南水分署生態檢核執行盤點及推展目標

Ecological Check Execution Review and Promotion Goals of Southern Water Resources Branch

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摘　要

為減輕公共工程對生態環境造成之負面影響，行政院公共工程委員會於 106 年訂定「公共工程生態檢核注意事項」並滾動檢討修正，中央機關或受中央補助 50%以上地方政府之新建工程，原則依據前述注意事項辦理生態檢核，於公共工程全生命週期中掌握生態環境影響及落實生態友善措施。為提升執行品質，經濟部水利署並於 105 年編定「經濟部水利署水庫集水區工程生態檢核執行參考手冊」，提供集水區保育治理工程依循。

經濟部水利水南區水資源分署（以下簡稱南水分署）於 103~105 年間針對轄區內關注物種山麻雀成立專案計畫研擬及推動保育對策，並自 107 年起啟動整體轄區工程生態檢核作業，透過專案計畫委請生態專業團隊協助工址評估、措施研擬、維管追蹤等工作，並透過民眾參與、資訊公開及保育宣導，在工程推動過程進行生態專家、生態社群、地方政府及在地民眾等多元溝通，積極納入不同群體生態環境需求，共同創造優質環境。南水分署亦於 111 年編製「生態檢核操作推廣手冊」，透過圖表化及案例輔助方式，深入淺出介紹執行方法以利南水分署及受補助機關承辦同仁參考辦理。

經過 6 年（107~112 年）系統性推動生態檢核工作，南水分署於 113 年設定第二階段推展目標，共分為三大調整方向。其一為增加時空尺度，將原本以檢視單一時間、單一地點之工程範圍的執行方式，推展到以面的空間尺度評估工程影響情形，如整理 102~111 年 22 件曾文水庫主流護岸工程資訊，以溪流縱橫向連結探討系列工程與生態環境互動情形。其二為建立指標物種，將原本以關注物種為保全對象的單一物種執行方式，推展到以可代表棲地生物多樣性狀態的多元指標物種，從各單位既有監測資料出發，擬訂並執行可呈現時間變化的監測計畫。其三為導入生態系統服務功能，將原本以人類生命財產為保全對象的改善或搶修工程，推展到工程服務對象亦包含其他生物及水土環境，以良好生態系統提供人類服務的角度重新盤點工程效益，尋求更完整的生態環境友善措施。

關鍵詞：生態檢核，時空尺度，指標物種，生態系統服務功能

Abstract

To reduce the negative impact of public constructions on the ecological environment, the Public Construction Commission of the Executive Yuan formulated the "Precautions for Ecological Review of Public Constructions" in 2016 and reviewed it and revised it when needed. Central government and local government with subsidies over 50% should conduct ecological check to understand its ecological environmental impact and implement ecologically friendly measures throughout the entire life cycle of public projects. To improve implementation quality, the Water Resources Agency developed "Reference Manual for Ecological Check of Reservoir Catchment Area Constructions " in 2016 to provide guidelines for watershed conservation and management projects.

Between 2014 and 2016, Southern Water Resources Branch implemented projects to develop and promote conservation strategies for the Russet Sparrow, a species of concern in a certain area, and been implementing ecological check for all the jurisdiction area since 2017. The ecological professional team assists in site assessment, measure development, maintenance follow-up, etc. Through public participation, information disclosure and conservation promotion, different voices such as ecological experts, ecological communities, local governments and local people were heard, jointly created a high-quality environment. Southern Water Resources Branch developed the "Ecological Check Implementation Manual" in 2022. Through diagrams and example cases, it introduces the implementation methods in simple and easy-to-understand terms.

After 6 years (2018~2023) of systematically implementing ecological check, the Southern Water Resources Branch set the promotion goals for phase II in 2024, with three major upgrading strategies. First, increase the spatial and temporal scale by extending the original check on a single construction site into a comprehensive spatial and time scale, such as reviewing 22 mainstream bank protection constructions at Zengwen Reservoir catchment during 2013 to 2022, to discuss the vertical and horizontal connections of streams and the ecological environment. Second, establish indicator species by turning the focus from single species of concern to multiple indicator species that can represent the status of habitat biodiversity. Based on existing monitoring data, formulate and implement a monitoring plan to show the changes over time. Third, introduce ecosystem service functions. Move the purpose of constructions from emergency repairing to ecosystem service improving, and re-evaluating the construction benefits from the perspective of ecosystem service providing, seeking more complete ecologically friendly measures.

Keywords: Ecological Check, Spatial and Time Scale, Indicator Species, Ecosystem Service Functions