DRAINAGE EVALUATION ON WONOSARI TENGAH ROAD BENGKALIS SUB-DISTRICT, BENGKALIS DISTRICT WITH HECRAS SOFTWARE

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ABSTRACT

The middle wonosari area is one of the villages in Bengkalis Regency, Bengkalis District. One of the main causes of flooding is rainfall that exceeds normal capacity. When it rains with high intensity, water cannot be absorbed by the soil or flowed properly, thus inundating areas that are usually dry. Aiming to get the flood discharge plan. Based on this problem, the author feels the need to conduct further research on the problem by using the Log Person Type III method and using HEC-RAS (Hydrologic Engineering Center-River Analysis System) software for open channel flows such as drainage. Based on the hydrological analysis and distribution test, the Log Pearson Type III distribution is used so that the magnitude of the planned rainfall flood discharge for the 10-year return period is obtained, namely the right channel = 3,626 m3/det and the left channel = 3,577 and the existing capacity of the drainage channel on the right channel = 2,138 m³/det and left = 1,904 m³/det.

Keywords: Rainfall, Catchment Area, Flood Discharge