

GEO-METADATA STRUCTURE OF GIS FOR ENVIRONMENTAL MANAGEMENT IN CAM RANH BAY, VIETNAM

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ABSTRACT

Geo-metadata of GIS plays an important role of environmental management. The geo-metadata can provide information to managers and users as well as supports the analysis results, which target to specific managing objectives of environment in marine and coastal regions. Therefore, the good designing and building geo-metadata structure contributes to the best practices of environmental management and integrated coastal zone management. This paper discusses about the structure of geo-metadata in GIS, including its components (metadata, input and output modules, spatial analysis and advantage module of environmental management, such as estimation of risk assessment, environmental carrying capacity) and decentralized use to admin, managers, and users. Based on information collected in Cam Ranh Bay, a GIS geo-metadata was built with the environmental and socio-economic data of maps, database, charts, textual documents and non-geographic data, and was controlled on the map window dot.net (using opening sources). Finally, some assignments of environmental assessment, for example, resulted for economic development and environmental prevention in Cam Ranh Bay.