

Working Title: Evaluation of Invasion Threat Score of Non-Indigenous Species in Manila Bay

ABSTRACT

Considered as one of the major gateway in the Philippines and in Asia, Manila Bay has been one of the entry points for the marine non-indigenous species in the country. Port monitoring for biological invasion have been done using different methodologies including the use of a fouler collector designed by North Pacific Marine Sciences Organization (PICES). Another method that can be surpass taxonomic resolution is the use of eDNA technique which is a non-invasive method that promotes a reliable and cost-effective method for monitoring various organisms in an aquatic environment, particularly when the populations are low in abundance. Introduction of NIS can become invasive and cause damage to the natural resources and ecosystem services since it can trigger decline or even extinction of native species, disruption of ecosystem functions, enhance transmission of virus and pathogens. To create a non-indigenous invasion threat score in Ports of Manila, the global NIS occurrence likelihood assessment was looked into together with the species' habitat suitability, species invasiveness and traffic data analyses. The general objective of the study is to evaluate the invasion threat scores of the NIS in Manila Bay. This study is expected to evaluate the invasion threat scores of non-indigenous species in Ports of Manila. The study will also compare the species identified using the morphological and eDNA techniques.

Keywords: non-indigenous species, NIS, PICES, eDNA, Manila Bay