

集水區土砂整治率之修正及案例分析

連惠邦^[1] 蔡易達^[2] 段錦浩^[3] 王晉倫^[4]

摘要 日本為最早提出整治率 (Completeness Ratio, CR) 概念之國家, 其對於整治率之定義, 即為『為達到集水區治理計畫目標所需投入之總治理工作規模與現階段已完成工作規模之比率』(日本建設省, 1958)。本研究針對日本及台灣之既有整治率(整備率)公式及其各項因子進行研究及分析, 修正既有整治率之盲點及實際計算上之問題所在。另根據既有整治率之問題分析後, 本研究提出兩組『修正後整治率』公式, 其一為『以集水區各種工程治理成效為基礎之量度指標 (CR_{S_1})』, 其二為『以計畫基準點土砂流出量為基礎之量度指標 (CR_{S_2})』, 並以三處集水區為例進行案例分析演算。

關鍵詞: 整治率、治理成效。

The Improvability of Watershed Completeness Ratio and Case Study

Hui-Pain Lien^[1] I-Ta Tsai^[2] Ching-Hao Tuan^[3] Chin-Lun Wang^[4]

ABSTRACT The nation that announced "Completeness Ratio" at the earliest stage is Japan. The meaning of "Completeness Ratio": "in order to reach the target of the managing of watershed, need to be put into of manage total and the comparison for managing that complete already currently". (Japanese construction province, 1958). This research aims at the formula of Completeness Ratio of Japan and Taiwan and it various parameters carry on a research. Revise Completeness Ratio of difficult and actual calculation up of problem. Besides ,according to after problem analyze, this research puts forth two sets of "revise behind Completeness Ratio" formula. The first, for "with the watershed manage for basal index(CR_{S_1})".The second is "the sediment of watershed downstream export- based index(CR_{S_2})".Also take three watersheds as an example, carry on the calculation of case.

Key Words: completeness ratio, manage result.

一、前言

集水區整體治理係以河溪治理、土砂控制及坡地保育等為主軸, 故可藉由各種整治率, 有效評估現階

-
- [1] 逢甲大學水利工程與資源保育學系教授兼任逢甲大學營建及防災研究中心主任
Professor and Director, Department of Water Resources Engineering and Construction and Disaster Prevention Research Center, Feng-Chia University, Taichung, Taiwan 407
- [2] 逢甲大學營建及防災研究中心專案組長 (通訊作者)
Project Supervisor, Construction and Disaster Prevention Research Center, Feng-Chia University, Taichung, Taiwan 407
(Corresponding Author)
e-mail: ittsai@fcu.edu.tw
- [3] 國立中興大學水土保持學系教授
Professor, Department Of Soil and Water Conservation, National Chung Hsing University, Taichung, Taiwan 402
- [4] 行政院農業委員會水土保持局保育治理組組長
Director, Planning Division, Soil and Water Conservation Bureau