

River Dulais Enhancement Project, Llandeilo, Wales, UK

The River Dulais is a tributary of the River Towy, one mile east of Llandeilo, South West Wales, and is an important spawning tributary for migratory fish. The Dulais is a mobile gravel bed river of moderate to high energy and in the demonstration area has a history of instability and planform adjustment. Several bioengineering techniques were employed based on the local reach scale erosion process, water depth and stream power. For example, in reaches with slack bed gradients and therefore reduced stream power simple low cost techniques were used, such as bank grading and toe protection using live willow bundles (faggots/fascines). The entire reach was fenced in order to keep livestock off the banks.



Above : Erosion on an out bend of the River Dulais



Above : Tree Root Revetment Being Installed



Above : Tree Root Revetment After Installation



Above : Tree Root Revetment 18 months after installed



Above : Erosion on the Dulais



Live Willow fascines and bank grading 2 years after