Abstract

SPECIAL EVENTS:

Technical and Policy Workshop on Sustainable Nutrient Management in Support of the Asian Platform of Global Partnership on Nutrient Manegement



THE EAST ASIAN SEAS CONGRESS 2015 16-21 November 2015 • Danang, Vietnam

Global Targets Local Benefits Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015

The Laguna de Bay Ecosystem Health Report Card: An Assessment and Planning Tool for Integrated Lake Basin Management

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In 2013, the Laguna Lake Development Authority (LLDA) and the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), collaborated in the preparation of the first Laguna de Bay Ecosystem Health Report Card (LdB-EHRC). This was funded by UNEP/GEF under the project on Global foundations for reducing nutrient enrichment and oxygen depletion from land based pollution, in support of the Global Nutrient Cycle. Two groups of indicators were used. i.e. water quality and fisheries. The former were nitrate, phosphate, cholorphyll a, dissolved oxygen, biochemical oxygen demand and total coliforms from 2004 to 2013. The fisheries indicators were zooplankton, population of native species, , and the catch per unit effort . To ensure independence in the interpretation of data generated by the LLDA , a team of local and international experts were engaged.

The measured indicators in the West Bay, Central Bay, East Bay and South Bay were evaluated in terms of compliance to the National Water Quality Criteria for Class C waters (Fisheries), which is the classification of Laguna de Bay. The scores were based on the Philippine's Grading System for students in all levels of education. The numerical scores were then transformed into the equivalent grade in five colors, wherein green is the highest grade and red is the lowest grade. The fisheries indicators were calculated as ratios or percentage that are then combined for each bay. The scores were normalized to form a fisheries index.

Based on the 10-year data, the ecosystem health of Laguna de Bay scored a passing mark of 76% or a C- in water quality. This was affected by untreated domestic, agricultural and industrial wastes, mismanagement of solid wastes, rapid land conversation and declining forest cover. The lake received a 30% or a D in Fisheries. Invasive species, competition for natural food and poor water quality contributed to the low scores.

The dissemination forum for stakeholders was conducted 0n October 28, 2015. It elicited discussion, interest and expression of support by participants to be part of the solution, making it also as a venue for a Call to Action to all sectors. The first LdB-EHRC is due for official release this November.