ANALYSIS OF RIVER CHANNEL MORPHOLOGY AND RIPARIAN LAND USE CHANGES USING AERIAL PHOTOGRAPHS AND TOPOGRAPHICAL MAPS

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This study is to trace the change of stream shape using the past series of aerial photographs and topographic maps, and to compare the land use changes of riparian area along the stream. For the Gyeongan national stream, aerial photographs of 1966, 1981 and 2000 and topographical maps of 1914-1915 were used. Apparent changes of the stream were found that the consolidated reaches of stream by levee construction became straight together with widening of their stream widths. Especially the stream width of inlet part of Paldang lake widened almost twice because of the rise of water level by dam construction in 1974. The land use of riparian areas of three selected years were classified into six categories (water, forest, agricultural land, urban area, road, sandbar) by digitizing method. The forest and agricultural areas decreased and urban area increased as the stream consolidation have been performed.

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