

水庫集水區山坡地範圍土砂生產環境檢查評估-以曾文及白河水庫為例

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摘要 本文藉由水庫集水區土砂環境檢查評估作業流程，利用土砂災害發生危害度，探討對於水庫集水區土砂生產環境所形成威脅，用以評估水土保持需求性及進行治理成效追蹤；文中以曾文以及白河等兩座水庫集水區為案例示範區，並以莫拉克颱風災害事件做為治理工程之時間分界點，評估水庫集水區土砂生產環境變動；經分析顯示莫拉克颱風後之治理工作，使得坡面植生覆蓋皆持續復育中，唯土砂生產環境尚未完全恢復到莫拉克颱風前之狀況。為抑制具有潛勢土砂區域發生二次災害，故再進行野溪集水區之潛勢土砂分級，發現於山坡地範圍內，曾文水庫有 82 個、白河水庫有 71 個野溪集水區，需加強水土保持或持續監測，利於迅期間進行土砂災害防治工作，以減緩水庫庫容淤積風險。

關鍵詞：土砂環境檢查、水庫集水區、潛勢土砂分級。

Sediment Environment Assessment for Reservoir Watershed – Case Studies of Tsengwen and Baihe Reservoirs in Taiwan

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ABSTRACT This study has completed the assessment of the sediment environment of the Tsengwen and Baihe Reservoirs and considers the factors of sediment-related disasters to evaluate the threat of sediment production and plan the requirements of soil and water conservation works for the reservoir watersheds. Case studies suggest the post-typhoon Morakot sediment environment of Tsengwen and Baihe reservoir watershed in 2013 has recovered well after remediation, but is comparatively less than pre-typhoon Morakot. Furthermore, in order to limit the occurrence of secondary disasters in disaster-prone creek watersheds, this study suggests a list of watersheds which require improvement to their sediment environments under the suggested potential sediment production classification. Consequently, there are 82 located in Tsengwen reservoir watershed, 71 located in Baihe reservoir watershed which still requires soil and water conservation works. These observations can serve as the basis for effectively managing reservoir watersheds, planning of disaster prevention works and reducing risk of rapid sedimentation in reservoirs during the flood season..

Key Words: sediment environment assessment, reservoir watershed, potential sediment production classification..

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