River Wensum Rehabilitation Project

Technique: Restoring a defunct meander

Project location: Billingford

River: Wensum County: Norfolk

Project start date: April 2000 (5 days)

Project end date: April 2000

Length: 30m section

Cost: £3500

Upstream grid reference: TG 006 200



Restored meander on the Wensum, Billingford. View looking upstream to inflow of meander.

Site background

The River Wensum is a lowland river which rises to the west of Fakenham and flows through predominantly agricultural land joining the River Yare at Norwich. The meander loop was created by the Environment Agency as an ORSU (Off River Support Unit) in the 1970's, to provide backwater refuges for fish. Sheet piling was installed on the upstream and downstream end of the meander loop. Over the years the ORSU partially silted up and ceased to function as an effective backwater refuge.

Objectives

To reconnect a defunct meander loop to the main river to provide a backwater refuge for fish.

Design

- The sheet piling was removed from the upstream and downstream ends
 of the meander loop. Material was dredged out of the loop and
 deposited on the floodplain nearby.
- The new backwater was fenced off to protect the banks from poaching by livestock.
- A deflector was constructed at the upstream end of the old mender loop to divert flow into the new backwater. An otter holt is also planned for construction.

Subsequent performance - RRC's views (2001)

Water now circulates freely around the restored meander loop. Protruding tree roots on the opposite bank of the main river act as a natural deflector to send flow around the backwater. The in-flow at the upstream end of the meander is quite narrow which may restrict flow and cause sediment to begin silting up requiring further maintenance (dredging). Widening of the in-flow could help to maintain a constant flow at all times of the year and prevent excessive silt build up.

Out-flow of restored meander into main river Wensum. Water-filled gravel pits in background.



Dredged material deposited on floodplain. View of restored meander in the background.



the River Restoration Centre Case Study Series
This site was last visited by RRC staff on 15th February 2001

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