

**FLOOD ESTIMATION ANALYSIS ON SG. ARA
CATCHMENT**

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BY

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DECLARATION BY THE CANDIDATE

I Judy Primus, 2001498694 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

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ABSTRACT

Flood becomes one of the major critical problems in Malaysia especially in the floodplain area like Pulau Pinang and Kuala Lumpur. If flood can be predicted, controlled and managed systematically, the lost due to flood such as life, properties and resources can always be prevented or at least minimized. Thus, flood estimation is needed. In this study, the method to do flood estimation is using Time-Area Method. This study depicts flood estimation analysis that was conducted for the design flood events for the design flood events for 5, 10, 20, 50 and 100 year Average recurrence Interval (ARI) with 120 minutes design rainfall duration. The result of this study indicates that the study area, Sg Ara is estimated to be flood for 5, 10, 20, 50 and 100 year Average recurrence Interval (ARI) with 120 minutes design rainfall duration. With this flood estimation analysis, the immediate action can be taken to overcome the upcoming problems.