

# MAINTENANCE REFURBISHMENT NEW BUILD

## PROJECT RIVER RESTORATION



Historically, the practice of straightening, widening, and deepening river channels was common, but these approaches are challenging to sustain and disrupt ecological systems. In response, the Water Framework Directive (WFD) urges water companies to reinstate more natural watercourses.

Stonbury is pleased to offer a range of river restoration solutions from large scale river re-profiling to small-scale stream enhancements to help clients meet WFD objectives estore streams and rivers to a more resilient, ecologically diverse status

Stonbury's specialist teams are trained in biosecurity, protected species, and safe fish rescue for de-watering operations. Each scheme is programmed to minimise environmental impact from start to finish and maximise ecological benefit through the use and re-use of locally sourced organic materials.

### Channel works

- Channel realignment and re-meandering via both excavation and the construction of berms and gravel shoals to create flow diversity and promote ecological growth
- Bank reprofiling using ecological methods such as Flex MSE vegetated bags and locally won aggregates
- Creation of organic features such as brushwood faggots and help protect banks and riverbeds from erosion and provide habitat
- Installation of small scale, ecologically-sound features such as

check weirs, fish settling ponds and fish and eel passes where structures cannot be removed

### Barrier removal

- Removal of man-made barriers such as weirs and dams to aid migration of fish and young wildfowl and allow natural sediment redistribution

### Habitat enhancement

- Construction of deflectors to narrow flow paths, increase scouring of the riverbed, encourage natural siltation and vegetation growth, and provide refuge for fish and other species such as newts
- Construction of in-river features such as pools and riffles to create habitat for spawning fish and freshwater invertebrates
- Invertebrate and fish surveys

### Vegetation management

- Channel clearances of debris, overgrowth, and other flow obstructions
- Control of invasive non-native species (INNS)
- Planting of native terrestrial and aquatic flora

### Wetland creation

- Construction of artificial wetlands adjacent to rivers