

## **Relative Nutrient Contributions to Lake Yojoa, Honduras**

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**Abstract.** Lake Yojoa, the largest lake in Honduras, is important to the natural environment and associated wildlife and also to the surrounding communities. Providing habitat to both native species and captive bred fish, Lake Yojoa provides not only a method of subsistence, but has become a thoroughly integrated component of the local economy. However, nutrient inputs from surrounding municipal, agricultural and natural sources threaten to compromise the health of the lake and the ecosystem services it provides. In-lake tilapia aquaculture also constitutes a significant source of nutrients. By comparing legacy and contemporary data on discharge and nutrient concentrations, we will evaluate the nutrient loading attributed to aquaculture, as compared to sources from the watershed. The problem of nutrient loading, and resulting loss of ecosystem health, is not merely aesthetic and ecological but also has dire social and economic impacts on local communities.