



World Scientific News

WSN 66 (2017) 281-292

EISSN 2392-2192

Distribution of Marine Debris in Biawak Island, West Java, Indonesia

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ABSTRACT

Marine debris becomes a challenge to the ocean view especially in Indonesia as a maritime country. This study investigates the distribution of marine debris in the Biawak Island, Indramayu district, Indonesia. This study was conducted in November 2013 and 2014 by completing the standard form of the global International Coastal Cleanup (ICC) Network. By doing this, we aim to establish the condition and distribution of debris in the ecosystem area. The data collected from 7 stations along the coast of the Biawak island. The results showed that the total weight of marine debris ranged from 3-26 kg in each station with the highest density located at the eastern part of Biawak Island. The total weight of marine debris was 68 kg of 655 meters from total length 4.93 km of coastal line. Marine debris that found in the region predominantly composed of waste rope, styrofoam, and plastics. Debris from fishing activities also suggesting as a prevalent debris item found in the region. The result indicates that sources of debris transported from other regions by the ocean currents.

Keywords: Biawak Island, plastics, fishing gear, tracking, mangrove ecosystem

1. INTRODUCTION

Marine debris as a global issue for this century [1]. This issue blow up by UNEP Report in 2011, Rio +20 Conference in 2012, and World Economic Forum in 2016. The report