

PENYUSUNAN *CRITICAL LINE CURVE* BERDASRKN PARAMETER CURAH HUJAN PENYEBAB ALIRAN DEBRIS (Studi Kasus: Aliran Sungai Kuning Bagian Hulu)

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ABSTRAK

Gunung merapi merupakan salah satu gunung ter aktif didunia. Hampir setiap periode gunung merapi mengalami erupsi.. Ancaman sekunder yang ditimbulkan oleh endapan material vulkanik di punggung Gunung Merapi yang bercampur dengan air hujan akan menjadi aliran debris. Aliran debris akan mengalir di alur sungai dengan kemiringan tertentu, akan menjadi aliran yang deras dan sangat berbahaya. Bahaya dan dampak yang diakibatkan oleh aliran debris khususnya di Kali Putih dan Kali Boyong sangat besar, sehingga diperlukan suatu penyelesaian yaitu prediksi mengenai aliran debris. Kali kuning merupakan percabangan dari Kali Gendol yang hulunya di lereng selatan merapi. Analisis karakteristik hujan penyebab aliran debris dilakukan dengan menggunakan metode Critical line curve yang diterbitkan oleh Ministry of Land, Infrastructure and Transport Infrastructure Development Institute “ Japan metode tersebut didasarkan pada: rangkaian hujan penyebab aliran debris, working rainfall (RW), dan hujan efektif.. Hasil penelitian menunjukkan bahwa hujan penyebab terjadinya aliran debris di Kali Kuning bagian hulu maximum kedalaman hujan 65 mm dan intensitas hujan 25 mm/jam.Kata Kunci: Aliran Debris, Kali Gendol , *Working Rainfall*, Intensitas Hujan Efektif

Kata Kunci: Aliran Debris, Kali Kuning, Working Rainfall, Kali kuning

PREPARATION OF CRITICAL LINE CURVE BASED ON RAINFALL PARAMETERS CAUSING DEBRIS FLOW (Case Study: Upper Yellow River)

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ABSTRACT

Mount Merapi is one of the most active mountains in the world. Almost every period, Mount Merapi experiences an eruption. The secondary threat posed by the deposition of volcanic material on the back of Mount Merapi which mixes with rainwater will become a debris flow. The debris flow will flow in the river channel at a certain slope, becoming a fast and very dangerous flow. The dangers and impacts caused by debris flows, especially in Kali Putih and Kali Boyong, are very large, so a solution is needed, namely predictions about debris flows. Kali Kuning is a branch of Kali Gendol which reaches its headwaters on the southern slopes of Merapi. Analysis of the characteristics of rain that causes debris flows is carried out using the Critical line curve method published by the Ministry of Land, Infrastructure and Transport Infrastructure Development Institute - Japan. This method is based on: a series of rain that causes debris flows, working rainfall (RW), and effective rain .. The research results show that rain causes debris flows in the upstream part of Kali Kuning. The maximum rain depth is 65 mm and the rain intensity is 25 mm/hour. Keywords: Debris Flow, Gendol River, Working Rainfall, Effective Rain Intensity

Keywords: Debris Flow, Yellow River, Working Rainfall, Yellow River