

Marholm Brook Improvements

How local businesses can help

January 17

We are working in partnership with Peterborough City Council, Anglian Water, RiverCare and Peterborough Environment City Trust, to improve the quality of the water environment in Marholm Brook, Werrington Brook and Cuckoo's Hollow.

What are we doing and why?

Our work here will help improve the way Marholm Brook flows, helping increase the brook's wildlife and provide a healthier environment for people to enjoy. We are constructing new features inside the existing channel that are found in similar but healthier brooks.

These features will help improve the water quality during dry periods when there is less water in the brook. They will also help improve the brook's ability to maintain its own health without impacting flood risk.

Our works here are part of a 5 year partnership programme to improve Marholm Brook, Werrington Brook and Cuckoo's Hollow to meet the requirements of the Water Framework Directive (2003). For more information on these works, our future programme or for opportunities to get involved, please visit www.pect.org.uk/WerringtonBrook.



How can local businesses help?

The brooks flow through a number of public open spaces in Walton and Werrington. The water in the brooks is easily accessible and used by people and wildlife. Water that enters surface water drains from roads and private property, often enter the Peterborough brooks directly. Contaminated or reduced quality water from these drains places great pressure on the brooks. These pressures often result from accidental pollution, misconnected pipes and lack of awareness of the impact of what happens by putting contaminated water down a drain. There are a variety of substances that impact the quality of the water and its habitat including fish and plant life.



Diesel spill enters Marholm Brook from surface water outlet, Jan 17.

We would like to encourage all businesses in the area to:

1. For all pollutions, please call 0800 807060 immediately.
2. Check up-to-date and effective pollution prevention plans are in place.
3. Check supplier pollution prevention plans in place.
4. Check for misconnections - further information at www.connectright.org.uk.
5. Identify how site drainage operates because often it will drain directly into Peterborough's brooks and rivers.
6. Brief employees on these important requirements and why we are asking local businesses to help.

By working together we can help improve local water environments for the benefit of business, employees, communities and wildlife.

What are the improvements and where are they taking place?

Marholm Brook flows from the village of Marholm through the main railway embankment until it meets Werrington Brook near Gunthorpe Road. The brook runs between Dukesmead and Brookfield Business Parks. It receives surface water from both these business parks, the road network and Mancetter Square.

We have been focusing the first stages of our improvement programme on this section of the brook. This has involved constructing features that are proven to help improve the water quality during low flows and comprise:

1. Berms: typically comprise of earth material taken from within the channel to create a meander (see pic). We will also put plants on the Berms to help speed up their establishment. Berms will vary in height from between 0.25 and 0.5m high and their length between 3 and 10m depending on their location in the brook. Berms in the right location help improve the water quality and habitat during low flows without affecting high flows.
2. Riffles: comprise of stone that is heavy enough to withstand high flows. The stone, which can be limestone or mixed, is usually laid in a shallow area in the water course. It can span the width of the river and can be between 3 and 10m long and up to 0.25m deep. Some of the stone will move. Riffles help clean the water, provide fish with spawning habitat and help increase oxygen in the water. Riffles especially help during low flows and are designed not to affect low flows.
3. Pools: are dug in the river bed and can be up to 0.5m deep and 2 to 3m long. They provide deep water during low flow conditions for fish and other wildlife habitat. They also help trap sediment during lower flows helping clean the water. Sediment is then washed out during higher flows downstream. Pools can help improve flood risk as they are making space for water.



Marholm Brook near Dukesmead before improvements Feb 16



Marholm Brook near Dukesmead after improvements Apr 16



Marholm Brook near Dukesmead after improvements Aug 16

How will you know if this project has been successful?

We are working with the local River Care to monitor the improvements. These includes measurement of the depth, flow, water quality, plant community and wildlife. During 2016 we hosted 3 Business and Corporate half day events to enable businesses and their employees to take part in the monitoring programme. If your business or employees are interested in getting involved please contact us on the details below.

Who can I contact if I have further questions?

If you would like to understand more about these works or the wider programme or are interested in joining us on a tour of the works please contact us on the details below, Monday to Friday during normal office hours.

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