

TURNING THE RED RIVER BLUE, ENVIRONMENT AGENCY



BIODIVERSITY ENHANCEMENT OVERVIEW

The River Medlock rises in the hills above Oldham and empties into the River Irwell in central Manchester. Throughout its history, the Medlock has been famous for bursting its banks and flooding parts of the city.

In response to flooding in 1872, work began on a red terracotta-brick channel, which has since carried the river between the park and adjoining cemetery. The red brick channel runs for approximately 1.6km through Philips Park. This swere like sterile environment provides limited, if any, in-channel or bankside habitat, and fish numbers are extremely low. It also poses a risk to the public, as many children are drawn to the fast nature of the water and the easily accessible brick lined margins. The section is failing it's WFD classification for fish, macro-invertebrates and macrophytes.

A 350m restoration project was delivered in 2013/2014 by the Environment Agency in partnership with the Irwell Rivers Trust, Manchester City Council and Groundwork.

As the site is complex and challenging the works were carried out by the internal Environment Agency workforce who have the skills, knowledge and adaptability to deliver difficult projects such as this. The work involved removing 100,000's of Accrington Bricks from the channel and also the 1m thick concrete ledge they were sat on. Features and natural stone were then introduced to help create a more dynamic and diverse river corridor that will allow fish and other wildlife to return to this lifeless corridor. The difference is truly amazing and aquatic invertebrate scoring has already improved, as well as the fish populations.

The project is now a European case study for restoration and as a key tributary of the Irwell catchment is a key project within the official 'European Community of Practice'. The Irwell catchment has delivered more restoration projects in the last 3 years than any other in the UK. This has been achieved by a 'can do' attitude and exemplar partnership working.

Fact box

Company name:
Environment Agency

Project name:
Turning red river blue

Location:
River Medlock Restoration -
Manchester

Biodiversity enhancement:

- river corridor restoration
- weirs removal
- wildflower replanting programme
- natural gravel substrate
- community events delivery.

Size:
350m river restoration

Cost:
£290,000 of water framework
directive funding

Tips:

- don't be afraid of risk seeks ways to manage them
- be ambitious
- work closely with your partners
- deal with problems and issues as a collaborative unit
- monitor change to prove effectiveness (pre and post monitoring)
- engage with the local community and stakeholders from a very early stage.

Year completed:
2014

Categories:

- Large scale permanent
- Community engagement

BIODIVERSITY ENHANCEMENT OVERVIEW (cont.)

Restoration has not only improved WFD classifications and engaged people with their environment at a local level, but also sent positive echoes across the whole of the UK and inspired other projects that it really is possible to restore even our most challenging and constrained river corridors. The Medlock restoration team are a very ambitious and determined group, and the learning they have gained from this project will be really useful for future restoration challenges.

SUMMARY

- 350m of restoration on one of the UK's most heavily modified and constrained river corridors.
- Removal of 2 impassable and degrading weirs.
- Implementation of features to create a pool, riffle glide sequence along the whole stretch.
- Wild flower replanting programme (full re-seed along both banks) to reduce the amount of Invasive species dominating the bankside habitat.
- The substrate is now purely natural gravel and cobble (moved in naturally already from upstream). Prior to the delivery of this project there was no variance in substrate in any of the stretch due to the velocities off the water flowing over the brick bottom.
- Delivery of 5 community events including the X factor river challenge with over 20 schools from around the area. The aim was to encourage children to build models of their ideal river. Some of their ideas were incorporated into the design of the actual project.
- Working with partners we have delivered a more natural channel providing more diverse habitat for a wide range of fauna and flora by; the removal of the concrete and brick channel, repairing damaged flood walls, widening the channel by introducing features that will reduce the velocity of the water and create a backing up effect. We have also improved bankside access by peeling back the old brick wall and tapering off the steep bank which will also improve access to the waters edge for the public.

River Medlock prior to the restoration



Schools engagement



If you would like to sign up for the BIG Challenge, please contact Louise Clarke, CIRIA by email louise.clarke@ciria.org



**the BIG
Challenge**
do one thing

