

Water Quality and Coastal Management Profile Assessment of Puerto Galera Bay, Philippines

Authors : Ma. Manna Farrel B. Pinto

Abstract : As global industrialization progresses, the environment remains to be at risk of disturbances brought by developments of cities and communities. Impacts of flourishing industries such as tourism require rapid growth of establishments and may threaten ecosystems and natural resources. Puerto Galera as a biosphere reserve and declared as the Center of the World's Center of Marine Shorefish Biodiversity is on the brink of ecological deterioration as tourism further develops in its coastal areas. Apparently, attempts were initiated to establish a baseline for designation of protection in the economic and coastal marine zones of Puerto Galera but continuity of its implementation and coordination of concerned units remains deficient. Indications of eutrophication have been observed based on water quality analysis although parameter values still comply with the national standards for coastal waters. Water quality data, biodiversity and hydrodynamic information, gathered from studies, and local government units were analysed to assess the condition of the coast as well as acting policies implemented by the local authorities. Sources of contaminants were also located in its three main communities, and their shores wherein in recommendations for installing wastewater treatment facilities and further improvement of policies of waste discharge must be addressed. With a conceptual framework proposed in the study, a comprehensive data analysis and coordinated management are necessary to form an integrated coastal management for further protection and preservation of the sustainable coastal marine ecosystem of Puerto Galera.

Keywords : coastal management, environmental management, integrated resource management, Puerto Galera

Conference Title : ICEMTE 2017 : International Conference on Environmental Management, Technology and Engineering

Conference Location : Paris, France

Conference Dates : July 20-21, 2017