

CASE STUDY: *FROM CONCRETE WALL TO FLOATING ECOSYSTEM*

RIVER BRENT, HANWELL, UK
Client: Canal & River Trust



Land & Water Services, Biomatrix Water and Terraqua Environmental Solutions, were commissioned by the Canal & River Trust to provide river bank protection and new habitat, to restore a vertical concrete edged section of the River Brent. The project team was tasked with creating new riparian habitat without obstructing flow or navigability of the waterway.





Biomatrix Water's Floating Edge Ecosystem technology was selected because of its durability, and it's ability to provide a restoration solution without obstructing the cross-sectional water flow area of the river.

The 124 meters long Floating Edge Ecosystem was engineered with stainless steel guide rails, which allow the system to move up & down with the changing water levels. Natural curvature and angled deflectors allow the water and any flotsam to flow past smoothly.



Installation took just 3 days, in collaboration with Land & Water Services and Terraqua Environmental Solutions. Sections fit together using a locking stainless steel quick connect system, which can be adjusted to match up to the curvature of the embankment.

The floating nature of the system, and the ability for water to flow smoothly underneath were important features for the approval of the Environmental Agency (EA) in the flood prone location.

RESULTS:

- 150 square meters of ideal riparian habitat created
- Angle deflectors to avoid build up of flotsam
- Embankment protected from erosion from boat wash
- Quick and easy installation
- Minimal disturbance to sight or surroundings
- Increased aesthetic amenity
- Cost saving technology

"The units were chosen on price and quality. Also the units have the advantage of providing habitat in an otherwise 'hard edged' watercourse, without affecting the inherent flood risks on this section which was important in getting the appropriate consents. The installation was carried out to a high standard and we are pleased with the end results."

Paul Fox
Senior Project Manager
Canal & River Trust

