



NATURAL
OUR WATER. OUR FUTURE
COURSE



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.

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1. INTRODUCTION

The Catchment-Based Approach (CaBA) has established catchment partnerships throughout England and Wales, which work together with local stakeholders for the management of the water environment. The main aims of these partnerships is to jointly deliver more integrated water management leading to improved water quality and to reduced flood risk.

England and Wales together are divided into ten River Basin Districts. One of these is the North West River Basin District within which sits the Alt Crossens Catchment.

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.

Vision for the Alt
Crossens Catchment

“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”

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
- 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 Water Framework Directive (WFD) classifies all 11 surface water bodies as less than 'good overall potential' and all are heavily modified*. The partnership has developed a vision and a set of objectives to overcome these challenges and improve the potential of our waterbodies.

The Alt Crossens Catchment Partnership is hosted by the Mersey Rivers Trust and includes the Environment Agency, Local Authorities, United Utilities, Mersey Forest, The Wildlife Trust for Lancashire, Manchester & North Merseyside, Wildfowl & Wetlands Trust, RSPB, the NFU, Natural England and Catchment Sensitive Farming, as well as working with other partnerships such as the Flood and Coastal Risk Management (FCRM) partnership.

* data from latest WFD classification in 2016

2. MAP

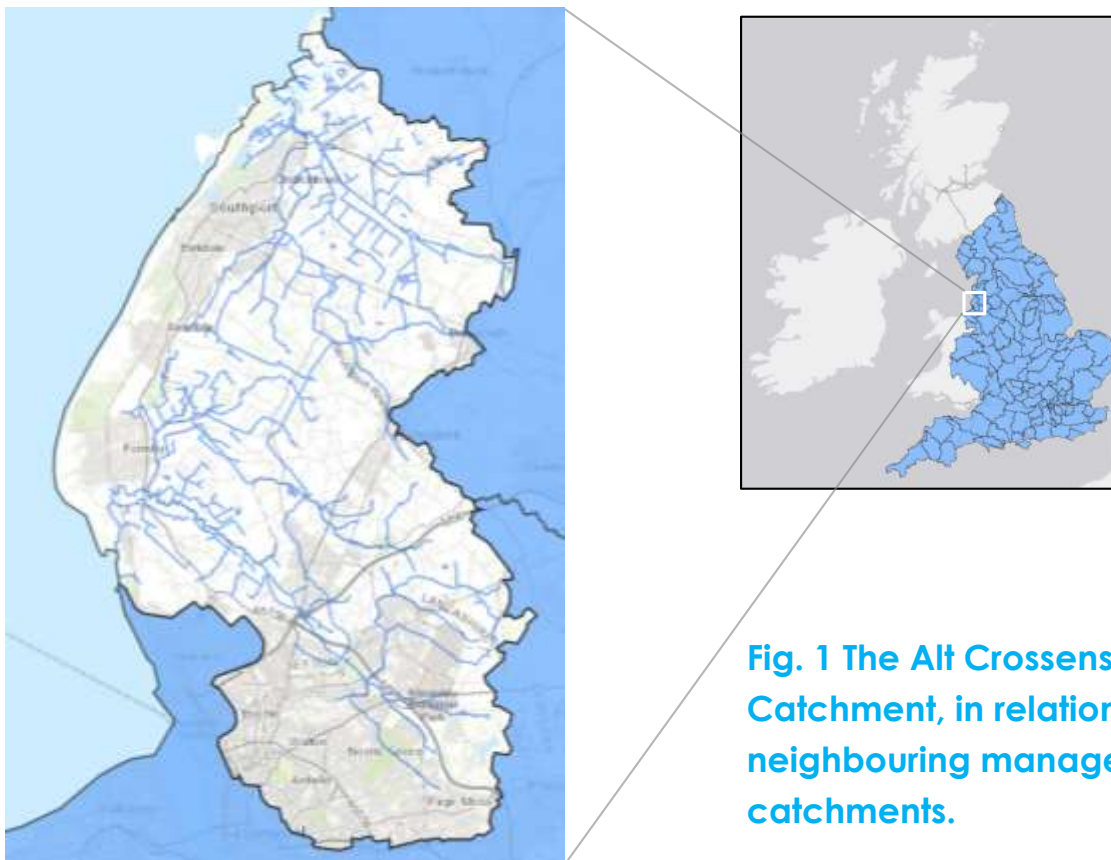


Fig. 1 The Alt Crossens Catchment, in relation to neighbouring management catchments.

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:



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

Our objectives set out what we will do to deliver our vision:

OBJECTIVE 1 – DEVELOPING AN EVIDENCE BASE UPON WHICH INFORMED DECISIONS CAN BE TAKEN

Taking an evidence-based approach, we will seek to establish what and where the issues are, and to 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.

The partnership has agreed to do this:

- To prevent deterioration of waterbodies
- To move waterbodies towards good ecological potential
- To help manage and reduce flood risk
- To protect species and habitats
- To control and prevent the spread of Invasive Non-Native Species (INNS)
- To understand and respond to the needs of our communities
- To support a thriving local economy in both rural and urban areas

In order to create and maintain a strong evidence base, the Catchment Partnership has developed a GIS [storymap](#) that allows partners to spatially map locations of issues across the catchment. Examples of issues include:

- Urban/Rural diffuse pollution
- INNS
- Bank erosion
- Weirs
- Flood risk

We will undertake monitoring of the water environment and flooding in a scientific and robust way wherever possible and where resources are available to do so. We have a volunteer programme of citizen scientists with the [Mersey Rivers Trust River Guardians programme](#) to enable ongoing monitoring on a regular basis. Examples of monitoring techniques include invertebrate kick sampling, chemical testing and Water Vole surveys. We will collaborate with other organisations and partnerships to share data to develop our evidence base.



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

Using the storymap, needs can be identified and prioritised and solutions and improvements established to meet the needs.

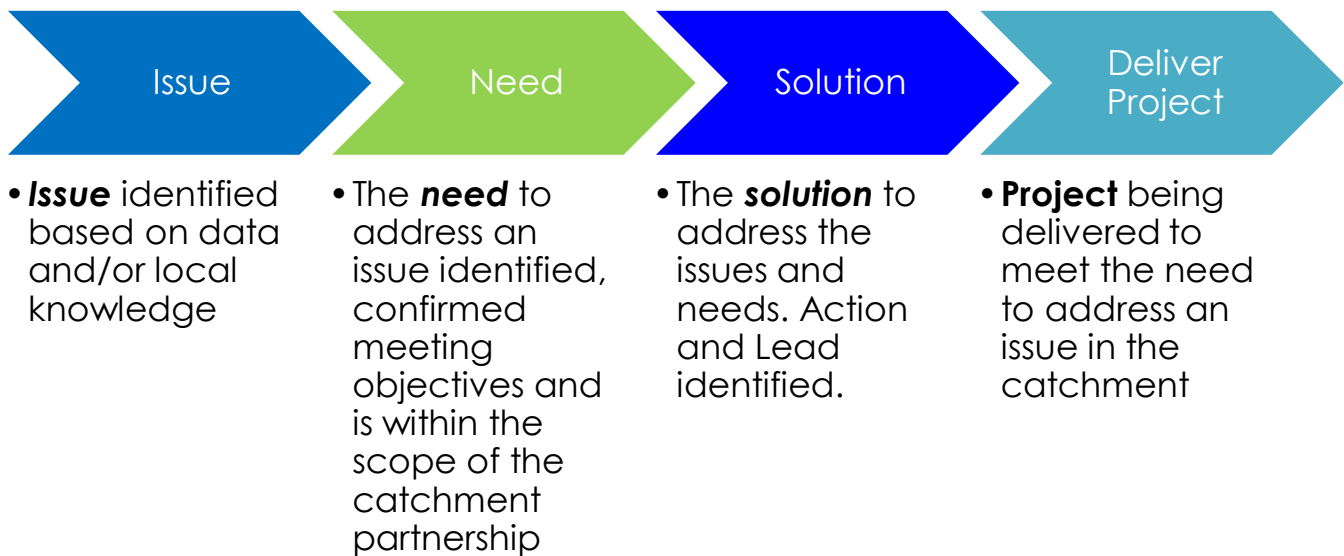


Fig 3. Storymap process from identifying an issue to delivering a project

Examples of solutions and improvements include:

- Influencing new development with regard for a better water environment
- Enabling more natural solutions such as [Sustainable Drainage Systems](#) (SuDS)
- 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.

OBJECTIVE 2 – DELIVERING INTEGRATED WATER MANAGEMENT BY MAKING SPACE FOR WATER

We will improve the catchment in order to create a healthier environment for both people and wildlife, whilst affording better protection from flooding through reconnection with the flood plain and re-naturalisation of the river channel where possible.

The aims of the Water Framework Directive are for all waterbodies to reach 'Good Ecological Status'. As all of the waterbodies in this catchment are Heavily Modified, we will work towards 'Good Ecological Potential', which will enable our modified catchment to achieve as natural an ecosystem as possible.

Water Framework Directive:

A framework for the protection of inland surface waters, estuaries, coastal waters and groundwater (EA, 2010).

Good Ecological Status:

The WFD default objective for all water bodies, defined as a slight variation from undisturbed conditions (ERCC, 2014).

Good Ecological Potential:

The best ecology that can be achieved in a heavily-modified water body (ERCC, 2014).

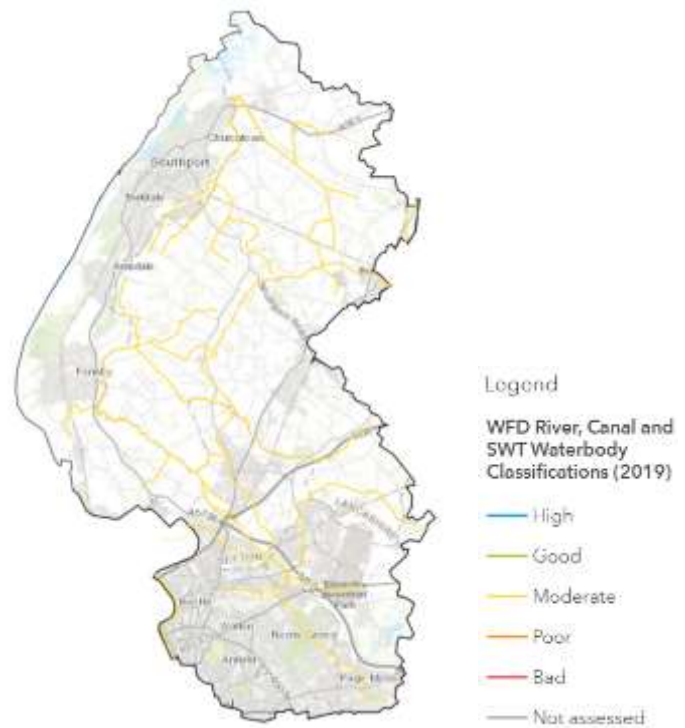


Fig. 4 Alt Crossens Catchment with WFD status of waterbodies

As a Catchment Partnership, we integrate water quality management and flood risk management and consider both together in our activities.

Development is considered important and we liaise with the various planning authorities within and beyond the boundaries of the catchment. Local Authorities are an important part of the catchment partnership and we particularly have close working relations with the Lead Local Flood Authorities. We are establishing a Natural Flood Management (NFM) Delivery Group together with partners to deliver integrated catchment management with a particular focus on reducing flood risk. Improved water quality will be delivered as a result of reductions in the frequency and magnitude of flooding.

We recognise there are many factors that can have an effect on the water environment including

- farming
- green infrastructure
- the built environment

- flood frequency
- habitat quality and connectivity
- artificially pumped catchments

Our [storymaps](#), together with partnership meetings, will help us identify issues, needs, priority areas and therefore drive opportunities for improvements which deliver multiple benefits.

OBJECTIVE 3 – SUPPORTING OPPORTUNITIES FOR USING THE WATER ENVIRONMENT

Our vision is for the water environment to be a real community asset that supports economic activity and the health and wellbeing of local people. These activities include farming, fishing, watersports and riverside walks.

We will do this to provide and enhance opportunities for access, sustainable transport, recreation, local tourism and local businesses linked to the water environment.

We will deliver our vision by:

- supporting local businesses to use and benefit from water in a sustainable way
- developing our role in supporting the health & wellbeing of our communities
- increasing drought resilience

OBJECTIVE 4 – ENGAGING THE COMMUNITY

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

- providing volunteer opportunities e.g. River Guardians and 'Friends of' groups
- promoting and using [The Flood Hub](#) and other online resources
- publicising our work through our Catchment Partnership and through our partners
- engaging communities at a project level in both urban and rural areas

OBJECTIVE 5 – DELIVERING CLEANER AND HEALTHIER WATERBODIES

We need healthy waterbodies to achieve our vision. A healthy waterbody is one which is free from pollution and able to support a thriving ecosystem, rich in biodiversity. The challenges in the Alt Crossens Catchment are varied and include industrial discharges, sewage effluent and misconnections, soil loss, runoff from historic landfill sites and diffuse and point source pollution

from farming. We will make improvements to water quality and the physical environment to enable invertebrates and fish to flourish in our waterbodies and allow native plants to thrive.

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

- Identifying and tackling misconnections and illegal discharges
- Working with farmers and landowners to improve agricultural practices in relation to soil, nutrient and pesticide management e.g. Water Friendly Farming projects
- Influencing and investing in better drainage and sewage treatment infrastructure
- Improving discharges from industrial and landfill sites through regulation and collaboration
- Working alongside volunteers to enable river clean ups and litter picks
- Create and promote educational material about the harm litter can do to our water environment
- Mapping and controlling the spread of INNS

OBJECTIVE 6 – MAINTAINING AND ENHANCING THE NATURAL ASPECTS OF OUR CATCHMENT

The key challenge for the Alt Crossens Catchment is the highly modified nature of our waterbodies. The type and reason 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 catchments.

Whilst many of these modifications are still required to enable productive land use and 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, including removing barriers to fish and eel
- Improving the ecology and amenity value of the river corridor
- De-culverting and daylighting water courses to improve morphology, reduce flood risk and enable people to see and appreciate them
- Incentivise land managers to install buffer zones where possible
- Supporting the delivery of green infrastructure and sustainable drainage systems (SuDS)
- Endeavoring to maintain the natural aspects of the catchment.

5. CHALLENGES

There are many challenges for the catchment.

Rural diffuse pollution

The agriculture that takes place in the catchment produces food, particularly from arable farming, and food production is important and of great value to the population. However, agriculture and also septic tanks can be a source of pollution to watercourses in rural areas.

Physical modifications:

- Straightened channels in rural areas with artificial flows and lack of connectivity to flood plain are a feature of this catchment.
- Long culverts in urban areas are expensive to remove
- There are barriers to fish and eels
- Impoundments have impacts on water resources
- This is a pumped catchment.

Urban diffuse pollution

In our towns, and the city of Liverpool, the rivers and streams receive the run-off from the land in these urban areas. Urban diffuse pollution is causing pollution to watercourses from:

- Transport routes including run-off from roads
- Misconnections
- Landfill sites
- Industrial parks.

Invasive Non-Native Species

The dominance of plants and animal species that invade, become established and then crowd out the native species is threatening to biodiversity and they can propagate themselves along watercourses. These include:

- Plant species such as Himalayan Balsam, Giant Hogweed, Japanese Knotweed
- Animal species such as Signal Crayfish.

6. OUR ACTION PLAN

Our action plan sets out what activity areas we will deliver annually to work towards achieving our vision. Our plan identifies action owners, timescales and tangible outputs and key outcomes of our work.

Through our Catchment Partnership meetings, we will monitor and report on delivering our action plan and will report to our funders as and when required.

As partners, we will hold each other and ourselves accountable for the delivery of our action plan.

You can find our action plan [here](#).

APPENDIX

The [Water Framework Directive \(WFD\)](#) is a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. It ensures that all aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands meet 'good status'. Below are the 2019 classifications of our waterbodies and links to the Environment Agency's [Catchment Data Explorer](#). The overall objective for all of our waterbodies is to reach 'good' status by 2027.

Alt

Waterbody	Overall classification (2019)	Link
Alt	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069060580
Alt DS Bull Bridge	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069061442
Alt US Bull Bridge	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069061441
Chisnall Brook	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069064510
Croxteth/Knowsley Brook	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069060610

Downholland Brook (Lydiate/Cheshire Lines)	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069060640
Downholland Brook	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069064500
Simonswood Brook	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069060630
Tue Brook	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069060600

Crossens

Waterbody	Overall classification (2019)	Link
Back Drain and Sluice	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112070064880
Three Pool's Waterway	Moderate	https://environment.data.gov.uk/catchment-planning/WaterBody/GB112070064830

This Catchment Plan has been agreed by the members of the Alt Crossens Catchment Partnership.