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February 2 is World Wetlands Day: Wetlands are not wastelands; they are highly productive ecosystems



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The Laguna de Bay, one of country's largest inland freshwater lake, is a productive fishing ground and the biggest aquaculture hub in the Philippines. It is one of the most economically important water bodies in the Philippines. Photo courtesy of [Pamalakaya](#)

The World Wetlands Day (WWD) is celebrated every February 2 to raise global awareness about the important role of wetlands for people and planet. It marks the date of the adoption of the Convention on Wetlands on February 2, 1971, in the Iranian city of Ramsar.

This year, the celebration is the first time that WWD will be observed as a United Nations international day after it was adoption by the General Assembly on August 30, 2021, in a resolution co-sponsored by 75 member states.

The WWD theme this year is “Wetlands Action for People and Nature,” to highlight the importance of actions “to ensure the conservation and sustainable use of wetlands for humans and planetary health.”

The Philippines, through the Biodiversity Management Bureau (BMB) of the Department of Environment and Natural Resources, (DENR) celebrates WWD in support of its international commitment to protect and conserve wetlands.

Global celebration

As part of the global celebration, and in recognition of the value of wetland ecosystems in the Asean region, the Philippine-based Asean Centre for Biodiversity (ACB), in partnership with the Department of Freshwater Wetlands Conservation, General Directorate of Natural Protected Areas of the Ministry of Environment of Cambodia, the Society for the Conservation of Philippine Wetlands, and the Ramsar Convention on Wetlands, will be conducting a series of events for the celebration of WWD.

“As this year’s Asean chairman, Cambodia is underscoring the importance of enhancing the capacity of the region to respond against climate change and natural disasters,” ACB Executive Director Theresa Mundita S. Lim told the BusinessMirror via Messenger on January 25.

“Thus, the Asean WWD 2022 event will highlight the significance of wetland protection and conservation as a key contributor to Asean’s response against the impacts of climate change, and to pandemic recovery and prevention,” Lim added.

Lim said this year’s theme underlines the importance of wetlands in sustaining people’s health and livelihoods, and its crucial role in addressing biodiversity and the climate crises.

“The events aspire to intensify regional awareness on the conservation, sustainable and wise use, and restoration of wetlands in the region,” she noted.

Vanishing ecosystems

According to the UN World Wetlands Day Secretariat, about 90 percent of the world’s wetlands have been degraded since the 1700s and wetlands are lost three times faster than forests.

It noted that while wetlands are critically important ecosystems that contribute to biodiversity, climate mitigation and adaptation, freshwater availability, world economies and more, protection and conservation initiatives remain wanting.

In the Philippines, wetland conservation is one of the mandates of the DENR through its Caves, Wetlands and Other Ecosystems Division (Cawed).

What is a wetland?

Republic Act 11038, or the Expanded National Integrated Protected Area Systems Act (ENIPAS Act), defines wetlands as a wide variety of inland habitats, such as marshes, peatlands, floodplains, rivers and lakes, and coastal areas, including salt marshes, mangroves, intertidal mudflats and seagrass beds, and also coral reefs and other marine areas no deeper than 6 meters at low tide, as well as human-made wetlands, such as dams, reservoirs, rice paddies and wastewater treatment ponds and lagoons.

According to the DENR-BMB, wetlands are land areas flooded or saturated with water, either seasonally or permanently such that they take on the characteristics of a distinct ecosystem.

To be considered as a wetland, an area should have the following characteristics, Anson Tagtag, OIC division chief of the DENR-BMB's Cawed, told the BusinessMirror via email on January 23.

- 1) It should be covered by water or has waterlogged soil for at least seven days during the growing season;
- 2) Life forms have adapted to life in the wetlands, e.g. plants develop special adaptation mechanism, such as stilt roots, pneumatophores, etc.; and
- 3) The soil is hydric, which means that the substrate, since filled with water, will not have enough oxygen for some plants to grow such as big evergreen trees," Anson Tagtag, OIC Division Chief of the DENR-BMB's Caves, Wetlands and Other Ecosystems Division (CAWED) told the BusinessMirror via email on January 23.

3 largest inland wetlands in the Philippines

The Philippines has three categories of wetlands: inland wetlands, human-made wetlands, and marine and coastal wetlands.

The country boasts of large wetlands—the three largest inland wetlands of the Liguasan Marsh, Agusan Marsh and Laguna Lake.

A conglomeration of Libungan, Ligawasan and Ebpanan Marshes, Liguasan Marsh spreads over the provinces of Maguindanao, North Cotabato and Sultan Kudarat.

The Agusan Marsh—home to "Lolong," the largest saltwater crocodiles ever to be captured alive—is a well-known wetland complex comprising marshes, lakes, swamps, rivers and peatlands. It is recognized worldwide having been declared as a Ramsar Site and an Asean Heritage Park.

Meanwhile, the Laguna Lake is the largest lake in the country and the third largest freshwater lake in Southeast Asia.

Home to endemic wildlife

Wetlands are critical for biodiversity, they are home to more than 100,000 known freshwater species alone, and continuously growing as new species are discovered.

The Liguasan and Agusan marshes serve as habitat of various native and endemic flora and fauna, and are known to support endemic bird species.

"They also support various migratory waterbirds, providing habitat for staging, wintering, roosting and feeding birds," the DENR-BMB added.

These two large marshes are known habitats of the critically endangered Philippine crocodiles and the Philippine duck. Both species are considered vulnerable species.

Importance of wetlands

Tagtag explained that wetlands are “highly productive ecosystems, providing many important benefits or goods and services.”

They provide many ecosystem services—such as 1) provisioning services (e.g. fish and other food, raw materials, water supply, hydropower); 2) regulating services (e.g. carbon sequestration, water purification, flood mitigation); 3) cultural services (e.g. sacred natural sites and other faith sites, recreation, tourism and ecotourism); and 4) supporting services (e.g. primary production, nutrient cycling, global water cycle).”

Some wetlands like the Laguna Lake are known for its many economic uses and benefits. These include fishing, transportation, agriculture, recreation, industrial cooling, hydropower generation and water supply.

Wetlands create sustainable products and livelihoods. Globally, 61.8 million people earn their living directly from fishing and aquaculture. Including their families, more than 660 million people depend on these sectors.

Nature’s shock absorber

In an earlier telephone interview, Tagtag spoke of wetland’s importance as an important natural defense system against calamities like strong typhoons.

He said wetlands, however, are only able to perform its function as a “shock absorber” when they are in their natural state, undisturbed by human activities.

“The best way to use nature is by not using them at all,” he pointed out.

He added that while wetlands can help protect communities from disaster in times of natural calamities, they, too have their limits.

Peatlands and wet grasslands in river basins act as natural sponges, absorbing rainfall, creating wide surface pools and reducing floods in streams and rivers, Tagtag pointed out.

This storage capacity also helps safeguard against drought. Coastal wetlands, such as coral reefs, mangroves, tidal flats, deltas and estuaries, can limit the damaging effects of storm surges and tidal waves by acting as a physical barrier that reduces the water's height and speed.

Threatened ecosystems

Tagtag said historically, throughout the world, wetlands have often been mistakenly regarded as wastelands because they are wet, soggy, muddy areas that bred mosquitoes, flies, diseases and had unpleasant odor.

“Because wetlands were not productive for our traditional needs, such as shelter or agricultural production, [they] were thought of as places to avoid, and in many cases eliminated. As a result, large areas of wetlands were drained and converted for other land uses, such as housing developments and farmland,” he said.

Threats to wetlands include habitat destruction, overexploitation and unsustainable utilization, proliferation of invasive alien species, pollution, poaching and illegal trade, incompatible tourism activities, overlapping and conflicting policies, drought and climate change, among many others.

Saving wetlands

The DENR currently implements the Philippine Inland Wetland Conservation Program (PIWCP) and the Coastal and Marine Ecosystems Management Program (CMEMP) for the wise-use and sustainable management of Philippine wetlands.

The PIWCP covers wetlands' inventory and database management, profiling and assessment, management planning, and management plan implementation, as well as the monitoring of the program implementation.

At the same time, the CMEMP covers the establishment and strengthening of the Marine Protected Area (MPA) Network through: assessment, mapping and site selection, management plan development, and maintenance and protection.

A major strategy being pursued by the DENR-BMB is the continuous production of CEPA materials regarding the importance and conservation of wetlands to promote public awareness, instil social and environmental consciousness and effect behavior change toward wetlands ecosystems, Tagtag said.

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