

**STUDY ON RIP CURRENT OF
PENGKALAN DATU TO KUALA BESAR, KELANTAN**

by

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ABSTRACT

Rip Current is strong narrow current that flows from the beach towards to the sea. It is one of the main mechanism by which water brought forward to the shore by breaking waves is returned back to the sea to satisfy continuity.

Due to its strength and relative difficulty to detect, the presence of rip current is very dangerous especially on beaches used for recreational purposes. The aim of this study is therefore to detect the pattern and location of the rip currents at a selected beach, so as to make it safe for anyone using the beach. Rip currents depend a lot on seabed bathymetry, thus it is also important to relate changes in bathymetry due to sediment transport to shifting of the location of rip currents in the timescale involved.

Chapter 1

1.0 INTRODUCTION

1.1 General

The physical behavior of coastal systems is a dynamic phenomenon and is influenced by a host of environmental factors that include current, tides, wind, wave, freshwater inflows, return flows and sediment transport. In the project the MIKE 21 program are used to determine the circulation of the rip current in the nearshore zone.

1.2 Problem Statement

The main problem is the shoreline of the Pengkalan Datu to Kuala Besar is the erosion by the effect of current and the sediment transport. A project is to determine the current pattern and sediment transport pattern to improve access to the future.

1.3 Objective

The objective of this project is to study the rip current in the beach of Pengkalan Datu to Kuala Besar, Kelantan. The aim is to detect the pattern and location of the rip current and sediment transports in a