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UNIVERSITI TEKNOLOGI MARA PERAK BRANCH

FLOOD RISK MANAGEMENT IN MALAYSIA

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ABSTRACT

Risk management has been established as a well-defined procedure for handling risks due to natural, environmental or man-made hazards, of which floods are representative. Flood risk management is about reducing damages and fatalities. Some large damages, which the population are unable to cover through insurance or savings, can threaten livelihoods. Kuala Lumpuris located in a flash flood prone area. Thus, Kuala Lumpur city experiences flash flood more frequently in this period of time of the years, although flash flood does not always enclose with monsoon seasons every year. Therefore, this study will focus on finding the causes of flood within the city are specifically in Kuala Lumpur. This paper also examined the communities of contractor and developer level of awareness towards risk management of flash flood and also the effectiveness of flood warning measure issued by authorities to reduce flash flood risk. The data will be obtaining throughout distribution of questionnaire to 100 respondents, and the data will be supported by interviewing the contractors or developers randomly to ask about flash flood management. Participatory Statistically Program for Social Study (SPSS) is applied to analyze the data that will be obtaining throughout questionnaires. Increasing numbers of impermeable lands, inadequate drainage schemes and people's selection of the hazardous flood plains have compounded human activities and exacerbated flood incidents in the presence of natural causes. Strengthening and raising awareness among contractors and developers is necessary as community knowledge is very important to improve preparedness and mitigation to reduce impact due to flood.

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CHAPTER ONE

1.1 Background

Natural disaster is widely known as nature-induced disasters. Such natural disasters consist of volcanic eruptions, earthquakes, tsunamis, avalanches, lahars, landslides, blizzards, heat waves, hurricanes, typhoons, tornadoes, floods, and so on.

Flash flood characterized by high velocity flows and short warning time (Jonkman & Kelman 2005; Ashley & Ashley 2008; Sharesta 2010). Although, some confined the occurrence of flash flood to a specific geographical region such as mountain (Yong Tu et al. 2013), as the impact are more devastating due to the cascading hazard, it also rampant and disastrous to a low land area as well. It is a known fact that flash flood is the most dangerous kind of flood because it combines the destructive power of a flood with incredible speed and unpredictability (Doocy et al. 2013). As these types of floods frequently occur without notice, it often causes extensive damage to infrastructures, the environment, and the loss of lives, further degrading the livelihood and economic prospects of local residents. However, at a higher level, the engineering approach must be seen as integrated in the flood risk management planning decision process. This mechanism includes not only engineers, but also many social classes in society, from government decision-makers to people who are directly exposed to floods. According to Jonkman (2005), flood events caused half million in mortality, and impacted over 3million people from 1980 until 2009. Emergency Event Database (EM-DAT) or Center for Research on the Epidemiology of Disasters (CRED 2009), reported there was a 66 percent global increase of intense hydro-meteorological disasters of 1210 during 1991–2000 to 2004 during 2001–2010 and Asia region is the most affected area by flooding and has the highest casualties per year (Figure 1).