

**RAINFALL/RUNOFF MODELING OF TAMAN MAYANG
SUB CATCHMENT**

by

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ABSTRACT

This study is to determine the runoff coefficient for overland flow in an urbanization catchment area, a relationship between rainfall intensity. Taman Mayang catchment area in Petaling Jaya has been selected as a study case.

CHAPTER ONE

1.0 INTRODUCTION

1.1 GENERAL

Rainfall is a major factor influencing flood formation in urban area. Rapid urban expansion takes place in Malaysia, centred in Klang Valley. The increasing population and the movement of people from rural to urban areas on all spatial continents lead to changes in land use.

The increase in surface runoff from urban areas may cause local flooding, thus causing threats to human life and wildlife, disrupting ecosystems and human activities, and damaging houses and other properties.

Inadequate drainage of excess rainfall causes huge runoff which in turn causes flood. The runoff response of urban catchment is very fast due to high percentage of impermeable surface like roads & highways, building, paved area, parking lots roof areas etc., which hinder the natural infiltration process of rain. The runoff peak discharges which are the main contributors to these flood problems are thus of major concern in recent days for the design of urban drainage system.

The Planning And Design Procedure No.1 entitles " Urban Drainage Design Standards and Procedure for Peninsular Malaysia " is one of the most widely used engineering design procedures in the country for the design of hydraulic structures, including bridges, culverts and drains. The Procedure uses the Rational Formula for the