CENRO San Jose

Reviewed by
NILO P. VADOR
Chief of CENRO San Jose

Allocated by
ORLINO B. BACALAN
Chief of CENRO San Jose

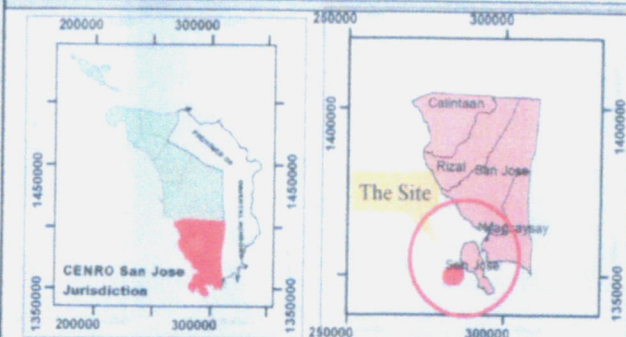
EFREN D. DELOS REYES
CENRO San Jose

NOTE

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Republic of the Philippines
Department of Environment and Natural Resources
Region IV-MIMAROPA
Community Environment and Natural Resources Office
San Jose, Occidental Mindoro



Location Map

LOCATION MAP OF INLAND WETLANDS IN BARANGAY AMBULONG ISLAND, SAN JOSE, OCCIDENTAL MINDORO



SCALE: 1:8,000



Coordinates System: GCS WGS 1984
Datum: WGS 1984
Prime Meridian: Greenwich
Angular Unit: Degree

APPROXIMATE AREA: 61.89 ha.

LEGEND

- Minanga Cove
- Existing NGP Sites 2011-2021
- Municipal Boundary

Prepared by:
[Signature]
LUCILLE B. CASTICIMO
Forest Planning Officer

Verified by:
[Signature]
JIMMY D. BAYAN
Former LUCO, DENR

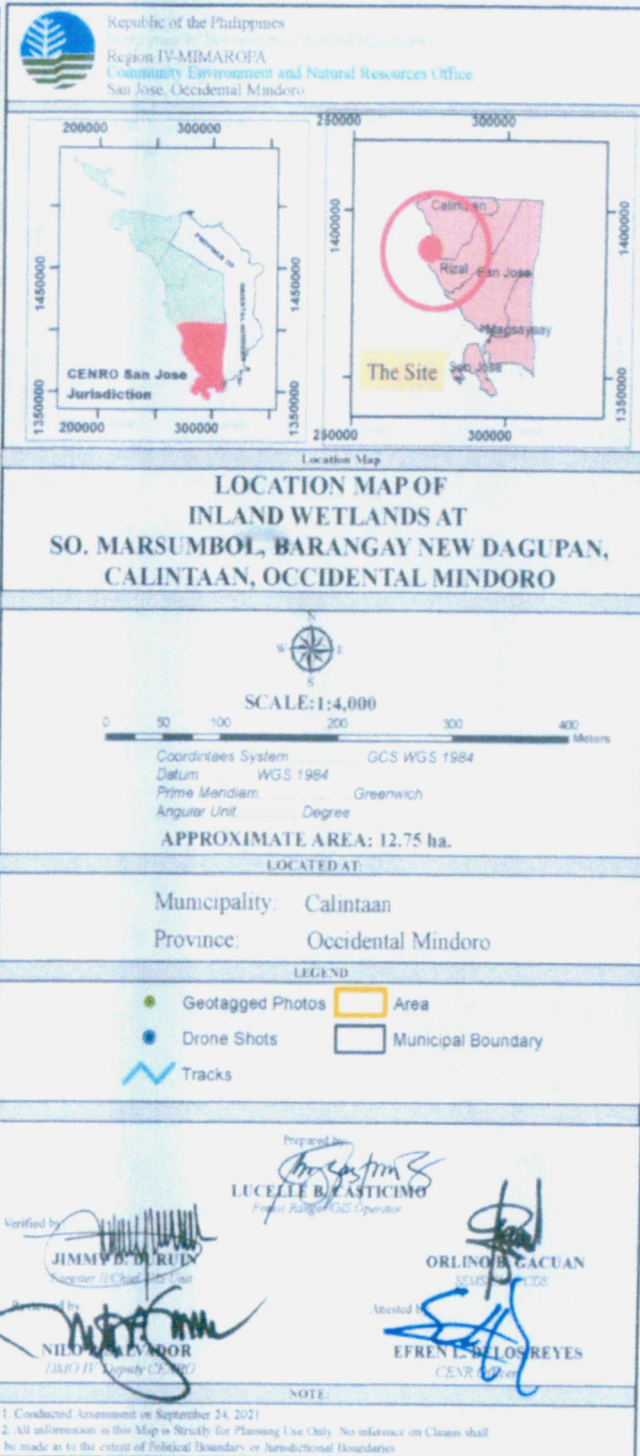
Reviewed by:
[Signature]
NILIO P. CALADOR
DARO IV Deputy CENRO

Attested by:
[Signature]
ORLING B. CACUAN
DENR

Attested by:
[Signature]
EFREN L. DE LOS REYES
CENRO Officer

NOTE:


1. All information in this Map is Strictly for Planning Use Only. No inference on Claims shall be made as to the extent of Political Boundary or Jurisdictional Boundaries.



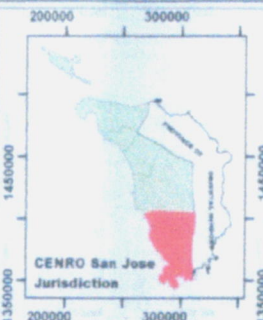


Source: Bing, Google, GeoEye, Earthstar, etc. imagery, processed by: GIS/ENR/DO, 11/11/2020, Aerial/DO, 10/11/2020, and the 4th Line Company

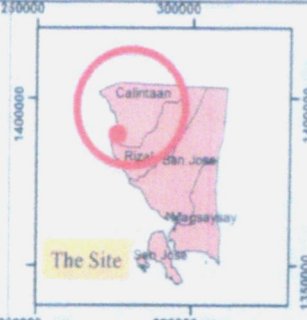




Republic of the Philippines
Department of Environment and Natural Resources
Region IV-MIMAROPA
Community Environment and Natural Resources Office
San Jose, Occidental Mindoro




CENRO San Jose
Jurisdiction



Calintaan
Rizal dan Jose
Magsaysay
San Jose
The Site

Location Map

LOCATION MAP OF INLAND WETLANDS IN BARANGAY POBLACION, CALINTAAN, OCCIDENTAL MINDORO



SCALE: 1:3,000

0 35 70 140 210 280 Meters


Coordinates System: GCS WGS 1984
Datum: WGS 1984
Prime Meridian: Greenwich
Angular Unit: Degree

APPROXIMATE AREA: 6.24 ha.


LEGEND

- Geotagged Photos
- Drone Shots
- Area
- Municipal Boundary


Prepared by:



LUCILLE B. CASTICIMA
Forest Ranger/CENRO Operator

Verified by:



JIMMY O. DIZON
Forester I/CENRO, CENRO

Attested by:


NILO P. SALVADOR
DAO II, Deputy CENRO

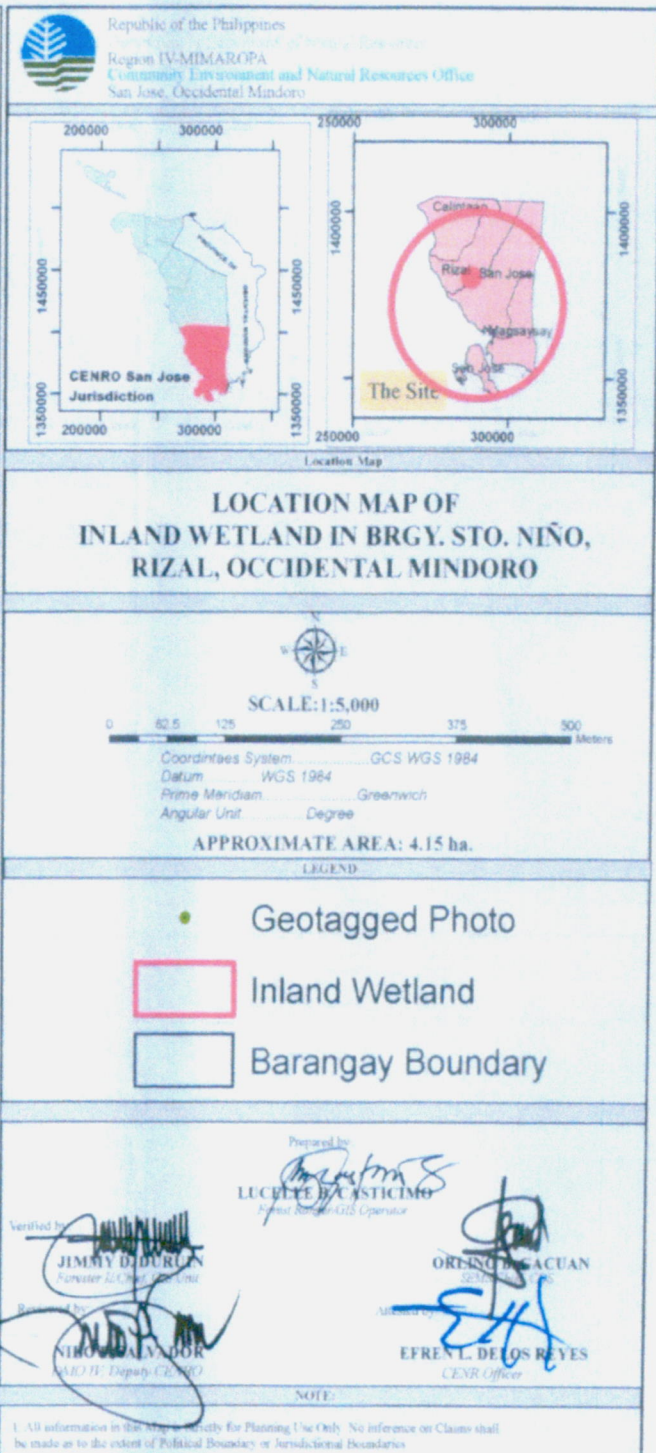
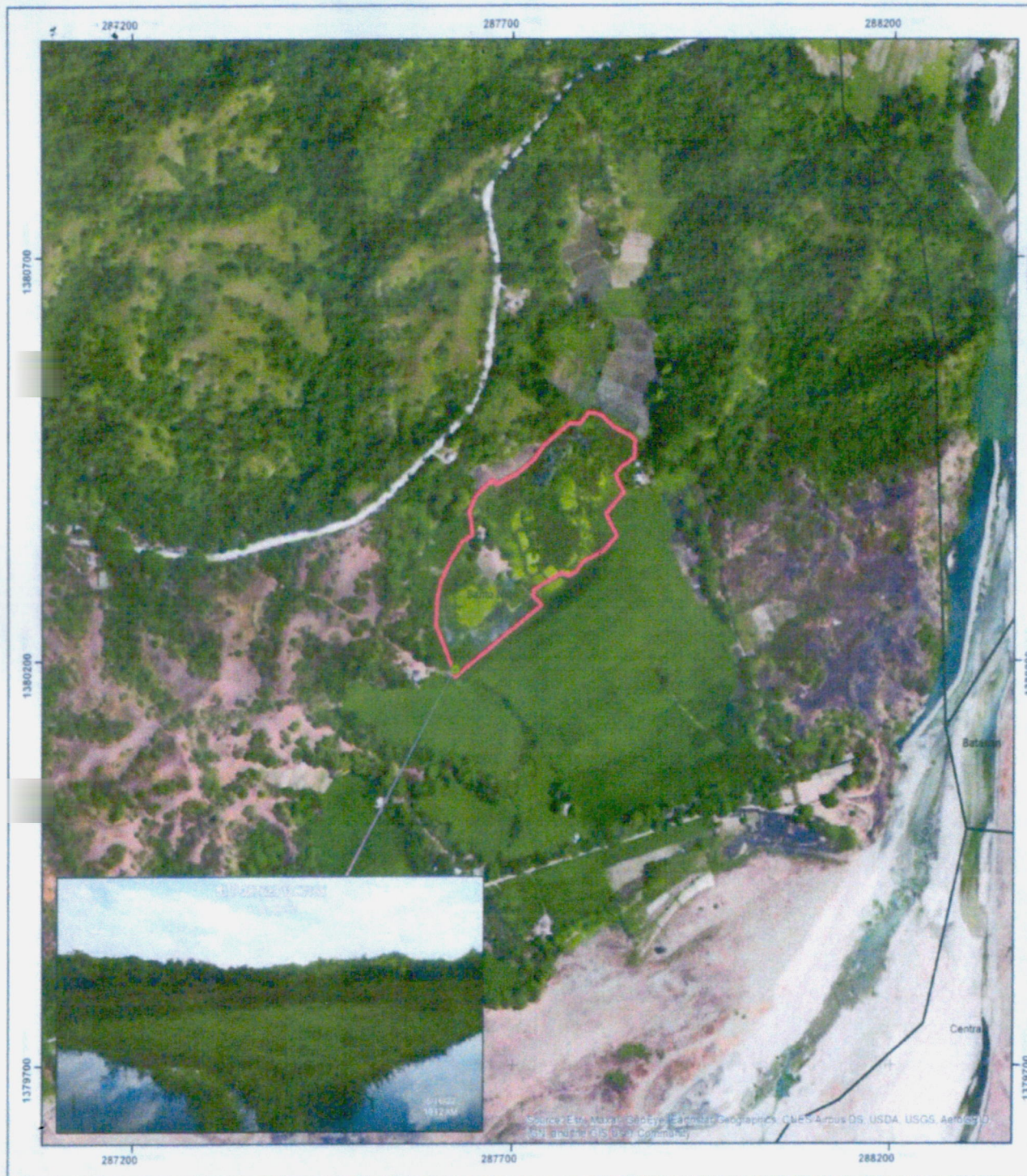

ORFINO L. ARCUAN
DAO II, CENRO

Attested by:


EFREN L. DE LOS REYES
CENRO Officer

NOTE:

- Conducted Assessment on September 24, 2021
- All information in this Map is strictly for Planning Use Only. No inference on Claims shall be made as to the extent of Political Boundary or Jurisdictional Boundaries



ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): **BUKAL SPRING AND MANGROVE AREA**

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

Bukal Spring

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).



2. **Wetland type** (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. **Area, boundary and dimensions:**

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Elongated

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|---------------|--------------|---------------|-------------------------------|
| Brgy. Nicolas | Brgy. Alibog | Brgy. Calawag | Garza Island, Brgy. Alibog |

Area (total size in hectares, seasonal max/min, where relevant)

Total Area - 47.7 hectares

| | Dry Season | | Wet Season | |
|--|------------|----------------------|------------|-------|
| | Min | Max | Min | Max |
| Including watershed : | _____ | _____ | _____ | _____ |
| Area of water/wet area : (river/creek not included) | _____ | <u>47.7 hectares</u> | _____ | _____ |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):
Length – 9.65 kms. (Spring to Tadlok River Mouth)

| | Dry Season | | Wet Season | |
|----------|------------|-------|------------|-------|
| | Min | Max | Min | Max |
| Length : | _____ | _____ | _____ | _____ |
| Width : | _____ | _____ | _____ | _____ |
| Depth : | _____ | _____ | _____ | _____ |

Elevation (in meters above sea level) : 12 masl

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------------|----------|--------------|--------------------|
| Sitio Bukal | Nicolas | Magsaysay | Occidental Mindoro |
| | Calawag | Magsaysay | Occidental Mindoro |
| | Laste | Magsaysay | Occidental Mindoro |
| | Alibog | Magsaysay | Occidental Mindoro |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|----------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Magsaysay | Nicolas | | | 3,384 | Fishing | |
| | | | | | Farming | |
| | | | | | | |
| | | | | | | |
| Total Population | | | | 3,384 | | |

Source and Date of Information : _____

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):
Tadlok River

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc.):

Approximately 9.6 kms for the spring to Tadlok River Mouth

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|----------------------|----------------|
| Centroid | : 51 P 275738 | 1389213 |
| *Upstream | : 12°17'23.84"N | 121°12'26.28"E |
| *Midstream | : 12°15'58.28"N | 121°12'8.30"E |
| *Downstream | : 12°14'23.63"N | 121°12'29.35"E |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

Map Coordinates: 51 P 275738 1389213

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): I

Climatic Type Description:

Two pronounced seasons, dry from November to April, and wet during the rest of the year. The maximum rain period is from June to September

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |
|--------------------------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|-------------|-----------------|
| Ave. precipitation mm (inches) | 30 (1.2) | 26 (1.0) | 39 (1.5) | 58 (2.3) | 192 (7.6) | 283 (11.1) | 341 (13.4) | 323 (12.7) | 317 (12.5) | 231 (9.1) | 119 (4.7) | 56 (2.2) | 2,015 (79.3) |
| Ave. rainy days | 10.3 | 8.3 | 12.4 | 16.3 | 23.5 | 27.1 | 13.4 | 27.3 | 27.6 | 26.3 | 19.2 | 13.6 | 240.3 |
| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Minimum (°C) | 21 (70) | 21 (70) | 22 (72) | 24 (75) | 25 (77) | 25 (77) | 25 (77) | 25 (77) | 25 (77) | 24 (75) | 23 (73) | 22 (72) |
| Maximum (°C) | 30 (86) | 31 (88) | 32 (90) | 32 (90) | 31 (88) | 30 (86) | 29 (84) | 29 (84) | 29 (84) | 29 (84) | 30 (86) | 30 (86) |
| Average (°C) | | | | | | | | | | | | |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity): 7 – 16 kph

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

The wetland developed through deposition of river deposits sediment on adjacent lands during floods.

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):

ALFISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : Clayey

Wetland/aquatic area : Muddy

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : _____

Wetland/aquatic area : _____

6. Water regime:

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Bukal Spring , So. Bukal, Brgy. Nicolas, Magsaysay, Occidental Mindoro

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Pandurucan Bay, So. Tadlok, Brgy. Alibog, Magsaysay, Occidental Mindoro

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):
N/A

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): _____

Flooding susceptibility (rain-induced flooding susceptibility based on MGB): 9.226%

Flooding frequency (how often does flooding occur within a year?): _____

Flooding seasonality (in what month/s does flooding usually occur?): _____

Flooding duration (for how long does floodwater usually stay within each season?): _____

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?): _____

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | | | | |
| Chlorine (mg/L) | | | | |
| Color (TCU) | | | | |
| Dissolved Oxygen (mg/L) | | | | |
| Fecal coliform (MPN/100mL) | | | | |
| Nitrate as NO ₃ -N (mg/L) | | | | |
| pH (range) | | | | |
| Phosphate (mg/L) | | | | |
| Temperature (°C) | | | | |
| Total suspended solid (mg/L) | | | | |
| Turbidity (NTU) | | | | |
| Salinity | | | | |
| Conductivity | | | | |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?) :

Year Data Collected :

Sampling Frequency (annual or monthly) :

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|----------------------------------|----------------|---|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Mangrove (Bakawang Lalaki, | Rhizophora | <i>mucronata</i> and <i>apiculata</i> | Abundant | Threatened | Shorelines | |
| | Nipa | Nypa | <i>fruticans</i> | Abundant | Threatened | Shorelines | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribu- tion | Conser- vation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|---------------------|--------------------|-------------------|-----------------------------|---|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | Black-naped Oriole | | <i>O. chinensis</i> | | Abundant | LC | | |
| Mammals | Monkey | | | | Abundant | LC | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | Crabs, Shrimp | | | | Abundant | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. Ecosystem services: (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | How important? | Describe benefit | Scale of benefit | | |
|-----------------------|--|----------------|---------------------------------------|------------------|----------|--------|
| | | | | Local | Regional | Global |
| Provisioning Services | Fresh water | ++ | Potable water | / | | |
| | Food | + | seafoods | / | | |
| | Fuel | 0 | | | | |
| | Fibre | 0 | | | | |
| | Genetic resources | + | Nursery area for fishes | | | |
| | Natural medicines or pharmaceuticals | ? | | | | |
| | Ornamental resources | ? | | | | |
| | Clay, mineral, aggregate harvesting | ? | | | | |
| | Waste disposal | - | | / | / | |
| | Energy harvesting from natural air and water flows | ? | | | | |
| Regulatory Services | Air quality regulation | ? | | | | |
| | Local climate regulation | ++ | | / | / | / |
| | Global climate regulation | + | | | | |
| | Water regulation | + | The wetland regulates water discharge | | | |
| | Flood hazard regulation | ++ | Regulate and store flood water | | | |
| | Storm hazard regulation | + | Regulate storm surge | | | |
| | Pest regulation | ? | | | | |
| | Disease regulation - human | ? | | | | |
| | Disease regulation - livestock | ? | | | | |
| | Erosion regulation | + | Presence of dense vegetation | | | |
| | Water purification | + | | | | |
| | Pollination | + | | | | |
| | Salinity regulation | + | | | | |
| | Fire regulation | + | | | | |
| | Noise and visual buffering | + | | | | |

| | | How important? | Describe benefit | Scale of benefit | | |
|---------------------|-------------------------------|----------------|-----------------------------------|------------------|----------|--------|
| | | | | Local | Regional | Global |
| Cultural Services | Cultural heritage | 0 | | / | | |
| | Recreation and tourism | ++ | | / | / | |
| | Aesthetic value | + | | / | / | |
| | Spiritual and religious value | ? | | | | |
| | Inspiration value | ? | | | | |
| | Social relations | + | Development of agricultural areas | / | / | |
| | Educational and research | + | | / | | |
| | | | | | | |
| Supporting Services | Soil formation | + | | / | | |
| | Primary production | + | | / | / | / |
| | Nutrient cycling | + | | / | / | / |
| | Water recycling | ++ | | / | / | / |
| | Provision of habitat | ++ | | / | / | / |
| | | | | | | |
| Notes: | | | | | | |

Remarks/Other Information (on the importance of the particular wetland): _____

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): The local land use consists of community settlements (IP and non-IP), with existing fishponds and agricultural areas.

Land use in the river basin : Settlements and port for boats bound to Brgy. Alibog, Magsaysay, Occidental Mindoro

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

1. Poor visitor solid waste management by the visitors and by the members of the community that may produce pollution to the wetland and ocean;
2. The wetland and community is in the Southern Mindoro fault line, making the area vulnerable to landslide;
3. Continuous conversion of wetland into fishponds and salt farm that degrades the mangroves and quality of water and environment.

14. Conservation and management status of the wetland (*List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions*):

NONE

15. Existing Management plans and monitoring programs: (*Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone*)

NONE

16. References (Full citation)

- https://en.wikipedia.org/wiki/Magsaysay,_Occidental_Mindoro

17. Compiler/Contact/Focal person (including contact information: office address, telephone number, fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|---------------------------|-----------------|------------------|----------------|---------------------------|
| MA. TERESITA P. DAVID JR. | ECOMS II | CENRO- SAN JOSE | 0917-855-6396 | cenrosanjose@gmail.com |
| HEROLD S. CASTRO | FOREST TECH. II | CENRO – SAN JOSE | 0906-721-3751 | herold.s.castro@gmail.com |

Date Accomplished: **March 11, 2022**

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

1. Conversion and expansion of fishponds and other agricultural activities adjacent to the wetlands;
2. Solid waste of adjacent communities being dragged to the wetland and eventually into the ocean;
3. Forest Land utilization such as kaingin and clearing that may cause erosion and siltation to the wetland.

19. Management Prescriptions/Proposed Management Interventions:

1. The wetland be included in the Municipal Ecotourism Management Plan to fully conserve and maximize its opportunity as eco-tourism site;
2. To declare the wetland as Locally-Managed Marine Protected Area to be fully protected, conserved and managed area for environment and natural resources without compromising the livelihood of the residents.

20. Proposed Classification (*which portions are relevant or critical for management for*)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): MINANGA COVE

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

None

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).



2. **Wetland type** (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. **Area, boundary and dimensions:**

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Oval

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|--------------|-------------|-----------|-----------------------------------|
| Mangarin Bay | Ilin Island | Shoreline | Semirara Island, South of Palawan |

Area (total size in hectares, seasonal max/ min, where relevant)

61.89 Hectares

| | Dry Season | | Wet Season | |
|---|------------|-------|------------|-------|
| | Min | Max | Min | Max |
| Including watershed : | _____ | _____ | _____ | _____ |
| Area of water/wet area : <u>61.89 Hectares</u> (river/creek not included) | _____ | _____ | _____ | _____ |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-------|------------|-------|
| | Min | Max | Min | Max |
| Length : | _____ | _____ | _____ | _____ |
| Width : | _____ | _____ | _____ | _____ |
| Depth : | _____ | _____ | _____ | _____ |

Elevation (in meters above sea level) : **8 masl**

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|-------------|-----------------|--------------|--------------------|
| So. Minanga | Ambulong Island | San Jose | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|------------------|-----------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| 153,267 | Ambulong- 2,224 | | | 2,224 | Farming/ Fishing | Near Shoreline and mouth to |
| | | | | | | |
| Total Population | | | | | | |

Source and Date of Information : **PSA 2020**

River Basin/Watershed Name (name of river basin/watershed where the wetland is located): **N/A**

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|---------------|--------------------|----------------|
| Centroid : | 51 P 283636 | 1349697 |
| *Upstream : | _____ | _____ |
| *Midstream : | _____ | _____ |
| *Downstream : | _____ | _____ |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): **I**

Climatic Type Description:

Two pronounced seasons, dry from November to April, and wet during the rest of the year. The maximum rain period is from June to September

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |
|--------------------------------|---------------|----------------|----------------|----------------|-----------------|------------------|------------------|------------------|------------------|-----------------|-----------------|----------------|--------------------|
| Ave. precipitation mm (inches) | 8.4 (0.33) | 11.7 (0.46) | 11.1 (0.44) | 26.8 (1.06) | 170.5 (6.71) | 377.7 (14.87) | 457.5 (18.01) | 475.6 (18.72) | 406.7 (16.01) | 252.0 (9.92) | 106.5 (4.19) | 55.9 (2.20) | 2,360.2 (92.92) |
| Ave. rainy days | 3 | 2 | 2 | 3 | 10 | 17 | 21 | 22 | 20 | 16 | 9 | 5 | 130 |
| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| Minimum (°C) | 22.7 (72.9) | 22.7 (72.9) | 23.8 (74.8) | 24.5 (76.1) | 24.8 (76.6) | 24.3 (75.7) | 24.0 (75.2) | 24.0 (75.2) | 23.9 (75.0) | 23.9 (75.0) | 23.7 (74.7) | 23.4 (74.1) |
| Maximum (°C) | 35.5 (95.9) | 36.2 (97.2) | 37.6 (99.7) | 38.5 (101.3) | 38.5 (101.3) | 38.0 (100.4) | 37.4 (99.3) | 35.0 (95.0) | 35.4 (95.7) | 36.0 (96.8) | 38.0 (100.4) | 36.0 (96.8) |
| Average (°C) | 32.3 (90.1) | 32.6 (90.7) | 33.9 (93.0) | 34.6 (94.3) | 33.8 (92.8) | 32.1 (89.8) | 30.8 (87.4) | 30.7 (87.3) | 30.7 (87.3) | 31.5 (88.7) | 32.3 (90.1) | 32.2 (90.0) |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity): **5 – 12 kph**

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (*How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.*):

The wetland develop due to forces of nature with affect of rising sea levels and human activities by the adjacent community that alters drainage patterns.

Type/order of soils (*Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3*):

ALFISOL

Type of substrates (*sandy, muddy, clayey, gravel etc.*):

Terrestrial/riparian area : Sandy

Wetland/aquatic area : Sandy and muddy

Soil biology (*presence of small organisms, organic debris, organic matter etc.*):

Terrestrial/riparian area : _____

Wetland/aquatic area : _____

6. Water regime: Marine subtidal

Water source (*check the source and write the name and/or location of inflow and outflow*): N/A

☐ Surface source

☐ Ground water source

Inflow/s (*Name and/or location of wetland/s which flows into the site; show in map, if possible*):

N/A

Outflow/s (*Name and/or location of wetland/s which flows out of the site; show in map, if possible*):

Minanga Cove mouth

Ground water classification (*for ground water source, indicate the NWRB Groundwater Classification, Appendix 4*):

7. Flooding:

Flooding vulnerability (*flooding vulnerability based on ERDB assessment*): Low

Flooding susceptibility (*rain-induced flooding susceptibility based on MGB*): N/A

Flooding frequency (*how often does flooding occur within a year?*): N/A

Flooding seasonality (*in what month/s does flooding usually occur?*): N/A

Flooding duration (*for how long does floodwater usually stay within each season?*): N/A

Magnitude of flow and/or tidal regime (*what is the maximum water level of the flood and how fast does it flows out?*):

N/A

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | | | | |
| Chlorine (mg/L) | | | | |
| Color (TCU) | | | | |
| Dissolved Oxygen (mg/L) | | | | |
| Fecal coliform (MPN/100mL) | | | | |
| Nitrate as NO ₃ -N (mg/L) | | | | |
| pH (range) | | | | |
| Phosphate (mg/L) | | | | |
| Temperature (°C) | | | | |
| Total suspended solid (mg/L) | | | | |
| Turbidity (NTU) | | | | |
| Salinity | | | | |
| Conductivity | | | | |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?) :

Year Data Collected :

Sampling Frequency (annual or monthly) :

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Wetland areas were dominated by mangrove (Rhizophora) species and seagrass beds.

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|--|----------------|--|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Mangrove (Bakawang Lalaki, Babae) | Rhizophora | <i>Mucronata and Apiculata</i> | Abundant | Threatened | Shorelines | |
| | Pagatpat | Sonneratia | <i>Alba</i> | Abundant | Threatened | Shorelines | |
| | Api-api | Avicennia | <i>Alba</i> | Abundant | Threatened | Shorelines | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | Seagrass species | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|--------------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | | | | | | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

Key
 ++ Potential significant positive benefit
 + Potential positive benefit
 0 Negligible benefit
 - Potential negative benefit
 -- Potential significant negative benefit
 ? Gaps in evidence

| | | | Scale of benefit | | | |
|-----------------------|--|------------------|---|----------|--------|---|
| | How important? | Describe benefit | Local | Regional | Global | |
| Provisioning Services | Fresh water | ? | No source of fresh water | / | | |
| | Food | ++ | Source of seafoods | / | / | / |
| | Fuel | 0 | | | | |
| | Fibre | 0 | | | | |
| | Genetic resources | + | Mangroves/ seaweeds | / | / | / |
| | Natural medicines or pharmaceuticals | ? | | / | | |
| | Ornamental resources | ?/ 0 | | | | |
| | Clay, mineral, aggregate harvesting | ? / 0 | | / | | |
| | Waste disposal | 0 | | / | / | / |
| | Energy harvesting from natural air and water flows | ? | | / | | |
| | | | Scale of benefit | | | |
| | How important? | Describe benefit | Local | Regional | Global | |
| Regulatory Services | Air quality regulation | ? | | | | |
| | Local climate regulation | + | / | / | / | |
| | Global climate regulation | + | Carbon Sequestration | / | / | / |
| | Water regulation | + | Regulate discharges | / | / | / |
| | Flood hazard regulation | + | Regulate and store flood water | / | / | / |
| | Storm hazard regulation | ++ | Absorbs energy from extreme events | / | / | / |
| | Pest regulation | 0 | | | | |
| | Disease regulation - human | ? | | | | |
| | Disease regulation - livestock | 0 | | | | |
| | Erosion regulation | + | Mangroves and plants protect from erosion | / | / | / |
| | Water purification | + | | | | |

| | | | | | | | |
|---------------------|-------------------------------|----------------|------------------------------------|------------------|----------|--------|--|
| | Pollination | + | | / | / | / | |
| | Salinity regulation | 0 | | | | | |
| | Fire regulation | + | Water restricts the spread of fire | / | / | / | |
| | Noise and visual buffering | 0 | | | | | |
| | | | | Scale of benefit | | | |
| Services | | How important? | Describe benefit | Local | Regional | Global | |
| | Cultural heritage | ? | | | | | |
| | Recreation and tourism | + | | | | | |
| | Aesthetic value | + | | | | | |
| | Spiritual and religious value | ? | | | | | |
| | Inspiration value | ? | | | | | |
| | Social relations | + | | | | | |
| | Educational and research | ? | | | | | |
| | | | | | | | |
| | | | | | | | |
| Supporting Services | Soil formation | + | | | | | |
| | Primary production | ++ | | | | | |
| | Nutrient cycling | + | | | | | |
| | Water recycling | ++ | | | | | |
| | Provision of habitat | ++ | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Notes: | | | | | | | |

Remarks/Other Information (on the importance of the particular wetland):

Serve as breeding and nursery ground for the species of fishes and other marine wildlife.

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): The area is being used as settlements of Sitios Minanga and Bugtong Buri and as fishpond areas as well.

Land use in the river basin : N/A and/or

Land use in the coastal zone : _____

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

Expansion and conversion of the wetland into agricultural areas such as fishponds

14. **Conservation and management status of the wetland** (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

NONE

15. **Existing Management plans and monitoring programs:** (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

NONE

16. **References** (Full citation)

- https://en.wikipedia.org/wiki/San_Jose,_Occidental_Mindoro

- Comprehensive Land and Water Use Plan (CLWUP) Of The Municipality Of San Jose, Occidental Mindoro

17. **Compiler/Contact/Focal person** (including contact information: office address, telephone number; fax, email address, etc.)

| Name | Designation | Office | Contact Number | Email |
|---------------------------|-----------------|------------------|----------------|---------------------------|
| MA. TERESITA P. DAVID JR. | ECOMS II | CENRO- SAN JOSE | 0917-855-6396 | cenrosanjose@denr.gov.ph |
| HEROLD S. CASTRO | FOREST TECH. II | CENRO – SAN JOSE | 0906-721-3751 | herold.s.castro@gmail.com |
| | | | | |

Date Accomplished: **March 17, 2022**

E. ASSESSMENT AND RECOMMENDATIONS

18. **Potential Threats:**

1. Conversion and expansion of fishponds and other agricultural activities adjacent to the wetlands;
2. Solid waste of adjacent communities being dragged to the wetland and eventually into the ocean;
3. Forestland and utilization such as kaingin and clearing that may cause erosion and siltation to the wetland.

19. **Management Prescriptions/Proposed Management Interventions:**

1. The wetlands be included in the Municipal Ecotourism Management Plan to fully conserve and maximize its opportunity as eco-tourism site;
2. To declare the wetland and islands of Ilin and Ambulong as Protected Landscape and Seascape or Locally-Managed Protected Area to be fully protected, conserved and managed without compromising the livelihood of the residents/communities concerned.

20. **Proposed Classification** (which portions are relevant or critical for management for)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997.

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): **NIYAYOS RIVER AND MANGROVE AREA**

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

NONE

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).



2. Wetland type (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. Area, boundary and dimensions:

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Elongated

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|-------|------|------|-------|
| | | | |

Area (total size in hectares, seasonal max/ min, where relevant)

6.24 Hectares

| | Dry Season | | Wet Season | |
|--|------------|----------------------|------------|-----|
| | Min | Max | Min | Max |
| Including watershed : | | 6.24 Hectares | | |
| Area of water/wet area : (river/creek not included) | | | | |

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

| | Dry Season | | Wet Season | |
|----------|------------|-----|------------|-----|
| | Min | Max | Min | Max |
| Length : | | | | |
| Width : | | | | |
| Depth : | | | | |

Elevation (in meters above sea level) : 8 masl

Administrative location/coverage:

| | | | |
|---------|-----------|--------------|--------------------|
| Sitio | Barangay | Municipality | Province/Island |
| Niyayos | Poblacion | Calintaan | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|--------------|-----------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Calintaan | Poblacion | | | 6,589 | Fishing | |
| | | | | | Farming | |
| | | | | | | |
| | | | | | | |
| Total | | | | 6,589 | | |

Source and Date of Information : MPDO , 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Niyayos River Basin

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|-----------------|------------------|
| Centroid | : 12°12'13.17"N | : 121° 0'43.16"E |
| *Upstream | : _____ | : _____ |
| *Midstream | : _____ | : _____ |
| *Downstream | : _____ | : _____ |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): I

Climatic Type Description:

Two pronounced seasons, dry from November to April, and wet during the rest of the year. The maximum rain period is from June to September

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |
|-----------------------------------|---------------|----------------|----------------|----------------|-----------------|------------------|------------------|------------------|------------------|-----------------|-----------------|----------------|--------------------|
| Ave. precipitation mm (inches) | 8.4 (0.33) | 11.7 (0.46) | 11.1 (0.44) | 26.8 (1.06) | 170.5 (6.71) | 377.7 (14.87) | 457.5 (18.01) | 475.6 (18.72) | 406.7 (16.01) | 252.0 (9.92) | 106.5 (4.19) | 55.9 (2.20) | 2,360.2 (92.92) |
| Ave. rainy days | 3 | 2 | 2 | 3 | 10 | 17 | 21 | 22 | 20 | 16 | 9 | 5 | 130 |
| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| Minimum (°C) | 22.7 (72.9) | 22.7 (72.9) | 23.8 (74.8) | 24.5 (76.1) | 24.8 (76.6) | 24.3 (75.7) | 24.0 (75.2) | 24.0 (75.2) | 23.9 (75.0) | 23.9 (75.0) | 23.7 (74.7) | 23.4 (74.1) |
| Maximum (°C) | 35.5 (95.9) | 36.2 (97.2) | 37.6 (99.7) | 38.5 (101.3) | 38.5 (101.3) | 38.0 (100.4) | 37.4 (99.3) | 35.0 (95.0) | 35.4 (95.7) | 36.0 (96.8) | 38.0 (100.4) | 36.0 (96.8) |
| Average (°C) | 32.3 (90.1) | 32.6 (90.7) | 33.9 (93.0) | 34.6 (94.3) | 33.8 (92.8) | 32.1 (89.8) | 30.8 (87.4) | 30.7 (87.3) | 30.7 (87.3) | 31.5 (88.7) | 32.3 (90.1) | 32.2 (90.0) |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity): 5 – 12 kph

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):
ALFISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : Sandy
Wetland/aquatic area : Sandy and muddy

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area :
Wetland/aquatic area :

6. Water regime: Marine subtidal

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment):

Flooding susceptibility (rain-induced flooding susceptibility based on MGB): 1.5895% – 2.4183%

Flooding frequency (how often does flooding occur within a year?):

Flooding seasonality (in what month/s does flooding usually occur?):

Flooding duration (for how long does floodwater usually stay within each season?):

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | | | | |
| Chlorine (mg/L) | | | | |
| Color (TCU) | | | | |
| Dissolved Oxygen (mg/L) | | | | |
| Fecal coliform (MPN/100mL) | | | | |
| Nitrate as NO ₃ -N (mg/L) | | | | |
| pH (range) | | | | |
| Phosphate (mg/L) | | | | |
| Temperature (°C) | | | | |
| Total suspended solid (mg/L) | | | | |
| Turbidity (NTU) | | | | |
| Salinity | | | | |
| Conductivity | | | | |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?) :

Year Data Collected :

Sampling Frequency (annual or monthly) :

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Mostly are mangrove species on wetland parts and seagrass beds

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|---|----------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Mangrove (Bakawang Lalaki, Babae and Bato) | Rhizophora | | | | | |
| | | | | | | | |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | Seagrass species | | | | | | |
| | | | | | | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|--------------------|--------------------|--------------|------------------------|---|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | Zebra Dove | Geopelia | <i>G. striata</i> | Abundant | Abundant | Vulnerable | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | | | | Abundant | Abundant | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | Abundant | Abundant | | | |
| Invertebrates | | | | Abundant | Abundant | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. **Ecosystem services:** (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | How important? | Describe benefit | Scale of benefit | | |
|-----------------------|--|----------------|--|------------------|----------|--------|
| | | | | Local | Regional | Global |
| Provisioning Services | Fresh water | 0 | | / | | |
| | Food | + | Fish | / | / | |
| | Fuel | 0 | Timber | / | | |
| | Fibre | 0 | Fuelwood | / | | |
| | Genetic resources | ? | | | | |
| | Natural medicines or pharmaceuticals | + | Medicinal Herbs | / | | |
| | Ornamental resources | ? | | | | |
| | Clay, mineral, aggregate harvesting | ? | | | | |
| | Waste disposal | - | Niyayos community | / | / | |
| | Energy harvesting from natural air and water flows | ? | | | | |
| | | How important? | Describe benefit | Scale of benefit | | |
| | | | | Local | Regional | Global |
| Regulatory Services | Air quality regulation | 0 | | | | |
| | Local climate regulation | + | Presence of vegetation | / | / | |
| | Global climate regulation | + | Carbon sequestration | / | / | |
| | Water regulation | + | Regulate water discharge | / | / | |
| | Flood hazard regulation | + | Regulate. Store and retain flood water | / | / | |
| | Storm hazard regulation | 0 | | | | |
| | Pest regulation | + | Natural predation of pest | / | / | |
| | Disease regulation - human | ? | | | | |
| | Disease regulation - livestock | ? | | | | |
| | Erosion regulation | + | Presence of dense vegetation | / | / | |
| | Water purification | + | Deposition of silt and improve water quality | / | / | |
| | Pollination | + | Habitat to pollinators | / | / | |
| | Salinity regulation | ++ | Provide barrier to saline water | / | / | |
| | Fire regulation | + | Provide barrier to the spread of fire | / | / | |
| | Noise and visual buffering | + | Absorb and buffer the impact of noise | / | / | |

| | | | | Scale of benefit | | |
|----------------------------|-------------------------------|-----------------------|----------------------------------|------------------|----------|--------|
| | | | | Local | Regional | Global |
| Cultural Services | | How important? | Describe benefit | | | |
| | Cultural heritage | 0 | | / | | |
| | Recreation and tourism | 0 | | / | | |
| | Aesthetic value | 0 | | / | | |
| | Spiritual and religious value | 0 | | / | | |
| | Inspiration value | 0 | | / | | |
| | Social relations | + | Fishing community of Niyayos | / | / | |
| | Educational and research | 0 | | / | | |
| | | | | | | |
| | | | | | | |
| Supporting Services | Soil formation | 0 | | | | |
| | Primary production | + | Plants & algae | / | / | |
| | Nutrient cycling | + | Presence of Fauna | / | / | |
| | Water recycling | + | Presence of wetland vegetation | / | / | |
| | Provision of habitat | ++ | Provide habitat to local species | / | / | |
| | | | | | | |
| | | | | | | |
| Notes: | | | | | | |

Remarks/Other Information (on the importance of the particular wetland):

Serves as breeding and nursery ground for different species of fishes and other marine life.

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): The local land use setting of the wetland was settlements of Sitio Niyayos, Poblacion, Calintaan

Land use in the river basin : Fishing and gathering of other seafoods, and/or

Land use in the coastal zone : Serve as parking space of boats during typhoons

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

- Poor Visitor and Solid waste management by the members of the community that may produce pollution to the wetland and ocean;
- Continuous conversion of wetland into agricultural areas that degrades the mangroves and quality of water and environment.

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

NONE

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

NONE

16. References (Full citation)

- https://en.wikipedia.org/wiki/Calintaan,_Occidental_Mindoro

17. Compiler/Contact/Focal person (including contact information: office address, telephone number, fax, email address, etc.)

| Name | Designat | Office | Contact | Email |
|---------------------------|-----------------|------------------|---------------|---------------------------|
| MA. TERESITA P. DAVID JR. | ECOMS II | CENRO- SAN JOSE | 0917-855-6396 | cenrosanjose@denr.gov.ph |
| HEROLD S. CASTRO | FOREST TECH. II | CENRO – SAN JOSE | 0906-721-3751 | herold.s.castro@gmail.com |
| | | | | |

Date Accomplished: **June 2, 2022**

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

1. Solid waste of adjacent communities being dragged to the wetland and eventually into the ocean;
2. Forest Land utilization such as kaingin and clearing that may cause erosion and siltation to the wetland.

19. Management Prescriptions/Proposed Management Interventions:

1. The wetland be included in the Municipal Ecotourism Management Plan to fully conserve and maximize its opportunity as eco-tourism site;
2. To declare the wetland as Locally-Managed Marine Protected Area to be fully protected, conserved and managed area for environment and natural resources without compromising the livelihood of the residents.

20. Proposed Classification (which portions are relevant or critical for management for)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997

ANNEX B. FORM FOR WETLAND PROFILING (WETLAND INFORMATION SHEET)

Core (minimum) Data Fields for Wetland Profiling

(Adapted and revised from: Ramsar handbooks for the wise use of wetlands, 4th edition, 2010. Handbook 13: Inventory, assessment, and monitoring.)

A. GEOGRAPHICAL INFORMATION

1. Site name (official name of site): **MARSUMBOL WETLAND AREA**

Other names (If there is a non-official, alternative name, including for example in a local language, catchment name/other identifier(s) (e.g., reference number) provide it here:

NONE

Photograph. (Provide at least one high-resolution and one geotagged photograph of wetland).



2. **Wetland type** (Circle or underline the applicable codes for the wetland types based on the Ramsar "Classification System for Wetland Type" present in the site. Descriptions of each wetland type code are provided in Appendix 1)

Marine/coastal : A • B • C • D • E • F • G • H • I • J • K • Zk(a) •

Inland : L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts •

U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b) •

Human-made : 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c) •

3. **Area, boundary and dimensions:**

Site shape (cross-section and plan view (i.e. circular, oval, elongated)):

Elongated

Administrative boundaries (to the North, East, South and West etc.):

| North | East | West | South |
|-----------------|-------------------|----------------------------|-----------------------|
| Brgy. Poblacion | Brgy. New Dagupan | Calintaan Municipal Waters | Brgy. Malawaan, Rizal |

Area (total size in hectares, seasonal max/ min, where relevant)

12.75 Hectares

Dry Season
Wet Season

Min
Max
Min
Max

Including watershed : _____ **12.75 Hectares** _____

Area of water/wet area : _____
 (river/creek not included) _____

Length, width, depth (in meters, seasonal max/min, where relevant; For rivers, provide data for at least three sections—upstream, midstream, downstream, measurement should be taken only from the main tributaries of the rivers):

Dry Season
Wet Season

Min
Max
Min
Max

Length : _____
 Width : _____
 Depth : _____

Elevation (in meters above sea level) : 8 masl

Administrative location/coverage:

| Sitio | Barangay | Municipality | Province/Island |
|----------|-------------|--------------|--------------------|
| Marumbol | New Dagupan | Calintaan | Occidental Mindoro |
| | | | |
| | | | |

Demographic Information: (Socioeconomic characteristics of communities within the administrative location mentioned above)

| Municipality | Barangay | Population | | | Primary Sources of Income | Describe the location in wetland area (i.e. near shoreline, landlocked) |
|--------------|-------------|------------|--------|-------|---------------------------|---|
| | | Male | Female | Total | | |
| Calintaan | New Dagupan | | | 5,402 | Fishing | |
| | | | | | Farming | |
| | | | | | | |
| | | | | | | |
| Total | | | | 5,402 | | |

Source and Date of Information : MPDO, 2020

River Basin/Watershed Name (name of river basin/watershed where the wetland is located):

Marumbol River Basin

Geomorphic setting (Describe the setting in the landscape/catchment/river basin - including altitude, upper/lower zone of catchment, distance to coast where relevant, etc).:

Map Centroid (mid-point) (Provide the coordinates (in degrees, minutes and seconds) of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas. *For rivers/creek provide three (3) coordinates taken from the upstream, midstream and downstream of the river main channel):

| | Latitude | Longitude |
|-------------|----------------------|----------------|
| Centroid | : 51 P 275068 | 1388241 |
| *Upstream | : | |
| *Midstream | : | |
| *Downstream | : | |

Mapping details (Attach GIS generated map in a separate sheet, Projection system: World Geodetic System 1984; Map coordinates: latitude/longitude, in degrees and minutes, refer to Appendix 2 for the required map scale.)

4. Climate: (Overview of prevailing climate type, zone and major features i.e. precipitation, temperature, wind)

Climate Type (Based on PAGASA Classification): I

Climatic Type Description:

Two pronounced seasons, dry from November to April, and wet during the rest of the year. The maximum rain period is from June to September

Precipitation/Rainfall (in millimeter (mm), average per month; total amount per year; maximum and minimum level):

| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |
|--------------------------------|---------------|----------------|----------------|----------------|-----------------|------------------|------------------|------------------|------------------|-----------------|-----------------|----------------|--------------------|
| Ave. precipitation mm (inches) | 8.4 (0.33) | 11.7 (0.46) | 11.1 (0.44) | 26.8 (1.06) | 170.5 (6.71) | 377.7 (14.87) | 457.5 (18.01) | 475.6 (18.72) | 406.7 (16.01) | 252.0 (9.92) | 106.5 (4.19) | 55.9 (2.20) | 2,360.2 (92.92) |
| Ave. rainy days | 3 | 2 | 2 | 3 | 10 | 17 | 21 | 22 | 20 | 16 | 9 | 5 | 130 |
| Month | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Year |

Temperature (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| Minimum (°C) | 22.7 (72.9) | 22.7 (72.9) | 23.8 (74.8) | 24.5 (76.1) | 24.8 (76.6) | 24.3 (75.7) | 24.0 (75.2) | 24.0 (75.2) | 23.9 (75.0) | 23.9 (75.0) | 23.7 (74.7) | 23.4 (74.1) |
| Maximum (°C) | 35.5 (95.9) | 36.2 (97.2) | 37.6 (99.7) | 38.5 (101.3) | 38.5 (101.3) | 38.0 (100.4) | 37.4 (99.3) | 35.0 (95.0) | 35.4 (95.7) | 36.0 (96.8) | 38.0 (100.4) | 36.0 (96.8) |
| Average (°C) | 32.3 (90.1) | 32.6 (90.7) | 33.9 (93.0) | 34.6 (94.3) | 33.8 (92.8) | 32.1 (89.8) | 30.8 (87.4) | 30.7 (87.3) | 30.7 (87.3) | 31.5 (88.7) | 32.3 (90.1) | 32.2 (90.0) |

Heat Index (in Degree Celsius °C, average per month; maximum and minimum level):

| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Minimum (°C) | | | | | | | | | | | | |
| Maximum (°C) | | | | | | | | | | | | |
| Average (°C) | | | | | | | | | | | | |

Wind (in kilometer per hour (KPH), major features such as prevailing wind direction, velocity): 5 – 12 kph

B. BIO-CHEMICO-PHYSICAL INFORMATION

5. Soils:

Geology (How did the wetland evolved? i.e. develop through erosion processes, deposition of sediment on adjacent lands during floods, forces of nature, rivers deposit sediment, rising sea levels, human activities alter drainage patterns, etc.):

Type/order of soils (Based on BSWM nine (9) soil orders recognized in the Philippines, refer to Appendix 3):
ALFISOL

Type of substrates (sandy, muddy, clayey, gravel etc.):

Terrestrial/riparian area : _____ Sandy _____

Wetland/aquatic area : _____ Sandy and muddy _____

Soil biology (presence of small organisms, organic debris, organic matter etc.):

Terrestrial/riparian area : _____

Wetland/aquatic area : _____

6. Water regime: Marine subtidal

Water source (check the source and write the name and/or location of inflow and outflow):

☐ Surface source

☒ Ground water source

Inflow/s (Name and/or location of wetland/s which flows into the site; show in map, if possible):

Outflow/s (Name and/or location of wetland/s which flows out of the site; show in map, if possible):

Ground water classification (for ground water source, indicate the NWRB Groundwater Classification, Appendix 4):

7. Flooding:

Flooding vulnerability (flooding vulnerability based on ERDB assessment): _____

Flooding susceptibility (rain-induced flooding susceptibility based on MGB): 1.5895% – 2.4183%

Flooding frequency (how often does flooding occur within a year?): 1

Flooding seasonality (in what month/s does flooding usually occur?): AUGUST

Flooding duration (for how long does floodwater usually stay within each season?): N/A

Magnitude of flow and/or tidal regime (what is the maximum water level of the flood and how fast does it flows out?):

8. **Water quality** (information can be obtained from EMB regular monitoring if any, or/and conduct of actual field sample collection. Secondary data from other sources could be also used to fill this section):

Waterbody Classification (Based on DENR- EMB Classification): _____

| Parameter | Standard ¹ | Minimum ² | Maximum ³ | Average ⁴ |
|--------------------------------------|-----------------------|----------------------|----------------------|----------------------|
| Biochemical Oxygen Demand (mg/L) | | | | |
| Chlorine (mg/L) | | | | |
| Color (TCU) | | | | |
| Dissolved Oxygen (mg/L) | | | | |
| Fecal coliform (MPN/100mL) | | | | |
| Nitrate as NO ₃ -N (mg/L) | | | | |
| pH (range) | | | | |
| Phosphate (mg/L) | | | | |
| Temperature (°C) | | | | |
| Total suspended solid (mg/L) | | | | |
| Turbidity (NTU) | | | | |
| Salinity | | | | |
| Conductivity | | | | |
| Other: _____ | | | | |

¹ Based on DENR- DAO 2016-08 Classification

² Lowest value collected in a year

³ Highest value collected in a year

⁴ Average value collected in a year

Source (who conducted the monitoring?) :

Year Data Collected :

Sampling Frequency (annual or monthly) :

9. Noteworthy flora/Plant communities:

Vegetation structure (Describe the physical/morphological structure/appearance of existing vegetation, canopy cover such as open or closed forest):

Mostly are mangrove species on wetland parts and seagrass beds

Vegetation zones (What are the dominant species? Include indicative location of plant communities, tabulate and show in map, use extra sheet if necessary):

| Zone | Local/ Common Name | Family Name | Scientific Name | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|---|---|----------------|---------------------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian (i.e. trees, plant, shrub) | Pagatpat | Sonneratia | <i>S. alba</i> | Abundant | Threatened | | |
| | Api-api | Avicennia | <i>A. alba</i> | Abundant | Threatened | | |
| | Saging -saging | Aegiceras | <i>A. corniculatum</i> | Few | Threatened | | Rare |
| B. Aquatic (i.e. aquatic trees, plants, macrophytes, phytoplankton) | Nipa () | Nypa | <i>Nypa fruticans</i> | Abundant | Threatened | | |
| | Mangrove (Bakawang Lalaki and Babae) | Rhizophora | <i>Apiculata/ mocrunata</i> | Abundant | Threatened | | |

10. Noteworthy fauna/Animal communities:

Main species present (What are the dominant species? Population size and proportion where known? Indicative location of animal communities. Tabulate and show in map, use extra sheet if necessary):

| Class | Local/ Common Name | Family Name | Scientific Name | Population Size | Distribution | Conservation Status | Indicative Location in Wetlands and time of the year abundant | Remarks (i.e. IAS, Rare, Unique, Seasonal, etc.) |
|-----------------------------|--------------------------|----------------|--------------------|--------------------|--------------|------------------------|--|---|
| A. Terrestrial/ Riparian | | | | | | | | |
| Avifauna | Zebra Dove | Geopelia | <i>G. striata</i> | Abundant | Abundant | Vulnerable | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | | | | | |
| Invertebrates | | | | | | | | |
| Others | | | | | | | | |
| B. Aquatic | | | | | | | | |
| Fish | | | | Abundant | Abundant | | | |
| Mammals | | | | | | | | |
| Herpetofauna | | | | Abundant | Abundant | | | |
| Invertebrates | | | | Abundant | Abundant | | | |
| Others | | | | | | | | |

C. WETLAND BENEFITS

11. Ecosystem services: (Fill up the corresponding box for the applicable wetland function/benefit based on the list of relevant ecosystem services provided in the site. Include a key phrase/words describing the importance of the wetland and the relative location where the service is provided. Refer to Appendix 5 for the Guidance Note.)

RAPID ASSESSMENT OF WETLAND ECOSYSTEM SERVICES FIELD ASSESSMENT SHEET

| | |
|-----|--|
| Key | How important? |
| ++ | Potential significant positive benefit |
| + | Potential positive benefit |
| 0 | Negligible benefit |
| - | Potential negative benefit |
| -- | Potential significant negative benefit |
| ? | Gaps in evidence |

| | | Scale of benefit | | | | |
|-----------------------|--|------------------|--|-------|----------|--------|
| | | How important? | Describe benefit | Local | Regional | Global |
| Provisioning Services | Fresh water | 0 | | / | | |
| | Food | + | Fish | / | / | |
| | Fuel | 0 | Timber | / | | |
| | Fibre | 0 | Fuelwood | / | | |
| | Genetic resources | ? | | | | |
| | Natural medicines or pharmaceuticals | + | Medicinal Herbs | / | | |
| | Ornamental resources | ? | | | | |
| | Clay, mineral, aggregate harvesting | ? | | | | |
| | Waste disposal | - | Marumbol community | / | / | |
| | Energy harvesting from natural air and water flows | ? | | | | |
| | | Scale of benefit | | | | |
| | | How important? | Describe benefit | Local | Regional | Global |
| Regulatory Services | Air quality regulation | 0 | | | | |
| | Local climate regulation | + | Presence of vegetation | / | / | |
| | Global climate regulation | + | Carbon sequestration | / | / | |
| | Water regulation | + | Regulate water discharge | / | / | |
| | Flood hazard regulation | + | Regulate. Store and retain flood water | / | / | |
| | Storm hazard regulation | 0 | | | | |
| | Pest regulation | + | Natural predation of pest | / | / | |
| | Disease regulation - human | ? | | | | |
| | Disease regulation - livestock | ? | | | | |
| | Erosion regulation | + | Presence of dense vegetation | / | / | |
| | Water purification | + | Deposition of silt and improve water quality | / | / | |
| | Pollination | + | Habitat to pollinators | / | / | |
| | Salinity regulation | ++ | Provide barrier to saline water | / | / | |
| | Fire regulation | + | Provide barrier to the spread of fire | / | / | |
| | Noise and visual buffering | + | Absorb and buffer the impact of noise | / | / | |

| | | | | Scale of benefit | | |
|---------------------|-------------------------------|----------------|---|------------------|----------|--------|
| | | | | Local | Regional | Global |
| Cultural Services | | How important? | Describe benefit | | | |
| | Cultural heritage | 0 | | / | | |
| | Recreation and tourism | 0 | | / | | |
| | Aesthetic value | 0 | | / | | |
| | Spiritual and religious value | 0 | | / | | |
| | Inspiration value | 0 | | / | | |
| | Social relations | + | Fishing community of Niyayos and Marumbol | / | / | |
| | Educational and research | 0 | | / | | |
| | | | | | | |
| | | | | | | |
| Supporting Services | Soil formation | 0 | | | | |
| | Primary production | + | Plants & algae | / | / | |
| | Nutrient cycling | + | Presence of Fauna | / | / | |
| | Water recycling | + | Presence of wetland vegetation | / | / | |
| | Provision of habitat | ++ | Provide habitat to local species | / | / | |
| | | | | | | |
| | | | | | | |
| Notes: | | | | | | |

Remarks/Other Information (on the importance of the particular wetland):

Serves as breeding and nursery ground for different species of fishes and other marinelife.

D. MANAGEMENT INFORMATION

12. Land use:

Local land use (including adjacent settlements, agricultural areas, industries etc.): The local land use setting of the wetland is agriculture, developed by residents of Sitio Marumbol, Brgy. New Dagupan, Calintaan.

Land use in the river basin : Fishing and gathering of other seafoods, and/or

Land use in the coastal zone : Settlements

13. Existing pressures/threats and trends (concerning any of the features listed above, and/or concerning ecosystem integrity):

1. Poor Visitor and Solid waste management by the members of the community that may produce pollution to the wetland and ocean;
2. Continuous conversion of wetland into agricultural areas that degrades the mangroves and quality of

14. Conservation and management status of the wetland (List down the legal instruments and social or cultural traditions that influence the management of the wetland; including protected area categories according to the IUCN system and/or any national system and other existing management interventions):

NONE

15. Existing Management plans and monitoring programs: (Indicate presence and list down the management plans and monitoring programs in place and planned within the wetland and in the river basin and/or coastal zone)

NONE

16. References (Full citation)

- https://en.wikipedia.org/wiki/Calintaan,_Occidental_Mindoro

17. Compiler/Contact/Focal person (including contact information: office address, telephone number, fax, email address, etc.)

| Name | Designat | Office | Contact | Email |
|---------------------------|-----------------|------------------|---------------|---------------------------|
| MA. TERESITA P. DAVID JR. | ECOMS II | CENRO- SAN JOSE | 0917-855-6396 | cenrosanjose@denr.gov.ph |
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| | | | | |

Date Accomplished: June 2, 2022

E. ASSESSMENT AND RECOMMENDATIONS

18. Potential Threats:

1. Solid waste of adjacent communities being dragged to the wetland and eventually into the ocean;
2. Forest Land utilization such as kaingin and clearing that may cause erosion and siltation to the wetland.

19. Management Prescriptions/Proposed Management Interventions:

1. The wetland be included in the Municipal Ecotourism Management Plan to fully conserve and maximize its opportunity as eco-tourism site;
2. To enhance the management and as Locally-Managed Marine Protected Area to be fully protected, conserved and managed area for environment and natural resources without compromising the livelihood of the residents.

20. Proposed Classification (which portions are relevant or critical for management for)

| Classification | Description | Relative location (Mention which part of the wetland where the service is provided) |
|---|-------------|--|
| <input type="checkbox"/> Food production | | |
| <input type="checkbox"/> Water regulation | | |
| <input type="checkbox"/> Disaster mitigation | | |
| <input type="checkbox"/> Biodiversity importance* | | |

* Based on criteria mentioned in DMC 17 series of 1997