River Quaggy at Sutcliffe Park Techniques: Re-meandering, backwater creation, de-culverting

Project location: Eltham, South East London River: Quaggy London Borough: Greenwich Project end date: 2003 Length: Approx 500m Upstream grid reference: TQ411748 Partners: Environment Agency, Quaggy Waterways Action Group, Breheny Engineering, Greenwich Council

Site background

For years the River Quaggy at Sutcliffe Park was lost underground in a culvert. Local residents only became aware that a river was there when their homes flooded more frequently as development increased. Rather than further deepening and widening the hidden channel, a decision was made to combine flood risk management with a strategy for river restoration that would benefit the local community.

Objective

• To provide additional flood storage area in the form of ponds and lakes, whilst creating an attractive open space for the public.

Design

A new 'low-flow' meandering channel was cut through the park, following its original alignment. The previous culvert was retained, enabling it to take excess water in times of extreme flood events. Flow is now regulated between the two



Open water providing space to manage flood risk and provide access to nature

watercourses by a sluice. To provide further flood water storage, the park itself was lowered and re-shaped to create a floodplain capable of storing a maximum of 85,000 cubic metres of flood water. A network of boardwalks, pathways and viewing points were designed to encourage access to the river and ponds, all of which were an integral part of the scheme for community and wildlife enhancements.

Subsequent Performance - RRC's views

The combination of the new smaller open river together with the old culverts is a good demonstration of how to regulate flow for a range of environmental and flood conditions that should both help reduce future flood risk and low flow scenarios associated with climate change impacts. In addition people have been reconnected to waterscapes and locally completed surveys have indicated that visits to the park have increased by 73%. The open watercourse and wetland pond areas have sustained a range of native plant species since project completion which, together with the natural gravels found at the site, provide a range of habitats necessary for wildlife diversity.



the **River Restoration Centre Case Study Series** This site was last visited by RRC staff on 11th March 2008



Boardwalks close to the river and informal wetland area link people to nature