UNIVERSITI TEKNOLOGI MARA

ANALYSIS OF RELATIONSHIP BETWEEN LOGGING ACTIVITIES AND WATER QUALITY IN ULU MUDA AND SUNGAI MUDA, KEDAH.

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Thesis submitted in fulfillment of the requirements for the degree of Bachelor of Science Surveying and Geomatics (Honors)

Faculty of Architecture, Planning and Surveying

JULY 2017

AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

The objectives of this study are to identify the pattern of logging activities and water quality in 2011 to 2015 and to map the condition of water quality after logging activities. The parameters of the water surface are hydrogen potential (pH), temperature, dissolved oxygen (DO), salinity, conductivity and turbidity. In this study, there are only three parameters have been utilized which were pH, DO and temperature in order to identify the parameters in Ulu Muda and Sungai Muda, Kedah after the logging activities. These parameters was subsequently interpolated the Sungai Muda, Kedah, exploiting Kriging method. Kriging method presents the finest result for the parameters of water quality. This study discusses the details of the interpolation method and shows the water quality parameters. The result shows the pattern of logging and water quality and the map of water quality parameters based on the study area for more efficient of logging activities. The findings of this study were successfully attained by exploiting Geographic Information System (GIS) techniques with its capability and efficiency.

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