ANALISIS PENGELOLAAN PANTAI BERDASARKAN KARAKTERISTIK SAMPAH PANTAI SERTA STATUS LINGKUNGAN DI YOGYAKARTA

Oleh: Muhammad Fikri Hibatullah

22/509823/PGE/01535

INTISARI

Sampah laut menjadi permasalahan global yang dapat memengaruhi lingkungan baik di darat ataupun di laut. Selain berdampak secara fisik, permasalahan ini juga dapat berpengaruh terhadap kondisi sosial ekonomi. Keunikan dari karakteristik berbagai pantai di Daerah Istimewa Yogyakarta (DIY) menyebabkan berkembangnya industri pariwisata pantai yang dikenal dengan *sun, sea, and sand industry*. Pengembangan potensi wilayah dengan perkembangan industri yang masif dapat menimbulkan permasalahan sampah pantai. Faktor lain yang memengaruhi yaitu aransemen morfologi yang langsung menghadap ke samudra dapat memudahkan pergerakan, pengendapan, dan memperbanyak kelimpahan sampah pantai, menjadikannya rawan terhadap permasalahan sampah pantai. Tujuan dari penelitian ini adalah untuk mengetahui besaran dan karakteristik sampah pantai, asal sumber sampah, serta proses dinamika yang terjadi di lingkungan pantai DIY; menganalisis status lingkungan di pantai DIY; dan menentukan arahan pengelolaan lingkungan pantai berdasarkan karakteristik sampah, asal sampah, serta status lingkungan di pantai DIY. Sembilan pantai sampel dipilih berdasarkan morfologi, keberadaan muara sungai, dan peruntukan pantai untuk mewakili pengaruh faktor tersebut terhadap permasalahan sampah pantai. Analisis dilakukan untuk mengetahui karakteristik dan sumber sampah pantai, pengaruh morfologi, dan karakteristik hidro-oseanografi. Analisis status lingkungan pantai dilakukan dengan Indeks Kebersihan Pantai dan Indeks Barang Bahaya. Pantai di DIY mempunyai perbedaan karakteristik sampah pantai ditinjau dari massa, ukuran, jumlah, dan asal usulnya. Perolehan sampah pantai paling banyak terdapat pada Pantai Congot sejumlah 5.995 sampah dan paling sedikit pada Pantai Krakal sejumlah 195. Pantai dengan morfologi saku memiliki jumlah kelimpahan sampah pantai. Pantai yang berada di muara sungai dengan panjang DAS yang lebih panjang memiliki bentuk sampah yang lebih kecil. Aktivitas di pantai juga memengaruhi kelimpahan sampah pantai. Pantai yang memiliki nilai Indeks Kebersihan Pantai paling besar yaitu Pantai Congot dengan nilai Indeks Barang Berbahaya paling tinggi juga. Berdasarkan analisis status lingkungan pantai terdapat 5 (lima) pantai yang termasuk ke kategori sedang dan 5 (lima) pantai ke kategori buruk. Pengelolaan sampah pantai dapat dilakukan dengan menerapkan peraturan yang sudah berlaku tetapi perlu juga diperhatikan faktor-faktor seperti, morfologi pantai, asal sumber sampah pantai, dan peruntukan pantai.

Kata kunci: pengelolaan pantai, pesisir, plastik, sampah pantai, status lingkungan,

ANALYSIS OF BEACH MANAGEMENT BASED ON MARINE DEBRIS CHARACTERISTICS AND ENVIRONMENTAL STATUS IN YOGYAKARTA

Oleh: Muhammad Fikri Hibatullah

22/509823/PGE/01535

ABSTRACT

Environmental impacts from marine debris can occur both on land and at sea, making it a global concern. This issue may impact socioeconomic circumstances in addition to the physical realm. A business centered around the sun, sea, and sand has emerged because of the distinctive features of the beaches in the Special Region of Yogyakarta (DIY). Significant industrial development coupled with the growth of the region's potential may exacerbate the issue of coastal debris. The morphological configuration that confronts the ocean is another important element. This configuration can cause coastal debris to move more easily, sediment, and accumulate more readily, leaving the area more susceptible to issues with marine debris. The morphological configuration that confronts the ocean is another important element. This configuration can cause coastal debris to move more easily, sediment, and accumulate more readily, leaving the area more susceptible to issues with coastal debris. Finding the quantity and types of coastal debris, the source of the waste, and the dynamic processes that take place in the DIY coastal environment were the main goals of this study. It also aimed to assess the environmental state of the DIY coast and suggest a course for coastal environmental management based on the waste's characteristics, origin, and the DIY coast's environmental state. Based on the morphology, the existence of river estuaries, and the beach's classification as a representative sample, nine beaches were chosen to illustrate the impact of these elements on the issue of coastal trash. The purpose of the investigation was to identify the traits and origins of coastal debris, as well as the impact of morphology and hydro-oceanographic features. The Hazardous Goods Index and the Beach Cleanliness Index were used to analyze the state of the coastal environment. In terms of mass, size, amount, and origin, beach garbage varies amongst DIY beaches. Krakal Beach has the least quantity of beach trash—195—while Congot Beach has the most—5,995 pieces. The most beach garbage is seen on beaches with pocket topology. Longer river watersheds produce smaller trash types at their beaches. Beach garbage is influenced by several activities on the beach. Congot Beach holds the top spot for both the Hazardous Goods Index value and the Beach Cleanliness Index value. There are 5 (five) beaches in the intermediate category and 5 (five) beaches in the poor category, according to the examination of the coastal environmental status. Marine debris management can be achieved by putting current legislation into practice, but it's also important to consider things like beach morphology, beach waste source, and beach designation.

Keywords: coastal environmental status, coastal management, marine debris, plastic