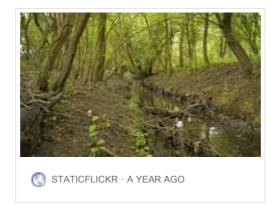
by HertsCMS a year ago

# Pix Brook Watercourses Project Update

#### PROJECT COMPLETED OCTOBER 2014



#### PROJECT UPDATES

### **OCTOBER 2014**

A launch event was held on the 10th of October to celebrate the completeion of the Pix Brook Watercourses Project to enhance the Pix Brook which runs through Norton Common in Letchworth.



Local councillors, volunteers and officers joined in the celebrations on Norton Common. With speeches thanking all involved especially the volunteers, followed by a walk around the site looking at the project work. The sun even made an appearance to help show off the works.

#### **SEPTEMBER 2014**

Walks and More Evening Stroll around Norton Common Thursday 4th September 2014

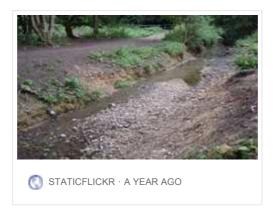


Join the Countryside Management Service for a guided walk around Norton Common. Come and see how the recent wetland project is establishing, while looking out for night time visitors as the evening draws in, hopefully spotting a few bats along the way.

Bring a torch - Booking Essential.

## JULY 2014 - Wetland Works - Week 16

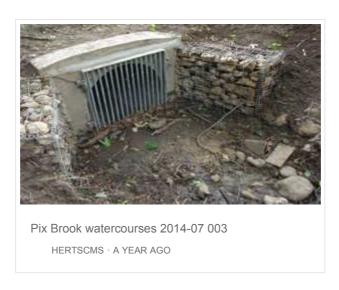
With only the marginal planting and a few bits and pieces left to complete the proejet is almost at an end. After some recent heavy rain Project I along Norton Stream has started to take shape. The water has deposited gravels and created more natural pools and riffles. The surrounding coppiced and pollarded trees are all springing back to life making the area look much more attractive.



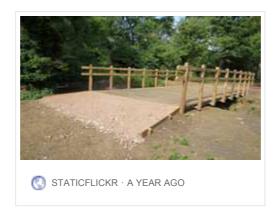
Project I with newly formed pools and riffles



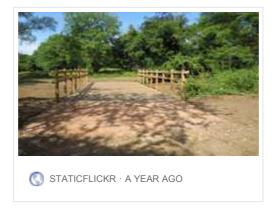
Second trash screen by Project D in the centre of the site



Trash screen to stop rubbish and debris from getting washed into Project D



Vehicle bridge with handrials and ramps



# Vehicle bridge at Project D complete



Pix Brook watercourses 2014-07 006 HERTSCMS · A YEAR AGO

Pedestrian bridge at Project G with ramps

# JUNE 2014 - Wetland Works - Week 15

The bridges have arrived. First came the pedestrian bridge, quickly followed by the vehicle bridge.



Pix Brook watercourses 2014-06 001 HERTSCMS · A YEAR AGO

# Detail of anti-slip decking on vehicle bridge



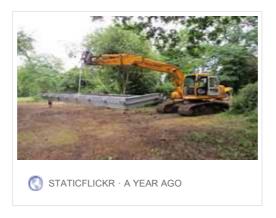
Pix Brook watercourses 2014-06 002 HERTSCMS · A YEAR AGO

# Decking boards being installed



Pix Brook watercourses 2014-06 003 HERTSCMS · A YEAR AGO

Base of vehicle bridge in position at project H



# Vehcile bridge base being unloaded



# Decking boards ready for installation



Decking boards for vehicle bridge being unloaded



# Ends of handrails



Handrail detail

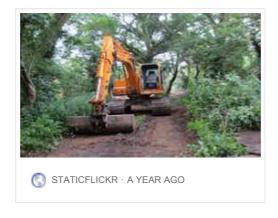


Pix Brook watercourses 2014-06 010 HERTSCMS · A YEAR AGO

Pedestrian bridge in place at Project G

### JUNE 2014 - Wetland Works - Week 14

The end is in sight. With the bank reprofiling and marginal shelf completed at Project G, the final culvert removed from Project H and the reprofiling and marginal shelves complete in this area, we now wait for the bridges to arrive.



Digger waiting for bridges to arrive



Pix Brook watercourses 2014-06 012 HERTSCMS · A YEAR AGO

# Marginal shelf and bank reprofiling



Pix Brook watercourses 2014-06 013 HERTSCMS · A YEAR AGO

# Project G before works



Bank edges reprofiled where first culvert was removed from



Reprofilied bank edges and marginal shelf



Amazingly for a change it was not a concrete pipe



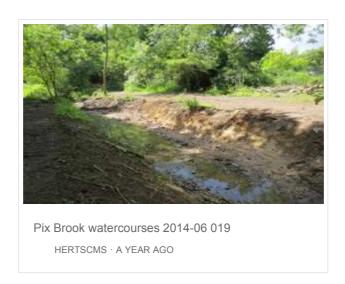
Culvert removed



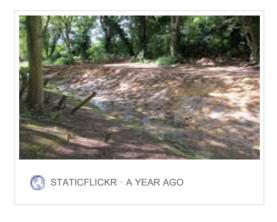
Project H second culvert before works

### JUNE 2014 - Wetland Works - Week 13

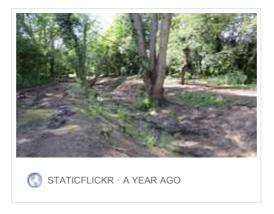
With Project F completed the sloping bank edges and marginal shelf are ready for planting and seeding; it was onto Project I for more reprofiling and marginal shelf creation.



Marginal shelves and reprofiling carried out in areas where there is a lot of light reaching the banks will help the bank side vegetation to colonise



# Marginal shelves created



# Bank edges being reprofiled



Once a dark straight shady channel



Project I before works



Reprofiled bank edges with marginal shelf



Project F completed

### JUNE 2014 - Wetlands Works - Week 12

Project F is almost completed. The final gabions have been made, geogrid has been installed along the far bank and the bank edge reprofiling and marginal shelf work have been started.

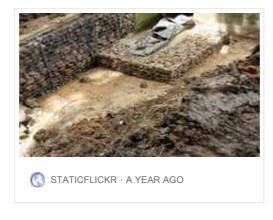


Bank edge reprofiling beginning

Geogrid installed along whole of bank



Geogrid being installed to strengthen the bank



Rock rolls and gabions installed around the inlet to reduce erosion

#### MAY 2014 - Wetlands Works - Week 11

A damp start to a varied week, with the completion of the concrete foundations on Project H, then onto Project G to remove the culvert and create more concrete foundations ready for the pedestrian bridge and then some more gabion basket filling back up at Project F.



While the concrete dries its back to Project F to fill some more gabions with stone



Concrete pipe that came out of the culvert at Project G along with lots more concrete



Only an old metal post remaining, waiting for the concrete foundation to dry before it is removed



# Culvert removed



Project G before the culvert is removed



Finished concrete foundation at Project H ready for the new vehicle bridge

## MAY 2014 - Wetlands Works - Week 10

Starting work on the foundations for the vehicle bridge at Project H



A very slow process filling the foundations with concrete



One of the vehcile bridge foundations waiting to be filled with concrete

### MAY 2014 - Wetlands Works - Week 9

Continuing with Project F and then starting on removing the first of two culverts at Project H.



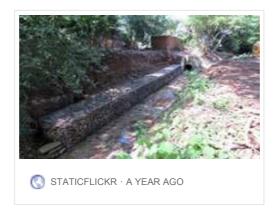
First stage of reprofiled bank edge



Digger reprofiling the bank edge once the culvert had been removed



One of the culverts at Project H before removal



Row of gabion baskets installed to protect the bank edge from erosion



Headwall has been cut back and all concrete removed

#### MAY 2014 - Wetlands Works - Week 8

Work has started on Project F, to restore a section of watercourse lined with concrete.



Concrete is removed from one side...



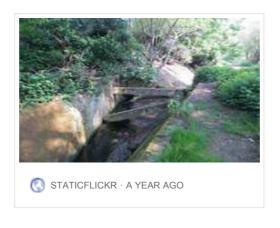
...then the other



## The natural bed is revealed



# Concrete awaiting removal from site



Project F before wetland works started

## APRIL 2014 - Wetlands Works - Week 7

The bridge works are now complete and the area looks so different.



Reprofiled bank edge next to repaired bridge



Headwall on downstream side also repaired



Gabion baskets and stone used to hide the concrete



Completed bridge repairs now ready to use

## APRIL 2014 - Wetlands Works - Week 6

The bridge repairs continue at Project J, with the addition of gabion baskets.



Behind gabion backfilled; stone detail on top of concrete to match gabion



Gabion baskets installed both sides of the bridge to help funnel the water through the pipe



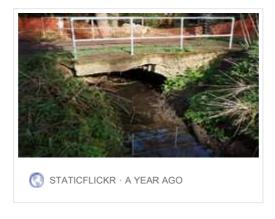
Concrete walls installed, just removing the wooden shuttering

## APRIL 2014 - Wetlands Works - Week 5

With the gabions (wire cages filled with stone) installed to reinforce the bank at Project J, improvements made around the headwall of the pipe and the repairs to the bridge the area is already looking much more attractive.



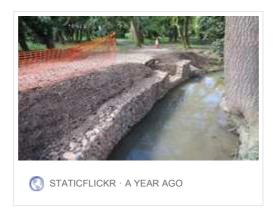
Wooden shuttering being installed to cast the concrete bridge support



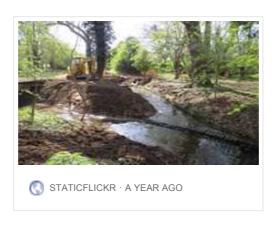
Bridge before repair works, lots of the bricks have become dislodged due to a large tree root



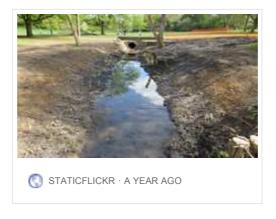
# Improvements to the pipe headwall



# Gabion baskets reinforcing the bank edges



Reprofiled bank edge and marginal shelf



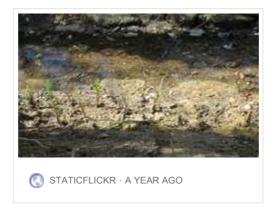
Completed planting by volunteers along the marginal shelves of Project D

## APRIL 2014 - Wetlands Works - Week 4

**CMS Thursday Practical Volunteers** and **Friends of Norton Common** came out in force on the 10th for some wetland planting. After a short tour round some of the project sites to see what had been done; the volunteers set to work planting nearly 1,000 wetland plants on the marginal shelves.



Rush planted along the marginal shelf



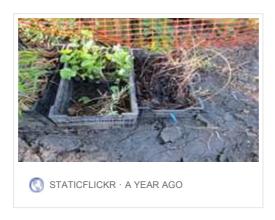
and a few Sedge



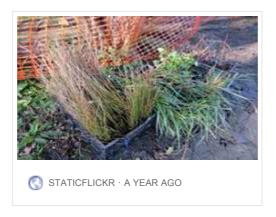
Friends of Norton Common busy planting along the marginal shelves of Project D



CMS Thursday Practical Volunteers hard at it, planting yet more wetland plants this time along Project A



Wetland plants - Marsh Marigold, Iris and Loosestrife



## Rush and Sedge

We were greeted with a lovely sunny day on Wednesday the 9th for the guided walk to look at the wetland projects. 21 people came along to enjoy the sunshine, we were joined by the sounds of Chiff Chaffs, saw lots of butterflies and found some interesting ferns and plants along the watercourses and of course looked at all the project improvement works. Everyone had a lovely time.

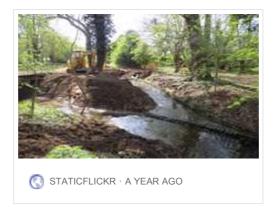
Project J is well underway with the removal of lots of armour blocks from the channel and bank egdes. More marginal shelves have been created and the pipe headwall and area by the bridge is being repaired to stop erosion of the bank.



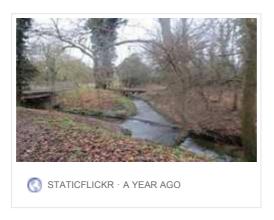
Old headwall removed



# Old pipe headwall

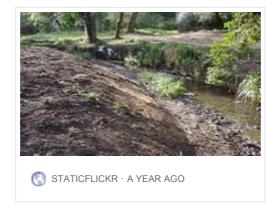


Removed concrete blocks, reprofilied bank edges and marginal shelf



Bank edge before works with concrete armour blocks up the banks

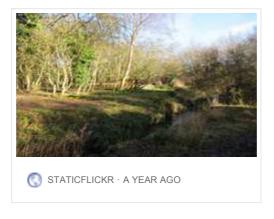
Contractors moved onto Project K at the far end of the site and created some marginal shelves on the last meanders of the Pix Brook to slow the water down before it joins Norton Stream.



Project K after wetland work - marginal shelf with sedges



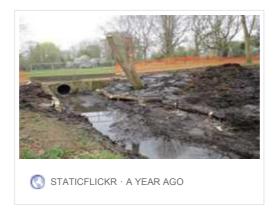
New marignal shelf and gently sloping bank edge



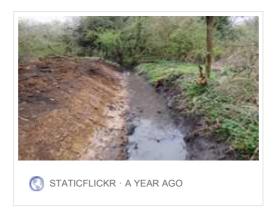
Project K before wetland works started

#### MARCH/APRIL 2014 - Wetlands Works - Week 3

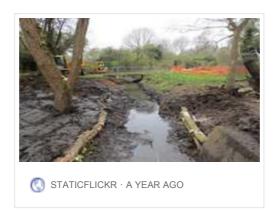
The additional bay on Project B has been completed and the contractors have now moved to the centre of the site to start work on Project D. Continuing the theme of creating marginal shelves with reprofilied bank edges; this time along both bank edges and using logs left from the tree works to hold back the leaf litter when removed from the channel.



Logs from tree works being used to hold back material removed from channel



More bank edge reprofiling and marginal shelf work



Project D in the centre of the site well underway



The additional bay on Project B having a marginal shelf added along with gently reprofiled bank

#### MARCH 2014 - Wetlands Works - Week 2

With Project A completed it was onto Project B, working along the Swimming Pool Stream, to create more marginal shelves and reprofile bank edges. This time the material removed was to be transported across the grassland using a dumper and levelled in the woodland. Boards need to be used to cross the grassland to avoid excess damage to the grass.

Reprofiled bank edge with marginal shelf

New marginal shelf being created

Boards across the grass to get the material via dumper into the woodland at Project B.

Project A completed now waiting for the marginal planting

Completed gabions by the outlet of Poject A

## MARCH 2014 - Wetlands Works - Week 1

Wetland contractors have started on site and are busy working on Project A - by the swimming pool. They are removing the concrete sandbags from the bank and from in the stream, creating a marginal shelf ready for planting wetland vegetation and reprofiling the bank edge.



Digger creating marginal shelf.



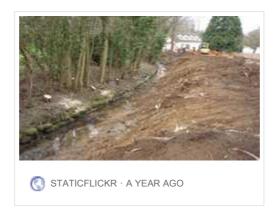
Gabion baskets being installed by inlet



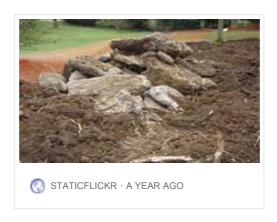
View from inlet - sandbags removed



# Reprofiling starting



# and marginal shelf being created



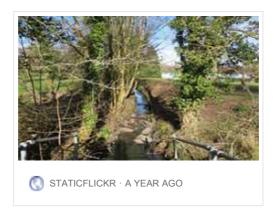
A pile of sandbags removed from the channel



Digger ready for action

## MARCH 2014 - Tree Works - Week 3

Tree works are complete. Tree contractors have been working really hard to complete all the tree works on time.



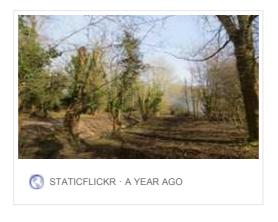
View from the inlet of the Pix Brook - Project A by the swimming pool after tree works



Project A after tree works



The long straight dark channel of Norton Stream - Project I before tree works



Large willows high pollarded along the watercourse



Bonfire to remove wood as site is still too wet to get on to take material off



CMS Thursday Volunteers and Friends of Norton Common were out in force to help coppice some of the smaller bankside vegetation



Cut material was used to make deer baskets around some hazel coppice stools to protect them from grazing deer

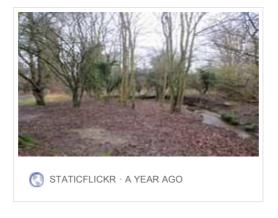


### Completed deer baskets

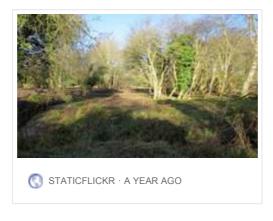
Limited reprofiling works are to be carried out along the Pix Brook as it already has a lot of vegetation and light. The last two bends are to have marginal shelves created and be reprofiled (Project K) to help reduce the flow before it reaches the bridge.



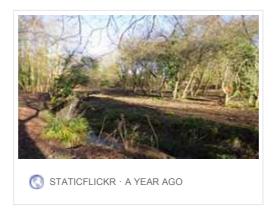
Project K before tree works



Project K before tree works

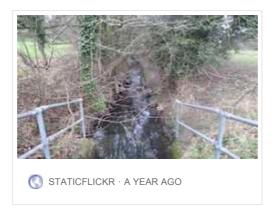


Bank edges have been opend up to allow more light into the brook and make way for machines to carry out the wetland enhancement works.



## FEBRUARY 2014 - Tree Works - Week 2

Tree works are progressing well, with projects F, G and H almost completed. It was off to Project A by the side of the swimming pool to open up the bank edges ready for the wetland contractors to come in and remove the concrete and reprofile the edges.



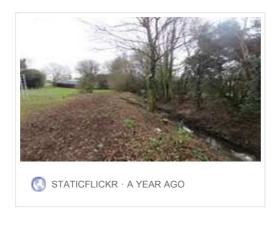
View from inlet



# Concrete in channel near inlet



Bank edge before tree works



Bank edge during tree works

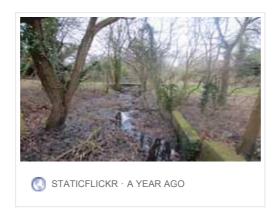
## FEBRUARY 2014 - Tree Works - Week 1

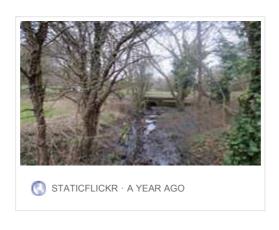
Tree works are underway, contractors have started coppicing and pollarding sections of bank side trees around the common to allow more light into the watercourses; this will help plants to establish on the bank edges. The trees will be recoppiced periodically on rotation.

Project D - In the centre of the common



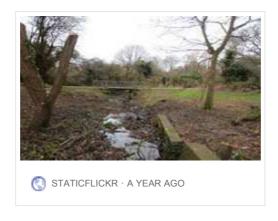
Before tree works







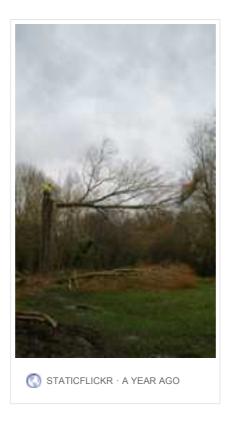
Tree works being carried out



After tree works, shading trees removed allowing more light into the watercourse.



# Large willow before pollarding



Large willow being pollarded



Large willow after pollarding