

# 環境地理資訊系統應用於河川自然淨化處理技術 之研究—以烏溪為例

The Study and Design on Environmental Geographic Information  
System in River Natural Treatment System –  
Take Wu River for Example

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## 摘要

由於台灣地區的水體環境大多未能達到河川水質分類標準，因此如何從各種河川  
污染整治技術中，探討出最佳的應用組合方式為目前最重要的課題。其中河川自然淨  
化處理系統(NTS)衍生價值十分多元，若能將此系統納入水資訊規劃時之參考，將有  
助於整體水環境之整合。本研究為利用地理資訊系統(GIS)作為各類資料之主要處理  
分析工具，並配合功能估算表與技術關聯資料庫，尋求河川自淨系統可用之施作場  
址。並藉由功能決策運算推行最適之淨化處理效能與效益，以提供決策者作為河川自  
然淨化生態保育與淨化場址功能評估之參考。

關鍵詞：地理資訊系統、自然淨化處理系統、技術關聯資料庫

## Abstract

Presently, the water body in Taiwan does not reach the standards of the water body  
classification. For this reason, we have to choose the best collocation from the river  
restoration technology. The NTS (natural treatment system) is a good approach to improve  
water quality. It can not only improve water quality but also bring a lot of benefit to our  
environment and society. This paper used the environmental GIS (geographic information  
system) to build the technical databank and functional estimation of the NTS. And this  
research can also help the policy-maker select the fitting site for the NTS by operation  
deciding system to as the reference for policy.

Keywords : Environmental Geographic Information System, Natural Treatment System,  
Technical Databank

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