

River Cole Restoration

RCC UK RIVER PRIZE

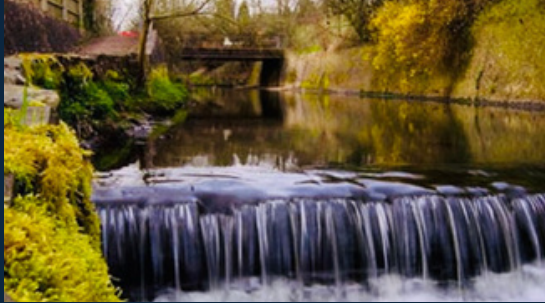
Unlocking Birmingham's Hidden Green Corridor



The RIVER COLE - Current



Situated within a green corridor running through East Birmingham, Solihull and Warwickshire. The area has been historically impacted by industry, straightening and oversteepening. Improving catchment biodiversity, accessibility and water quality is vital. The project is unique because of its placement within one of the largest and most industrialised cities in the UK. It incorporates a catchment-based approach with multiple weir removals, wetland additions, reconnection with flood plains and improvements to biodiversity



The RIVER COLE - Catchment History



The Catchments rich history dates back to the medieval period, when it was used as a transportation route for goods and people. It was also an important source of water for local industries, such as mills and iron works. In more recent times, the River Cole has become a popular recreational spot for fishing, canoeing, and walking. Despite its beauty and historical significance, the River Cole has faced several environmental challenges over the years. In the past, the river was heavily polluted by industrial waste, which had a detrimental effect on its ecosystem



Positive social media coverage

"The Team have enhanced green space for the people and wildlife of Birmingham whilst removing the legacy of our industrial past"

Multiple Stakeholders

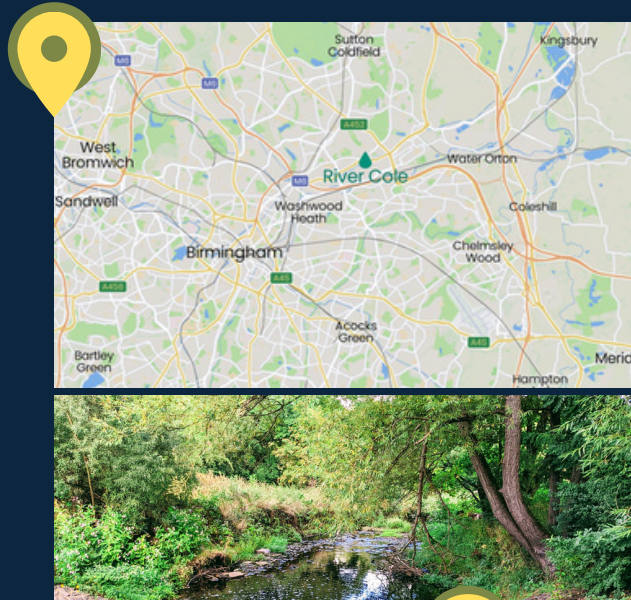


1000+ People engaged locally

An effective involvement of stakeholders and surrounding communities. An Innovative approach to integrating social, economic and ecological outcomes into The River Cole as part of our long-term vision.

Local colleges, primary and secondary schools have been engaged to develop the area as a site for climate change, sustainability, nature and ecology education, research and skills training. The team have arranged litter picks and community outreach days to inform the project application, development and delivery.

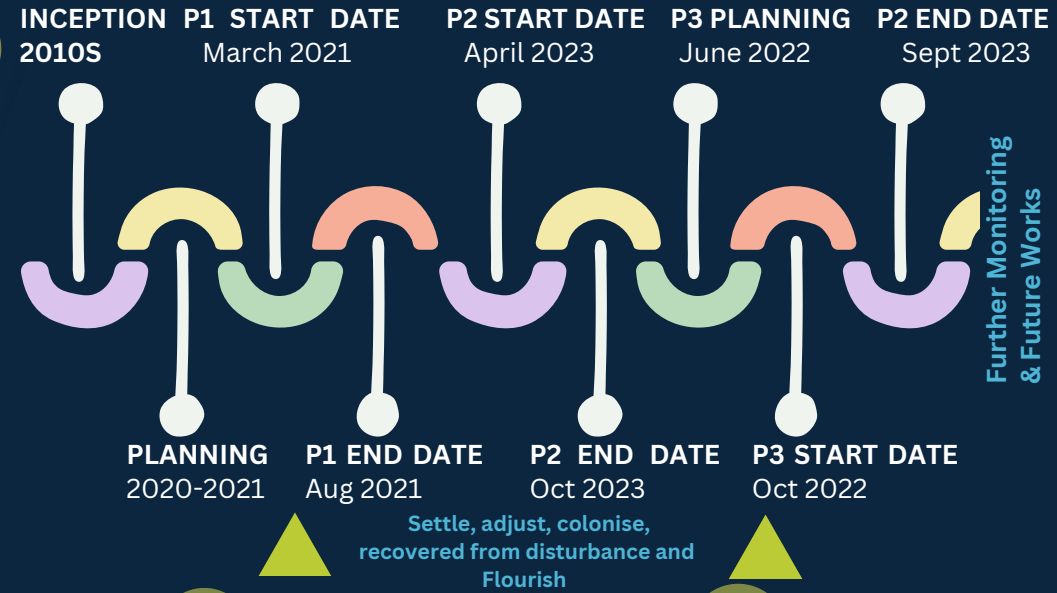
Project Overview



Measurement against specific environmental and social objectives;
Restoring river morphology and ecology to improve WFD target



Long Term Strategy



Further Monitoring & Future Works

Settle, adjust, colonise,
recovered from disturbance and
Flourish

Tyseley Weir Removal P1

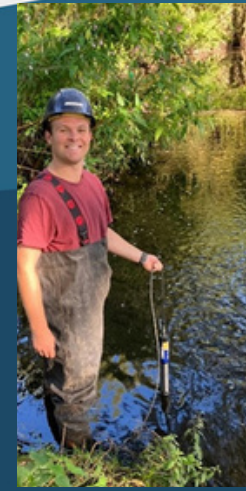
This scheme unlocked one of the first major migration barriers on the Cole as well as ancillary tasks involving canopy thinning, invasive species management and general improvements. It presented a large volume of flotsam management due the accumulation of a rubbish dam. This smaller removal of a 1m head structure started to address the real issues along the length of the River Cole throughout Birmingham

Ackers Weir Removal P2

This unique dam removal incorporated the bioremediation of 500m³ impacted silts, allowing not just the reconnection of 14.5km of the Cole, that reinstated fish passage, once again, connecting human and natural transport corridors but also resulted in the creation of new hibernacula whilst providing tangible biodiversity and chemical and oxygen level improvements

INNS and Natural Flood Management P3

NFM increases the rivers flood storage capacity and habitat diversity. Objectives are to create marginal shelves, widening the river corridor, with areas to act as buffers for the water overflow. The formation of meanders will re-naturalise the channel, as will the installation of berms and low-level riffles and gravel shoals. Combined they slow the flow of water, trap sediment and provide suitable habitat for aquatic species at different life stages.



SC *"Sanctus and the team have successfully restored the river habitat, following removal of gross contaminants, flow improvements and connecting the site with the nature reserve to provide a catchment wide flood management approach"* Birmingham City Council

Project Scale



14.5km of River Cole Unlocked

Natural Flood Management being Deployed, creating a range of habitats slowing the flow.



500m³ of Contaminated Silt Removed

Natural flood management techniques, increased planting, use of site won materials providing more storage carbon capture.



Main River barriers situated 800m Apart

Green engineering techniques used to stabilise the riverbank by securing organic bio- degradable coir erosion control blankets



80t of rubbish cleared from channel

Kilometers surveyed for Invasive species Populations Himalayan balsam, Giant Hogweed and Japanese knotweed recorded, and monitored with a treatment program implemented



The River Cole Long-term Vision

Improve WFD Score for generations to come

- Improving & Enhancing Biodiversity
- Improving Urban Greenspace in East Birmingham
- Creating Community Commons Project
- Revitalising Active Travel Corridor
- Improving the Lives of Residents along the River Cole
- Ensuring Long-term Maintenance Plans
- Engaging with Community creating training, education opportunities and securing long-term interest of Landowners and surrounding businesses.



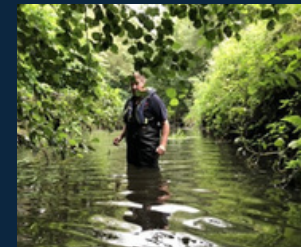
The River Cole Strategic Plan

All three phases fit into the strategic plan for restoring the river Cole set out in the 2010's Cole Valley Catchment Landscape Vision Report. Part of 11 + schemes and phases are being delivered . This sets out the scope of all projects to reconnect the river environment, create habitat and improve fish passage along the river Cole and surrounding catchment.

Project Achievements



UNIVERSITY OF BIRMINGHAM



Collaborating & Working in Partnership
1000+ people locally



Multiple groups benefiting from the works through engagement in the revitalised green space creating buy in and enthusiasm towards the green corridor.
7500+ social media interactions

A marked change in species has been observed and many more returning to the area as the re-naturalisation process continues



Successfully restoring and working with natural processes ensuring hydro and morphological improvements

The removal of migration barriers



Further Monitoring

During in-channel works across all sites, Sanctus used automated continual monitoring points upstream and downstream did not negatively impact water quality, and provided real time data for project partners. Extensive geomorphological surveys were undertaken as baselines - to be compared post improvement



Evaluation Process

4 months of aftercare and bioremediation on the materials taken from the river channel after the Ackers weir removal to improve surrounding habitat. Net Gains will be compared to pre removal baseline and reviewed

