

KAJIAN PERUBAHAN FENOMENA AKRESI - EROSI DI BAGIAN BARAT TELUK JAKARTA

Dian Ardani
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ABSTRACT

The northern coastal of Jakarta has been seriously degraded shoreline. Various studies on the development of the shoreline and environmental changes on the North Coast of Jakarta has been done, including studies by Herman Theodore Verstappen in 1953 on A Geomorphological on Shoreline Development of Jakarta Bay, research by Otto Sudarmadji R Ongkosongo in 1983 about Evolution and the Impact of Development in the Environmental Coastal of Jakarta Bay, and one of the project report is the Review Study of Reclamation Project in 2010. The conclusions derived from these studies demonstrate the phenomenon of shoreline changes in the western coastal of Jakarta Bay dominant experiencing accretion. If you see evidence some of the existing aerial photographs lately, the reality on the site deteriorated shoreline. For those in this study will examine the phenomenon of erosion that occurs with existing theory and error count in the past.

The method used in this study includes a qualitative study to determine the erosion phenomenon done by the first conducting a study of literature in the form of a review of previous studies and analysis of aerial photographs. Evolving issues concerning non-grain composition and cohesive sediments, changes in wind direction, the supply of sediment that empties into the Jakarta Bay, and detailing wave refraction pattern, as a subject of study to determine the factors that contribute to the phenomenon of erosion. Quantitative studies to demonstrate the likelihood of erosion by analyzing sediment budget on coastal segments that are the focus of research. The concept of sediment balance is used to determine sediment transport in and out of coastal segments reviewed, whether the incoming sediment is greater or less than the sediment out.

The results of the qualitative research shows that erosion phenomenon can be caused by several factors. The reduced in supply of sediment from upstream, non-grain and cohesive sediment composition, and loss of mangrove forests as a natural protection contributes to coastal erosion at the site. While changes in the wind does not have a significant influence on the trend of erosion and accretion. The quantitative results of the study indicate the likelihood of erosion phenomena dominant in the segment Tanjungan – Cengkareng Drain. Focus on protected forest west Cengkareng Drain excess shoreline position averaged over the period of 2005-2009 reached a maximum of -189.198 m to the existing shoreline in 2003. Changes in the average volume of sediment transport in the period 2005 – 2009 reached -206,146.83 m³.

Keywords : Jakarta Bay, Refraction, Erosion