Photo: Mersey Estuary

LOWER MERSEY CATCHMENT PLAN

CATCHMENT PARTNERS WORKING TOGETHER

This Catchment Plan has been agreed by the members of the Lower Mersey Catchment Partnership including the Environment Agency, Natural England, United Utilities, Liverpool John Moores University, Groundwork CLM, Mersey Forest, The Mersey Gateway Environmental Trust, Cheshire Wildlife Trust, Lancashire Wildlife Trust, the National Farmers Union (NFU), TCV, Merseyside Environmental Advisory Service, Merseyside Biobank, Local Authorities and the Mersey Rivers Trust.

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Vision for the Lower Mersey Catchment

"Our vision is of an urban catchment with a healthy water environment that everyone will be proud of, and which contributes fully to economic and social well-being"

CONTENTS

1. INTRODUCTION

The Lower Mersey 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 crosscutting and integrated nature, CaBA provides an ideal framework to support delivery of the government's 25 Year Environment Plan, 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
- Enabling the delivery of the Local Nature Recovery Strategy (LNRS)
- 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)
- Water Framework Directive (WFD) target of achieving Good Ecological Status or Good Ecological Potential for water environments
- The Local Nature Recovery Strategy (LNRS).

Awareness of sea level rises with climate change will be important in regard of all the above targets.

As a catchment partnership, our action planning is working to a shorter time-scale than the national targets, however we have high aspirations to achieving a thriving catchment.

CaBA partnerships are actively working in all 100+ river catchments across England and cross-border with Wales, directly supporting achievement of many of the targets under the Government's 25 Year Environment Plan.

Maps

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 Lower Mersey Catchment.

Fig 1. England and Wales River Basin Districts

The Mersey Estuary, or Lower Mersey catchment, covers the Wirral peninsular to the south of the River Mersey and from Crosby to Warrington to the North of the River.

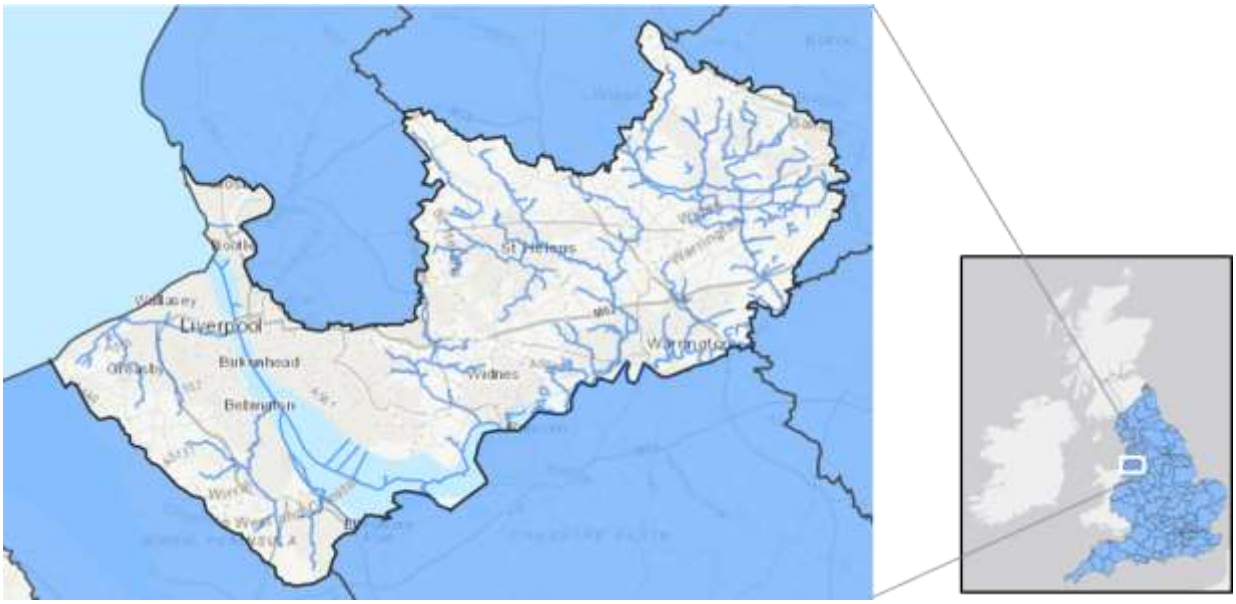

Fig. 2. Map of the Lower Mersey Catchment.

The catchment is split into five operational sub-catchments, which are Ditton, Sankey, Glaze, Mersey Estuary and Wirral.

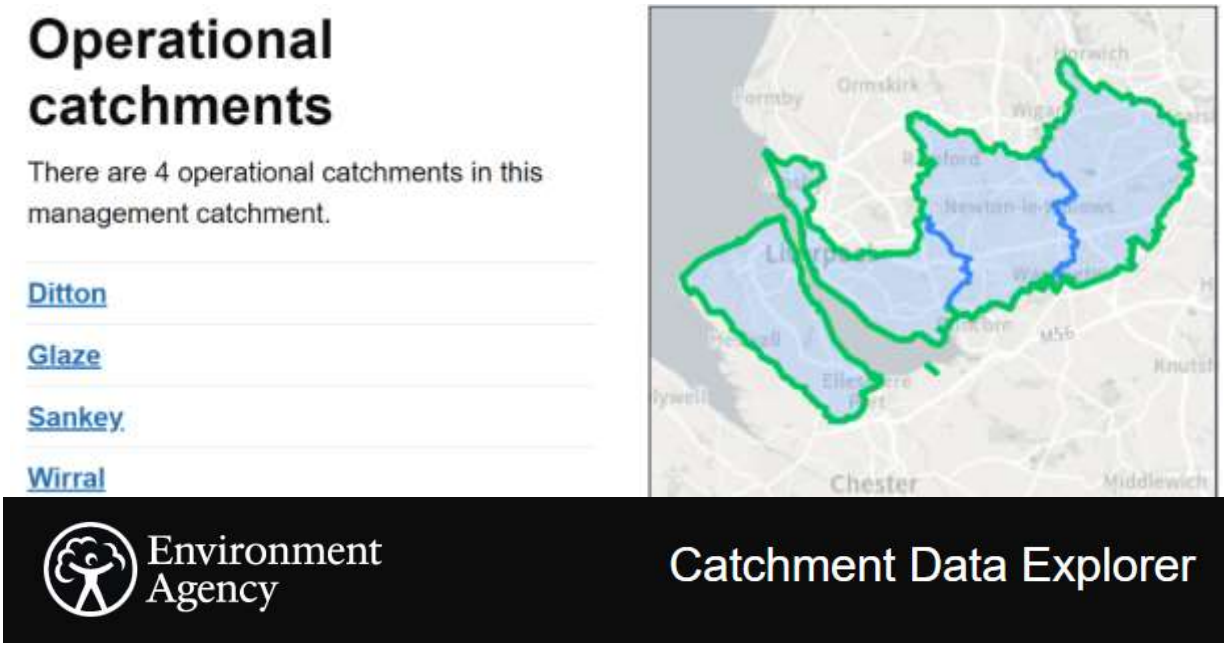

Fig. 3. Operational catchments in the Lower Mersey Catchment

Partners

The Lower Mersey 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, Groundwork CLM, The Mersey Gateway Environmental Trust, Cheshire Wildlife Trust, Lancashire, Manchester and North Merseyside Wildlife Trust, the National Farmers Union (NFU), TCV, Merseyside Environmental Advisory Service and Merseyside Biobank. The partnership reports to DEFRA.

Fig. 4. The Lower Mersey Catchment Partners

The Catchment Partnership is aligned to delivering the Environment Agency's North West River Basin Management Plan in the Lower Mersey Catchment. To find out more, or if you are interested in getting involved with the Lower Mersey Catchment Partnership, please contact the host, Mersey Rivers Trust.

2. VISION FOR THE LOWER MERSEY CATCHMENT

The partnership's vision for our catchment is:

"Our vision is of an urban catchment with a healthy water environment that everyone will be proud of, and which contributes fully to economic and social well-being"

Together we can create, protect and improve the water environment within the Lower Mersey 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:

- **Commit to the partnership, aligning our projects with the catchment plan**
- **Work collaboratively, looking for opportunities to deliver added value and multiple benefits, and sharing resources**
- **Base our decisions on the best available evidence**
- **Work better together to align our resources**
- **Strive to protect and enhance our biodiversity and water environment**
- **Innovate and challenge**
- **Share our data, evidence and expertise**
- **Promote the partnership within our networks and beyond**
- **Create a catchment partnership based on openness and trust which actively works to include everyone and make sure all voices are heard**

Fig. 5. Catchment Partnership Principles

3. CATCHMENT CHARACTERISTICS AND CHALLENGES

The Lower Mersey Catchment has a diversity of landscapes across a wide area. It covers the Wirral peninsular to the south of the River Mersey and from Crosby to Warrington to the North of the River. The catchment includes the Mersey Estuary and is split into five operational sub-catchments, which are Ditton, Sankey, Glaze, Mersey Estuary and Wirral.

The key challenge for the Lower Mersey Catchment is the amount of urban and suburban area within the catchment. Unlike many of the neighbouring catchments, its landscape is approximately 50% urban. To fulfil our vision and the objectives above, partners need to pay special attention to urban issues such as wrong connections, road run-off, leachate from industrial/contaminated land and 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. 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.

The other half of the catchment's landscape is a combination of agriculture and public green-spaces. Many of the catchment's streams and rivers flow through farmland, towns and industrial areas, which has resulted in the combination of agricultural and urban pollution affecting the water quality across the catchment.

The challenges the catchment faces include:

- the combination of agricultural, industrial, and urban pollution affecting the water quality
- the heavily modified nature of many of the watercourse to support historic 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, leachate from industrial/contaminated land
- Surface water is an issue here with from run-off from hard surfaces as well as flooding from rivers.

The partnership has developed a set of objectives to overcome these challenges and improve the potential of our waterbodies.

4. OBJECTIVES

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

The objectives of the partnership are to:

- Create cleaner and healthier water bodies
- Protect and enhance the natural aspects of our catchment

- Develop a catchment which is more resilient to the effects of climate change
- Use an evidence based approach.

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 many of the waterbodies in this catchment are classed 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 substantial changes to its physical character, resulting from physical alterations caused by human use.

The challenges in the Lower Mersey 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 to be used in industry for power or water supplies, 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 Our partnership collaboration will help us identify issues, needs, priority areas and therefore drive opportunities for improvements which deliver multiple benefits.
and fish to flourish in our waterbodies and native plants to thrive.

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
- 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
- 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 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 integrate water quality management and flood risk management and consider both together in our activities. The partnership will develop schemes to address climate change, create enjoyable and liveable 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.

Development is considered important and the partnership liaises with the various planning authorities within and beyond the boundaries of the catchment. Local Authorities are an important part of the catchment partnership which has particularly close working relations with the Lead Local Flood Authorities through the Merseyside Flood partnership. 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 DEFRA's 25-year Environment Plan, the Merseyside Flood Partnership's Business Plan and United Utilities' long term Asset Management Plans as well as the NW RBMP and the emerging LNRS in order to maximise opportunity for river and habitat restoration.

OBJECTIVE 2 – PROTECT AND ENHANCE THE NATURAL ASPECTS OF OUR CATCHMENT

The key challenge for the Lower Mersey 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 re-naturalisation of our rivers 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
- Removing barriers to fish and eel passage
- Improving the ecology and amenity value of the river corridor

- Enhancing and creating habitats in and around watercourses to benefit water invertebrates and fish
- De-culverting and daylighting water courses to improve 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 infrastructure and sustainable drainage systems (SuDS)

OBJECTIVE 3 – DEVELOP RESILIENCE TO THE EFFECTS OF CLIMATE CHANGE

Climate change affects the Lower Mersey Catchment in a number of ways:

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

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

- Better managing 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)
- 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 water and wetland habitats that support the associated ecology
- Increasing resilience in the face of rainfall events by encouraging everyone, including the public, to work together across the catchment and at all levels, to enhance the management of rainwater.

OBJECTIVE 4 – USE AN EVIDENCE BASED APPROACH

We will develop an evidence base to inform our decisions. 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. 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 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.

Multiple issues may be present at one location which will highlight the need for an integrated approach providing the opportunity to deliver multiple-benefits with a single project.

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.

We will identify gaps in our data and evidence and strive to fill those gaps by various means including seeking input from academics and seeking data and research from others.

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

5. ENABLING ACTIVITIES

ENABLE 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
- Use storymaps
- Sharing information between meetings via the Catchment host to ensure it reaches all partners
- Utilise 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, including:
    - Sankey Catchment
    - Glaze Catchment
    - Mersey Estuary.

  The working groups action plan will support this Catchment Plan with action plans for the specific sub-catchments.
- Setting one year targets for the achievement of the action plans

ENGAGE COMMUNITIES

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
- designing and delivering educational 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.

STRENGTHEN PROCESSES

To support and enable collaboration and inclusivity in delivery we will strengthen our processes as a Catchment Partnership.

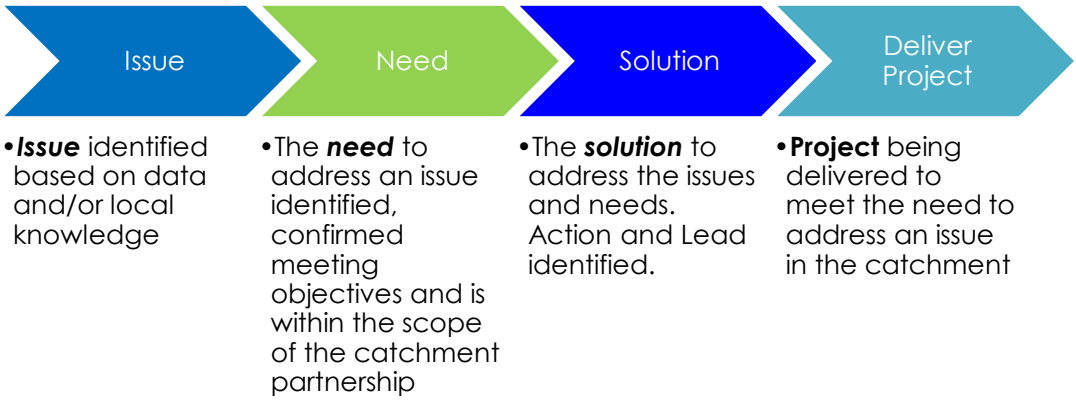

Fig. 6. Process for identifying issues, needs and solutions.

Using the storymap, needs can be identified and prioritised to establish solutions and improvements. Examples of solutions and improvements include:

- Working with local planning authorities to influence development of local plans for a better water environment
- Promoting more natural solutions e.g. Sustainable Drainage Systems (SuDS)
- Identifying where and how the Lower Mersey Catchment Partnership 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.

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

OUR 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 Lower Mersey Catchment Partnership Action Plan.

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

- The Mersey Gateway Environmental Trust
- The North West Coastal Forum
- The Merseyside Flood Partnership
- The Mersey Mid Cheshire Flood Partnership
- The Great Manchester Wetlands Partnership and the Glaze Task Force
- The Sankey Catchment Steering Group
- North Merseyside Local Sites Partnership
- Mersey Estuary Conservation Group.

Through a planning process and a review of priorities the Partnership has decided to focus on:

- Glaze sub-catchment
- Sankey sub-catchment

and has working groups in place to develop operational plans for activities in these operational catchments.

The Glaze is an operational catchment within the Lower Mersey and the Glaze task Force has been set up a as a subgroup. The Glaze sits within the Great Manchester Wetland Partnership area and there is very close working between the Catchment Partnership, the GM Wetlands Partnership and the Glaze Task Force.

The Sankey is another operational catchment within the Lower Mersey and the Catchment Partnership has worked closely with all relevant partners on the development of the Sankey

Catchment Action Plan. The Catchment Partnership is taking forward the aims and objectives set out in the Sankey Catchment Action Plan and includes delivering its projects alongside those highlighted in the Lower Mersey Catchment Action Plan. The catchment partnership is developing a programme for the Sankey Catchment and intends to apply for lottery funding to deliver it.

The partnership has also set up working groups to examine issues which have an impact across the catchment (and into other catchments). Currently, these are:

- Working with golf courses
- Improving equality, diversity and inclusion.

The Partnership also recognised these wider water environment challenges and agreed to work to:

- Support the Nature Recovery Network and Local Nature Recovery Strategy, because the catchment is under significant pressure from urban development and agricultural production
- Reduce storm overflows and drainage system incidents, because activities by all partners can contribute to achieving this objective
- Build environmental resilience and adaptation to climate change, because resilience is vital to managing the challenges arising from climate change
- Protect and restore healthy soils and nutrient balance, because good farming practices benefit the whole of the catchment
- Removing plastics/litter from the water environment, because we need to reduce the impact of plastics on biodiversity and the food chain
- Connecting communities with nature, because 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.

Action planning for the working groups will be monitored and the action plans will link the sub-groups to this catchment plan. Through our Catchment Partnership meetings, we will monitor and report on delivering our action plans.

Fig 7. Court Hey Park Wetland created

CATCHMENT PARTNERS

	Mersey Rivers Trust: Host www.merseyriverstrust.org
	Merseyside BioBank www.merseysidebiobank.org.uk
	Cheshire West and Chester Council www.cheshirewestandchester.gov.uk
	Cheshire Wildlife Trust www.cheshirewildlifetrust.org.uk
	Environment Agency (EA) www.gov.uk/government/organisations/environment-agency
	Groundwork www.groundwork.org.uk

	Halton Borough Council www.halton.gov.uk
	The Wildlife Trust for Lancashire, Manchester & North Merseyside www.lancswt.org.uk
	Merseyside Environmental Advisory Service www.meas.org.uk
	The Mersey Forest www.merseyforest.org.uk
	The Mersey Gateway Environmental Trust www.mget.org.uk
	National Farmers Union (NFU) www.nfuonline.com

	The Conservation Volunteers www.tcv.org.uk/
	St Helens Council www.sthelens.gov.uk
	United Utilities (UU) www.unitedutilities.com
	Warrington Borough Council www.warrington.gov.uk
	Wigan Council www.wigan.gov.uk
	Wirral Council www.wirral.gov.uk

	Nature Connected The Local Nature Partnership for Liverpool City Region www.natureconnected.org

Catchment Partnership revisions of the Alt Crossens Catchment Plan

Date	Revision
28/03/2023	2023
11/07/2022	2022
15/04/2021	2021
31/03/2021	v.15
06/11/2019	v.14
15/05/2019	v.13
27/03/2019	v.12