

An Experimental Study of Channel Habitat Improvement for Formosan Landlocked Salmon

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Abstract. With increasing recognition on conservation of endangered species in Taiwan, one of the major conservation projects is the habitat restoration of Formosan Landlocked Salmon which is major threatened by check dams in the channel for their blockading pathway to upstream and causing the problems of population isolation and close-blood mating. By removing partial dam body appropriately, this study tried to provide pathway for the fish for the better upstream channel habitat. The methodology utilized in this study was model-simulation under certain hydraulic condition of field environment. Therefore, implementation guidelines of target check dam was developed for the management agency for dam remodeling. Based on follow-up investigation, the channel morphology of observation sections is changing as expected trends of experimental results. Furthermore, the slope of upstream channel of remodeled dam changed to 7.08% from original 2.36%, and total volume of sediment flushed away from dam site was estimated about 6858 m³ at April 2000.

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