



U.S. DEPARTMENT
OF THE INTERIOR
INTERNATIONAL TECHNICAL
ASSISTANCE PROGRAM



USAID
FROM THE AMERICAN PEOPLE



University of
Southampton



REGIONAL FLYWAY INITIATIVE TRAINING SERIES: From Wetland Ecosystem Services to Nature-based Solutions

ADB HQ on 27–30 June 2023



CONSERVATION AND MANAGEMENT OF WETLANDS IN THE PHILIPPINES

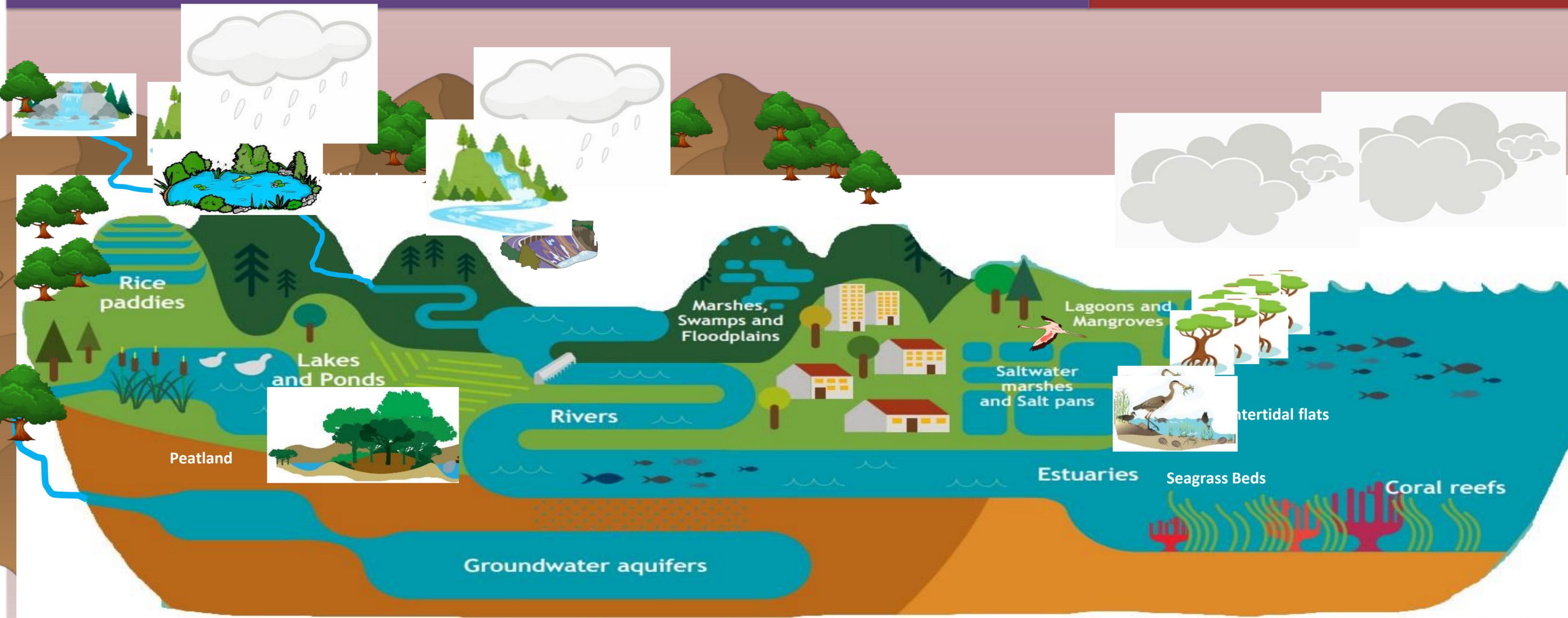


Department of Environment and Natural Resources
Biodiversity Management Bureau

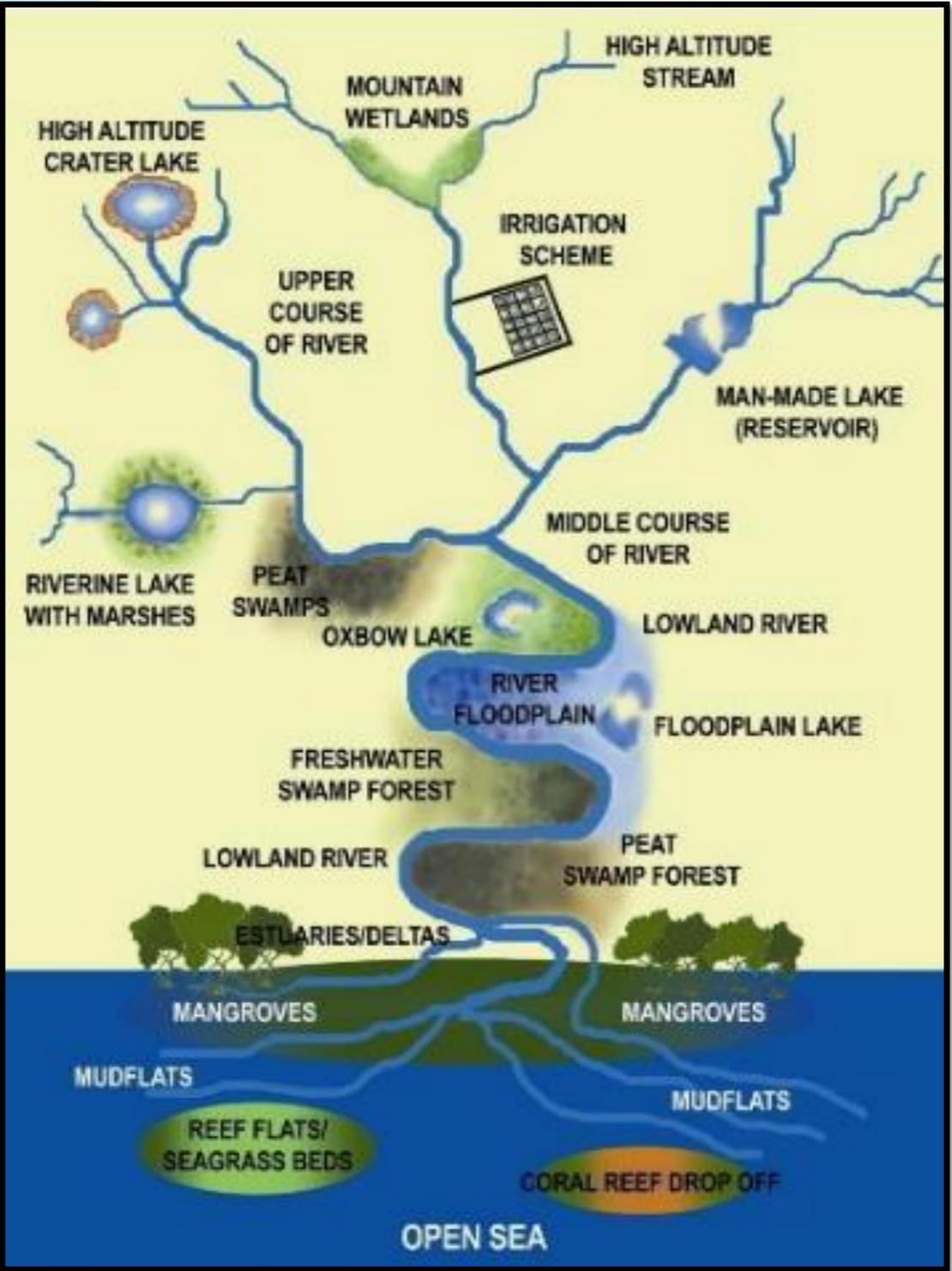
WETLANDS

Inland
Human-Made

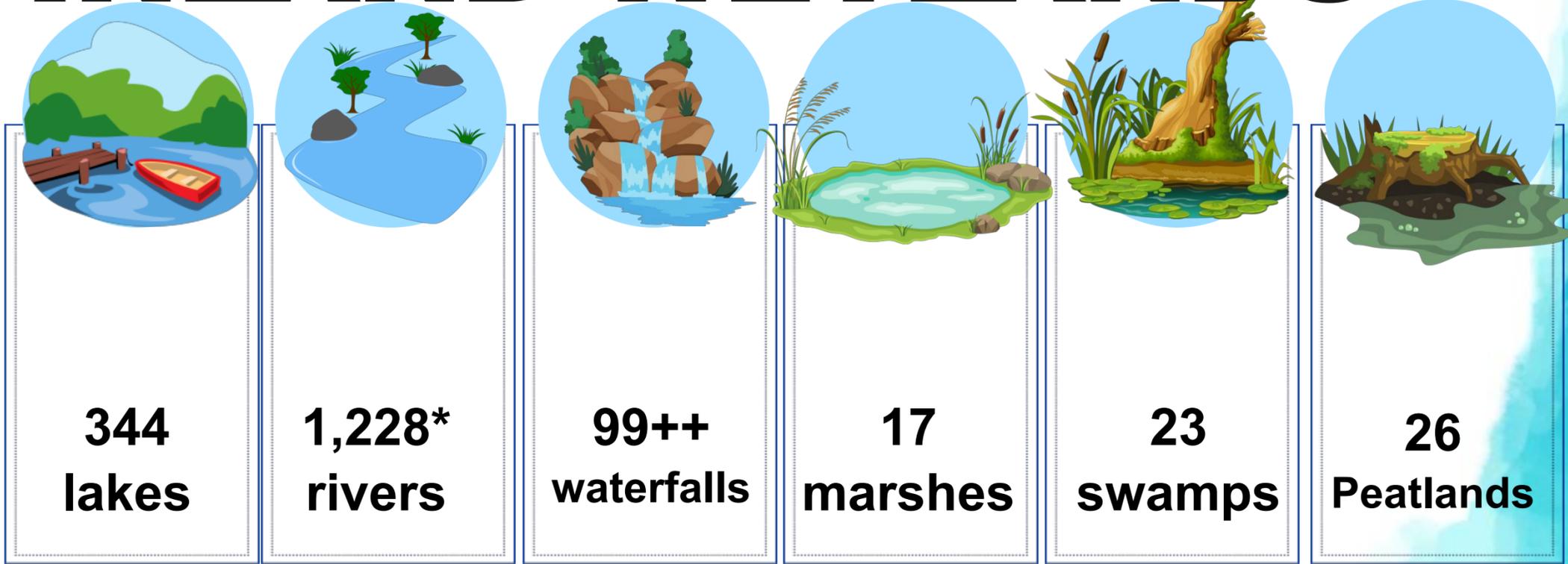
Coastal



WETLANDS refer to a wide variety of inland habitats such as marshes, peatlands, floodplains, rivers and lakes, and coastal areas such as saltmarshes, mangroves, intertidal mudflats and seagrass beds, and also coral reefs and other marine areas no deeper than six (6) meters at low tide, as well as human-made wetlands such as dams, reservoirs, rice paddies and wastewater treatment ponds and lagoons (*R.A. 11038 Expanded NIPAS Act*)



INLAND WETLANDS



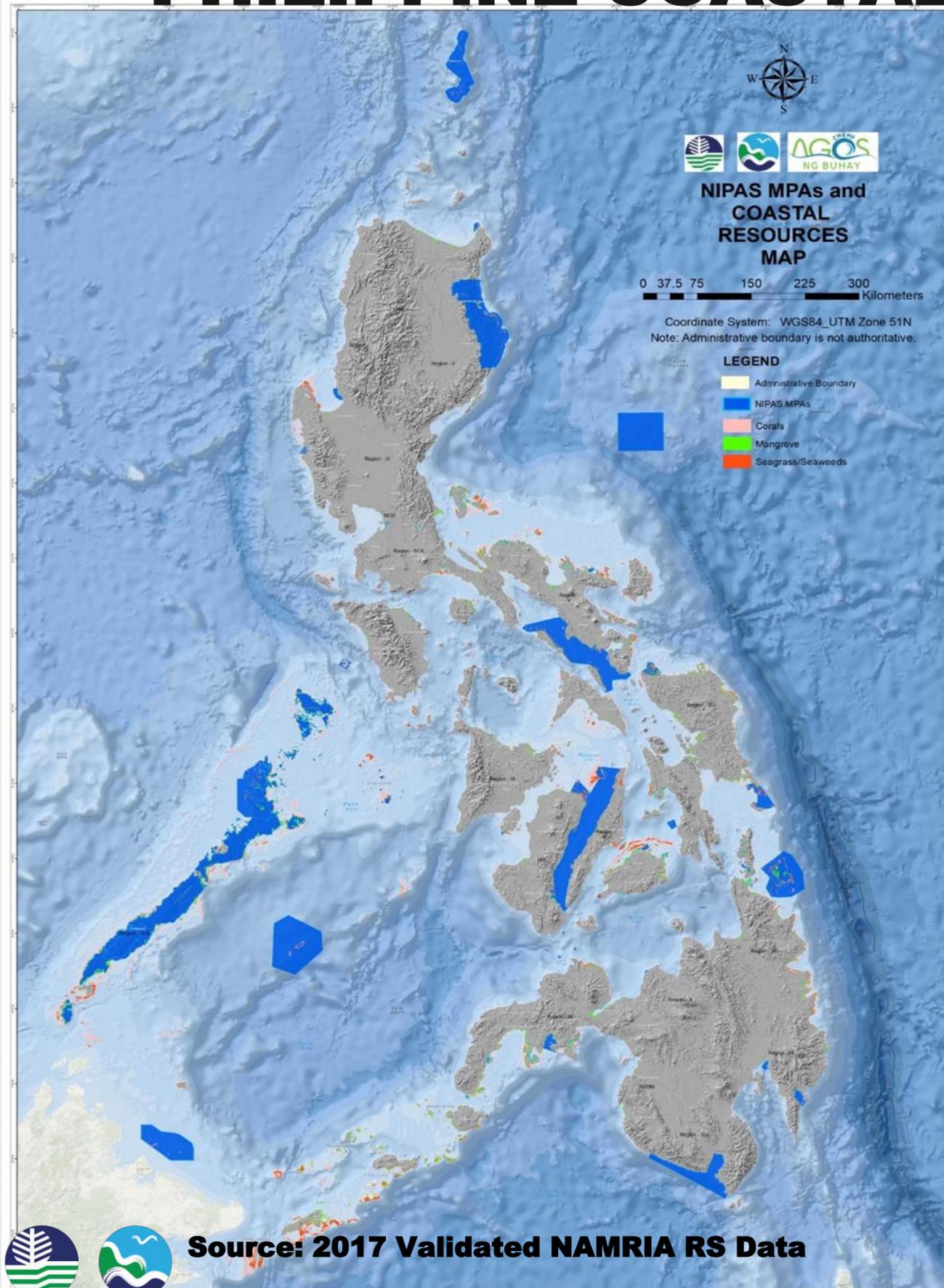
* **2,487** Rivers and river systems

(as per 2016 Atlas of Philippine Inland Wetlands and Classified Caves)

Diagram of various wetland types from the mountain to the sea



PHILIPPINE COASTAL AND MARINE RESOURCES/AREAS



COASTAL AND MARINE RESOURCES/ AREAS



CORAL REEFS

- **796,000** hectares (territorial seas)
- **65,267** hectares within NIPAS MPAs (8.2%)



MANGROVE FORESTS

- **303,373** hectares (territorial seas)
- **96,661** hectares within NIPAS MPAs (31.9%)



SEAGRASS BEDS

- **490,920** hectares (territorial seas)
- **53,929** hectares within NIPAS MPAs (11%)

7641 islands
~37,000 km coastline

Apex of the Coral Triangle

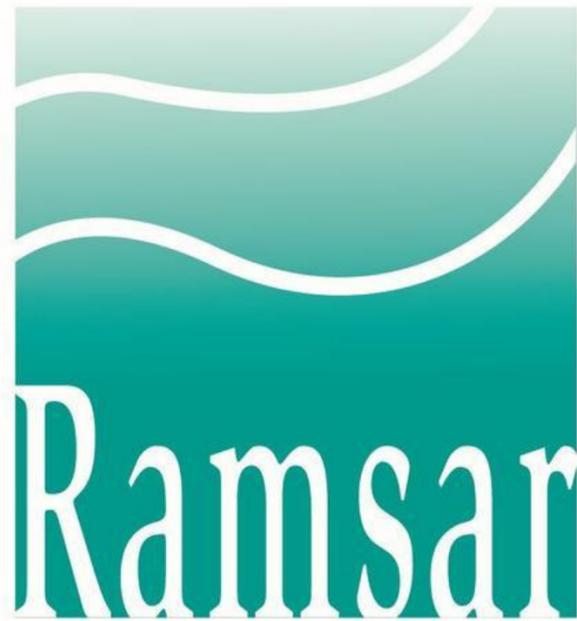
“6th longest in the world”

“Center of the center of marine shore fish biodiversity”

LEGAL BASES FOR WETLAND CONSERVATION IN THE PHILIPPINES



MULTILATERAL ENVIRONMENTAL AGREEMENTS



Convention on
Biological Diversity



EAAFP



ASEAN Agreement on Transboundary Haze Pollution
ASEAN Task Force on Peatlands (ATFP)



CORAL TRIANGLE
INITIATIVE
ON CORAL REEFS, FISHERIES
AND FOOD SECURITY

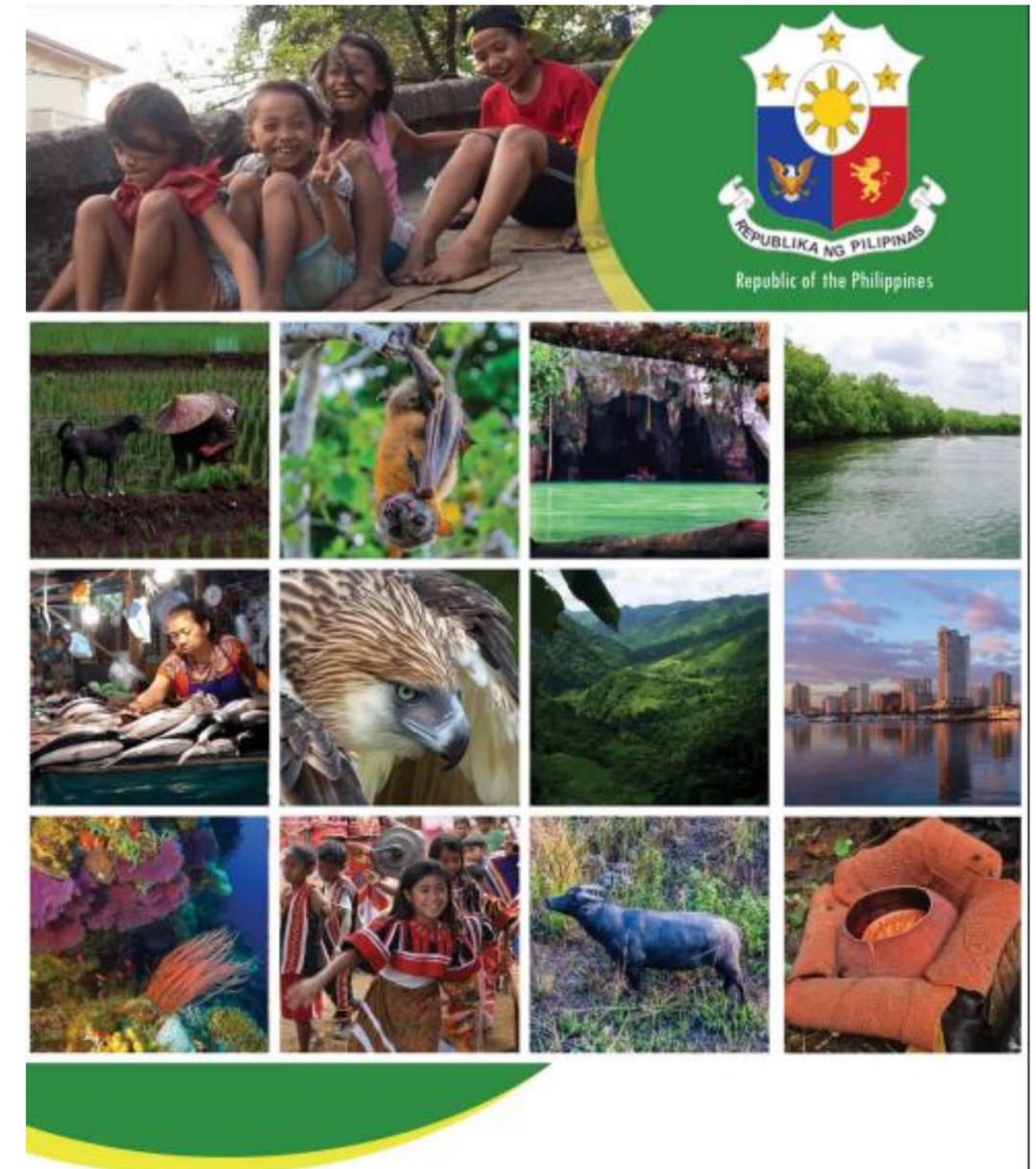




PDP 2023-2028
Chapter 4.3 and 17

PBSAP 2015-2028
Thematic sectors
include:

- Coastal and Marine
- Inland Wetlands



*Philippine Biodiversity Strategy and Action Plan
2015-2028*
Bringing resilience to Filipino Communities

NATIONAL COMMITMENTS



WETLAND-RELATED POLICIES



POLICIES IN THE PIPELINE

NATIONAL WETLAND CONSERVATION

ACT

Senate Bill No. 124

“An Act Establishing a National Wetland Policy, Providing Mechanism for its Institutionalization, and Appropriating Funds Therefor ”



House Bill No. 2504 and 5501

“ An Act Establishing a National Wetland Policy, Providing Mechanism for its Institutionalization, and Appropriating Funds Therefor ”



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

EIGHTEENTH CONGRESS
Second Regular Session

HOUSE BILL NO. 8925

INTRODUCED BY LUIS RAYMUND "LRAY" F. VILLAFUERTE, JR.

AN ACT ESTABLISHING A NATIONAL WETLAND POLICY, PROVIDING MECHANISMS FOR ITS INSTITUTIONALIZATION, AND APPROPRIATING FUNDS THEREOF

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

Section 1. Short Title. - This Act shall be known as the "National Wetlands Conservation Act".

Sec. 2. Declaration of Policy. - It is hereby declared the policy of the State to conserve and wisely use wetlands and wetland resources consistent with the principles of sustainable development, inclusive growth, poverty reduction, food security, biodiversity conservation, climate change adaptation and mitigation, and disaster risk reduction and management, while advancing the right to a balanced and healthful ecology in accordance with the harmony and rhythm of nature.

Sec. 3. Coverage. - This Act shall apply to all types of wetlands, both inland, coastal and marine and human-made wetlands, in the Philippines. For human-made wetlands, it shall be limited to those with known high biodiversity value such as, but not limited to, wetlands critical as wildlife habitat and as migratory routes of birds and migratory fishes.

Sec. 4. Categories of Wetlands. - Except for deep marine waters, wetlands are composed of water bodies or aquatic ecosystems, as well as their riparian areas. The three (3) broad categories of wetlands are the following:

a. Inland wetlands - are aquatic-influenced environments, sometimes referred to as freshwater or inland water/waterbodies, located within land boundaries; examples are inland deltas springs, creeks, rivers, streams, waterfalls, freshwater swamps and/or marshes, peatland, ponds, floodplain, wet caves and lakes;

b. Coastal wetlands - are wetlands located within the coastal watershed, such as bays, marine shores, estuaries, coastal lagoons, saltmarshes, mangroves swamps,



POLICIES IN THE PIPELINE

NATIONAL PEATLAND CONSERVATION ACT

Senate Bill No. 523

“An Act to Protect, Conserve and Sustainably Manage Peatlands and its Resources, and for Other Purposes”



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

NINETEENTH CONGRESS
First Regular Session

House Bill No. 3055

Introduced by Representative JONATHAN KEITH T. FLORES

AN ACT TO CONSERVE, PROTECT AND SUSTAINABLY MANAGE
PEATLANDS AND ITS RESOURCES TO INCREASE THE COUNTRY'S RESILIENCE
TO CLIMATE CHANGE, AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. Short Title. – This Act shall be known as the “*National Peatland and Peatland Resources Management, Conservation and Protection Act*”.

SECTION 2. Declaration of Policy. – It is the policy of the State to promote the conservation and sustainable development of peatland and peatland resources consistent with the principles of sustainable development, inclusive economic development, poverty reduction, biodiversity conservation, climate change adaptation and mitigation, and disaster risk reduction and management; while advancing the right to a balanced and healthful ecology in accordance with the harmony and rhythm of nature.

SECTION 3. Coverage. - This Act shall apply to all peatland and peatland resources nationwide within public and private lands.

SECTION 4. Definition of Terms. - The following terms shall be construed to mean as:

- a.) *High Conservation Value* refers to the biological, ecological, social or cultural values of outstanding significance at the national, regional or global level or of critical importance at the local level;
- b.) *Land use planning* refers to the rational and judicious approach of allocating available land resources to different land - using activities, (e.g. agricultural, residential, industrial) and for different functions consistent with the overall development vision/goal of a particular locality;
- c.) *Peat* refers to dead and partially decomposed plant material that have accumulated under high water saturation or waterlogged conditions. Peat soil is defined using the definition of histosol (organic soil) which are soils with cumulative organic layer(s) comprising more than half of the upper 80cm of the soil surface containing 35% or more organic matter (35% or more loss on ignition) or 18% or more organic carbon;
- d.) *Peat swamp forest* refers to a type of peatland that has forest cover and can be found in certain areas in the tropical regions of the world including the Philippines;

House Bill No. 8204

“An Act Providing the Regulatory Framework to Conserve, Protect, Restore, and Sustainably Manage Peatlands and their Resources to Enhance the Country's Resilience to Climate Change”



POLICIES AND GUIDANCES

DMC 1997-17	Criteria for the Identification of Wetlands Critical for Biodiversity Conservation
DAO 2016-26	Guidelines for the Implementation of the Coastal and Marine Ecosystems Management Program [CMEMP])
DAO 2021-07	Guidelines on the Establishment of Legal Easements Along the Seas, Rovers, Lakes, Esteros, and Creeks
DAO 2022-06	Guidelines for Sustainable Development Planning and Management of Peatlands
DMO 2023-01	Additional Guidelines for Projects Applying for a Environmental Compliance Certificate which are within or in close proximity to Protected Areas and/or Ramsar

Relevant BMB Technical Bulletins

- Outline of Cave/Wetland Management Plans
- Prescribing the Forms for Inland Wetland Inventory and Profiling
- Inland Wetlands and Terrestrial Caves: Technical Guide on Biodiversity Assessment and Monitoring System
- Guidelines on the application of integrated coastal management as strategy for the implementation of CMEMP)
- Guidelines on the implementation of environmental standards for diving and snorkelling
- Guidelines on enrichment planting of mangroves and beach forest for biodiversity conservation and coastal resiliency
- Guidelines in the identification and recognition of biodiversity-friendly enterprise (bdfe)
- Clarificatory guidelines on the procurement of watercraft for survey, assessment, monitoring and/or patrolling
- Guidelines on establishing and managing marine protected areas
- Guidelines on the assessment of coastal and marine ecosystems



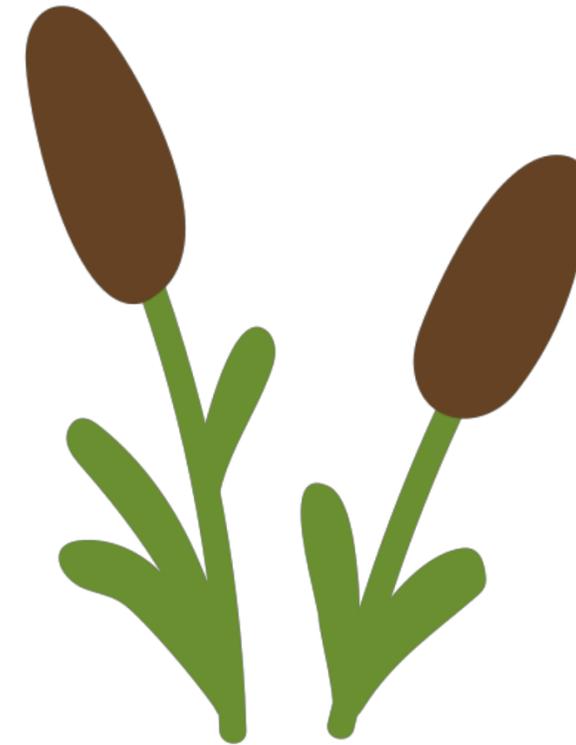


TWO (2) MAJOR PROGRAMS



**COASTAL AND MARINE
ECOSYSTEMS MANAGEMENT
PROGRAM (CMEMP)**

DENR Administrative Order 2016-26



**INLAND WETLAND
CONSERVATION AND
MANAGEMENT PROGRAM**

DENR Administrative Order 2016-12 (PBSAP)

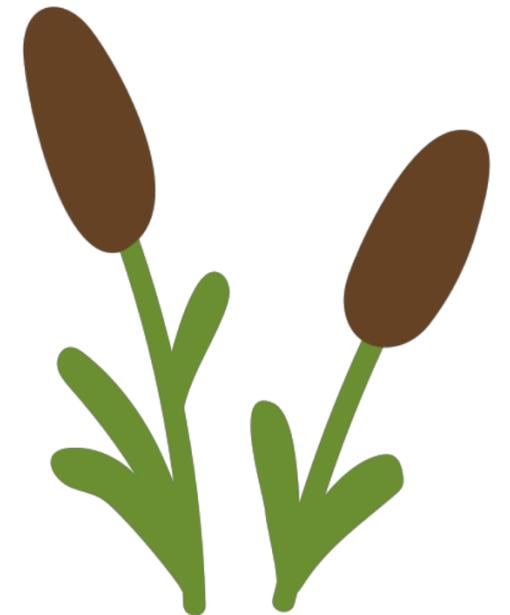


COASTAL AND MARINE ECOSYSTEMS MANAGEMENT PROGRAM

All coastal and marine areas in the Philippines covering all but not limited to NIPAS Marine Protected Areas, Locally-Managed Marine Protected Areas (LMMMPAs), Marine Key Biodiversity Areas (MKBAs), and adjacent municipal waters

INLAND WETLAND CONSERVATION AND MANAGEMENT PROGRAM

Applies to all inland wetlands within lands of the public domain, private lands, and ancestral domain/lands.



SCOPE OF THE PROGRAMS



CMEMP PROGRAM COMPONENTS



IWCMP PROGRAM COMPONENTS



Inland Wetland
Inventory and
Assessment



Management Plan
Development



Maintenance and
Protection



Biodiversity-
friendly Enterprise
Development



Research and
Development



Communication,
Education,
Participation and
Public Awareness



Capacity Building
and Technical
Assistance



Knowledge
Management
System



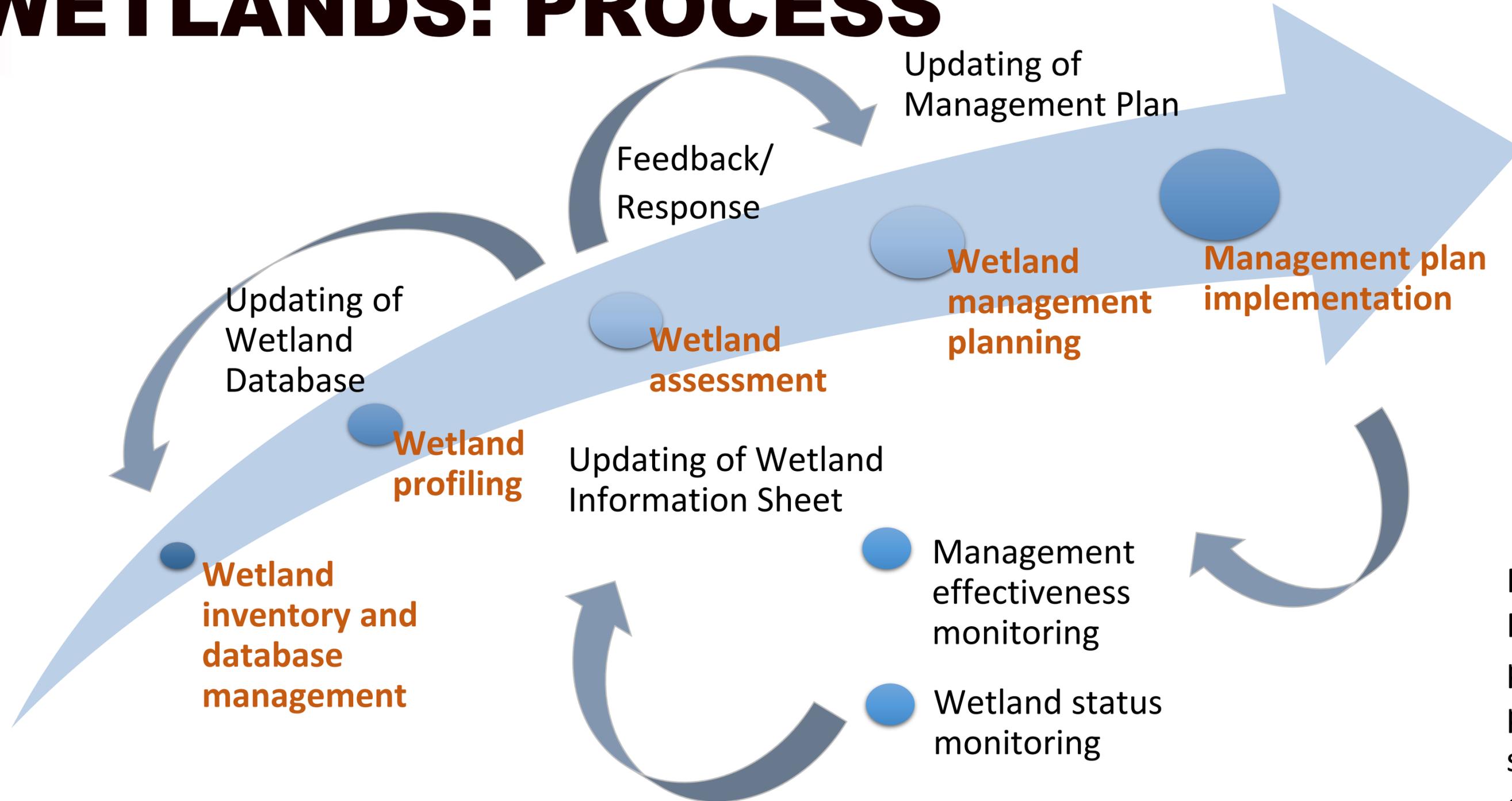
Sustainable
Financing
Mechanisms



Recognition and
Incentive
Mechanism



CONSERVATION AND MANAGEMENT OF INLAND WETLANDS: PROCESS



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PA, CH, ICCA, LCA, FS, or local policies, partnerships, stakeholder engagement

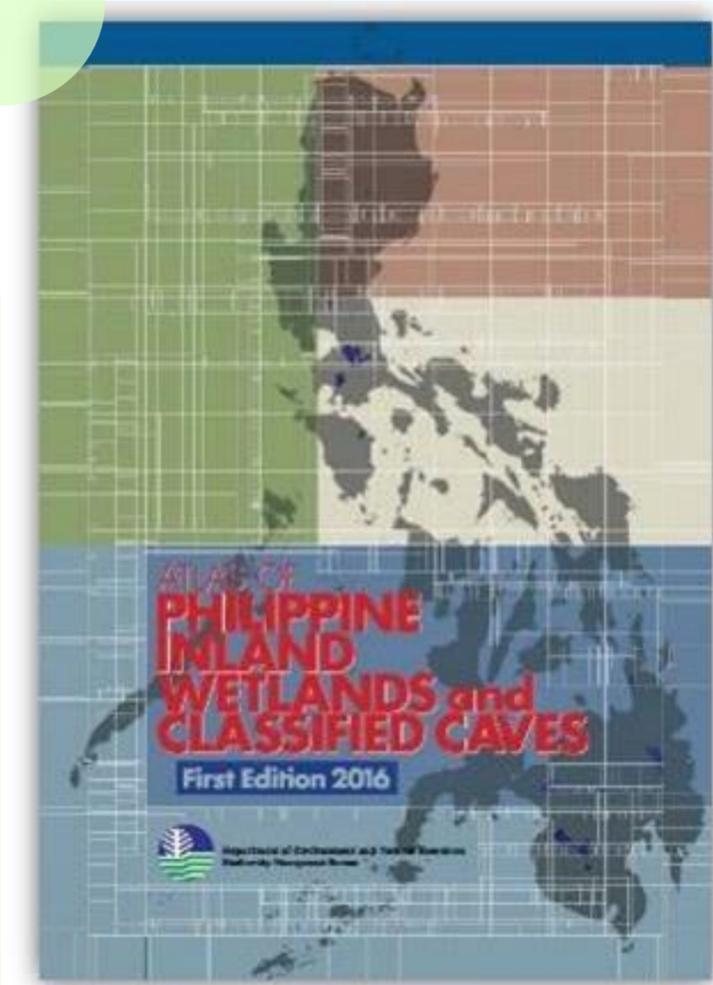
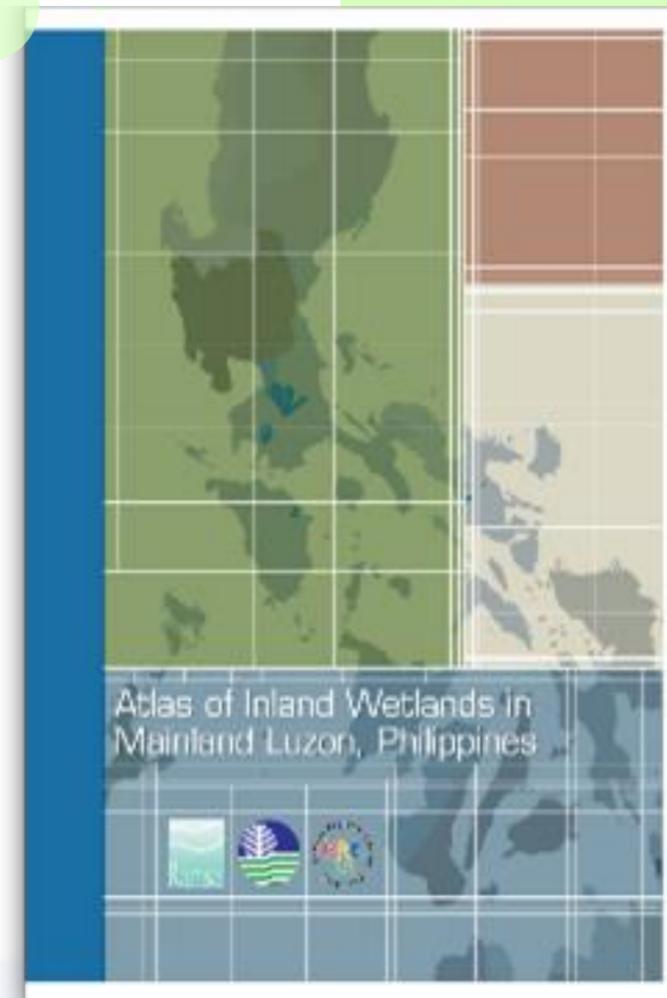


WETLAND INVENTORY

PUBLICATIONS

Wetland inventory reports are compiled into a national database and are published in the Atlas of Inland Wetlands.

The first edition was published in 2014 covering Luzon only. The second edition was then published in 2016, covering inland wetlands nationwide.



INFORMATION MANAGEMENT SYSTEM FOR PHILIPPINE WETLANDS

- An Online Caves and Wetland Database is currently being developed

https://cwis.bmb.gov.ph

DENR-BMB Home About List Partners Contact Us

Philippine Standard Time: Tuesday, June 27, 2023, 2:05:24 PM

CAVES AND WETLANDS INFORMATION SYSTEM

Explore Map

Discovered Datasets

Cave Data Visualization

Number of Inventoried Caves

Region	Count
Luzon	1
Visayas	1
Mindanao	1

Number of Classified Caves

Region	Count
Luzon	1
Visayas	1
Mindanao	1

Wetland Data Visualization

Number of Inventoried Wetlands

Region	Count
Luzon	1
Visayas	1
Mindanao	1

Number of Assessed Wetlands

Region	Count
Luzon	1
Visayas	1
Mindanao	1

What are Caves?

Caves are natural holes or openings extending from the surface of the earth to the underground, big enough for a person to enter that are formed over millions of years by various geological processes. They include any natural pit, sinkhole, underground passage, and other features extending from a cave entrance. Caves are major components of karst landscape which are typically made up of soluble bedrock such as limestone dissolved by acidic surface and/or groundwater.

Caves provide life support systems such as freshwater, food, and shelter needed by humans and other species. They are important sites of biodiversity as they are irreplaceable homes for unique, rare and even unknown flora and fauna. Caves are also vital sources of groundwater and may contain rivers, pools and even waterfalls.

[Read More](#)

What are Wetlands?

Wetlands are lands that are either permanently or seasonally inundated with water, supporting species that are adapted to live there. They host a wide range of biodiversity and provide a myriad of ecosystem services, ranging from food, fiber, and freshwater supply to flood control, and climate change mitigation. It is also their natural feature to have cultural and spiritual importance.

Wetlands are divided into three (3) categories: coastal and marine, inland or freshwater, and human-made wetlands. These can be freshwater ecosystems such as lakes, rivers, freshwater swamps and marshes, and peatlands; or coastal and marine areas like tidal flats, salt marshes, estuaries, lagoons, mangrove swamps, seagrass beds, and coral reefs. Human-made wetlands are fishponds, saltponds, wastewater ponds, rice paddies, dams, and reservoirs.

[Read More](#)



ASSESSMENT AND MANAGEMENT

As of December 2022, out of the 546 inventoried inland wetlands, 242 wetlands have already been assessed



What is the Wetland Information Sheet (WIS)?

a form containing core minimum datasets used to describe the ecological character of a particular wetland

A. GEOGRAPHICAL INFORMATION

B. BIO-CHEMICO-PHYSICAL INFORMATION

C. WETLAND BENEFITS

D. MANAGEMENT INFORMATION

E. ASSESSMENT AND RECOMMENDATIONS

Output: **Wetland Profile**

Ecological Character

“is the combination of the ecosystem components, processes and benefits/services that characterize the wetland at a given point in time”
(Ramsar Resolution IX.1)



A. GEOGRAPHICAL INFORMATION

B. BIO-CHEMICO-PHYSICAL INFORMATION

C. WETLAND BENEFITS

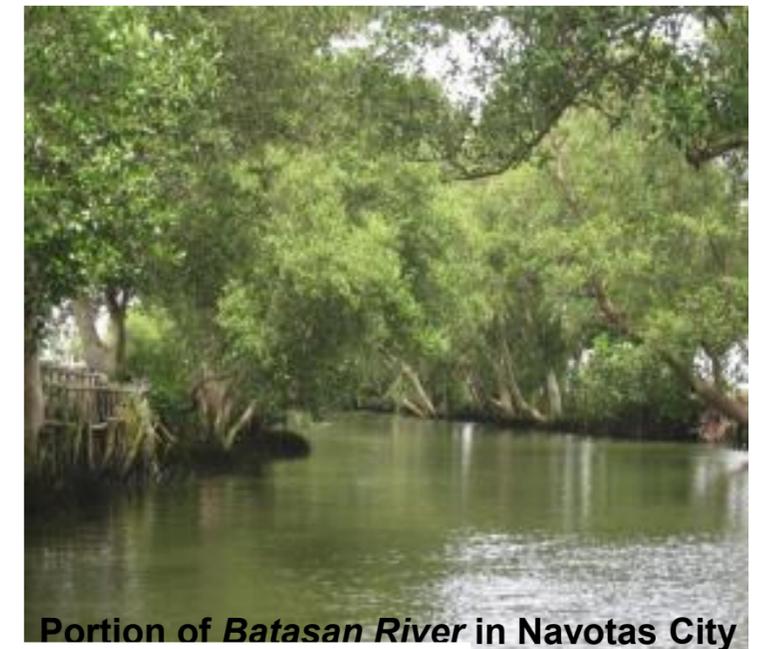
D. MANAGEMENT INFORMATION

E. ASSESSMENT AND RECOMMENDATIONS

The Rapid Assessment of Wetland Ecosystem Services (RAWES)

- Tool to assess the broad range of ecosystem services (ES) provided by the wetland
- For awareness, reporting, management and monitoring purposes
- Field assessment sheet determines how important or valuable each ES is

11. ECOSYSTEM SERVICES



Portion of *Batasan River* in Navotas City

Table 1: Ecosystem services provided by or derived from wetlands

SERVICE CATEGORIES	SPECIFIC SERVICES	COMMENTS AND EXAMPLES
Provisioning	Food	production of fish, wild game, fruits, and grains
	Fresh water	storage and retention of water for domestic, industrial, and agricultural use
	Fibre and fuel	production of logs, fuelwood, peat, fodder
	Biochemical	extraction of medicines and other materials from biota
	Genetic materials	genes for resistance to plant pathogens, ornamental species, and so on
Regulating	Climate regulation	source of and sink for greenhouse gases; influence local and regional temperature, precipitation, and other climatic processes
	Water regulation (hydrological flows)	groundwater recharge/discharge
	Water purification and waste treatment	retention, recovery, and removal of excess nutrients and other pollutants
	Erosion regulation	retention of soils and sediments
	Natural hazard regulation	flood control, storm protection
	Pollination	habitat for pollinators
Cultural	Spiritual and inspirational	source of inspiration; many religions attach spiritual and religious values to aspects of wetland ecosystems
	Recreational	opportunities for recreational activities
	Aesthetic	many people find beauty or aesthetic value in aspects of wetland ecosystems
	Educational	opportunities for formal and informal education and training
Supporting	Soil formation	sediment retention and accumulation of organic matter
	Nutrient cycling	storage, recycling, processing, and acquisition of nutrients



MANAGEMENT PLANNING FOR WETLAND CONSERVATION

- **BMB TB No. 2016-10:** Outline of Cave/Wetland Management Plans
- Per record, **117** wetlands have management plan

OUTLINE OF CAVE/ WETLAND MANAGEMENT PLAN

I.	Title Page
II.	Table of Contents and Annexes
III.	Foreword
IV.	Acknowledgement
V.	Executive Summary
VI.	List of Acronyms and Abbreviations
VII.	Introduction <ol style="list-style-type: none"> 1. Statement of Policies (National and International) 2. Historical background (when discovered, initial exploration, how it was named) 3. Purpose of the Plan 4. Links between resource use and conservation needs 5. Present land use pattern, including adjacent areas, indicating relative location 6. Brief description of the planning processes (documentation to be part of the annexes)
VIII.	Area Profile <ol style="list-style-type: none"> 1. Geographic location – should include map of area with information on coordinates, administrative/legal jurisdiction, boundaries and accessibility 2. Conservation measures - Protected Area (PA), Key Biodiversity Area (KBA), Critical Habitat (CH), Indigenous peoples' / community conserved territories and areas (ICCA) 3. Bio-physical profile (include spatial representations/maps) of the following: <ol style="list-style-type: none"> a. General topography and physiography:

h.	Built up area including map of settlements
5.	Economic profile <ol style="list-style-type: none"> a. Land use (include land use surrounding the cave, adjacent river basin and in the coastal zone, where applicable) b. Resource use (sex-disaggregated resource users); c. Other ecosystem services of the wetland/cave (review of the provisioning, regulating, cultural, supporting services) - indicate relative location d. Economic activities/livelihood/enterprises (sex-disaggregated) e. Patron-client relationships f. Reciprocal arrangements- agreement in which two (2) or more parties agree to share resources or perform certain action in an emergency case to achieve a common goal g. Economic infrastructures (roads, electricity) d. Local Ordinances and other
X.	Past and Current Initiatives (supported with maps/tables/figures; documentation of past initiatives) <ol style="list-style-type: none"> a. Past and on-going activities (government) b. Researches c. Implementing institutions, persons
XI.	Situational Analysis (Purpose assessment of the area) Reasons why cave/wetland was classified as such, significant features of the cave/wetland, status of biodiversity, flora and fauna including invasive species and habitat of concern in that cave/wetland, current potential problems, existing threats and trends, management constraints, local community interests, potential of the area, roles of LGUs and other major stakeholders, required change in legal status
XII.	Scope and limitation- should indicate data/information not available to include provisions for data gaps clustered into: <ol style="list-style-type: none"> a. cave/wetland and environs development/management (for the natural system) b. community preparations and participation with gender concerns; visitor management and other linkages
XIII.	Vision Statement – description of the future state that the plan wants to attain

Mission Statement – statement of the methods, ways and means to attain the vision
 Goals - General statement of a problem that needs to be resolved and should be attainable in 10 yrs; the desired outcome if the critical issues identified in the situational analysis are addressed.
 The following are to be considered in structuring goals:
 a. Ecological restoration
 b. Sustainable livelihoods
 c. Institutional development
 d. Communication, Education, Public Awareness (CEPA)

- | | | |
|--------|------------|--|
| XIV. | Obj | h. Social Marketing/IEC Campaign |
| XV. | Ma | i. Human Resources Development/Capacity Building |
| | | j. Livelihood Development |
| | | k. Research and development (including area/species assessments) |
| | | l. Local Policy |
| | | m. Gender and development |
| | | n. Vulnerability Assessment |
| | | o. Indigenous Peoples Concerns |
| XVI. | Implement | Implementation Scheme (to specify what particular unit will be in charge of over-seeing or implementing the Cave/Wetland Plan; organization structure and functional chart) |
| XVII. | Specify | Specify Legal instruments needed to adopt & implement the plan <ol style="list-style-type: none"> a. For non-PAs, resolution of Concerned LGUs (Municipal/City and Barangay level), as recommended by the RCC/PCC and approved by RED b. For PAs, PAMB and RED to approve the adoption of the Cave/Wetland Management Plan |
| XVIII. | Monitoring | Monitoring and Evaluation and Feedback mechanism (who and what to do, when to do, identify indicators to assess) |

XIX. Annexes

- a. Maps
- b. Work and financial Plan
- c. Organizational Structure
- d. Resolutions Adopting the plan (DMM, LGU and PAMB in the case of PA)
- e. Planning process documentation

XX. Action Plan for (see format below)

Action plan should be updated every 3 years.

Long Term	10 year	Master Plan
Medium Term	7 year	Management Plan
Short Term	3 year	Annual Work and Financial Plan

Action Plan (Proposed format)

Goal:	Task/Concern/ Objective	Activity (Plan and Action)	Measurable Outcome	Timeline	Responsible Agency/Person	Potential Support Partner/ Organization	Budget Estimate



MANAGEMENT SCHEMES

Management
Modalities



National Integrated Protected Area System



Management Authority



Local Government Administration



Declared Critical Habitat



International Recognition or as a Sites Network member

(e.g. Ramsar Site, EAAF Network Site, AHP, WHS etc.)



01

National Integrated Protected Area System

- A Protected Area Management Board (PAMB) is required in all protected areas
- Composed of a multi-sectoral body, chaired by the DENR

Holon Lake (Allah Valley Protected Landscape)



Examples of NIPAS areas which features inland wetlands

- Naujan Lake National Park,
- Agusan Marsh Wildlife Sanctuary,
- Puerto Princesa Underground River,
- Taal Volcano Protected Landscape,
- Buhi Wildlife Sanctuary,
- Balinsasayao Twin Lakes Natural Park
- Tinuy-An Falls Protected Landscape,
- Mainit Hotspring Protected Landscape,
- Lake Lanao Watershed Reservation,
- Lake Buluan GRWS,
- Lake Danao Natural Park



01

National Integrated Protected Area System

Taal Volcano Protected Landscape

- Habitat of site-endemics:
 - Tawilis (*Sardinella tawilis*)
 - Duhol or Freshwater snake (*Hydrophis semperi*)

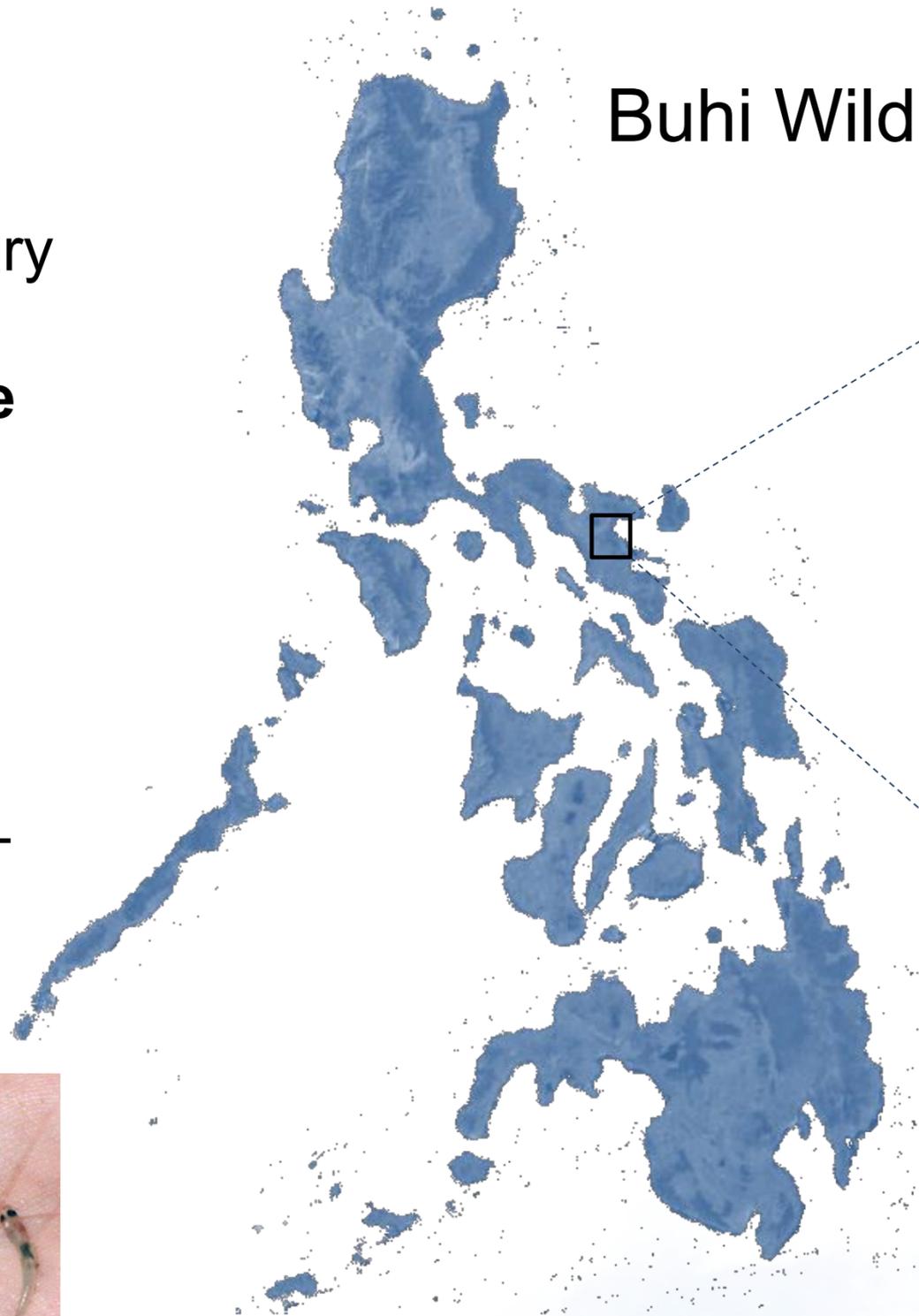
- Legislated as a protected area through the Expanded NIPAS Act (Republic Act 11038)
- Managed by a Protected Area Management Board (PAMB) composed of 258 members:
 - 243 local government units,
 - 5 other government agencies,
 - 3 non-government organizations,
 - 1 academe,
 - 1 private sector and
 - 4 district representatives



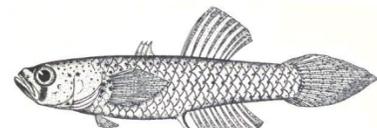
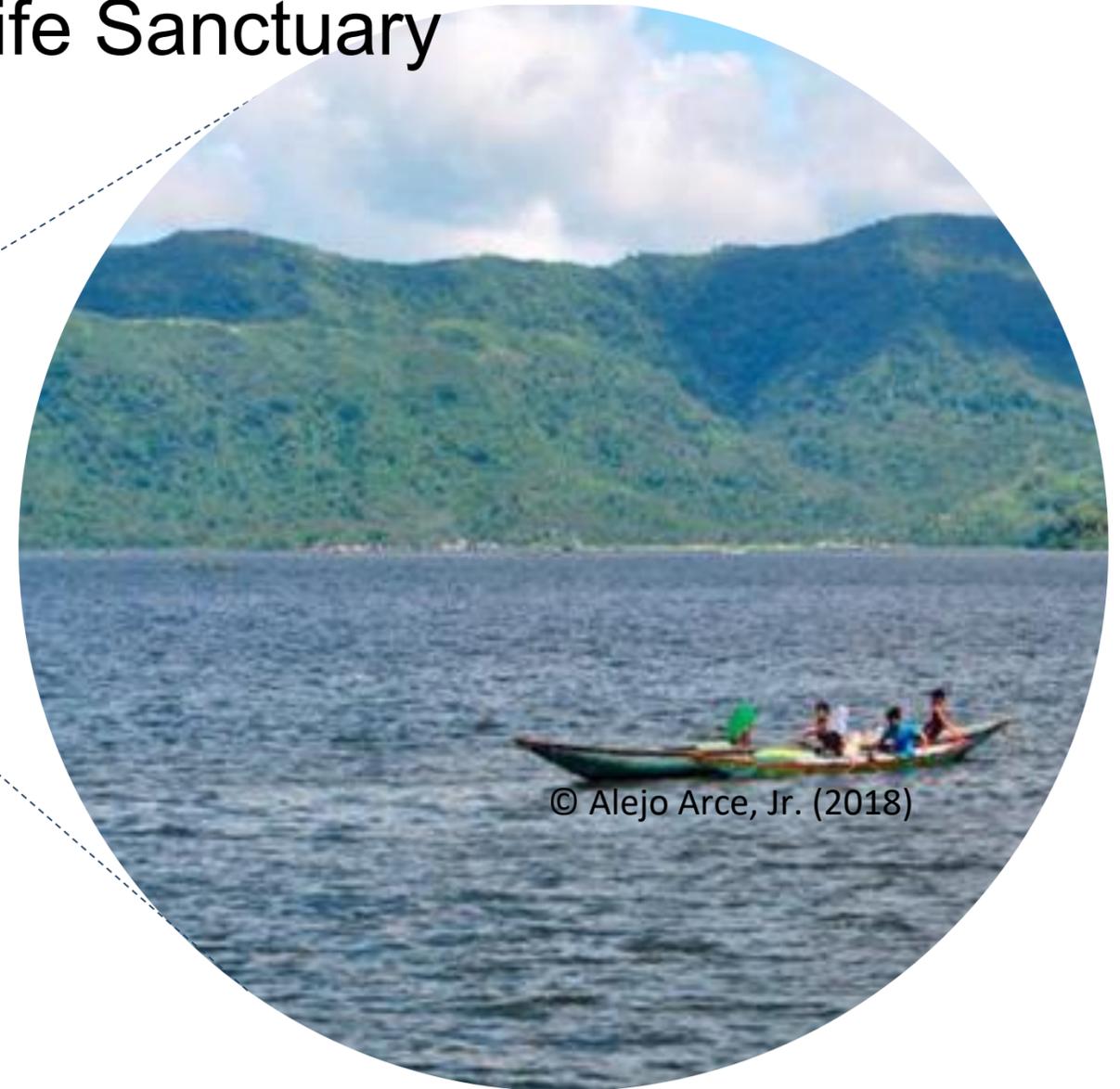
01

National Integrated Protected Area System

- The Buhi Wildlife Sanctuary PAMB manages the Rinconanda Lakes – **Lake Buhi**, Lakelets Manapao, Katugday, Makuwaw and Danao
- Home of the world's smallest commercial fish – sinarapan or tabios (*Mistichthys luzonensis*)



Buhi Wildlife Sanctuary



© Herre (1910)



AREA
1,672.53 ha

PROVINCE
Camarines Sur

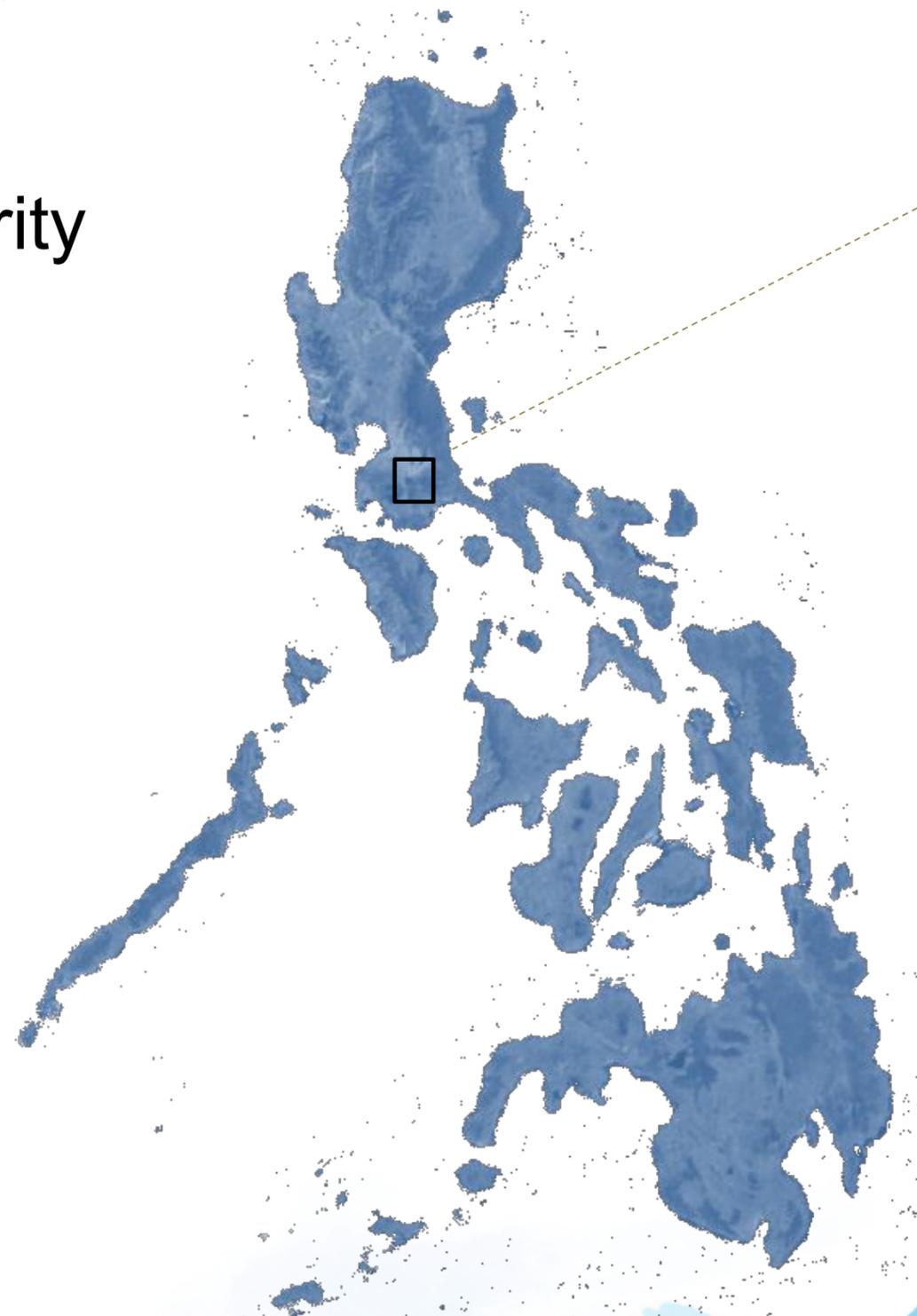


02

Management Authority

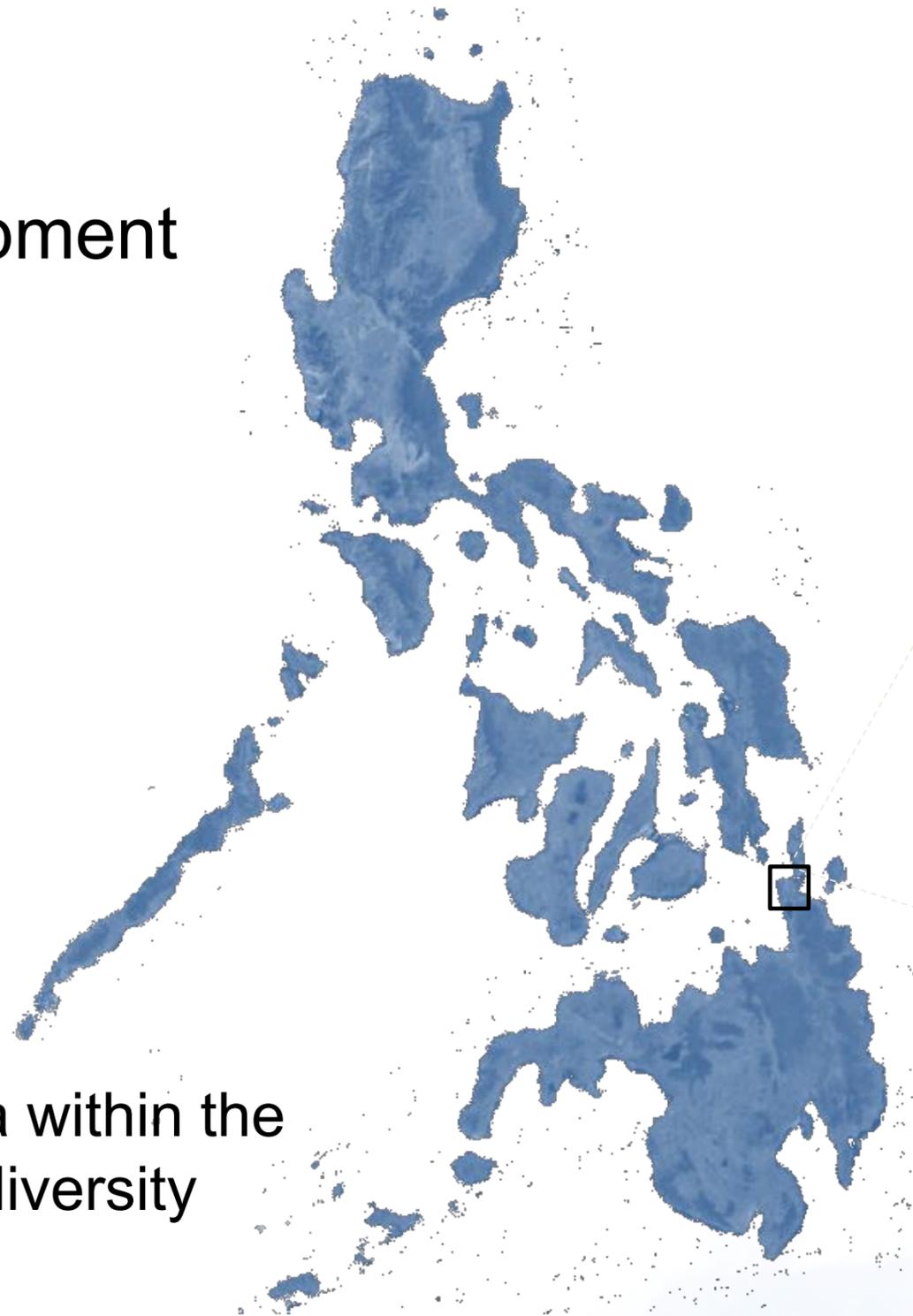
Laguna Lake Development Authority (LLDA)

- The only lake basin management authority in the country **created through a special law** - Republic Act 4850 (1969)
- Other lakes within the Laguna de Bay Region are also under the jurisdiction of LLDA (7 crater lakes of San Pablo City and Tadalac Lake in Los Baños, Laguna)



Lake Mainit Development Alliance

- Created through a **Memorandum of Agreement** between concerned local government units and National Government Agencies
- A Key Biodiversity Area within the Eastern Mindanao Biodiversity Corridor



AREA
14,287.14 ha

PROVINCE/S
Surigao del Norte
& Agusan del Sur

Local Government Administration

Don Carlos Lake Pinamaloy Protected Landscape and Ecotourism Park

The Local Government Unit of Don Carlos in Bukidnon signed a **city ordinance** declaring the “*Don Carlos Lake Pinamaloy Protected Landscape and Ecotourism Park*” – to regulate fishing, ecotourism, and other related activities in the lake.

Clean-up drive

CEPA

City Ordinance

Tree planting

Infrastructure Development



04

Declared Critical Habitat

Malasi Tree Park and Wildlife Sanctuary

- Declared as a Critical Habitat of Philippine Ducks as per DENR Administrative Order 2012-01
- **Malasi Lakes**
 - Malasi Dakal Lake (11.91 has),
 - Malasi Baddi Lake (23.58 has),
 - Macabanning Lake (3.87 has)



©Merlijn van Weerd(2014)

AREA	PROVINCE
39.37 ha	Isabela

Other Wetland CH:

- Cabusao Wetland Critical Habitat, Camarines Sur (DAO 2011-10)
- Sasmuan Critical Habitat and Ecotourism Area (DAO 2021-36)

International Recognition or Site Network member

- Naujan Lake, within the National Lake National Park
- Ramsar Site No. 1008
- East Asian-Australasian Flyway Network Site specifically for tufted ducks (*Aythya fuligula*)



AREA
8,665.84 ha

PROVINCE
Oriental Mindoro

THE PHILIPPINES

8

RAMSAR

SITES

4

EAAF

SITES



TUBBATAHA REEFS NATURAL PARK

OLANGO ISLAND WILDLIFE
SANCTUARY

NAUJAN LAKE NATIONAL PARK

NEGROS OCCIDENTAL COASTAL
WETLANDS CONSERVATION AREA

PHILIPPINE RAMSAR SITES

LAS PINAS PARANAQUE WETLAND
PARK

AGUSAN MARSH WILDLIFE
SANCTUARY

PUERTO PRINCESA UNDERGROUND
RIVER

SASMUAN PAMPANGA COASTAL
WETLANDS



TUBBATAHA REEFS NATURAL PARK

OLANGO ISLAND WILDLIFE
SANCTUARY

NAUJAN LAKE NATIONAL PARK

NEGROS OCCIDENTAL COASTAL
WETLANDS CONSERVATION AREA

PHILIPPINE EAAF NETWORK SITES



World Wetlands Day
2 February 2022
Wetlands Action for People and Nature

VALUE - MANAGE - RESTORE - LOVE

WETLANDS

ATLAS OF PHILIPPINE INLAND WETLANDS and CLASSIFIED CAVES
First Edition 2016

Department of Environment and Natural Resources
Biodiversity Management Bureau

A Pictorial Handbook on
Peat Swamp Flora
of Agusan Marsh, Mindanao
Philippines

Wetlands CEPA Program

CONSERVE
PHILIPPINE
WETLANDS

Department of Environment and Natural Resources
Biodiversity Management Bureau

Pamana, the Invaluable Philippine Wetlands

It takes only a glassful of rice, a strand of fish and a glass of fresh water to taste and see that the Pinoy table is blessed with an enviable abundance. Rice, and fish, typical of a Filipino meal, as well as water are only a few of the many products of our wetlands.

Peatland forests are globally important ecosystems being the most carbon-dense in the terrestrial biosphere.

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Sustainable Use and Protection of Philippine PEATLANDS

Department of Environment and Natural Resources
Biodiversity Management Bureau

Manual on Biodiversity Assessment and Monitoring System for Inland Wetland Ecosystems

Department of Environment and Natural Resources
Biodiversity Management Bureau

Key Issues on Wetland Conservation and Management

01

Transboundary
management

04

Weak stakeholder engagement
in management for common use
resource

02

Lack of wetland
management plan

05

For some wetlands, tributaries
are not within the Protected Area
or do not share common
management unit

03

Insufficient
information on
biodiversity and
ecosystem services

Strategies and Current Efforts

NATIONAL POLICY AND PROGRAM ON WETLANDS CONSERVATION

- harmonization of different mandates and policies
- creation of inter-agency working group or committee
- national policy and framework on Philippine Wetlands

CAPACITY-BUILDING AND CEPA

- continuous CEPA and concerted efforts
- nation-wide World Wetlands Day celebration
- Freshwater biodiversity and similar symposium

STRENGTHENING CONSERVATION MEASURES

- additional Local Conservation Areas, NIPAS, Critical Habitat, Ramsar Sites etc.

STAKEHOLDER ENGAGEMENT AND PARTNERSHIPS

- DA-BFAR* and DENR-BMB convergence initiative
- private sector partnerships
- encourage citizen science and volunteerism

(*DA-BFAR = Department of Agriculture – Bureau of Fisheries and Aquatic Resources)



STAKEHOLDER ENGAGEMENT AND PARTNERSHIPS



Boracay Adopt-a- Wetland partnerships

with Energy Development Corp. (EDC), Aboitiz Equity Ventures Inc., San Miguel Corp. (SMC), Boracay tubi System Inc. (BTSI), JG Summit Holdings Inc.



Peatlands Conservation

three-year partnership between DENR and PLDT-Smart group for the protection, conservation, and restoration of Caimpugan and other peatlands in Agusan Marsh WS



**MARAMING
SALAMAT
PO!**



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REGIONAL FLYWAY INITIATIVE TRAINING SERIES: From Wetland Ecosystem Services to Nature-based Solutions

ADB HQ on 27–30 June 2023

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