

The Application of Geographical Information System in Managing Coastal Areas in Selangor

**Tuminah Paiman
M. Zainora Asmawi**



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The Application of Geographical Information System in Managing Coastal Areas in Selangor

Globally, coastlines are undergoing rapid development and firm management policies have to be established. However, for any shore management to be effective, the policies need to be based on informed decision-making. Geographical Information System (GIS) encourages the development and use of standards for coastal data definition, as well as collection and storage, which promote the compatibility of data and processing techniques between projects and departments, as well as ensuring the consistency of approach at any one site over time. The purpose of this research is to gather perceptions from the government agencies that have used GIS in managing coastal areas in Selangor. Two main divisions of coastal change analysis may be recognized: monitoring and simulation modelling. GIS modelling and the simulation of coastal phenomena are extremely valuable techniques for assessing the effectiveness and likely impacts of such intervention. Thus, a well-designed coastal area information system could be a significant decision support tool to aid the development of integrated and sustainable coastal resource management strategies. The aim of the research is to assess the implementation of GIS by government agencies on coastal management initiatives in Selangor. The objectives of the research are to identify the present affiliation between coastal management and GIS at government agencies in Selangor coastal districts, to study the application of GIS and related spatial information technologies to local government staff and officials, to aid the agencies in moving towards sustainable management of the coastal area in Selangor and to make recommendations to decision makers, planners and the general public that can be used to strengthen environmental policy and guide management decisions in the coastal areas of Selangor.

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