



## **Catchment Restoration in the Tweed UNESCO [U+2010] IHP HELP Basin [U+2010] Eddleston Water**

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The EU Water Frame Work Directive (WFD) requires member states to work towards the achievement of ‘good ecological status’ for water bodies, through a 6 year cycle of river basin management plans (RBMPs). Within these RBMPs, states must develop and implement programmes of measures designed to improve the quality of individual water bodies at risk of failing to achieve this status. These RBMPS must not only be focussed on the key causes of failure, but increasingly look to deliver multiple benefits, such as flood risk reduction and improvement to biodiversity from such catchment interventions, and to involve communities and other stakeholders in restoration of their local environment. This paper reports on progress of a detailed study of the restoration of the Eddleston Water, a typical ‘failing’ water body in Scotland, the monitoring and governance arrangements behind this, and implications for rehabilitation of river systems elsewhere.

Within UK rivers, the main causes of failure to achieve good ecological status are historical morphological changes to river courses, diffuse agricultural pollution and invasive non-native species. The Eddleston Water is a 70 sq kms sub-catchment of the Tweed, an UNESCO IHP-HELP basin in the Scottish : English borders, and is currently classified as ‘bad’ status, due largely to morphological changes to the course and structure of the river over the past 200 years. The main challenge therefor is physical restoration of the river to achieve functional connectivity with the flood plain. At the same time however, the two communities within the catchment suffer from flooding, so a second priority is to intervene within the catchment to reduce the risk of flooding through the use of “natural flood management” measures and, underlying both these two aspects a whole catchment approach to community participation and the achievement of a range of other ecosystem service benefits, including conservation of biodiversity.

We report on the initial characterisation of the catchment; the identification of potential key locations and types of intervention to improve ecological status and flood risk reduction; the setting up of the monitoring networks, the engagement with local communities and land managers; initial habitat modifications and the early results of the study. We situate this within the wider context of priorities for restoration and the UNESCO IHP-HELP programme.