

PEMBUATAN PETA RESIKO BANJIR SEBAGAI ACUAN DASAR MANAJEMEN BENCANA ALAM KAWASAN SUNGAI GAJAH WONG DI KOTA YOGYAKARTA

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ABSTRACT

Along Gajah Wong river bank in Jogjakarta City, it shows many high risk flood area. The area around Gajah Wong banks are huge populated area, education area, culture reservation (Affandi Museum), Flora Fauna conservation (Gembira Loka Zoo) industry and tourism area.

This research identifies the flood characteristic of Gajah Wong river through hydraulic routing and identify the risk area characteristic around Gajah Wong river bank with field survey.

Based on hydraulic routing in Gajah Wong River with HEC-RAS 3.1 software, we can find that area Affandi Museum, Gembira Loka Zoo, UIN Sunan Kalijaga College, PT Sari Husada's waste disposal, Rejo winangun, and Waring Boto, are not flood area. The area have inundation around Papringan, Sukowaten, Balirejo, Sambirejo, and Jurang, with average inundation time < 5 hours, height of inundation < 70 cm and the flow velocity was < 1 m / s. The result of hydraulic routing within survey area shows the score that indicates the flood risk area. Papringan, Balirejo, Sambirejo, and Jurang have score 12.1 until 27,5, it shows the high risk rate. Sukowaten have score 2,2, it means that has low risk rate.

Key words: *Flood, Risk, Gajah Wong River*