Alt Crossens
Catchment Partnership

Photo: River Alt at Lunt Meadows

# Alt Crossens Catchment Plan

## Catchment Partners working together

This Catchment Plan captures the aspirations of the Alt Crossens Catchment Partnership for a better water environment in the Alt/Crossens Catchment and beyond

# Contents



**Our vision is "to deliver cooperative & considerate water management that works towards a healthy water environment, rich in wildlife & a real community asset that supports economic growth and health & wellbeing"**

## 1. Introduction

### The Catchment Based Approach

The Alt Crossens Catchment Partnership is part of the Catchment Based Approach (CaBA), an inclusive civil society-led initiative that works in partnership with national and local government, water companies and other businesses, agriculture, and communities to support the management of the water environment in England and deliver more integrated water management. There are CaBA partnerships in all the river catchments across England, and cross-border with Wales.

Due to its integrated nature, CaBA provides an ideal framework to support delivery of the Government's water management objectives and directly supporting key targets, including:

- Using and managing land sustainably
- Recovering nature and enhancing the beauty of landscapes
- Connecting people with the environment to improve health and wellbeing
- Increasing resource efficiency, and reducing pollution and waste
- Clean and plentiful water
- Thriving plants and wildlife
- A reduced risk of harm from environmental hazards such as flooding and drought
- Using resources from nature more sustainably and efficiently
- Enhanced beauty, heritage and engagement with the natural environment.
- The national target, known as 30 by 30, a worldwide initiative for governments to designate 30% of Earth's land and ocean area as protected areas by 2030.

Other government targets include:

- Biodiversity Net Gain (BNG)
- The Water Framework Directive (WFD) target of achieving Good Ecological Status or Good Ecological Potential for water environments
- Delivery of Local Nature Recovery Strategies (LNRS).

Having an awareness of predicted/actual sea level rises associated with climate change will be important in regard to all of the above targets.

## Catchment characteristics and challenges

The Alt Crossens Catchment has a diversity of landscapes across a wide area and is split into two operational sub-catchments:

- The River Alt and its catchment
- The Crossens system

The Alt Crossens catchment is an area of low-lying land between the Mersey and Ribble Estuaries. Approximately 30% of the catchment is made up of urban areas, including North Liverpool, Formby and Southport along the coast and Kirkby, Maghull and Ormskirk inland. A large area of the catchment is high grade farmland which is crossed by a series of highly modified watercourses and drains. The water levels are controlled by pumping stations and the catchments drain out into Liverpool Bay and the Ribble Estuary.

The River Alt runs source to sea from Huyton to Hightown. Unusually for a river, it runs from an urban area to a more rural environment. The Crossens is a system of small watercourses in a predominantly rural area. The catchment faces a number of key challenges including:

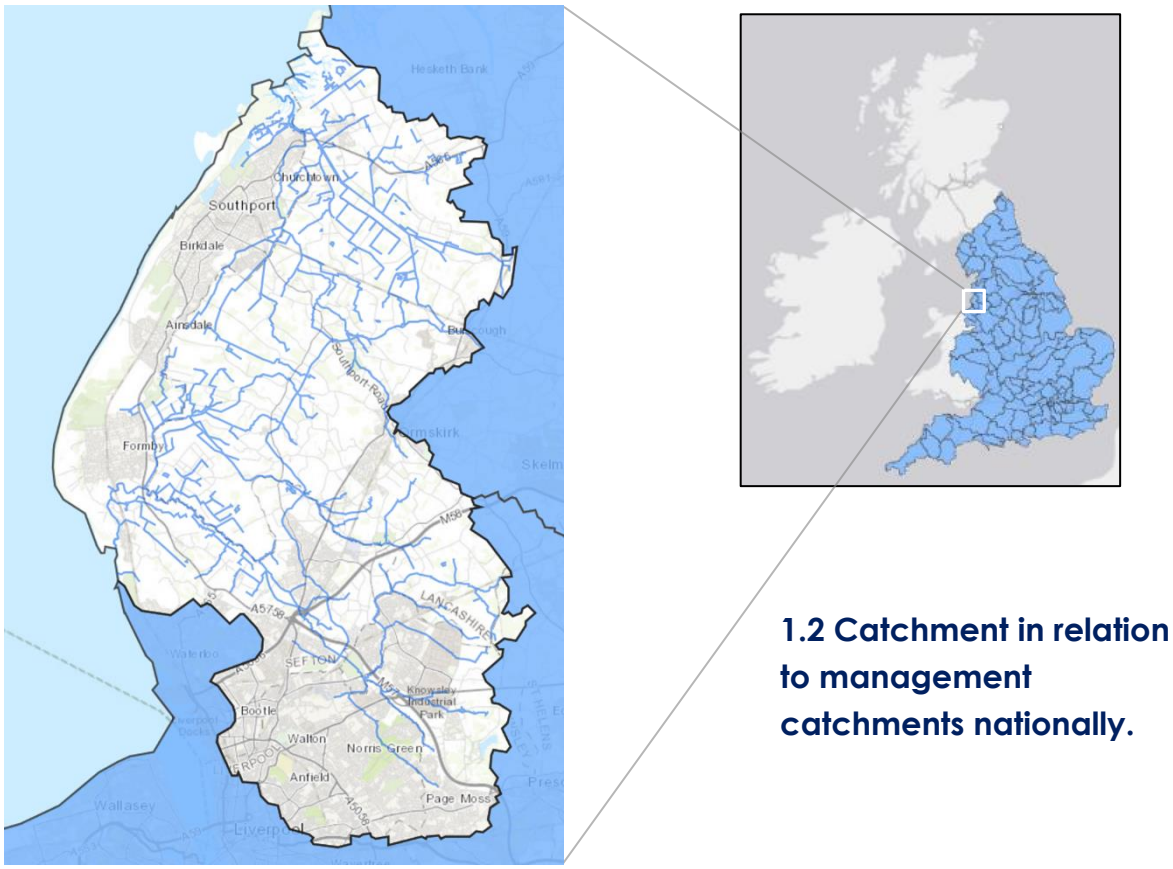
- Productively farmed high-grade agricultural land
- Urban/rural divide with the combination of agricultural, industrial, and urban pollution affecting water quality
- The Crossens is a pumped catchment with a large area below sea level
- Artificial drainage systems leading to a heavily managed catchment
- High levels of point-source and diffuse pollution
- Surface water and fluvial flooding.
- The historic and heavily modified nature of many of the watercourses to support industrial development and agriculture. Many of the streams are culverted, restrained, and built over. There are also many barriers to fish passage
- Urban issues such as wrongly connected drainage systems, road run-off and leachate from industrial/contaminated land
- Surface water is an issue with from run-off from hard surfaces as well as flooding from rivers
- A prevalent disparity between deprived and affluent communities.
- Disconnects between the floodplain and watercourses in a heavily modified catchment, preventing natural flood plain processes from functioning
- Administrative boundaries can create challenges.

The partnership has developed a set of objectives (see page 5) to overcome these challenges and improve the potential of our waterbodies.

The Alt Crossens Catchment Partnership is led and hosted by the Mersey Rivers Trust and includes the Environment Agency, Local Authorities, Natural England, United Utilities, Liverpool John Moores University, Mersey Forest, The Wildlife Trust for Lancashire, Greater Manchester and North Merseyside, the National Farmers Union (NFU), Catchment Sensitive Farming (CSF), Merseyside Flood Partnership, Merseyside Environmental Advisory Service and Merseyside Biobank, RSPB and The Wildfowl and Wetland Trust. The partnership reports to DEFRA. The Catchment Partnership is aligned to delivering the Environment Agency's North West River Basin Management Plan in the Alt Crossens Catchment.

To find out more, or if you are interested in getting involved with the Alt Crossens Catchment Partnership, please contact the Mersey Rivers Trust.

## 2. Maps




**1.2 Catchment in relation to management catchments nationally.**

**Fig. 1.1 The Alt Crossens Catchment**

## 3. Vision for the Alt Crossens Catchment

Our vision for our catchment is:

***"We will look to deliver cooperative & considerate water management that is working towards a healthy water environment, which is rich in wildlife and a real community asset that supports economic growth and health & wellbeing"***

Together we can create, protect and improve the water environment within the Alt Crossens Catchment so that it becomes a flourishing, productive catchment that meets all our communities' needs and future challenges and brings sustainable multi-functional economic, social and bio-diverse benefits for all.

In order to ***deliver cooperative & considerate water management,*** the following principles will flow through everything we do:

- Partners commit to the partnership, aligning our projects with the catchment plan
- We work collaboratively, looking for opportunities to deliver added value and multiple benefits, and sharing resources Work better together to align our resources
- We base our decisions on the best available evidence
- We strive to protect and enhance our biodiversity and water environment
- We welcome innovate and challenge
- We will share our data, evidence and expertise, within and beyond the Partnership
- We commit to the development and implementation of Local Nature Recovery Strategies (LNRS) for Liverpool City Region and Lancashire.
- We will promote the partnership within our networks and beyond.


**Natural Capital**

"the elements of nature that produce value or benefits to people (directly and indirectly), such as the stock of forests, rivers, land, minerals and oceans, as well as the natural processes and functions that underpin their operation" (NCC, 2013)

## 4. Objectives

The objectives of the partnership are to:

**4.1 Create cleaner and healthier water bodies**
**4.2 Protect and enhance the natural aspects of our catchment**
**4.3 Develop resilience to the effects of climate change**

To enable us to deliver our objectives we will also:

- develop and use a robust evidence base to inform our decisions
- engage and support communities in the catchment so that they understand, and in turn support, the delivery of the partnership's objectives
- strengthen the processes of running the Catchment Partnership to build collaboration and inclusivity to support delivery

## Objective 1 - Create cleaner and healthier water bodies

A healthy waterbody is one which is free from pollution and able to support a thriving ecosystem, rich in biodiversity. The aims of the Water Framework Directive are for all waterbodies to reach 'Good Ecological Status' (GES). As, however many of the waterbodies in this catchment are classified as Heavily Modified, the partnership will also work towards 'Good Ecological Potential' (GEP), which will enable our modified catchment to achieve as natural an ecosystem as possible. A heavily modified waterbody cannot achieve GES because of the substantial changes to its physical character, resulting from human induced physical alterations.

The challenges in the Alt Crossens Catchment are varied and include industrial discharges, sewage effluent and misconnections, soil loss, leaching from historic landfill sites and diffuse and point source pollution. Many of the water bodies have also been heavily modified for water supplies, either to enable development, or to facilitate drainage. For each WFD waterbody, the partnership aims to take action to address the reasons for not achieving good. As a partnership, we will aim to make improvements to water quality and the physical environment to create as natural an ecosystem as possible, enabling invertebrates and fish to flourish in our waterbodies and native plants to thrive. Partnership collaboration will help us to identify issues, needs and priorities and therefore drive opportunities for improvements which deliver multiple benefits.

As the public perception of a healthy watercourse is often based on the amount of litter, the partnership will also include litter reduction.

Where possible our approach will include:

- Identifying, tackling and raising awareness of misconnections and illegal discharges
- Working with farmers and landowners to improve agricultural practices in relation to soil, nutrient and pesticide management
- Influencing and investing in better drainage and sewage treatment infrastructure
- Reducing/improving discharges from industrial and landfill sites through regulation and collaboration
- Working alongside volunteers to enable river clean ups and litter picks
- Creating and promoting educational material about the harm litter can do to our water environment
- Mapping and controlling the spread of INNS, utilising a strategic approach
- Re-naturalising river channels where possible, including removing barriers to fish and eel passage
- Improving the river corridor to support wildlife and enable public access
- De-culverting watercourses to improve natural morphology, reduce flood risk and enable people to see and appreciate them

- Supporting the delivery of green infrastructure and sustainable drainage systems (SuDS).

As a Catchment Partnership, we will integrate water quality and flood risk management and consider both together in our activities. The partnership will develop schemes to address climate change, create enjoyable and habitable places, promote healthy lifestyles, design multi-functional and interconnected green infrastructure, reduce flood risk and maximise multiple benefits; in particular, it will look to deliver flood risk management schemes using nature-based solutions and natural flood management.

The Partnership recognizes the need for development and liaises with the various planning authorities within and beyond the boundaries of the catchment. Local Authorities have a strong role in the Catchment Partnership which has particularly close working relations with the Lead Local Flood Authorities across Merseyside/Liverpool City Region and Lancashire CC. Improved water quality will be delivered as a result of reductions in the frequency and magnitude of flooding.

The partnership will continue its work to support the Merseyside Flood Partnership's and Lancashire's Business Plans as well as the NW RBMP and the emerging LNRS in order to maximise opportunites for river and habitat restoration.

## Objective 2 – Protect and enhance the natural aspects of our catchment

The key challenge for the Alt Crossens Catchment is the highly modified nature of our waterbodies. The reasons for their past modification are many and range from culverting (piping a watercourse), restraining and building over water courses in our urban areas, to pumping and maintenance of channels in our farmed landscapes.

Whilst many of these modifications are still required to enable productive land use and the management of flood risk, some can be improved to achieve a healthier water environment. We will use the following techniques to move towards a more natural catchment:

- Re-naturalising and restoring river channels where possible
- Removing barriers to fish and eel passage
- Improving the ecology and amenity value of river corridors
- Enhancing and creating habitats in and around watercourses to benefit invertebrates and fish
- De-culverting and daylighting water courses to improve natural morphology, reduce flood risk and enable people to see and appreciate them
- Influencing land managers to install buffer zones where possible
- Supporting the delivery of green and blue infrastructure and sustainable drainage systems (SuDS) and reconnecting the floodplains.

### Objective 3 - Develop resilience to the effects of climate change

Climate change already affects the Alt Crossens Catchment in a number of ways, and we can expect these impacts to be compounded:

- Extreme rainfall events, including unseasonal heavy rainfall in summer, causing flash flooding.
- The increasing number and length of spells of prolonged dry weather, and resulting stresses on the supply and demand for water, could lead to a greater risk of water shortages
- Lower water levels, higher water temperatures and unnatural flow conditions in rivers and lakes threaten the viability of habitats and the capacity of wildlife to survive/thrive

We will work to increase the resilience of our catchment by:

- Better management of flood risk, particularly through natural flood management processes wherever possible
- Increasing public awareness of the actions they can take to reduce their contribution to flood risk (e.g. through de-paving, rain gardens, rainwater harvesting, water butts etc)
- Encourage and support the agricultural sector to increase water storage capabilities
- Increasing public awareness of the actions they can take to mitigate the impact of flooding through making their properties more resilient
- Helping the public, agriculture and industry better manage their water use
- Creating and maintaining a range of wetland habitats that support associated wildlife
- Increasing resilience to rainfall events by encouraging everyone, including the public, to work together across the catchment and at all levels, to improve the management of rainwater.

## 5. Enabling activities

To support the delivery of our objectives we will undertake the following enabling activities.

### Develop an evidence base to inform our activities

Taking an evidence-based approach, we will seek to establish what and where the issues are, and use this knowledge to determine what the needs of the catchment are. Based on the evidence, we will seek to protect and enhance the waterbodies in the catchment. In this way, needs will be identified, prioritised and addressed.

In order to create and maintain a strong evidence base, the Catchment Partnership will collect, collate, and present spatial information to support decision-making and action. To this

end the catchment plan will feed into the LNRS strategies. Multiple issues may be present at one location which will highlight the need for an integrated approach providing the opportunity to deliver multiple-benefits through a single project.

The partnership will continue to develop our evidence base by monitoring of the water environment in a scientific and robust way wherever possible, and where resources are available to do so. We will engage, develop, and support citizen scientists to enable ongoing monitoring on a regular basis. Examples of monitoring techniques include invertebrate kick sampling, chemical testing and electric fishing surveys. We will collaborate with other organisations and partnerships to share data to develop our evidence base.

We will strengthen our evidence base by monitoring the projects we deliver in order to evaluate their effectiveness and help us refine the techniques we use. Actions we will take and tools we will use to develop our evidence base will include:

- Setting objectives with measurable outputs
- Developing and using measures of outcomes
- Including monitoring and evaluation measures in all our projects
- Establishing baseline data at the start of a project
- Using Citizen Science to support our activities and to engage communities
- Ground-truthing models to test their validity in specific situations.

## Promote and support collaboration

To deliver our plan we need to collaborate effectively. Actions we will take to support collaboration include:

- Creating a shared space for sharing documents
- Use a shared data hub as a single point of access repository for partners to contribute towards and utilise the data, which can also act as a signposting hub to data stored elsewhere
- Sharing information between meetings via the Catchment Host to ensure it reaches all partners
- Utilise Local Record centres and research from universities to fill gaps in data and collaborate with research organisations.
- Having working groups in place for locations and topics to increase focus and enable swift action, e.g. in the Upper Alt. Working groups' actions will also support this Catchment Plan.

### Engage communities

People are not always aware of their local watercourses and/or do not always appreciate them. We will raise awareness and encourage communities including residents, farmers and businesses to value their local water environment and appreciate it more by:

- Providing and/or supporting volunteer opportunities e.g. River Guardians, the Plastic Free Mersey Project or 'Friends of' groups,
- Promoting and using The Flood Hub and other online resources
- Publicising our work through our Catchment Partnership and through our partners
- Designing and delivering educational events/programmes for schools and youth groups
- Running campaigns for the general public and specific targeted groups e.g. Water Friendly Farming; What Not to Flush
- Identifying and engaging communities in our projects, making a particular effort to identify and engage hard to reach communities
- Encouraging and enabling peoples' access to nature.

## 6. Action Plan

Our action plan lists the activities partners will carry out to support the achievement of our vision. As partners we agree to work together, where possible, on developing and delivering projects in support of delivery of the Alt Crossens Catchment Partnership Action Plan.

The Catchment Partnership works closely with other initiatives in the catchment, specifically:

- The North West Coastal Forum
- The Merseyside Flood Partnership & the Lancashire Flood Partnership
- North Merseyside Local Sites Partnership
- Liverpool City Region Local Nature Partnership

Through a planning process and a previous review of priorities, the Partnership currently focuses on Natural Flood Management (NFM) and Water Friendly Farming and has established working groups for both activities. The Water Friendly Farming stakeholder engagement group is working with farmers and landowners in the catchment on water issues including water quality and water resources. The NFM group is actively developing nature-based solutions to reduce flood risk in the Alt catchment.

The Partnership also recognises the following wider water environment challenges and agrees to work to:

- Support the Nature Recovery Network and Local Nature Recovery Strategy, as the catchment is under significant pressure from urban development and agricultural production

- Reduce storm overflows and drainage system incidents, as activities by all partners can contribute to achieving this objective
- Build environmental resilience and adaptation to climate change, as resilience is vital to managing the challenges arising from climate change
- Protect and restore healthy soils and nutrient balance, as good farming practices benefit the whole of the catchment
- Removing plastics/litter from the water environment, as we need to reduce the impact of plastics on biodiversity and the food chain
- Connecting communities with nature, as people living in the many areas of deprivation in our catchment would benefit from connecting with nature.

Partners will take account of the current priorities and wider challenges in their work in the priority locations and other waterbodies.

**Fig. 2 Wetland created alongside the River Alt in Croxteth Park**

Working collaboratively through the catchment partnership, needs can be identified and prioritised, and solutions and improvements established to meet these needs.

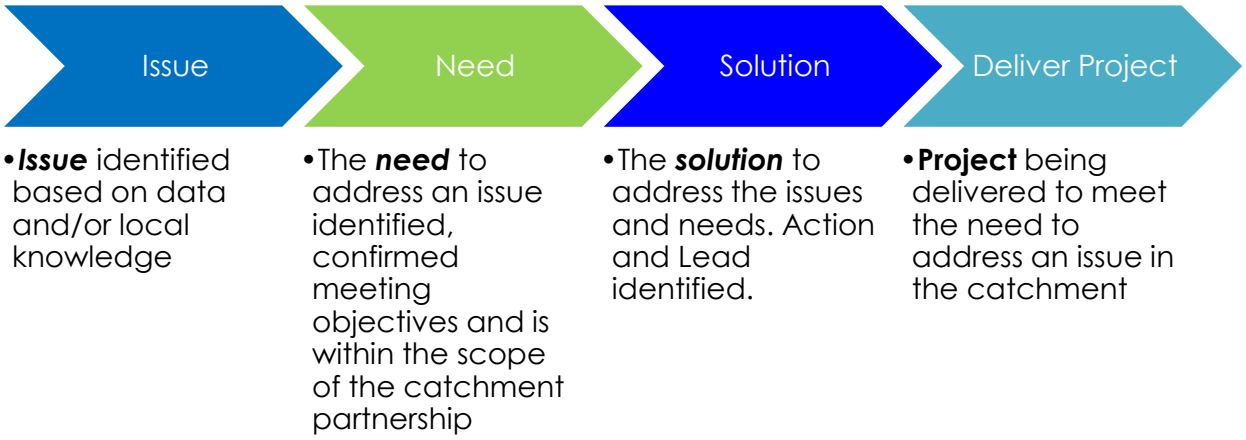



**Fig 3. Catchment Partnership process from identifying an issue to delivering a project**

Examples of solutions and improvements include:

- Influencing new development with regard for a better water environment
- Enabling more natural solutions such as Natural Flood Management (NFM)
- Identifying where and how we can restore and create new habitats
- Re-naturalising and restoring river channels where appropriate within a managed environment

Multiple issues may be present at one location which will highlight the need for an integrated approach providing the opportunity to deliver multi-beneficial schemes at a project level.

We will strengthen our evidence base by monitoring the projects we deliver in order to evaluate their effectiveness and help us refine the techniques we use.

## Catchment Partnership revisions of the Alt Crossens Catchment Plan

| Date | Revision |
|---|---|
| 11/09/2024 | 2024 v.20 |
| 31/03/2023 | 2023 v.19 |
| 11/07/2022 | 2022 v.18 |
| 15/04/2021 | 2021 v.17 |
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