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Judging Restoration Success of Kamisaigo River Japan

Authors: Rita Lopa, Yukihiro Shimatani

Abstract: The focus of this research is 880m extension development along the Kamisaigo River. The river is flowing tributary of grade 2 rivers Fukutsu City, Fukuoka Prefecture. This river is a small-scale urban river and the river was formerly a straight concrete sea wall construction. The river runs through National Highway No. 3 from the confluence of Saigo River. The study covers the river basin about 326 ha with a catchment area of 20.63 ha and 4,700 m3 capacity regulating pond. The river is not wide, shallow, and has a straight alignment with active (un-vegetated) river channel sinuosity (ratio of river length to valley length) ranging between 1 and 1.3. However, the alignment of the low-flow river channel does have meandering or sinuous characteristics. Flooding is likely to occur. It has become difficult to live in the environment for organisms of the river. Hydrophilic is very low (children cannot play). There is little connection with the local community. Overall, the Kamisaigo River watershed is heavily urbanized and from a morphological, biological and habitat perspective, Kamisaigo River functions marginally not well. For river improvement and maintenance of the Kamisaigo River, the workshop was conducted in the form of planning for the proposed model is presented by the Watershed Management Laboratory. This workshop showed the relationship between citizens, City Government, and University of mutual trust has been established, that have been made landscape, environment, usage, etc.: retaining wall maintenance, hydrophilic zone, landscape zone, nature walks zone: adjacent medical facilities and adjacent to large commercial facilities. Propose of Nature walks zone with point of the design: provide slope that the wheelchair can access and walking paths to enjoy the scenery, and summary of the Kamisaigo River workshop: creating a multi-model study and creation of natural rivers.

Keywords: river restoration, river improvement, natural rivers, Saigo River

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