

**ANALYSIS OF DISCHARGE AND FLOOD WATER LEVEL DUE  
TO RAINFALL IN WONOSARI VILLAGE AREA USING HEC - RAS  
APPLICATION (CASE STUDY: INTERCHANGE BETWEEN  
JL. SDN 04 DAMON, JL. WONOSARI BARAT)  
BENGKALIS CITY**

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**ABSTRACT**

*Bengkalis City is one of the islands surrounded by the sea, so geographically Bengkulu City is one of the islands that is prone to flooding. This is caused by high rainfall, especially those that often occur on road bodies, as is the case in the Wonosari area, especially in the intersection between Jl. Wonosari Barat, Jl. SDN 04 Damon, Bengkulu Regency. The methods used in hydrological analysis are Log Pearson III and rational methods, and the method for flood water levels in each drainage channel cross section is to use the HEC - RAS application. From the results of the calculations carried out, the 5-year plan channel discharge data was obtained, Jl. Wonosari west right = 2.9 m<sup>3</sup> / sec and left 2.82 m<sup>3</sup> / sec. Jl. Antara right = 3.599 m<sup>3</sup> / second and left = 3.553 m<sup>3</sup> / second. Jl. SDN 04 Damon right = 2.55 m<sup>3</sup> /second and left = 2.5 m<sup>3</sup> /second. Jl. Antara right end = 3.240 m<sup>3</sup> / second and left = 3.274 m<sup>3</sup> / second. And the drainage that cannot accommodate the discharge plan is Jl. Wonosari west sta 0+180 - 0+440, Jl. Antara sta 0+000 -sta 0+100, Jl.SDN 04 Damon sta 0+000 - 0+100, Jl. SDN 04 Damon sta 0+040 - 0+280, Jl. Antara end sta 0+080 - 0+100.*

*Keywords: Rainfall, Discharge, Drainage, HEC - RAS.*