River Brent at Tokyngton Park

Techniques: Re-meandering, backwater creation, de-culverting

Project location: Wembley, North West London
River: Brent
London Borough: Brent
Project end date: 2003
Length: Approx 2km
Cost: £1,400,000
Upstream grid reference: TQ201848
Partners: London Borough of Brent, Environment Agency

Site background
Extensive historical flood alleviation works undertaken in the 1940’s and 1970’s led to this section of river being straightened and encased in concrete. The river provided little or no recreational value, whilst the quality of wildlife habitat was poor. In 1999 a partnership was formed, with the aim of carrying out improvements to the park and provide a new lease of life for the river.

Objectives
- To remove the river from its concrete banks and create an attractive public open space.

Design
The partnership developed a masterplan for the whole park following a community consultation through a Planning for Real ® exercise. The river provided a focal point in this process with the aspiration to provide a better environment for wildlife and people. The concrete river banks were removed and the watercourse re-meandered. Some banks needed stabilisation which was achieved using live willow poles on the bank and re-cycled crushed concrete from the site at the toe; other less vulnerable banks were left to naturalise. Pool and riffle sequences were initiated within the design by varying the bed levels and introducing natural river gravels. A backwater was created and planted with reeds to provide an additional habitat feature and refuge in times of flood or pollution events.

Subsequent Performance - RRC’s views
The project is a good demonstration of how river restoration can be an integral part of an urban regeneration programme. A far more attractive, diverse and accessible public open has been created, linking previously divided communities. The channel is now more natural and is able to support a greater range of wildlife. Working with natural river processes, flood protection should also be improved.

Bank stabilisation with crushed concrete (hidden) and live willow poles providing good marginal habitat

New footbridge constructed across river

Creating a green space for people and wildlife