River Roding at Ray Lodge Park
Techniques: Backwater & pond creation, bank re-profiling

Project location: Redbridge, North East London
River: Roding
London Borough: Redbridge
Project end date: 2008
Length: Approx 150m
Cost: £140,000
Upstream grid reference: TQ422928
Partners: London Borough of Redbridge, Environment Agency

Site background
Works on the nearby M11 in the 1970’s and 1980’s resulted in the river being artificially diverted and straightened and banks re-reinforced with artificial materials, resulting in poor quality wildlife habitat. The resulting fast flowing and flashy nature of the river also had implications for the survival of fish fry. A partnership project sought to address these issues by creating new habitats for a range of species, including water voles, dragonflies and numerous fish species.

Objectives
- To provide additional habitat to support a range of species, whilst maintaining the current levels of flood protection.
- To improve access to nature and provide a recreational facility for the public.

Design
Following the receipt of £140,000 of Office of the Deputy Prime Minister (ODPM) funding, earthworks took place between August and October 2007 at a number of locations. The banks of the river were re-profiled to a gentler gradient. Upstream of the footbridge the flood bund was realigned and raised and a backwater excavated to provide shelter for species such as chubb, roach and eel during periods of high flow. A pond was also dug behind the flood banks, with excavated gravel used to strengthen footpaths and improve access for the public. In May 2008, with help from the local volunteers and environment agency officers, the pond, backwater and a section of the river bank were planted up with numerous native riverside plants.

Subsequent Performance - RRC’s views
The excavation of a new backwater and floodplain appears to have provided a diversity of wildlife habitats able to support a range of species. The project is an excellent example of involving the local community especially through planting schemes and pre-project discussion both of which were important aspects in achieving a valuable and successful restoration scheme. Access to nature has been enhanced via new footpaths and a public recreational facility enhanced.

Work in progress to achieve new habitat features
Backwater shortly after excavation
Re-profiled banks downstream of footbridge