ISSUE 3 · JAN 2025

ALT CROSSENS NEWS

Official Newsletter of the Mersey Rivers Trust

Happy New Year! As we start a new year we take a look back at all the great work that has been delivered in the Alt Crossens catchment over the past 12 months and the exciting new projects we will be delivering in 2025.
We wish all our partners, stakeholders and volunteers a very happy and healthy 2025.

OUR BIGGEST PROJECT EVER!

The River Alt Natural Flood Management (NFM) Programme is a £2.1m partnership project, led by Mersey Rivers Trust, funded by the Environment Agency. It brings together partners from the Alt Crossens Catchment Partnership to deliver a range of NFM measures throughout the whole of the River Alt catchment, from the source at Huyton to the sea at Hightown. Phase 1 of the project has been delivered in 2024 which involved designing and developing the package of projects across 20 sites. Phase 2 will run from January 2025 to March 2027 and will involve the delivery of the various NFM interventions.
Mersey Rivers Trust will be delivering 10 projects including wetland creation, building leaky dams and woodland management. See pages 2-5 to find out more about our NFM projects.

Oak Plantation - leaky dams

Oak plantation is located in Knowsley and comprises a 2.78 ha site with woodland, grassland and an unnamed watercourse, which feeds into the River Alt. Much of the site and the adjacent housing is at risk of surface water flooding. NFM interventions planned for the site include woodland management (to be undertaken by Knowsley Council) and leaky dam creation. The woody material removed as part of the woodland management works will be re-used to create a series of leaky dams to increase attenuation of water and reduce water velocity and flood peaks in the main River Alt during high rainfall. The dams will allow normal water levels to flow unimpeded, but intercept and slow flood waters.

Hall Brook - wetland creation

Hall Brook is situated within Croxteth Country Park and flows between a field for livestock grazing and a housing estate. The site is at high risk of both fluvial (river) and surface water flooding. NFM works at this site will include reconnecting the floodplain to increase flood water storage capacity and slow the flow into the River Alt. An additional offline wetland will be dug in the northeast corner of the field to attenuate overland and groundwater run off. This will provide additional freshwater habitat and storage capacity, and reduce ground water flowing into Hall Brook in events of high rainfall.

Dam Wood - leaky dams and wetland creation

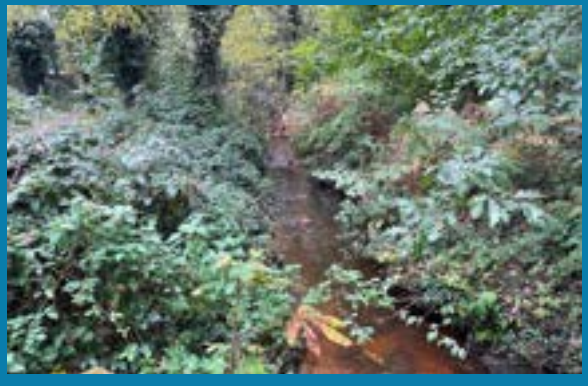
Dam Wood is an historic woodland, originally part of the grounds of Croxteth Hall. A series of ditches flow through the site, fed by surface water outfalls from the adjacent housing estates. The ditches flow to the northwest of the site where they join the River Alt. Much of this area is at risk of both fluvial and surface water flooding. This project will create a series of wetland scrapes to provide additional flood water storage capacity during high rainfall events. A series of leaky dams will be built within the ditches to increase attenuation during high flows. In combination with the scrapes, leaky dams will help to slow the flow of water into the River Alt and contribute to a reduction in downstream flooding.

Fazakerley WwTW - wetland enhancements

Tue Brook wetlands are situated along the western boundary of the United Utilities (UU) site for wastewater treatment, within the shallow valleys of Fazakerley Brook and the River Alt. The wetlands were created in 1999-2000 as a method of treating highly polluted water from Tue Brook due to industrial estate drainage, urban drainage and combined sewer overflows, before it met Fazakerley Brook. After liaison with UU and a site visit, it is evident the site has not been managed since it was first created over 20 years ago. Our proposal for this site includes full restoration of the wetland, including woodland management, re-digging of the wetlands, sediment buildup removal, channel widening and floodplain restoration. Restoration and increased storage capacity of the wetland will improve attenuation during heavy rainfall and flood events, improve water quality and flow dynamics, and help to reduce local and downstream flooding.

Dumbreeze & Clint East Wood - leaky dams

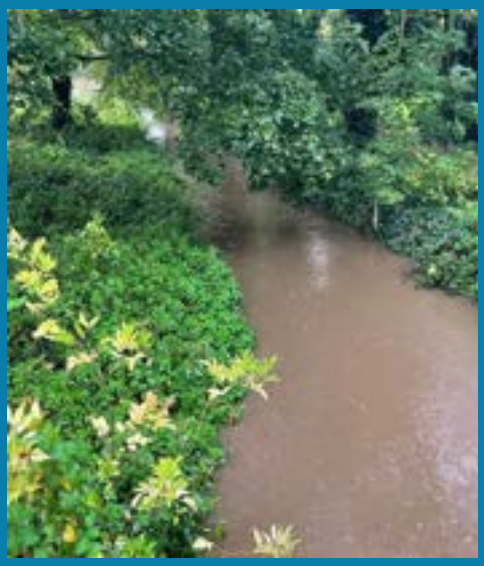
Dumbreeze wood is located in Knowsley and comprises a 0.28 ha woodland with a watercourse running through the site, part of the Knowsley/Croxteth Brook waterbody. The site is bound by residential housing and roads which are known to flood during high rainfall events. Frequent flooding on Mill Lane, adjacent to Dumbreeze wood, feeds into the channel and contributes to downstream flooding. The watercourse flows from Dumbreeze Wood, under Knowsley Lane and into Clint East Wood, which comprises 1.76 ha of riparian woodland. The site is bound by an industrial estate to the north which is at high risk of surface water flooding. Leaky Dams will be constructed at both sites, slowing river flow and increasing attenuation within the channel when water levels are higher. The dams will be raised from the river bed, allowing normal flow and the movement of sediment and fish. Knowsley Council will undertake some complimentary woodland management works at both sites.



Willowbed Plantation - leaky dams

Willowbed plantation (aka Bluebell Woods), is located in Knowsley and comprises a 1.69 ha woodland with Knowsley Brook running through the site. The site is located adjacent to the M57 motorway and is therefore a prime flood storage area for motorway runoff providing protection for the housing estates to the north. The river channel is very straight, with high banks making it ideal for multiple leaky dams. Woody material from Knowsley Council's woodland management works will be reused to create the dams. Interventions will reduce the speed of flow through the site and downstream, increase attenuation within Willowbed Plantation, and add desirable river dynamics into the currently straight, funnel-like channel.

Millbrook Millennium Green - wetland creation



Millbrook Millenium Green is a Local Wildlife Site situated in Knowsley and comprises woodland, grassland, ponds and a watercourse (Simonswood Brook) that runs through the centre of the site. Much of the site sits within flood zone 3 and many of the adjacent housing estates are at risk of surface water flooding due to outfalls becoming inundated at high river flows. A series of in channel scallops, berms and wetlands at the site are proposed to increase storage capacity, attenuation and reduce rate of flow. A series of online attenuation wetlands will be created at the downstream end of the site, alongside existing ponds to provide extra filtration, habitat and capacity during peak flows.

Valley Park - wetland creation

Valley Park is located downstream of Millbrook Millennium Green, before Simonswood Brook joins the River Alt. Restoration of a palaeo-channel and creation of online wetlands are proposed to naturalise the channel and increase capacity during flood events. A secondary channel will create a buffer downstream from the fast currents caused by the outflow, reducing the flow rate of the brook and erosion of the banks immediately downstream of the outflow. This will also help properties downstream that are at risk of flooding. It will provide valuable habitat for a variety of wildlife, including nesting birds and the protected Water vole which is present in the River Alt catchment.

Acornfield Plantation - leaky dams

Acornfield plantation is a Local Nature Reserve located in Knowsley and comprises mature woodland, ponds, ditches and peatland habitat. To the north of the site is an industrial estate and to the south are residential properties, both of which are at risk of surface water flooding. The ditch system, fed by rainwater, flows into a culvert before joining Simonswood Brook in a high flood risk area from both fluvial and surface water sources. Several leaky dams will be installed in the ditches to increase storage capacity, improve ditch geomorphology and create habitat for species. Knowsley Council will also undertake some complimentary woodland management works.

Old Hall Road Park - leaky dams

An overflow channel from the Leeds and Liverpool canal flows along the northern edge of Old Hall Road Park. The channel flows into Whinny Brook, which feeds into the river Alt. This site is in flood risk zone 3, meaning properties in this area and those downstream in Maghull are at high risk of flooding. Maghull has experienced severe flooding historically due to development on an area that is, in part, the historic flood plain of the River Alt. Maghull is particularly susceptible to surface water flooding due to the low-lying nature of the district and local surface water systems typically drain by gravity into the River Alt, creating a high flood risk area for hundreds of properties. Leaky dams in the canal overflow channel will help to increase attenuation of flows upstream within the channel during high rainfall events, slowing the flows that ultimately feed into Whinny Brook, and eventually the River Alt.

Monitoring

Mersey Rivers Trust are undertaking the monitoring requirements at all 20 sites in the River Alt NFM Programme to assess the effectiveness of the NFM interventions. A range of parameters are being measured before, during and after the project...

River depth
River flow
Water quality (chemicals, pH, temperature)
Invertebrates
Time-lapse photography
River MoRPh

Welcome to the MRT team!

Natasha Jacob

Natasha is a social scientist with a background in Human Ecology. A keen interest in helping nature and people work better together, Natasha has previously worked on NHLF-funded and Horizon Europe projects, with Manchester Consultancy Countryscape & Oppla. Natasha has joined Mersey Rivers Trust to project manage EA-funded NFM projects based in the Alt Crossens, from leaky dams to wetland creation, helping to reduce flooding in the Alt River catchment.

Ryan Teare

Ryan joined the Mersey Rivers Trust in 2024 as a Project Assistant in the Natural Flood Management (NFM) programme for the River Alt/Crossens catchment. The previous summer he graduated from The University of Birmingham with a BSc in Environmental Science where he discovered his passion for freshwater ecology and management. His work for the trust looks to strengthen the Evidence Base for the effectiveness of NFM at reducing peak discharge, increasing attenuation, and improving the river's overall health.

Josh Pridding

Josh joined the trust in November 2024 and is responsible for delivering natural flood management projects in the Alt and Crossens catchment area. His work currently focuses on wetland creation and restoration, as well as installing leaky dams to enhance flood resilience and habitat diversity.
He is excited to bring his skills and passion to MRT, contributing to meaningful projects that create space for wildlife and benefit the local community.

Upper Alt pollution monitoring

We have been successful in getting funding from the Environment Agency's Water Environment Improvement Fund (WEIF) to undertake water quality monitoring and outfall safaris in the Upper Alt. We aim to identify sources of pollution in the upper reaches of the River Alt, in and around Huyton. We will then engage with the public and stakeholders to highlight these issues and identify ways to stop pollution at the source.

Additionally, we will be continuing to develop plans for the creation of wetlands alongside the River Alt at Mab Lane. We plan to utilise an historic meander and create new scrapes to increase capacity in the channel, helping to reduce flooding downstream. The wetland areas will be planted with reeds which will help to filter harmful chemicals from the water and improve water quality.

Reed beds also provide important wetland habitat for a variety of birds, insects and small mammals, such as the protected Water Vole.

MAGHULL NFM OPPORTUNITIES

We have been funded by the Environment Agency to explore opportunities for Natural Flood Management measures in and around Maghull to help reduce flooding.
Much of Maghull is at high risk of both fluvial (rivers) and surface water flooding. There have been several flood events in recent years, including during Storm Christoph in January 2021 in which heavy rainfall led to the EA issuing two Severe Flood Warnings in Maghull, covering 439 properties within the fluvial flood warning areas. The record river levels breached flood defences on the River Alt.

Residential property and Bridges Ln flooded on 20th January 2021

The first phase of this project wil include opportunity mapping and design of interventions. It will run until March 2025 and then we will seek funding to deliver the NFM measures in following years.

Groundwater monitoring station

Since August 2024, the Mersey Rivers Trust and Wildfowl and Wetlands Trust staff have been collecting groundwater and peat depth measurements at Martin Mere and the surrounding agricultural land.

LOWLAND PEAT & GROUNDWATER PROJECT

The Crossens catchment is home to dozens of farms on Grade 1 agricultural land which is being utilised for arable crop production, making the region a high priority for England's food security. The fertility within the landscape is facilitated by the presence of large areas of peatland soils which are rich in organic matter. Despite it's agricultural productivity much of the land within the area is categorised as Zone 3 for flood risk, which refers to land with the highest possibility of flooding.

At the start of 2024, the Mersey Rivers Trust were awarded a grant by the Environment Agency as part of the Lowland Agricultural Peat Water Discovery Pilot (LAPWDP). This funding is being used to develop a solid baseline of the current condition of the peat, as well as looking at groundwater levels, focusing on wetter, less productive areas of the farmland.

As part of this project the Mersey Rivers Trust have been collaborating with local farmers and the Wildfowl and Wetlands Trust. Martin Mere is being utilised as a control site to compare its peat condition and groundwater levels with the surrounding farmland. Ultimately the knowledge gained will provide insight into whether "wetter farming" is a viable option within the catchment. With the data gathered, the trust will provide information to local farmers with the aim of improving the overall soil and water quality locally, whilst lowering the impacts of flood events.

What is wetter farming?

Wetter Farming, also known as Paludiculture, is the practice of growing crops on land that has had its water table permanently raised. Setting land aside for paludiculture to grow crops such as Sphagnum Moss or Typha not only brings environmental benefits, but it can also provide landowners a more economical way of farming areas that are typically less productive.

Farmland Species Recovery project

Merseyside Environmental Advisory Service (MEAS) are co-ordinating a Species Recovery project across a number of Farms in the Liverpool City Region. This is looking at enhancing farmland habitats to help the recovery of a number of protected farmland species, for example Water Vole, Brown Hare, farmland breeding bird assemblages and a number of farmland plant species.

Brown Hare

American Mink

MRT delivered a Water Vole survey training day and carried out a series of Water Vole surveys on a farm in Ince Blundell. It was found that the Water Voles were restricted to the farm ditches that were more isolated from the main River Alt. This possibly indicates that the Water Voles are finding refuge away from the main river due to the presence of American Mink (an invasive non-native species) and more regular incidents of flooding in the area. We have placed out Mink Rafts at key points between the river and the Water Vole Colonies. Rafts are used to indicate the presence of Mink.

MRT have advised on the design and location of wetland scrapes and farm ditch management to help improve the habitats for Water Voles and Birds.

A series of Breeding Bird surveys were carried on participating farms, in partnership with staff from MEAS. These have been followed up with a series of Wintering Bird Surveys. Following habitat improvements on the farms, these surveys will be re-done and compared to the pre-project baselines.

Lapwing

OUR ONGOING COLLABORATION WITH CPVG

We have continued to work closely with our friends at the Croxteth Park Volunteer Group (CPVG) throughout 2024. Their support in helping to deliver projects and maintaining previous interventions such as the Croxteth wetland is invaluable.
MASSIVE thank you to all at CPVG and we look forward to continuing to work with you in 2025!

Photo credit CPVG

CROXTETH BROOK NFM

In March 2024, we installed 19 leaky dams at Howard's Pits and Little Wood with the help of the Croxteth Park Volunteer Group and other local volunteers. 19 of the dams are in Croxteth Brook and a tributary to help 'slow the flow' downstream into the River Alt. One leaky dam was constructed on land to help reduce overland flow and protect a section of footpath which regularly floods.

This is one of a series of small Natural Flood Management measures in the Upper Alt which we hope will have a cumulative benefit to reducing flood risk downstream,

WATER RESOURCES COMMUNICATION AND ENGAGEMENT

Thanks to the Water Resources Communication & Engagement Fund, plus some Environment Agency and United Utilities funding, we have been able to continue engaging with the farming community in the Alt Crossens.

Over 20 farmers and growers joined us at Mere Brow Village Hall for our Water Friendly Farming Workshop in the Alt Crossens catchment. We had presentations from CSF and NFU covering farming grants and budget updates, Mersey Rivers Trust on the Lowland Agricultural Peat Project, Water Resources West presented on farmer Water Abstractor Groups and Environment Agency talked about their new "Harvesting Success" guidance for water friendly farming.

In 2025 we will be continuing to update our online Water Friendly Farming Hub, holding workshops for farmers, liaising with stakeholders, and applying for more funding to ensure we can continue to support the Alt Crossens farming community in years to come.

General

www.merseyrivers.org

Mersey Rivers Trust

@MerseyRivers

mersey_rivers_trust

info@merseyrivers.org

Farming

Farming Hub

farming@merseyrivers.org

Natural Flood Management

NFM Hub

Volunteer with MRT

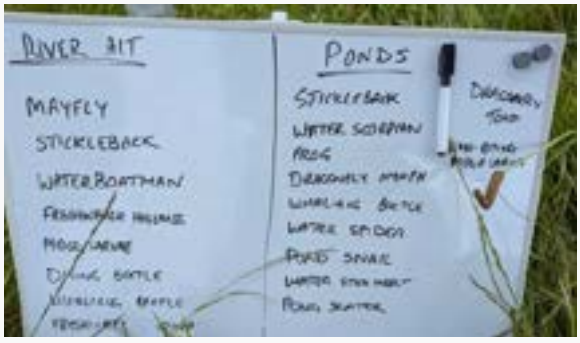
Building leaky dams in the Upper Alt catchment - email natasha@merseyrivers.org for more info or to register

Croxteth Park Bioblitz 2024

Our annual Croxteth Park Bioblitz was held in July during Love Parks Week. Lots of wildlife was recorded, freebies given away and people learning about natural flood management. Fabulous weather too! Thank you to the volunteers from Croxteth Park Volunteer Group for helping out.

Lunt Meadows Bioblitz

In July, we joined Lancashire Wildlife Trust and partners for a Bioblitz at Lunt Meadows. Lots of interesting river and pond invertebrates recorded.



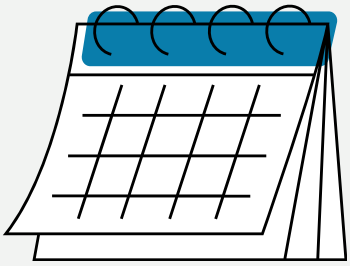
Millbrook Millennium Green Bioblitz for World Rivers Day!

On a very soggy day in September, we ran a bioblitz event at Millbrook Millennium Green in Kirkby to celebrate World Rivers Day. Unfortunately we were unable to kick sample in the river due to high water levels but we did find some exciting insects in the ponds, including newts! Thanks to those who braved the weather to come and see us!

West Derby Golf Club consultation event

In October, we joined Liverpool Council and Merseyside Biobank at West Derby Golf Course to talk to the members about out River Alt NFM project and the exciting plans for the golf course. The feedback from the members has helped with the design of the NFM measures to ensure it benefits the golf course as well as helping to protect properties downstream from flooding.

Key dates for 2025



2nd February	World Wetlands Day
14th March	International Day of Action for Rivers
22nd March	World Water Day
22nd April	Earth Day
21st May	World Fish Migration Day
5th June	World Environment Day
8th June	World Oceans Day
14th - 19th July	**Mersey Rivers Week 2025**
28th July	World Nature Conservation Day
28th September	World Rivers Day
5th December	International Volunteer Day