ANALISIS PENGARUH TRANSPOR SEDIMEN TERHADAP MORFOLOGI SUNGAI CALENDU KABUPATEN BANTAENG

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Abstract: A river is a flow of water on the surface of the earth that is formed naturally, starting from small upstream to large downstream. Sediment transport, as a natural process involving the movement of sediment material along a river, can have quite an impact on river morphology. The presence of sediment Too much can affect morphological changes such as changes in the shape of the flow and shallowing in the river, which can cause water to overflow which can cause flood disasters every year. In many cases found in Bantaeang Regency, the Calendu River experiences significant morphological changes due to sedimentation that is too high. The aim of this research is to find out how much sediment transport and the influence of sediment on changes in the flow of the Calendu River in Bantaeng Regency, and the results obtained for the usbr method, the occurrence of floating sediment transport was 13.85 tons/year and the total floating sediment transportation with the Q50 design discharge was 178.52 tons, the basic sediment transportation using the Mayer Petter Muler method was 1903.72 tons/year, Einstein 78.70 tons/year, and based on field data it is 56.22 tons/year. The method that approaches field data is the Einstein method. Based on 2018 to 2021, there was a change in morphology where in 2020 the largest sediment transport was obtained, namely 24.39 tons/year.

Keywords: River Morphology; sedimentation rate; Calendu River