

**A PROJECT REPORT PRESENTED IN PARTIAL FULFILLMENT OF THE
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ADVANCED DIPLOMA IN CIVIL ENGINEERING
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**TO STUDY THE IMPACT OF URBANISATION ON WATER QUALITY OF A
RIVER. A CASE STUDY SG. DAMANSARA, PETALING JAYA.**

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ABSTRACT:

The process of urbanisation is invariably accompanied by great changes to the natural landscape, with consequent impacts on the hydrological processes. As the original pervious and rough natural ground surfaces are being transformed into less permeable and smoother paved-up areas, rainfall abstraction losses due to infiltration and depression storage are reduced, resulting in an increase in the volume of surface runoff. As a result this will increase the volume of pollution discharge to the river water course as urban runoff. This thesis presents analysis on the potential impact of urbanisation on water quality of a river in Malaysia. This thesis is a case study of Sg. Damansara in Petaling Jaya. This river is being selected as a case study since it is situated at centre of development and urbanisation. This study results will be necessary in order to identify the standard of water quality of Damansara river. Water samples are taken from various point along the river. The samples are analysed based on the selected water quality parameters to identify the degree of water quality.

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1.0 INTRODUCTION

Malaysia is a fast developing country and experience development in many fields. Many of the land areas were developed for the purpose of industrialisation, residential and other commercial purposes.

Certain areas where formerly green vegetation was slowly diminished and become naked soil causing the land directly exposed to direct surface runoff. Erosion from construction due to urban development contributes sediment to the rivers and has direct impact towards water quality. Urban communities through their activities generate various kinds of pollutions and discharge to the nearby rivers.

Watercourses receive pollution from many different sources that vary both in strength and volume. Pollution is as great problem of the age as the growing scarcity of clean water, yet rivers are increasingly used for discharging and transporting of polluting matter.

Water pollution has been defined as occurring when the water in the river "is altered in composition or condition, directly or indirectly as a result of the activities of man, so that it is less suitable for any or all of the purposes for which it would be suitable in its natural state".