

Elton Backchannel

Location: Elton, Peterborough

Upstream Grid Ref: TL 08039 93829

Downstream Grid Ref: TL 08359 94101

Length: 466m

Completion date: May 2018

Cost: £25,402

Partners: National Lottery Heritage Fund, Environment agency, Nene Valley Catchment Partnership, Nenescape LP, Elton Estates & Peterborough & District Angling Association.

Summary of activities

The Elton Backchannel scheme comprised of 4 activities. The activities were:

Activity 1 – Remedial works to the ford to reduce sediment input.

Activity 2 - Tree planting to increase shade over the river and suppress the growth of emergent vegetation.

Activity 3 – Installing pasture pumps to provide water supply for cattle.

Activity 4 – Protect banks from future damage by erecting livestock fencing.

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Location map

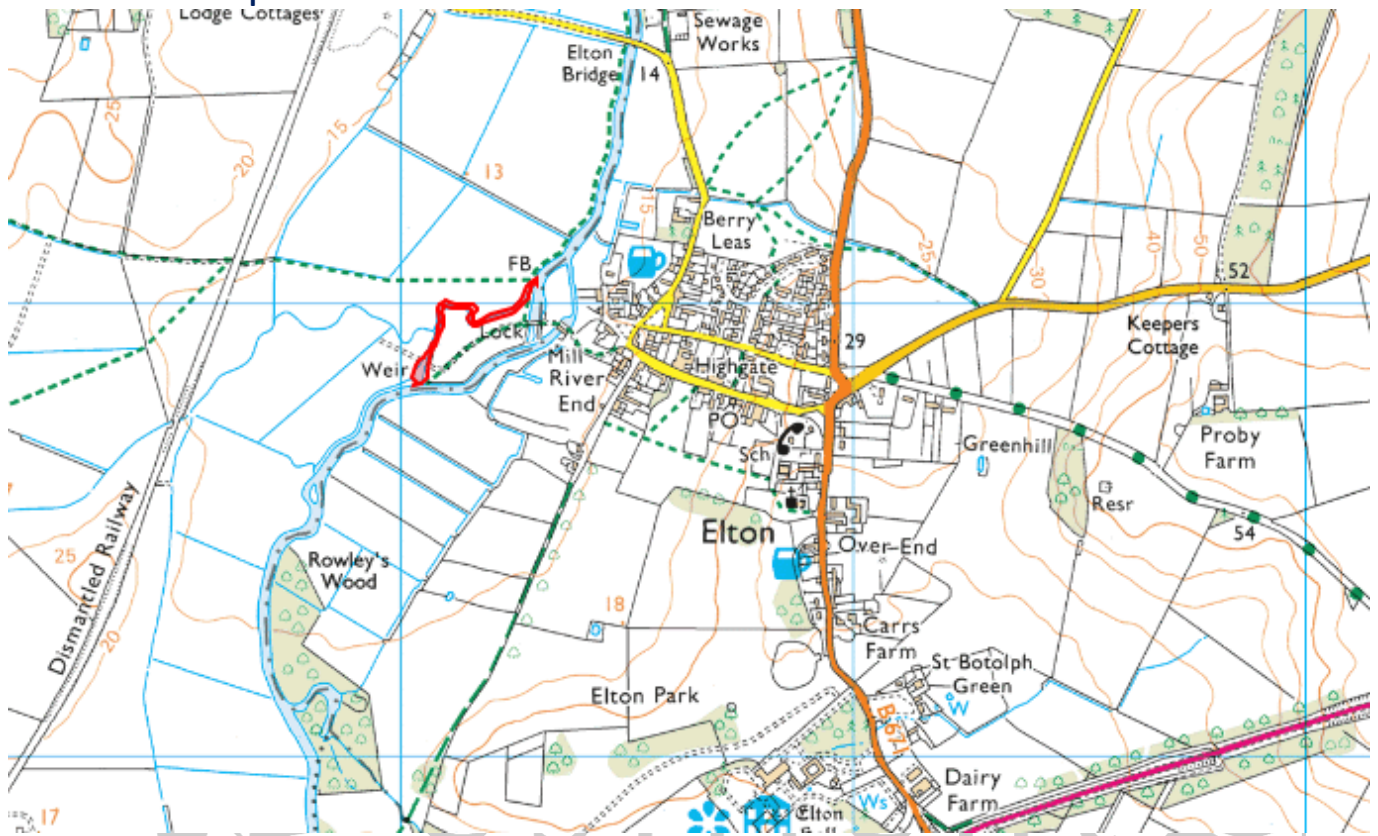


Figure 1 Map of Elton Backchannel

Background to project

This project was part of the Resilient River project, part of the Nenescape Landscape Partnership.

The Elton backchannel is generally deep, narrow and fast flowing with a good gravel bed and a dense fringe of common reed *Phragmites australis*. There are occasional semi-mature trees and shrubs, but there are also long, open unshaded sections of bank. The adjacent land is cattle-graze and the cattle are free to roam across several ungated fields which are linked by a ford through the back channel just below the weir pool at the top of the reach. During the summer and early autumn when the flow is lower and ground conditions are usually dry this is less of a problem, although cattle do congregate in the water to drink and cool-off at this time of year.

However, in the winter and after prolonged rain the ford and surrounding land become waterlogged and heavily poached and this results in significant introduction of fines sediment. The riverside fencing, particularly on the right bank, was also in poor condition and had collapsed in several places. This allowed the cattle to access the riverbank and wet berms and they were overgrazing and poaching the marginal wetlands.

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The main River Nene navigation channel is identified as a Local Wildlife Site. It is described as: “a major river which is not grossly modified by canalization or poor water quality. At least three species of Potamogeton spp. Nationally Scarce vascular plant species. Plant species which are rare in the county.” Although the back channel is not identified as part of the Local Wildlife Site, the implication implicit in the description is that the designation also extends to the back channel too. However, the objectives of the proposed enhancement scheme - to reduce fine sediment inputs to the river and prevent damage to riparian wetland habitats - would provide positive biodiversity benefits, not only for the back channel, but also for the river downstream.

Objectives

Elton backchannel proposed a number of enhancement opportunities with the primary focus of the project being to repair the heavily damaged ford. This project will benefit fish, other wildlife including otters and diversify the river habitats. The Project contributes to delivery of Water Frame Directive, improving the ecological status of the river. It will also help the EA deliver the Eel Management Plan and meet its statutory obligations under the Eel Regulations.

- Reduce fine sediment inputs at the ford caused by cattle poaching by reprofiling and grass seeding the eroded banks; re-stoning the access ramps; and installing post and rail fencing and gates to cattle control access to and across the back channel.
- Prevent future erosion by erecting livestock exclusion fencing.
- Install pasture pumps to provide cattle access to a water supply.
- Increase shade and reduce the growth rate of emergent weed beds by new tree planting.

Activities

Remedial work to the ford

Remedial work was completed on the ford to reduce fine sediment and nutrient inputs as a result of cattle crossing and congregating on the ford. The eroded ramps sides and the ford ramps were stabilised by re-profiling them to reduce the angle of the batter by having a base layer of 100-150mm of granite laid down with a top layer of 4-20mm of crushed granite being ‘tracked in’ after. This provides the cattle with a comfortable base to walk on when they are moved across the channel and the ramps were grass seeded after. The granite was placed no further than the face of the bank. The ‘wet’ bed of the ford was not be re-stoned to minimise further mobilisation of fine sediment.

A 360 tracked excavator with a suitable reach, operated by a qualified driver was used to carry out this work. “Clean” stone was specified to minimise the introduction of fine sediment to the water course. Stone was delivered by lorry to the ford. Prior to placement the stone was thoroughly re-washed using

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river water poured from the excavator bucket leaving any residual fine sediment on the bank. Figures 2 and 3 show a before and after comparison of the remedial work on the ford. The new ford is now suitable for cattle to cross with the newly lined ramps and the re-profiled banks.



Figure 2 Elton ford prior to this project



Figure 3 Elton ford after the works had been completed

Installing Pasture Pumps

Due to the fencing of the ford and new fence line running along the length of the river a new water supply was required on the left-hand bank. Three pasture pumps were installed for the cattle to drink from as this was deemed the most efficient method of providing water for the cattle. These devices are a very low maintenance way of providing water for cattle as the cattle operate them by pushing the pump with their nose as they drink from the small trough.

Tree planting

Prior to the project, there was limited tree stock throughout the reach, so 20 native trees and shrubs were planted along the right bank to, once mature, increase shade. The trees were staked and guarded to protect them from rabbit. Trees were planted on the bank crest in pairs leaving sufficient room for machinery to work around them if necessary. The angling club will maintain the trees on a regular basis, keeping the area clear so the growth of the trees is not suppressed.

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Fencing

The post and barbed wire fencing was previously in poor condition on the right bank and in places had collapsed. A new fence line was erected 1m back from the original line, the fencing was upgraded to 3 strands of barbed wire to minimise cattle damage and reduce the likelihood cattle would attempt to breach it. Angler access points were upgraded from a “pipe” crossing to a simple treadless post and rail stiles. Heavy duty post and rail fencing at the top of the banks either side of the ramps that lead down to the ford were erected and access gates were installed to prevent cattle access. Overall, over 600 metres of fencing was erected.



Figure 4 New fencing installed at Elton



Figure 5 One of three pasture pumps installed at Elton

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Contact information

For further information regarding the restoration project that took place at Whitemills or any other enquires please contact the River Nene Regional Park:

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Contractor Information

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Website - www.mickgeorge.co.uk

Fencing & Groundworks – Countrywide Fencing

Telephone - 01604 810625

Email – countrywidefencing@yahoo.co.uk

Website - www.countrywidefencing.com

Pasture Pumps – McVeigh Parker & Co. Ltd

Telephone – 0333 0050115

Email- sales@mcveighparker.co.uk

Website – www.mcveighparker.co.uk

Treated sleepers – UK Timber Ltd

Telephone – 01536 202114

Email - sales@uk-timber.co.uk

Website – www.uk-timber.co.uk



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