ANALYSIS OF BUILDUP LAND GROWING BASED ON LANDCAPE FRAGMENTATION AND ITS EFFECT TO RUNN OFF IN THE DAS CILLIWUNG HULU, BOGOR, INDONESIA

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Most of the Rencana Tata Ruang Wilayah (RTRW) in Indonesia allocate buildup land along road. Bogor and Cianjur Regency connected by road that pass through the DAS Ciliwung Hulu.. It caused very rapid growth in buildup land in years 1981, 1985, 1990, 1994, 2001 and 2010. The buildup land map in year 1981 and 1985 conducted by Pancromatic Aerial Phofograph, scale 1:50.000 and the others derivated from Landsat images. Analysis of landcape fragmentation using FRAGSTAT software while runn off data obtained from Katulampa Station. Spatial analysis by using landscape fragmentation showed that during the whole study period, there were an increase in core, edge and patch but decrease in perforated. It means that the buildup land already developed with less fragmented, specially for buildup land along road. Another result showed that an increase of the buildup land effected to increase in runn off.

Keywords Buildup land, Landcape fragmentation, Runn off, DAS Ciliwung Hulu