

# **KAJIAN SISTEM PENGENDALIAN BANJIR SUNGAI BANGER DI KOTA PEKALONGAN PROPINSI JAWA TENGAH**

**Teguh**

NIM : 12185/PS/MPBA/03

Telah dipertahankan di depan Dewan Penguji  
Pada tanggal 28 Maret 2005

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## **ABSTRACT**

Flood disaster is a main problem in urban area which the river flow through the city. Flooding caused huge damaged both direct and indirect impact. Comprehensive countermeasure is needed in order to reduce lose out of resources due to the flood. The problems progressively arise and will be national trouble variety without countermeasures. Pekalongan's flood control system has already installed focusing on river stream. It isn't attentiveness to the upper stream consequently flood occurs every rainy season. Populations rising need more space for live so it will affect the atchments area. Alteration of catchments area will change characteristic of flood and flow. An effort of flood control in Pekalongan's city is setting up 7,117 meters of floodway from Kupang River interconnection to the Banger River. It will solve the flood problem in Pekalongan city.

This research analyze water level along the river with installment of floodway used HEC-RAS software. There are three simulation conducted in this study. Firstly water level simulation executed with land use changing, second water level simulation performed with the recharge well and third water level simulation executed with combining the land use changing and recharge well. The results of these simulation will give information the variant of water level along the Banger river.

The study shows that the first simulation give information about reducing of the Banger River water level 94,3 cm up to 123,5 cm. Second simulation give information lessen Banger River water level 94.3 cm up to 132.8 cm. The third simulation decrease Banger River water level 1,01 cm up to 32,6 cm. This study purpose to give information in order to mitigate flooding in Pekalongan city. It can become the input to decide appropriate countermeasures of flood problem in Pekalongan city.

**Keyword :** *Floods, mitigation, floodway and management watershed*