

## ABSTRACT

Title: Evaluation of River Flood Debit Ciranji Method Using Snyder and Limantara Kragilan In the village, Serang district, Banten., Name: Alim Laksono, NIM: 41111010040, Supervisor: Acep Hidayat, ST, MT, 2016

The contribution of water from the river watershed Labuan Ciranji yet known the right way to use. This study presents a simple approach to compare the peak discharge and hydrograph shape flow hydrograph between measured and synthetic unit hydrograph in watershed Labuan. Some synthetic unit hydrograph methods such as how to Snyder, Limantara used to calculate peak discharge and hydrograph shape.

Based on the calculation and hydrograph seen from the graph it can be concluded that the HSS Limantara more useable on a sub-watershed of the river ciranji compared dengan HSS Snyder.

Because both of these methods have walaupun Time Peak ( $T_p$ ) which is much berbeda ie 3 hours for Snyder and 1.81 hours for Limantara.

But the peak discharge ( $Q_p$ ) owned by the HSS Limantara more appropriate for the watershed with an area of 17.429 km<sup>2</sup>, the basin area that belongs to the large size of the watershed.

Where the peak discharge ( $Q_p$ ) is the highest obtained from Snyder HSS calculation of 0.95 m<sup>3</sup> / sec and peak discharge ( $Q_p$ ) is the highest in the can from the calculation HSS Limantara of 1.21 m<sup>3</sup> / sec.

Based on the parameters of the hydrograph is the peak discharge ( $Q_p$ ) and time peak ( $T_p$ ) concluded that the method HSS Limantara is the most suitable method for the calculation of sub DAS Ciranji according to existing literature that HSS Limantara own and suitable for use in 6 DAS and 67 sub DAS on the island of Java.

Keywords: Synthetic unit hydrograph, Rain Debit, Snyder HSS, HSS Limantara, Ciranji River.