

Create compensatory habitat to offset impacts

Project Summary

Title: Moselle Brook

Location: Tottenham, North London, England

Technique: Deculverting

Cost of technique: £££££

Overall cost of scheme: £££££

Benefits: £££££

Dates: 2009 - 2011

Mitigation Measure(s)

Create compensatory habitat to offset impacts

Remove culverts

Improve channel geomorphology to create habitat

How it was delivered

Delivered by: London Borough of Haringey

Partners: Environment Agency; Heritage Lottery Fund;

Greater London Authority; Thames Water; Haringey

Heartlands Redevelopment.



Background / Issues

The Moselle Brook was previously culverted beneath a footpath in Lordship Recreation Ground Tottenham. The London Borough of Haringey had received funding to improve the park, but required additional money to deculvert the watercourse. The Olympic Delivery Authority had culverted a watercourse on the Olympic Park, with no mitigation available within that site. Funding to the equivalent cost of mitigation was therefore transferred via the Environment Agency to LB Haringey to enable a newly constructed open watercourse to flow through the improved park. The Moselle Brook was chosen due to it being part of the same water body (Lower Lea Valley) where the Olympic Park culverting had taken place.



Designs for new watercourse to be created in Tottenham as compensation for the culverting of a watercourse in the Olympic Park, Stratford.

Step-by-step

As the open watercourse on the Olympic Park was culverted over a length of 200m, an equivalent length of open channel was created on Moselle Brook to compensate. A new meandering channel was created to the west of the original course of the river. This incorporated shallow banks to encourage public access, and marginal planting and bankside planting to encourage ecological habitat improvements. The existing culvert was kept in-situ to provide additional flood risk benefits, whereby flow is apportioned predominantly down the new cut channel and the culvert utilised during higher flows.



(1) Culvert at the Moselle Brook during construction; (2) the newly-restored channel after construction.

Benefits

- The creation of newly restored watercourse at the Moselle Brook has resulted in no overall loss of open watercourse in the Lower Lea Valley.
- Improvements to in-channel, bankside and riparian habitats in the Moselle Brook.
- The scheme delivers multiple benefits as a central part of the creation of an improved multi-use landscape within the park. In particular, the deculverting improves public access to natural open water. This provides considerable recreational benefits in a deprived area with little access to exposed watercourses.



Lessons Learnt

- In constrained sites, offsite enhancement can be a viable option for mitigating actions and delivering environmental enhancements within the same catchment.

Success

Project contact: Fisheries & Biodiversity team, London Environment Team, Environment Agency