Pola spasial wilayah bahaya banjir bandang dengan metode flash flood hazard index di das Citarum hulu: study kasus: sub das Ciwidey = Spatial pattern of banjir bandang hazard areas using flash flood hazard index method in upstream Citarum watershed: case study: Ciwidey watershed

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Abstrak

DA Citarum Hulu dikenal dengan karakteristiknya yang unik dimana topografinya menyerupai cekungan dan dikelilingi oleh pegunungan. Dengan topografi berupa cekungan, kawasan DA Citarum hulu rawan banjir dan banjir bandang. Seperti di salah satu sub-DASnya yaitu Ciwidey, banjir bandang hampir terjadi setiap tahun dalam 10 tahun terakhir dan menimbulkan banyak kerugian. Berkaitan dengan permasalahan banjir bandang yang ada, perlu diwaspadai kejadian serupa di kemudian hari dengan melakukan kajian berupa upaya mitigasi untuk meminimalkan risiko dan dampak kerugian jiwa dan material. Dalam penelitian ini peneliti menerapkan metode indeks kerawanan banjir bandang yang bertujuan untuk mengetahui karakteristik fisik, hidrologis, dan tata guna lahan serta kawasan rawan banjir bandang di sub DAS Ciwidey Jawa Barat dengan skoring dan pembobotan yang terintegrasi. dalam perangkat lunak berbasis sistem informasi geografis. Dari proses tersebut dihasilkan daerah rawan banjir bandang dengan tingkat kerawanan sangat tinggi sebesar 33,9%, tingkat kerawanan tinggi sebesar 3,49%, tingkat kerawanan sedang sebesar 38,63%, tingkat kerawanan rendah sebesar 15,77%, dan kerawanan sangat rendah. tingkat., 21%.
..... Upper Citarum DA is known for its unique characteristics where its topography resembles a basin and is surrounded by mountains. With a topography of a basin, the upstream Citarum DA area is prone to flooding and flash floods. As in one of its sub-watersheds, namely Ciwidey, flash floods have occurred almost every year for the last 10 years and have caused a lot of losses. In relation to the existing banjir bandang problems, it is necessary to watch out for similar incidents in the future by conducting studies in the form of mitigation efforts to minimize the risks and impacts of life and material losses. In this study, the researchers applied the banjir bandang susceptibility index method which aims to determine the physical, hydrological, and land use characteristics as well as flash flood-prone areas in the Ciwidey sub-watershed, West Java, with integrated scoring and weighting. in geographic information system-based software. This process resulted in flash flood-prone areas with a very high level of vulnerability of 33.9%, a high level of vulnerability of 3.49%, a moderate level of vulnerability of 38.63%, a low level of vulnerability of 15.77%, and a very low vulnerability. . level., 21%.