

動態系統導向之高雄市水污染治理之研究

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摘要

The city life-supported system consists of industrial economic system and sustainable natural environment systems. The production of the environmental pollution mostly results from imbalance between the two big systems in time axle out; among them the river water pollution is the most serious. The water pollution is mostly dealt with from the single view of 'environmental engineering, which fails to take into consideration the dynamic relation between two major above-mentioned systems. It is essential to adopt the whole and structural macroscopically thinking. The purpose of this text is to re-evaluate the traditional one-sided way of solving water pollution problem with the environmental engineering. An innovative approach is therefore proposed. Based on macroscopically thinking of system dynamics, i think Strategy software is exploited as the simulation tools. Love River as a target, we created a model, analyzing the water pollution system of the Kaohsiung city and testing the efficiency of its policies of preventing and controlling water pollution. These observations are intended to build the relationship of the urban growth management strategies and city water pollution variations, which hopefully will pave the way to an optimized solution for the city long-term growth policy.

關鍵字：System Dynamics, Water Pollution, Policy Testing, Scenarios, Growth Management