River Cole Habitat Improvement Project Phase 2

In September 2016, Cole Bank Park Local Nature Reserve in Chelmsley Wood benefitted from a significant habitat improvement project. The project included desilting ponds and re-profiling a 250 metre section of bank on the River Cole to enable an increase in the natural river processes, reconnect the river to its floodplain, slow its flow and reduce flood risk downstream.



In February 2019 Phase 2 of the project was completed. This involved habitat enhancements to the River Cole adjacent to Meriden Park. A 300 metre section of the river at the confluence with the Kingshurst Brook was the focus of a range of different physical interventions.

Historically this section of river has been heavily modified (canalised) which has resulted in a uniform channel with steep banks and straight sides. There is an absence of natural river processes, including erosion and deposition. Consequently this stretch of water has a reduced ability to accommodate large populations of wildlife, known as the environment's 'carrying capacity'.

The team worked closely with the Environment Agency and Tame Valley Wetlands Partnership to design a range of physical interventions to reverse the decline in biodiversity suffered by the river over recent generations. These included:

• Excavation of a back channel at the confluence of the Kingshurst Brook and River Cole to create shallow water offering shelter from high velocity flows,

shade, feeding, spawning and a nursery site for fish with refuge from predation.

- Installation of large woody debris at four locations. The log sections were secured into the bank and project into the channel helping to deflect flows and encourage erosion and deposition and the re-naturalisation of this canalised watercourse.
- Installation of several berms constructed of gravels and secured with coir matting planted with native marginal plant species including marsh marigold and rushes. These berms are spurs of land that project out into the river with the effect of narrowing the channel forcing the water through a restricted space which speeds the flow resulting in greater turbulence and the cleansing of the river bed. The resulting cleansed gravels are ideal for spawning fish and other macro-organisms.
- Introduction of several tonnes of river washed gravels to create a substrate for spawning fish.

The collaborative project was funded by the Environment Agency and delivered by the Tame Valley Wetlands Partnership with support from the team, helping to deliver the key Council priority of working in partnership to enable cleaner, greener, safer and healthier neighbourhoods.