

08. DEVELOPING AN ENVIRONMENTAL HEALTH REPORT CARD FOR LAGUNA DE BAY, PHILIPPINES

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Laguna de Bay is the largest inland waterbody in the Philippines and the third largest in South East Asia. Laguna de Bay is connected to Manila Bay via the Pasig River, which flows through metro-Manila and is a tidal estuary. It has a surface area of 900 km², with an average depth of 2.5 meters and an elevation of about 1 meter above sea level. The watershed population is over 8 million people. Laguna de Bay features distinct regions. The West Bay watershed is the most populated and heavily developed, mainly because it includes part of Metro Manila, while the East Bay is the least. The West and Central Bays are separated by Talim Island, the biggest and most populated island. This first ecosystem health report card is designed to provide a better understanding of the current ecosystem health, particularly as water quality improvement strategies are developed. Two workshops were conducted to develop a framework for the report card, identified the target audience, developed indicators and thresholds, and determined the key messages. Overall Laguna de Bay scored a low passing mark, 76%, a C-, in water quality and an F in fisheries weigh regional scores also developed. Laguna de Bay consistently is within national water quality guidelines in DO, BOD, nitrate, and total coliform but consistently scored poorly for chlorophyll a and phosphate. Water quality and fisheries are negatively impacted by high population and industrialization. Laguna de Bay scored an F for fisheries due to catch per unit effort, invasive species, and zooplankton ratios.