

# **KAJIAN PERBAIKAN MUARA SUNGAI COKROYASAN KABUPATEN PURWOREJO PROVINSI JAWA TENGAH**

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## **ABSTRACT**

Cokroyasan River is experiencing problems of stricture of estuary. The condition resulted from sediment longshore transport brought by waving sea to estuary. Riskiest impact is at the time of beginning rains season causing flooding in upstream area of Cokroyasan and Delangu River. On the basis of that problem, required a study to contend the problems of flooding happened.

This research by doing simulation at existing condition and handling condition. Handling condition is done with development of jetty at estuary mouth and making of levee at river was happened overflow. Simulation is done by using Software HEC-RAS 4.0

Result of research indicates that with development of jetty and levee can prevent flooding overflow happened in upstream area. Result of simulation indicates that sand spit which has collected can be run-out after happened 3 times flooding with 1 Year return period of discharge and reduce elevation flooding to 1 m. While making of levee at Delangu River with elevation between 0.5 - 1 m can prevent flooding happened with 10 Years and 20 Years return period of discharge.

**Keyword** : *Estuary stricture, Flood, Simulation, Contend.*