

# Salisbury City Centre Millennium Project

## Technique: Enhancing concrete floodwalls

**Project location:** Salisbury  
**River:** Avon  
**County:** Wiltshire  
**Project start date:** June 2000  
**Project end date:** June 2000  
**Length:** 0.12km  
**Cost:** £29,000  
**Upstream grid reference:** SU 143 303

An interpretation Board alongside the River Avon, Salisbury city centre.



### Site background

The River Avon Special Area of Conservation & SSSI runs through the heart of Salisbury City Centre. At this place the river is characterised by a heavily engineered concrete, brick-lined channel, primarily functioning as a flood relief channel with a 2m high walled defence. This has the effect of inducing uniform flows and habitat without marginal or in-channel vegetation, producing a very exposed and impoverished habitat and passage-way, particularly for migratory fish such as salmon, which are an interest feature of the SAC. With limited cover or food for wildlife the channel offers very little aesthetic appeal.

### Objectives

To introduce a vegetated river margin to provide habitat and food for wildlife, to diversify the channel cross-section to offer variation to the flow and physical habitat and to improve the aesthetic & physical quality of the River Avon through Salisbury City Centre.

### Design

Approximately 120m of river channel was enhanced by:

- Construction of a marginal woven hazel and willow shelf along both banks to narrow the channel at low flows, increasing flow speed and cleaning the mid-channel gravels. The height of the structure was varied to create submerged and emergent zones and given an undulating edge to vary flow patterns, diversifying channel habitat and river-bed morphology. Once the structure was in place, it was finished with topsoil and planted with typical chalk river plants, sponsored by the public.
- Brushwood "mattresses" installed in the river channel to create physical habitat variation suitable for the establishment of aquatic plants and invertebrates.
- The centre of Salisbury is very sensitive in terms of flooding and the works had to be assessed in detail by the Environment Agency, using existing flood risk models.



View of enhanced concrete flood walls, August 2001.

### Partners

South Wilts Biodiversity Partnership, Salisbury District Council, EA, EN, Wessex Chalk streams Project, Wiltshire Wildlife Trust, Wild Trout Trust, Cain Consultancy, Friends of the Harnham Water Meadows Trust

### Subsequent Performance - RRC's views (2003)

Marginal aquatic plants have become well established, adding colour and diversity to the concrete channel. The project has been accepted with enthusiasm by the local community who 'paid' to plant a tree. This project was also a runner up in the Professional Category for the 2001 Wild Trout Trust Conservation awards.



*the River Restoration Centre Case Study Series*

This site was last visited by RRC staff on 15<sup>th</sup> June 2003

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