



Ecohydrologic Characteristics due to the development of Riparian Zone

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The ecohydrologic characteristics according to planting in riparian zone for the riparian restoration are analyzed in this study. The ecohydrologic components due to land use change in riparian zone from existing land cover to planted area such as pasture and wildrye are simulated in the test basin with the SWAT-MODFLOW model which is an integrated surface-groundwater hydrologic model. After analysis of change of the hydrologic properties such as surface flow, lateral flow, transpiration and soil water in riparian zone, it is revealed that soil water is one of the key factors and planting of wildrye can increase soil water in riparian zone. The simulation performance of the SWAT-MODFLOW model is validated in this study and it is expected that this model can be used to evaluate various riparian restoration scenarios.

keywords: Ecohydrologic components, Planting in riparian zone, Riparian restoration, SWAT-MODFLOW