



ANALISIS TINGKAT EROSI SETIAP SATUAN LAHAN DI SUB DAS KODIL

INTISARI

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Penelitian ini dilakukan untuk menganalisis dan membuat arahan konservasi lahan di sub DAS Kodil berdasarkan tingkat bahaya erosi. Prediksi tingkat erosi dilakukan dengan metode USLE (*Universal Soil Loss Equation*) yang terintegrasi dengan bantuan Sistem Informasi Geografis (SIG). Dalam penelitian ini, data yang digunakan merupakan data hujan tahun 2003-2014 dari stasiun pencatat hujan Sapuran, Kenteng dan Penungkulan. Data hujan ini dihitung untuk mendapatkan nilai erosivitas hujan yang kemudian dioverlay dengan peta jenis tanah, peta kemiringan lahan, dan peta penggunaan lahan. Overlay menghasilkan 30 unit lahan. Hasil penelitian menunjukkan bahwa Sub DAS Kodil termasuk dalam kriteria erosi berat dan sangat berat dengan rata-rata laju erosi 677,19 ton/ha/th dari total luasan wilayah 20.482 ha. Nilai laju erosi terbesar terjadi pada satuan lahan PBIV (tipe penggunaan lahan pemukiman, kemiringan lereng < 40%, jenis tanah *Brown Latosol* nilai laju erosi 5.226,89 ton/ha/tahun (kategori sangat berat). Prioritas rehabilitasi utama ditunjukkan untuk daerah yang rata-rata memiliki kecuraman tinggi, tanah dengan kepekaan erosi tinggi dan penggunaan lahan yang sedikit vegetasi.

Kata Kunci : *laju erosi, Sistem Informasi Geografis, sub DAS Kodil, unit lahan, USLE*



ANALYSIS OF UNIT LAND EROSION LEVEL IN KODIL RIVER BASIN

ABSTRACT

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This research was conducted to identify and to suggest conservation direction on land with erosion hazard in Kodil River Basin. USLE (Universal Soil Loss Equation) integrated with Geographic Information System (GIS) were used to predict the erosion rate. In this research, 10 years rainfall data (2006-2004) from rainfall station of Sapuran, Kenteng and Penungkulan were used. This rainfall data was calculated to determine rain erosivity value to be overlaid with land type map, land slope map, and land use map. Overlay has produced 30 units of land. This research resulted that Kodil River Basin was included heavy and very heavy erosion with average erosion rate 677,19 ton / hectares / year from total area of 20,481,60 hectares. The largest erosion rate occurred in PBIV unit land with erosion rate of 5,226.89 ton/hectares/year and included in the very heavy category where the land use was settlement on a slope <40% with Brown Latosol soil type. The main rehabilitation priorities was for areas with an average of high steepness, high erosion sensitive soil and slightly vegetation land use.

Keyword: *erosion, Geographic Information System, Kodil River Basin, land unit, USLE*