

KAJIAN DAMPAK EROSI PANTAI TERHADAP KELESTARIAN LINGKUNGAN DAN EKOSISTEM PENYU SISIK DI PULAU KEPAYANG KABUPATEN BELITUNG PROVINSI KEPULAUAN BANGKA BELITUNG

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INTISARI

Erosi pantai adalah proses terkikisnya material penyusun pantai oleh gelombang dan material hasil kikisan itu terangkut ke tempat lain oleh arus. Erosi pantai berdampak besar terhadap lingkungan, terutama kerusakan ekosistem penyu sisik. Penelitian ini bertujuan untuk mengkaji kejadian erosi pantai dan menganalisis pengaruhnya terhadap kerusakan lingkungan dan kelestarian ekosistem penyu sisik di Pulau Kepayang, sehingga dapat dirumuskan strategi pengendalian kerusakan lingkungan akibat erosi pantai untuk menjaga kelestarian ekosistem penyu sisik di daerah penelitian.

Penelitian ini menggunakan metode survei dengan pengambilan 5 titik sampel di lokasi penelitian namun 3 diantara yang terdampak erosi pantai cukup parah. Pengambilan sampel menggunakan teknik *purposive sampling* dengan parameter pengamatan meliputi: kemiringan pantai, angin, gelombang, dan arus (abiotik); flora dan fauna (biotik); dan persepsi masyarakat (kultural). Analisis data menggunakan metode deskriptif kualitatif dan kuantitatif.

Hasil penelitian menunjukkan bahwa kemiringan lereng pantai di Pulau Kepayang didominasi oleh lereng datar dengan kemiringan 6.5° (1.6 %), dengan arah gelombang dari arah tenggara pada musim timur ketinggian gelombang (H) rata-rata 0.8 meter, panjang gelombang (L) rata-rata 34.46 meter, dan periode gelombang (T) rata-rata 4.7 detik. Tipe empasan adalah *spilling* dengan kejadian arus sepanjang pantai (*longshore current*). Erosi pantai telah menyebabkan perubahan garis pantai ± 20 meter selama 5 tahun atau 3 - 5 meter/tahun. Erosi pantai menyebabkan lokasi peneluran penyu sisik terdegradasi, sehingga frekuensi penyu bertelur semakin berkurang hampir diseluruh lokasi peneluran. Strategi pengelolaan yang dapat dilakukan melalui penetapan zonasi konservasi ekosistem penyu sisik di Pulau Kepayang yang dikuatkan secara hukum melalui Peraturan Daerah. Sosialisasi secara berkala perlu dilakukan untuk meningkatkan kesadaran masyarakat terkait erosi pantai dan pengaruhnya terhadap kerusakan ekosistem penyu sisik di Pulau Kepayang.

Kata kunci : erosi pantai, ekosistem, Penyu Sisik, pengelolaan lingkungan

**STUDY OF THE IMPACT OF COASTAL EROSION ON ENVIRONMENTAL
SUSTAINABILITY AND THE HAWKSBILL TURTLE ECOSYSTEM
IN KEPAYANG ISLAND BELITUNG REGENCY
ISLAND PROVINCE OF BANGKA BELITUNG**

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ABSTRACT

Coastal erosion is the process of eroding the material that makes up the coast by waves and the eroded material is transported to other places by currents. Coastal erosion has a major impact on the environment, especially the damage to the hawksbill turtle ecosystem. This study aims to examine the incidence of coastal erosion and analyze its effect on environmental damage and the sustainability of the Hawksbill turtle ecosystem on Kepayang Island, so that a strategy for controlling environmental damage due to coastal erosion can be formulated to maintain the sustainability of the hawksbill turtle ecosystem in the study area.

This study uses a survey method by taking 5 sample points at the research location, but 3 of them are affected by coastal erosion quite severely. Sampling using purposive sampling technique with observation parameters include: beach slope, wind, waves, and currents (abiotic), flora and fauna (biotic) and public perception (cultural). Data analysis used descriptive qualitative and quantitative methods.

The results show that the slope of the coastal slopes on Kepayang Island is dominated by flat slopes with a slope of 6.5° (1.6 %), with the direction of the waves from the southeast in the east season, the wave height (H) is 0.8 meters on average, the wavelength (L) is average. an average of 34.46 meters, and an average wave period (T) of 4.7 seconds. The type of hurricane is spilling with longshore currents. Coastal erosion has caused shoreline changes of ± 20 meters for 5 years or 3 - 5 meters / year. Coastal erosion causes the nesting sites of Hawksbill turtles to be degraded, so that the frequency of turtle laying eggs is decreasing in almost all nesting locations. The management strategy that can be carried out is through the determination of the conservation zoning of the Hawksbill turtle ecosystem on Kepayang Island which is legally strengthened through Regional Regulations. Periodic socialization needs to be carried out to increase public awareness regarding coastal erosion and its effect on the damage to the Hawksbill turtle ecosystem on Kepayang Island.

Keywords : coastal erosion, ecosystem, Hawksbill Turtle, environmental management