



ORGANIZATION PROFILE WETLANDS INTERNATIONAL PHILIPPINES

"We safeguard and restore wetlands for people and nature"

ABOUT US

Wetlands International Philippines (Latin Internasyonal Pilipinas Inc., registered name with the Security and Exchange Commission) is a non-profit organization dedicated to protecting and conserving wetlands for people and nature.

Our goal is to have Healthy Wetlands, Resilient Communities, and Reduced Climate Risks by demonstrating and advocating for sustainable use of wetlands and nature-based solutions in addressing environmental issues (e.g., building-with-nature, room-for-the-river, and science-based approaches).

WHAT ARE WETLANDS?

Wetlands are areas where water is the present temporarily or permanently and is the primary factor controlling the environment and the associated plant and animal life.

The Convention on Wetlands or RAMSAR Convention lists five major wetland types that are generally recognized: marine, e.g. coastal wetlands including coastal lagoons, rocky shores, seagrass beds, and coral reefs; estuarine, e.g. including deltas, mudflats, tidal marshes, and mangrove swamps; lacustrine, e.g. wetlands associated with lakes; riverine, e.g. wetlands along rivers and streams; and palustrine which means "marshy", e.g. marshes, swamps, and bogs. Some wetlands are also man-made, such as dams, rice fields, or constructed ponds.



WHERE DO WE WORK?



Current Work in the Philippines

- Ridge to Coast, Rain to Tap Project: Sustainable Water Supply, Cagayan de Oro River Basin, Bukidnon and Misamis Oriental, Mindanao
- To Plant or Not to Plant Project (TPNTP): North coast of Manila Bay in Luzon (including the provinces of Bataan, Pampanga, and Bulacan)
- TPNTP: Macajalar Bay in Mindanao. Misamis Oriental, northern Mindanao

Partnerships

- Global Mangrove Alliance (GMA) Philippines Chapter
- Macajalar Bay Development Alliance
- Cagayan de Oro River Basin Management Council
- Bulacan State University
- Bataan Provincial Government
- Climate Change Commission
- Department of Environment and Natural Resources Biodiversity Management Bureau

Since 2021, the GMA has been focusing on the following three goals of halting loss, restoring half, and doubling protection of mangrove forests. We are advancing science-based restoration and increasing public awareness that will bring us closer to achieving our target of increasing the global area of mangrove cover by 20% over the current extent by the year 2030.

Projects in the Philippines



Since 2014, Wetlands International implemented projects with partners and stakeholders of wetlands. The projects are described briefly below.

Integrated Coastal Zone Planning

Wetlands International participated in the formulation of the Coastal Zone Management Plan for the City of Tacloban and Municipality of Palo in Leyte. We promoted nature-based approaches to build the protection of the coastline to storm surges. We also demonstrated the reversion of abandoned, underproductive fishpond to mangrove forest and the rehabilitation of a beach forest.

Partners for Resilience (PfR)

The Partners for Resilience (PfR) in the Philippines was part of a global alliance in 10 countries. The Partners are five Netherlands-based organizations in humanitarian development, climate adaptation, and environmental management, namely, the Netherlands Red Cross, CARE Netherlands, Cordaid, the Red Cross Crescent Climate Centre, and Wetlands International. Formed in 2011, PfR advocated for an Integrated Risk Management towards reducing natural and man-made hazards affecting vulnerable communities. This unique approach seeks to integrate disaster risk reduction interventions with climate change adaptation and ecosystem management and restoration (EMR).

Wetlands International Philippines demonstrated riverbank forest restoration and forest landscape restoration in Monkayo, Davao de Oro and Talacogon, Agusan del Sur to address erosion of slope and riverbank. We also provided scientific advice in the formulation of the Manila Bay Sustainable Development Masterplan that was led by the National Economic and Development Authority.

Ridge to Coast, Rain to Tap (R2CR2T) Project

The Ridge to Coast, Rain to Tap Project: Sustainable Water Supply Project was developed in response to the impacts of Typhoon Sendong in 2011 in Cagayan de Oro City and its residents. The project aims to repair and improve the facilities and delivery services of the water provider and to reduce the risk of flooding through the implementation of the integrated river basin management (IRBM) in the Cagayan de Oro River Basin. The IRBM includes the following components: reforestation (a community- and science-based approach in reforestation); payment for ecosystem services; and decision support tool, based on hydrological modeling, to guide landscape-wide rehabilitation. Wetlands International works with the Cagayan de Oro River Basin Management Council and Hineleban Foundation Inc. (of the plantation company).

Building with Nature Asia Initiative

Building with Nature (BwN) Asia Initiative accelerates adaptation to the impacts of climate change by integrating nature-based solutions into water-related issues in Asia and assist in building climate-resilient landscapes and seascapes that benefit people and nature. It is a participative approach to coastal, river, lake, and delta management. In the Philippines, BwN Asia focuses in Manila Bay. Wetlands International Philippines has mapped zones in the north coast of Manila Bay for the establishment of greenbelt of mangrove forest and the restoration of mudflats to address coastal flooding.

To Plant or Not to Plant (TPNTP) Project

To Plant or Not to Plant (TPNTP) is a mangrove restoration project that advocates for the science-based Ecological Mangrove Restoration (EMR) and Associated Mangrove Aquaculture (AMA). Through the TPNTP, Wetlands International Philippines promotes good practices (Work Package 1) and advances national policies (Work Package 2) that support mangrove restoration in the country. The implementation of the TPNTP is currently focused in Macajalar Bay, Mindanao and in the north coast of Manila Bay, Luzon. The national policies and bills that we support are the enhanced national greening program, integrated coastal zone management, blue carbon, blue economy, and nature-based solutions.

Restoring Wetlands as a Nature-based Solutions

In the era of the Anthropocene, human activities have significantly altered and influenced the natural balance and cycle of life on the surface of the earth. Now the whole earth is reeling from the stress of climate change, e.g., rising sea levels, extreme weather events, excessive flooding, and insecurity of food and water. These impacts threaten our very existence and those of other species. Solutions are needed to mitigate and adapt to the impacts of climate change.

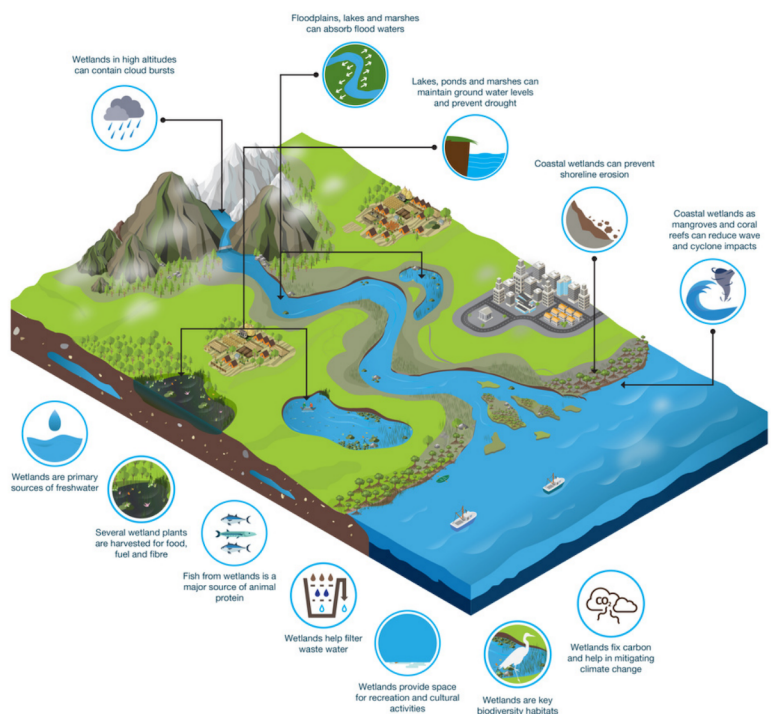
Likewise, we need the help of nature to solve our societal problems and ensure the survival of the human race as well as all living things. Nature-based solutions are the answer.

What are Nature-based Solutions?

Nature-based Solutions (NbS) is about working with nature to solve the environmental problems our planet is facing. This benefits both biodiversity and human well-being. NbS are actions to protect, sustainably manage, and restore the functions of the ecosystems to provide protection from excessive riverine flooding or coastal flooding, storage of water, prevention of erosion of land or coastline, storing carbon, and others. They are effective in solving societal issues and concerns, such as: climate change; disaster risk reduction; economic and social development; human health and food security; food and water security.

Restoring Wetlands as Nature-based Solutions

When it comes to water-related issues such as excessive flooding, poor water supply, and severe storms, wetlands are important to solving these. Rivers, lakes, swamps, and mangrove forests are regulators of natural flows of water. Rivers and tributaries channel rainwater to the sea. Ox-bow lakes temporarily store water and retard the strong flow of water downstream. Lakes store water that can be tapped for domestic and agricultural uses. Mangrove forests break the strength of strong waves along the coasts during severe storms. Restoring wetlands and their functions are thus nature-based solutions.





Restoration site in Camotes Island, Cebu

The other Benefits of Restoring Wetlands

Carbon sequestration

Protecting wetlands can store carbon while restoring wetlands can reduce greenhouse gas emissions to the atmosphere, slowing down climate change.

Flood and erosion control

Restoring the natural vegetation of forests in watersheds and river basins can stabilize soil, store water, and stabilize soil, thus reducing the risk of floods, erosion, and landslides.

Coastal Defense

Healthy coastal ecosystems can protect communities from the impact of storm surges, saltwater intrusion, and erosion. Mangrove forests can also provide recreational areas for mental and physical health.

Food and water security

Restoring forests using nature-based agricultural practices like intercropping native trees with crops sustains and enhances yields while reducing erosion and ensuring quality water supply.

Livelihood and economic opportunity

Restoring wetland ecosystems can generate jobs and provide livelihoods while securing supply chains. This way, healthy wetlands can support economic growth.

Cultural values

Wetlands inspire diverse cultural values. They provide beauty and rouse spiritual and religious connections, all the while bringing education, creativity, and health benefits.

Social capital

Healthy wetlands promote human wellbeing, giving us the capacity to adapt and become resilient to the changing world.



How We are Applying Nature-based Solutions in the Philippines



Planting of native toog seedlings in Claveria, Misamis Oriental in the upper river basins of Agusan Marsh.

Agusan River Basin

The Agusan Marsh Wildlife Sanctuary is among the most ecologically significant wetlands in the Philippines, harboring several types of wetlands such as floodplain lakes, ponds, rivers, swamplands, peat swamps, rivers, and inundated forests. The Agusan Marsh stores excess water during rainfall and protects downstream cities and towns from devastating floods.

However, parts of the Marsh have been cleared, logged, drained, or converted for agriculture, aquaculture, oil palm plantation, mining, and human settlement, thereby decreasing its water storage capacity. Meanwhile, rapid deforestation ails the areas upstream, causing erosion, landslides, and river bank erosion. As a result, downstream communities have experienced severe flooding.

As a nature-based Solution to the risk of flooding, erosion, and landslides, Wetlands International Philippines and our partners in the Partners for Resilience (PfR) Project joined forces to rehabilitate the exposed slopes and river banks of the Marsh. Through Forest Landscape Restoration, native and fruit-bearing trees were planted on the slope of Talacogon Municipality and through river bank forest restoration, vegetation was planted in Barangay Culiram in Talacogon and along Agusan River in the town of Monkayo.

Cagayan de Oro River Basin

One of the eighteen (18) priority river basins in the country, the Cagayan de Oro (CDO) River Basin has a total land area of 137,934 hectares with eight (8) tributaries cascading in the areas of Bukidnon and Cagayan de Oro City and emptying into the Macajalar Bay at Cagayan de Oro in the province of Misamis Oriental.

However, the river basin has faced a number of threats including flooding, soil erosion, and pollution due to unsustainable land use and agricultural practices, improper waste disposal, and informal settling along riverbanks. In 2011, Typhoon Sendong sent a torrent of rain that flooded Cagayan de Oro City, damaged the Water District that limited water supply, and washed away the settlements at the mouth of the Cagayan de Oro River.

To reduce the risk of a similar occurrence, the Ridge to Coast, Rain to Tap (R2CR2T) Project was developed. The rehabilitation of the watershed and river basin were initiated as a Nature-based Solution to the problem. The buffer zone and gullies of the Mt. Kitanglad Range Natural Park were planted with native hard-wood and fruit trees. This was done with the cooperation of the communities living within and near the Park.

A system for Payments for Ecosystem Services (PES) was also piloted in the CDO River Basin and the Hydrological Model and Decision Support Tool was also developed to encourage sustainability and further rehabilitation of the watershed.



Members of the Baungon-Higaunon Tribal Council staking the land in preparation for the restoration of riparian zones in Baungon, Bukidnon



Naturally regenerated mangroves from the propagules dispersed by the restored mangroves of Barangay 74 Nula-tula, Tacloban.

Barangay 74 Nula-tula, Tacloban City

When Super Typhoon Yolanda (international name Haiyan) struck in 2013, the City of Tacloban suffered mass devastation. Infrastructures, livelihoods, homes, and lives were wiped out by the passing of a single storm. The tragedy was so great, the City Government of Tacloban and its people saw the value of mangroves as coastal frontiers.

Under the One Resilience Team - Tacloban Project, an abandoned fishpond destroyed by the typhoon was selected by the City Environment and Natural Resources of Tacloban for rehabilitation. Native mangrove saplings were harvested and planted by villagers and volunteers in 2018. Continuous monitoring and protection followed.

More than five years later, the rehabilitated mangroves now provide protection and livelihood for the coastal community of Nula-tula and nearby villages, serving as a source of inspiration and proof that nature-based solutions are cost-effective and sustainable ways of solving social problems.

References

- “Nature-based Solutions.” IUCN, www.iucn.org/our-work/nature-based-solutions.
- “1.1 – What Are Nature-based Solutions (NbS)? [NbS for the Local Communities].” Youtube, uploaded by National Institute for Environmental Studies Center for Climate Change Adaptation (NIES CCCA), 1 Nov. 2021, www.youtube.com/watch?v=TMwcl6LHO_8.
- Seddon, Nathalie. “The Future We Can and Must Chose: Nature-based Solutions.” YouTube, 27 May 2021, www.youtube.com/watch?v=4-unUVfAwsQ.
- The Four Guidelines for Nature-based Solutions | Nature-based Solutions to Climate Change | Key Messages for Decision Makers in 2020 and Beyond. nbsguidelines.info.
- Ramsar.org. Information Sheet on Ramsar Wetlands, 12 November 1999. Ramsar Convention Bureau. Switzerland.
- User, Super. Protected Area, Biodiversity and Ecotourism. denrpenroads.com/index.php/priority-programs/national-greening-program/protected-area-biodiversity-and-ecotourism.
- [Draft] Formulation of an Integrated River Basin Management and Development Master Plan Cagayan de Oro River Basin, May 2014. River Basin Control Office, Department of Environment and Natural Resources, Quezon City. <https://faspelib.denr.gov.ph/sites/default/files//DOCUMENTS/cagayan%20de%20oro%20DRAFT%20MASTER%20PLAN.pdf>

Our vision is a world where wetlands are treasured and nurtured for their beauty, the life they support and the resources they provide. Our mission is to inspire and mobilise society to safeguard and restore wetlands for people and nature.



For further information please contact our office

Wetlands International Philippines

Units 911 & 912, 9th Floor DMG Center, #54 D.M. Guevara St.
cor. Calbayog Ext., Brgy. Mauway, Mandaluyong City,
1550 Philippines.

+632 8 5641562

latian.wiphils@wetlands.org

wetlands.org



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