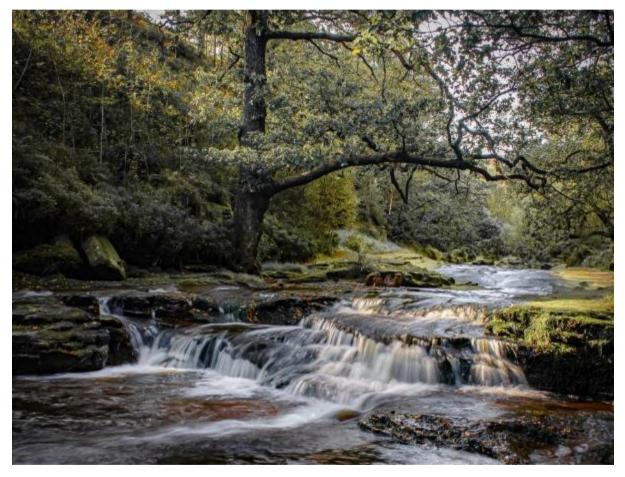


# UPPER MERSEY CATCHMENT PLAN March 2023



Birchen Bank Clough, source of the River Mersey

### 1. INTRODUCTION

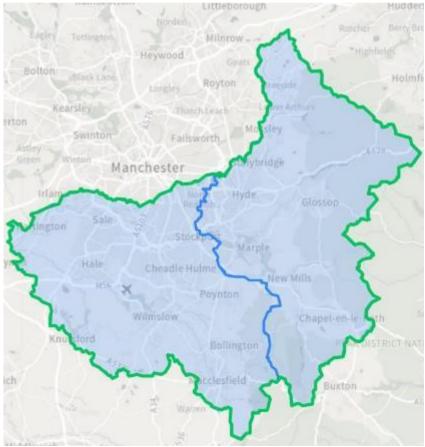
### 1.1 The Catchment Based Approach

The Upper 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 <u>25 Year Environment Plan</u>, directly supporting key targets, including:

- 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.

### 1.2 Catchment Characteristics and Challenges



Map of the Upper Mersey Catchment

The Upper Mersey Catchment has a diversity of landscapes. The catchment includes moorland on the edge of the Pennines and Peak District, lowland agricultural pasture, rural and semi-rural settlements, and densely-populated urban areas; over 1 million people live in the catchment's area.



River Goyt near its source in the Peak District

The waters from the main rivers - Tame, Goyt and Bollin - drain into the Upper River Mersey and the Manchester Ship Canal, which leads to the Lower Mersey Catchment (Mersey Estuary).

The key challenge for the Upper Mersey Catchment is the amount of urban and suburban area within the catchment. Unlike many of its neighbouring catchments, its landscape is 40% urban. The remaining 60% is comprised of farmland and moorland, with diverse farming practices, and public greenspace.



River Irk in Manchester City Centre

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 over 400 barriers to fish passage
- urban issues such as wrongly connected drainage systems, road run-off, and leachate from industrial/contaminated land

• flooding from rivers and from run-off from hard surfaces. The speed with which rainfall reaches the urban areas is a significant factor in this, especially combined with surface water run-off.

### 1.3 The Partnership

The Upper Mersey Catchment Partnership is led and hosted by the Mersey Rivers Trust. Partners include the Environment Agency, Natural England, Greater Manchester Combined Authority, Cheshire East Council, Friends of the Tame Valley, Stockport Council, Trafford Council, Tameside Council, Oldham Council, High Peak Council, Manchester City Council, BEACON, National Trust, Angling Trust, Canal and River Trust, National Farmers Union, United Utilities, Birkin Fly Fishers, Moors For The Future, Greater Manchester Ecology Unit, Trust For Conservation Volunteers, Groundwork Manchester, City Of Trees.

The Catchment Partnership is aligned to delivering the Environment Agency's North West River Basin Management Plan in the Upper Mersey Catchment

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

### 2 VISION AND PRINCIPLES

#### Our vision is to deliver a healthy water environment, which is rich in wildlife and a real community asset that is resilient to climate change, supports economic growth, and health and wellbeing.

We will achieve this by:

- determining our priorities on the basis of evidence and data
- collaborating across organisational boundaries and locations
- engaging with all the communities in our catchment
- developing innovative solutions and projects to deliver our vision.

Together we can create, protect and improve the water environment within the Upper 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 and 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
- Innovate and challenge
- Share our data, evidence and expertise
- Develop relationships with and consult, involve and support communities, volunteer groups and landowners
- 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

### 3 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 Nature Recovery and the natural aspects of our catchment
- develop a catchment which is more resilient 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 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 (WFD) 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 Upper 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.

Pollution on the River Bollin, February 2023

For each WFD waterbody, the partnership will 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. Our partnership collaboration will help us identify issues, needs, priority areas 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
- 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).

# **OBJECTIVE 2 – SUPPORT NATURE RECOVERY AND PROTECT AND ENHANCE THE NATURAL ASPECTS OF OUR CATCHMENT**

The key challenge for the Upper 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, including removing barriers to fish and eel passage
- Improving the ecology and amenity value of the river corridor, including fish restocking
- 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)



Tree planting on the River Tame to reduce erosion and create shaded fish habitats

# OBJECTIVE 3 – DEVELOP RESILIENCE TO THE EFFECTS OF CLIMATE CHANGE

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

• Extreme rainfall events, including unseasonal heavy rainfall in summer, causes flash flooding, soil loss and increased silt deposits in rivers. This is happening more often in areas that were not previously at risk of flooding.

- Increasing number and length of spells of prolonged dry weather, and stresses on supply and demand, mean that some localities in the catchment are at 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.



Leaky dam above Pott Shrigley

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
- Working with landowners and farmers to protect soils
- Creating and maintaining water and wetland habitats that support the associated ecology.

### 4 ENABLING ACTIONS

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

### 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.



# *Citizen Science River Guardian training for the Friends of Moston Brook*

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.

### 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
- Setting up working groups for locations and topics to increase focus and enable swift action
- Sharing information between meetings via the Catchment host to ensure it reaches all partners



Meeting of The River Tame Working Group, sub-group of the Catchment Partnership, including Friends of Tame Valley, River Tame Anglers, United Utilities, Stockport and Tameside Councils, and Tameside MP Andrew Gwynne.

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.

#### **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 all communities in our projects, making a particular effort to identify and engage hard to reach communities.

Volunteers creating brash leaky dams at Mossley, Greater Manchester



### 4 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 Upper Mersey Catchment Partnership Action Plan.

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

- The BEACON Bollin action plan
- The National Trust Riverlands project
- The UU/GMCA/EA Place-based Planning pilot

Through a combination of the Place-based Planning process and a review of priorities the Partnership has decided to focus on five watercourses/sub-catchments:

- River Tame
- Micker/Norbury sub-catchment
- Bollin sub-catchment
- Poise Brook sub-catchment
- South Manchester urban watercourses

and has set up working groups to develop operational plans for activities in these locations.

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

As part of the catchment planning process, the Partnership identified the following issues as priorities:

- Physical modifications because of the effect on fish movement, biodiversity, increased flood risk and people's access to rivers
- Pollution from agriculture and rural areas because land and livestock management has impacted water quality and degraded riparian habitat
- Changes to the natural flow and water levels because the catchment is vulnerable to increased flood events and also low flow with increased pollution and drought

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.

Through our Catchment Partnership meetings, we will monitor and report on delivering our action plan.

.

DELIVERING ON OBJECTIVES
OBJECTIVES
Objective 1: Create cleaner and healthier waterbodies
Outcome: By 2030 our priority water bodies (Tame, Bollin, Micker/Norbury) will have improved in water quality
Actions:
1.1 Establish a baseline of data on water quality on our priority identified watercourses and water bodies in the catchment
1.2 Use data and evidence to support prioritisation of CSOs for remedial action
1.3 Work with farmers to reduce pollution from agricultural sources
1.4 Work with businesses to reduce industrial pollution
1.5 Educate communities on the actions individuals can take to improve the water quality in the catchment
Objective 2: Protect and enhance the natural aspects, ecology and habitats of our catchment
Outcome: By 2030 we will have improved 10% (54km) of watercourses and waterbodies (50ha) and improved 10% (100km <sup>2</sup> ) of
waterside and catchment habitat.
Actions:
2.1 Identify and target priority water habitats in need of protection/enhancement
2.2 Develop a coordinated approach to managing INNS, starting with sharing data to map their presence in the catchment
2.3 Develop a plan to support the fish populations in each of our priority watercourses
2.4 Identify barriers to fish passage in the catchment and develop a prioritised plan for removing or modifying them
Objective 3: Develop resilience to the effects of climate change
Outcome: By 2030 the catchment and its communities will be more resilient to flooding
Actions:
3.1 Coordinate plans and initiatives to deliver low cost "quick win" NFM measures
3.2 Work with planning authorities, property developers and communities to ensure high quality NbS flood prevention schemes are part
of all new developments
3.3 Design and implement ecological interventions to support wildlife in adapting to climate change
3.4 Plant trees and other appropriate vegetation to enhance climate change resilience and carbon capture
3.5 Support peat bog restoration to support carbon capture and reduce the impact of climate change

ENABLERS
Enabler A: Develop an evidence base to inform our decisions
Outcome: Partners know where evidence can be found and willingly share evidence (where possible)
Actions:
A1 Identify what data and information partners hold and what can be shared with other partners
A2 Design a citizen science monitoring programme for roll out across the catchment
A3 Recruit, train and support a cadre of citizen scientists
Enabler B: Enable collaboration
Outcome: Projects which deliver better, multiple benefits, and improved value for money through collaboration
Actions:
31 Create a space/platform for sharing documents
32 Share project proposals and ideas to create opportunities to deliver multiple benefits
33 Pool funding to deliver projects over a larger scale
34 Set up working groups to tackle specific issues/locations
Enabler C: Engage communities
Dutcome: All communities (locality, agricultural, business) are given the opportunity to actively participate in improving the
catchment
Actions:
C1 Include community engagement, consultation, and participation in delivery as part of all projects wherever possible
C2 Actively reach out to all sections of the community, especially those in hard to reach groups
C3 Engage with schools and youth groups to educate young people about the issues in the catchment and the difference they can ma