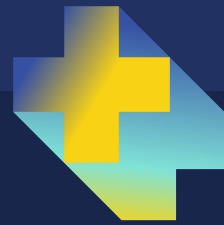


HOW **VULNERABLE** IS LAGUNA LAKE TO POLLUTION?

In general, the **vulnerability** of water resources can be **water shortage, water pollution, and water-related natural crisis** such as flood or drought.

In the case of water pollution and shortage within Laguna Lake, providing appropriate options for **pollution abatement technologies** is needed in order to improve its **water treatment and quality**.

Major causes of water shortage and environmental degradation of the lake:



These ecological stresses had affected the lake's water quality resulting to:

increasing **ALGAL BIOMASS**
high level **HEAVY METALS**
declining **FISH PRODUCTION**

DANGER IN HUMAN HEALTH

Fish products were found to be contaminated. Hence, not suggested for human consumption

POLLUTION LOAD

77%

Domestic Wastes

11%

Industrial Wastes

11%

Agricultural Wastes

1%

Forest Wastes

Sources:
Chen, Y., Feng, Y., Zhang, F., & Wang, L. (2018, December 24). Assessing Water Resources Vulnerability by Using a Rough Set Cloud Model: A Case Study of the Huai River Basin, China. Entropy 2019, 21, 14; doi:10.3390/e21010014. www.mdpi.com/journal/entropy.

The Manila Times. (2016, July 31). EcoWaste backs testing of fish from Laguna lake. www.manilatimes.net/2016/07/31/news/national/ecowaste-backs-testing-of-fish-from-laguna-lake/277111/

About the project



The School of Environmental Science and Management from University of the Philippines is currently implementing the project titled,

"TOOLS AND METHODS IN ESTABLISHING LAKE RESOURCE VULNERABILITY INDEX AND ASSESSING POLLUTION ABATEMENT TECHNOLOGIES TOWARDS A WATER QUALITY IMPROVED LAGUNA LAKE"

This project aims to

- Assess the state and vulnerability of the water resource of Laguna Lake
- Determine the appropriate tools and methods in developing lake resource vulnerability index
- Provide options for potential pollution abatement technologies that are cost-effective and socially acceptable

End goal

Choose the best tool among pollution abatement technologies suited for Laguna Lake