

Assessment of Imjin Riverine Wetland Function Using Hydrogeomorphic Method

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Abstract. In recent, it has been known that the wetland has various functions such as biodiversity, flood control, reduction of greenhouse gas, etc. And so we have tried to do many efforts for wetland conservation and restoration. In addition, riverine wetland requires a proper management plan for satisfying a biodiversity conservation and flood control. For this, we may need understand the wetland function. Therefore the aim of this study is to estimate and assess the wetland functions for the study or target wetland. Hydrogeomorphic (HGM) method can be used for wetland function assessment. The method considers hydrological, ecological and geological characteristics of the wetland for evaluation of Index of Function (FCI) for target wetland and reference wetland. Then two wetlands are compared for knowing the function of target wetland. Here reference wetland is Upo wetland in Korea which is Ramsar wetland and a target wetland is Imjin riverine wetland, Korea. Estimated functional index of Imjin riverine wetland were in the range of 0.55 ~ 0.85. It describes that the Imjin riverine wetland is providing the functions of 55 ~ 85% of Upo wetland. We had a difficulty in obtaining the proper and reliable data and so to obtain the reliable variables for the assessment of the functions, therefore, the long-term monitoring of the wetland are required. The assessment of wetland functions could be very useful for the wetland conservation and management.

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