Designing the restored channel...





cbec eco-engineering, in partnership with Sheffield and Rotherham Wildlife Trust and the Environment Agency have developed initial designs for restoring a 1 km stretch of the River Rother near Treeton.

The restoration design is based on kick-starting and imitating natural processes, whilst also considering constraints to the design process. Ensuring that flood risk is not increased has also been a priority. Existing features such as the flood storage area at Catcliffe, existing flood embankments, invasive plant species such as Himalayan balsam and Japanese knotweed, and risk of contaminated soils have all influenced the development of the design. Given these constraints, the design comprises a series of in-channel features to create a more meandering channel. In addition, where possible it is proposed to re-profile the river banks. Not only will this help reconnect the river with it's floodplain but also make the river a more visible feature within the surrounding landscape and more accessible to the local community. The invasive plant species will be treated and the river banks will be planted with native plants to help improve habitat for local wildlife. At the upstream end of the restoration site is a rock ramp weir that was installed as part of the work that was undertaken following the closure of Orgreave Colliery. The rock ramp was designed to enable fish to move up and over the weir, however, over the past 20 years the condition of this structure has deteriorated, resulting in the formation of a small jump between the top of the rocks and the crest of the weir. This means the weir is not passable to all fish at all times. It is proposed to build up the rocks downstream to close the gap between the rocks and the crest of the weir and ensure fish can pass over the weir.

