Riparian Landscape Management

Riparian Landscape Management in the Midstream of Ciliwung River as Supporting Water Sensitive Cities Program with Priority of Productive Landscape

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Abstract

Nowadays, Ciliwung River is facing problem of the settlement occupation in its riparian zones. This phenomenon caused ecological damage in riparian, so it can aggravate the disaster of annual flooding in Jakarta. As an effort to control this catastrophe, riparian landscape management of Ciliwung River is needed. Based on its topography, Ciliwung River is divided into three segments, there are the upstream, the midstream, and the downstream. Data shows that riparian in the midstream is the largest area, it covers more than 60% of the total riparian area. This segment is very important to be managed in order to reduce runoff towards the downstream. The method used was comparing many standards to get the ideal riparian width in the midstream, which is 50 m for urban areas and 100 m for outside the urban areas. Next method was analyzing spatially to get riparian landscape characteristic of Ciliwung River. The result showed that 37.11% of riparian zones in the midstream had occupied by settlement. Analysis of riparian function and utilization had held by using Analytical Hierarchy Process. Priority of riparian function in the midstream of Ciliwung River is production. This can be realized with the plan of community garden or inland fisheries. Riparian landscape management in the midstream aims to support the food consumption diversification, and maximize the function of water catchment and water retention in order to support the program of Water Sensitive Cities.
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