

Wilayah prioritas konservasi tanah di DA Ciliwung Hulu = Land conservation priority areas at Ci-Liwung Hulu Watershed

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Abstrak

DA Ci Liwung hulu secara administrasi masuk ke dalam Kabupaten Bogor dan merupakan input awal bagi keberlanjutan DAS yang tergolong kritis. Penelitian di DA Ci Liwung dilakukan untuk mengetahui faktor-faktor besaran erosi dan dapat diketahui sebaran wilayah prioritas konservasi tanah. Metode penelitian USLE digunakan untuk memperoleh laju erosi. Indeks bahaya erosi (IBE) diperoleh melalui rasio laju erosi dan toleransi erosi tanah. Sebaran wilayah prioritas konservasi tanah diketahui melalui variable indeks bahaya erosi (IBE), kerapatan vegetasi dan pengelolaan lahan oleh masyarakat.

Hasil penelitian menetapkan kejadian erosi potensial dan IBE dengan resiko terberat paling luas terjadi di Sub-DA Ci Bogo - CiSarua. Melalui overlay variable IBE, kerapatan vegetasi, dan pengelolaan lahan diketahui Prioritas I mayoritas terletak pada wilayah dengan kriteria kelerengan 5 - 15% dengan luas 4.615 ha dengan rata-rata ketinggian 1.000 ? 2.500 m dpl, curah hujan yang cukup dengan besaran antara 3000 - 4000 mm, penutupan lahan yang ada kurang rapat - terbuka berupa kebun campuran serta ktidak adanya tindakan pengamanan pada lahan, dan wilayah prioritas I terluas terdapat di Sub DA Ci Seuseupan - CiSukabirus dengan luasan 1.106 ha.

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The Upstream Ci Liwung River, located in Bogor Regency, is the initial input and plays an important role in the sustainability of the watershed it forms. This research is conducted at the Upstream Ci Liwung River to determine factors influencing the magnitude of erosion at the watershed. The aim of this research is to determine priority soil conservation areas at the said watershed. The research implements the Universal Soil Loss Equation (USLE) method to determine the rate of erosion. Erosion Risk Index (ERI) was obtained by calculating the erosion rate ratio and tolerable soil erosion.

The results reveal that the CiBogo - CiSarua sub-watershed has the vastest area of potential erosion and also the highest Erosion Risk Index. The variables of ERI, vegetation density and land management were overlaid to determine Priority I areas at the watershed, which resulted to areas with a slope value of 5 - 15 percent, 4,615 hectares (\pm 11,403 acres) in area, average altitude of 1.000 - 2.500 m above sea level, precipitation of 3000 ? 4000 mm, and scarce or open vegetation (mixed plantation) with no land conservation efforts. The 1,106 hectare CiSeuseupan - CiSukabirus sub-watersheds is also a priority I area.