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Analisis Sedimen pada Embung Tambakboyo Berdasarkan Usia Guna dan Daerah Tangkapan Airnya
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ABSTRACT

Tambakboyo reservoir is located in Tambakbayan village which has an area of 20.7 km2 of the Water Catchment Area (DTA). Tambakboyo's watershed has a slope between 0-8% and the entire soil type is regosol soil with an operational age of more than 10 years. DTA of Tambakboyo is used to rice fields and settlements. Because of this, the author is interested in analyzing the volume of sediment present in Tambakboyo's reservoir to determine the effective age of the reservoir.

The USLE method is used to determine the rate of erosion that occurs based on the calculation of the factors causing erosion. Bathymetry measurements are used to determine the volume of sediment directly.

By using the USLE method, the erosion rate of DTA was obtained at 13.864 ton/ha/year, while by direct measurement of Echossounding it was 11.254 ton/ha/year. The remaining lifespan of the reservoir based on the USLE method is 23.02 years, while the direct measurement is up to 28.359 years. From the analysis, it can be concluded that SDR between the sediment entering the reservoir and the sediment calculated by the USLE method indicate that the sediment control carried out is still ineffective.

Keywords : Small dam, Tambakboyo, USLE