Landslides Intensity on River Morphology of Jeneberang Watershed after Collapse of Caldera Wall at Mt. Bawakaraeng

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Abstract: Disruption of morphological stability Jeneberang watershed, especially for river morphology of Jeneberang after disaster events continue to a negative impact on the quality, quantity and continuity of water volume in Jeneberang watershed as a result of increasing landslides activity and increasing debris flow into the river channel. This study aimed to analyze the vulnerability of river morphology and increasing of the landslides intensity area after the collapse of caldera wall at the Mt. Bawakaraeng. The method used is rosette diagram with stereonet 8 application, plotting the point of landslides location, estimate the direction of lineament (structural geology) with Davis and Reynolds method based on; observations of the regional structure pattern map, geological map and geomorphological analysis. Landslides observation data after the collapse of caldera wall at the Mt. Bawakaraeng showed the the active landslides pattern following the pattern of lineament (fault) that have occurred since the Pliocene-Pleistocene (5-1 m year ago). Tectonic processes that occur in the Jeneberang watershed can be classified into five stages, starting from the stage of the tectonic in Pliocene-Pleistocene, a period of equilibrium in the Pleistocene-Resen and a disruption of the equilibrium part II at the Recent time (collapse of caldera wall at Mt. Bawakaraeng) and increasing of landslides intensity after the great landslides of Mt. Bawakaraeng in faulting area that have developed as river morphology.

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