

**FLOOD CONTROL DUE TO RUNOFF
KALI KUNCIR KANAN NGANJUK REGION EAST JAVA**

1ST Student Name : Imas Rike Saberin
NRP : 3110.030.034
2ND Student Name : Lila Dyah Kisfani
NRP : 3110.030.038
Major : Diploma Civil Engineering 3
FTSP-ITS

CONSOULLER LECTURER : Ir. PUDIASTUTI

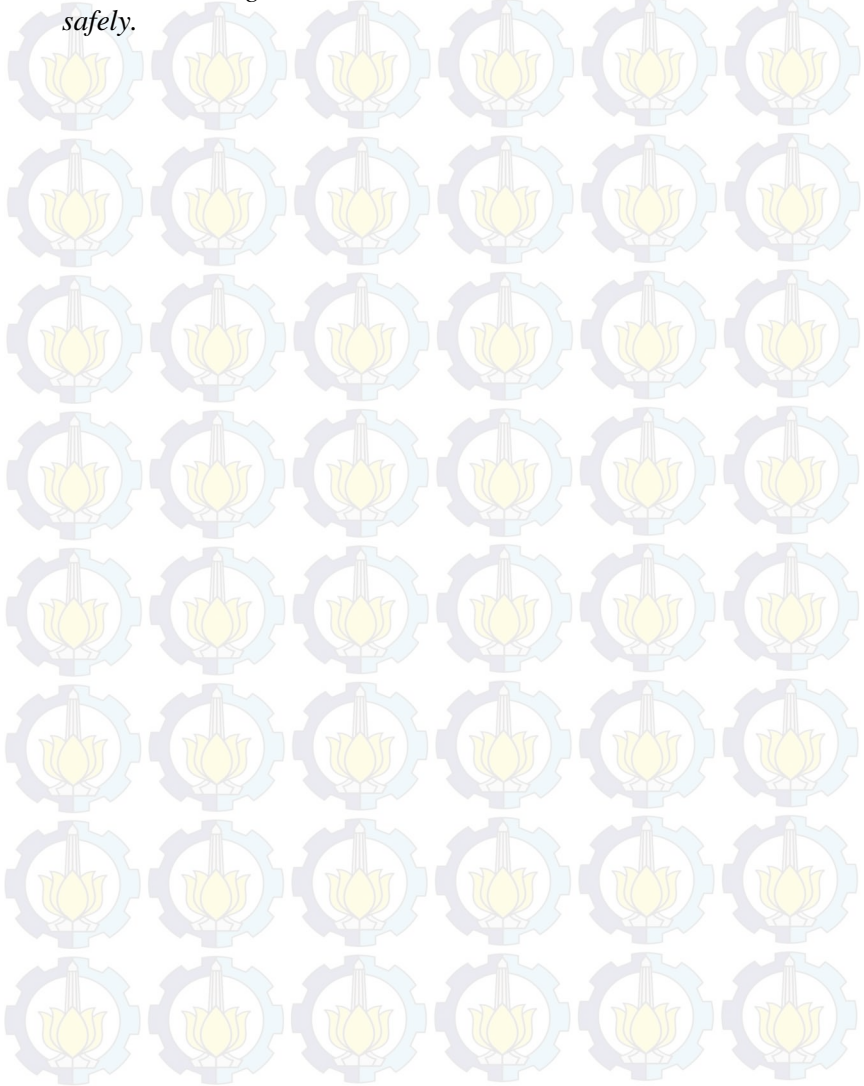
Abstract

Kali Kuncir Kanan located in Nganjuk, East Java. The river flows along the 10.3 miles. Kali Kuncir Kanan flowing and lead/meet kali Kedungsuko east of town Sukomoro. Floods due to runoff in kali Kuncir Kanan 3111 m in length or 31,11 miles. Implementation of this project is the second annual project undertaken in 2012 on the budget of the government project.

Due to the limited capacity of the drainage, if the rainwater that flows into kali Kuncir Kanan often lead to standing water due to overflowing flood that inundated farmland there.

Therefore, the existence of these problems need to be re-planning calculations kali Kuncir Kanan drainage using rainfall data from 2003 through 2012 from 3 stations namely Nganjuk Station, Banaran Station, and Kedungsuko Station in order to get the amount of return period flood discharge at 25 year with Q_B 50% in pot. 1-1 of 57,119 m³/second, in pot. 2-2 of 61,306 m³/second, pot. 3-3 of 65,157 m³/second and pot.4-4 at 77,536 m³/second. Then calculate the existing capacity in each piece, in pot. 1-1 of 39.44 m³/second, in pot. 2-2 of 49.95 m³/second, pot. 3-3 of 16.86 m³/second and pot. 4-4 of 191.18 m³/second. Seen

*that pot.1-1, 2-2, 3-3 overflow / unsafe, necessitating a redesign.
So that discharge into kali Kuncir Kanan can be accommodated
safely.*



Keywords: Discharge Flood, Fullbank Capacity, Redesign.