

River Quaggy, Chinbrook Meadows

Technique: Re-meander channelised section and floodplain storage

Project location: Lewisham
River: Quaggy
County: London
Project start date: Spring 2002
Project end date: Autumn 2002
Length: Approx 0.5km
Cost: £104,000
Upstream grid reference: TQ 410 721



The River Quaggy, d/s of Chinbrook Meadows, prior to restoration

Site background

This section of the River Quaggy, with a flashy flow regime, was channelised and straightened between 1960-1970 as part of a flood alleviation scheme. Prior to restoration it was encased in concrete with fences and high privet hedges near to each bank. It could neither be accessed nor viewed by the public and was devoid of natural fauna and flora.

Objectives

To reintroduce the floodplain as a natural flood storage area as part of a larger catchment flood alleviation plan; to enable the River Quaggy to become accessible to the public and hence create a local amenity; to create an environment where native fauna and flora could colonise and allow for natural channel processes.

Design

- The concrete channel in the park was replaced by a sinuous channel, allowing easy access. It was (except where the cost of moving existing sewage drains prevented this) cut to follow its path prior to channelisation.
- Whilst cutting the channel old gravels were evacuated and sufficient 'room' was left along the river corridor to allow for natural adjustment.
- The margins of the channel were planted using a reputable source of native wetland plants (including iris, water mint and reeds), a wetland grass and wild flower mix was also sown. One section downstream has not been planted since there was a request from the local group to allow natural colonisation.
- Flood storage ponds were included in the scheme and at the upstream section a boardwalk, pond dipping and educational area, were incorporated to attract local school children.



Marginal planting around the pond & along edge of river (2002)



Rapid natural changes in the river planform (2002)

Subsequent Performance - RRC's views (2002 and update 2007)



Vegetation development at the pond (2008)

This project is an excellent example of a partnership initiative that has not only restored the river and floodplain, but has also paid careful attention to improving the park amenities. The channel work was completed in spring 2002 and by September that year there had already been considerable movement of gravels. Natural geomorphological features including a pool/riffle sequence, gravel bars and steeper banks had formed. The pond has been colonised by invertebrates and the vegetation planted along the banks is now providing good cover in both the planted and unplanted sections.

This scheme continues to be successful. Some desilting of the dipping pond (not linked to the main channel due to the location of a drain) may be necessary in the future together with some vegetation management.

the River Restoration Centre Case Study Series

This site was last visited by RRC staff on 18th September 2002 and May 2007

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