

Are the Coastal Marine Waters of North Mainland Palawan's Major Tourism Sites Fit for Recreational Purposes?

Jenevieve P. Hara¹, Madrono P. Cabrestante¹, Marianne Faith G. Martinico-Perez^{1,2}

¹Palawan Council for Sustainable Development Staff

Puerto Princesa City, Philippines

²Graduate School of Environmental Studies, Nagoya University

Furo-cho, Chikusa-ku, Nagoya, Japan

harajenevieve@gmail.com

ABSTRACT

This study was conducted to determine the level of pollution in the major coastal areas of three mainland municipalities in Northern Palawan mainly San Vicente, Taytay and El Nido. Water quality parameters such as nutrients (nitrates and phosphates), oil and grease, total coliform and physical parameters (pH and temperature) were utilized as pollution indicators. Data from water quality monitoring since 2012 to 2015 were used in this study. Mean concentration for each parameters were computed and compared against the standard set for Class SB and SC or areas classified as recreational and fishery waters by DENR Administrative Order 34, Series of 1990 (DAO 34) for coastal and marine waters. Results of this study showed that there were no remarkable differences in temperature, pH, and nutrient concentrations among stations. However, some stations located in coastal communities in El Nido and Taytay exhibited high nitrates concentration. Most stations have oil and grease concentration within the limits set for Class SC, except to the three stations in Taytay and the station along the pier in El Nido. On the other hand, levels of total coliform in some areas were generally high and above the standard limit set for Class SC or recreational waters. Due to the evidence of anthropogenic input in the monitored coastal areas, it is recommended to identify the possible sources of pollutants and implement proper mitigating measures. Likewise, an integrated information campaign on the importance of the water resources and its other valuable contribution both economically and ecologically, should be implemented to increase the level of awareness of coastal and terrestrial communities.

Keywords: pollution, coastal areas, recreational water, anthropogenic factors, parameters