





Photo: M53 run-off

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, Local Authorities, United Utilities, Mersey Forest, Inspiring Healthy Lifestyles, Groundwork, The Mersey Gateway, Cheshire Wildlife Trust, Lancashire Wildlife Trust, the NFU, SSE and the Mersey Rivers

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1. INTRODUCTION

In 2013, the Government introduced the <u>Catchment-Based</u> <u>Approach (CaBA)</u>, an inclusive civil society-led initiative that works in partnership with Government, Local Authorities, Water Companies, businesses and more, to maximise the natural value of our environment.

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 focus areas identified for action, 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'.

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"

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.

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 Hightown to Warrington to the North of the River. The catchment is split into four operational sub-catchments, which are Ditton, Sankey, Glaze and Wirral.

The Lower Mersey Catchment Partnership is led and hosted by the Mersey Rivers Trust and includes the Environment Agency, Local Authorities, United Utilities, Mersey Forest, Inspiring Healthy Lifestyles Groundwork CLM, The Mersey Gateway, Cheshire Wildlife Trust, Lancashire, Manchester and North Merseyside Wildlife Trust, the National Farmers Union (NFU) and SSE. The partnership reports to DEFRA.



































Fig. 2 The Lower Mersey Catchment Partners

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

2. MAP

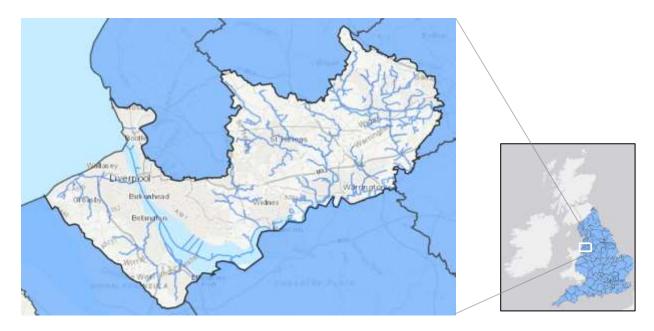


Fig. 3 The Lower Mersey Catchment.

3. 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:



Fig. 4 Catchment Partnership Principles

"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. CHALLENGES AND CHOICES

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

5. OBJECTIVES

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

- 1. Developing an evidence base upon which informed decisions can be taken
- 2. Delivering cleaner and healthier waterbodies
- 3. Delivering integrated water management
- 4. Supporting opportunities for using the water environment
- 5. Engaging the community

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

Taking an evidence-based approach, the partnership will seek to establish what and where the issues are, and to use this knowledge to determine catchment needs. Based on the evidence, the partnership 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, where possible:

- To prevent deterioration of WFD waterbodies
- To move waterbodies towards good ecological status and 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 enhance health and wellbeing.

In order to create and maintain a strong evidence base, the Catchment Partnership has developed a GIS <u>storymap</u> that allows partners to spatially map locations of issues across the catchment. The storymap is managed by the partnership host, Mersey Rivers Trust. Examples of issues include:

- Urban/Rural diffuse pollution
- INNS
- Bank erosion
- Barriers to fish migration
- Flood risk.

The partnership will continue to develop our evidence base by 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, electrofishing and Water Vole surveys.

The Lower Mersey Catchment Partnership will also collaborate with other organisations and partnerships to share data to develop our evidence base.

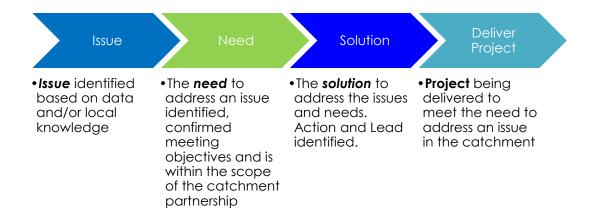


Fig. 5 Process for identifying issues, needs and solutions.

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.

OBJECTIVE 2 – DELIVERING CLEANER AND HEALTHIER WATERBODIES

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 Heavily Modified (see section 7), 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.

Water Framework Directive:

A framework for the protection of inland surface waters, estuaries, coastal waters and groundwater*

Good Ecological Status:

The WFD default objective for all water bodies, defined as a slight variation from undisturbed conditions**

Good Ecological Potential:

The best ecology that can be achieved in a heavily-modified water body**

*(EA, 2010) **(ECRR, 2014)

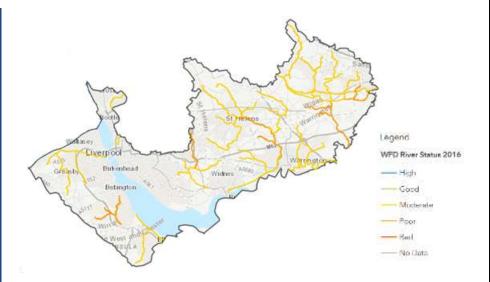


Fig. 6 Lower Mersey Catchment with WFD status of waterbodies

All WFD waterbodies are classified between High and Bad status (Figure 6), which is determined by the quality of water and ecology within it. Elements monitored may include (but are not limited to), phosphate, ammonia, dissolved oxygen, fish, invertebrates and macrophytes. When a waterbody fails to reach GEP or GES, reasons for not achieving good are determined. Point-source and diffuse pollution account for over 80% of the reasons for not achieving 'good status' in the Lower Mersey in 2015 (figure 7, data taken <u>from EA Catchment Data Explorer</u>).

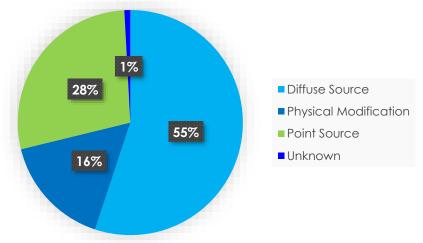


Fig. 7 Reasons for not achieving good status 2015 – Lower Mersey

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 Lower Mersey Catchment are varied and include industrial discharges, sewage effluent and misconnections, soil loss, runoff from historic landfill sites and diffuse and point source pollution. 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.

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 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
- Re-naturalising river channels where possible, including removing barriers to fish and eel
- Improving the river corridor
- De-culverting water courses to improve morphology, reduce flood risk and enable people to see and appreciate them
- Incentivise farmers to install buffer zones
- Supporting the delivery of green infrastructure and sustainable drainage systems (SuDS).

OBJECTIVE 3 – DELIVERING INTEGRATED WATER MANAGEMENT

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 livable places, promote healthy lifestyles, design multi-functional and interconnected green infrastructure, reduce flood risk and maximise multiple benefits.

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. The partnership is establishing a Natural Flood

Management (NFM) Delivery Group together with the Alt-Crossens Catchment Partnership 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.

OBJECTIVE 4 – SUPPORTING OPPORTUNITIES FOR USING THE WATER ENVIRONMENT

Our vision is for the water environment to contribute fully to economic and social well-being. The partnership will provide and enhance opportunities for access, sustainable transport, farming, recreation, local tourism and local businesses linked to the water environment.

Where possible, 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 and wellbeing of our communities.

OBJECTIVE 5 – ENGAGING THE COMMUNITY

People are not always aware of their local watercourses and/or do not appreciate them. The partnership will raise awareness and encourage communities 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 the Catchment Partnership and through other partners
- engaging communities at a project level in both urban and rural areas.

6. OUR ACTION PLAN

Our action plan sets out what activity areas the partnership will deliver annually to work towards achieving our vision. Our plan identifies action owners, timescales and tangible outputs and key outcomes of our work. The Partnership will seek funding from a variety of sources.

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 agree to work together, where possible, on developing and delivering projects in support of delivery of the Lower Mersey Catchment Partnership Action Plan. All Partnership Project work will be delivered in accordance with relevant Health & Safety legislation and projects delivered through Mersey Rivers Trust will be covered by their public liability insurance.

It is expected by the partnership that any partners leading on projects will have all relevant health & safety and insurances in place.

The Sankey is an 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 will look to take forward the aims and objectives set out in the Sankey Catchment Action Plan and include delivering its projects alongside those highlighted in the Lower Mersey Catchment Action Plan.

The Catchment Partnership is actively involved in the Merseyside NFM Delivery Group alongside members of the Alt/Crossens Catchment Partnership. This group is looking to take forward projects highlighted in the Merseyside Strategic NFM Targeting Maps.

You can find the Lower Mersey Catchment Partnership action plan here.





Fig 8. Volunteers installing Leaky Dams at Rivacre Brook

7. APPENDICES

7.1 WFD Waterbody classifications

The <u>Water Framework Directive (WFD)</u> 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 2016 classifications of our waterbodies, the overall waterbody objective and links to the Environment Agency's <u>Catchment Data Explorer</u>.

7.1.1 DITTON

Waterbody	Overall	Overall	Link
	classification	objective	
	(2016)		
Ditton Brook	Moderate	Moderate	https://environment.data.gov.uk/catchment-
(Halewood to		(2015)	planning/WaterBody/GB112069061390
Mersey			
Estuary)			
Dog Clog	Moderate	Good	https://environment.data.gov.uk/catchment-
Brook		(2027)	planning/WaterBody/GB112069060690
(including Mill			
Brook)			
Netherley	Moderate	Good	https://environment.data.gov.uk/catchment-
Brook		(2027)	planning/WaterBody/GB112069060680
Prescot Brook	Poor	Moderate	https://environment.data.gov.uk/catchment-
(Logwood Mill		(2027)	planning/WaterBody/GB112069060710
Brook)			

7.1.2 GLAZE

Waterbody	Overall	Overall	Link
	classification	objective	
	(2016)		
Astley Brook	Moderate	Moderate	https://environment.data.gov.uk/catchment-
(Mersey)		(2015)	planning/WaterBody/GB112069061100
Bedford Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
		(2027)	planning/WaterBody/GB112069060810
Glaze	Poor	Poor	https://environment.data.gov.uk/catchment-
		(2015)	planning/WaterBody/GB112069061420
Hey/Borsdane	Moderate	Good	https://environment.data.gov.uk/catchment-
Brook		(2027)	planning/WaterBody/GB112069064520

Mersey (Bollin	Moderate	Moderate	https://environment.data.gov.uk/catchment-
confluence to		(2015)	planning/WaterBody/GB112069061012
Howley Weir)			
Pennington	Moderate	Moderate	https://environment.data.gov.uk/catchment-
Brook (Glaze)		(2015)	planning/WaterBody/GB112069060760
Pennington	Moderate	Good	https://environment.data.gov.uk/catchment-
Flash		(2027)	planning/WaterBody/GB31232085
Shaw Brook	Poor	Good	https://environment.data.gov.uk/catchment-
		(2027)	planning/WaterBody/GB112069061090
Spittle Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
		(2027)	planning/WaterBody/GB112069061020
Westleigh Brook	Moderate	Moderate	https://environment.data.gov.uk/catchment-
		(2015)	planning/WaterBody/GB112069060820

7.1.3 SANKEY

Waterbody	Overall	Overall	Link
	classification	objective	
	(2016)		
Black Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
(Mersey		(2027)	planning/WaterBody/GB112069061230
Estuary)			
Hardshaw	Moderate	Good	https://environment.data.gov.uk/catchment-
(Windle) Brook		(2027)	planning/WaterBody/GB112069061210
Millingford	Moderate	Good	https://environment.data.gov.uk/catchment-
(Newton) Brook		(2027)	planning/WaterBody/GB112069061220
Rainford Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
		(2027)	planning/WaterBody/GB112069061240
Sankey Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
(Hardshaw		(2027)	planning/WaterBody/GB112069061180
Brook to			
Rainford Brook			
Sankey Brook	Poor	Poor	https://environment.data.gov.uk/catchment-
(Rainford Brook		(2015)	planning/WaterBody/GB112069061200
to Mersey)			
Sutton Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
		(2027)	planning/WaterBody/GB112069061170
Whittle Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
(Mersey		(2027)	planning/WaterBody/GB112069060990
Estuary)			

7.1.4 WIRRAL

Waterbody	Overall classification (2016)	Overall objective	Link
Dibbinsdale	Poor	Poor	https://environment.data.gov.uk/catchment-
Brook and		(2015)	planning/WaterBody/GB112068060270
Clatter Brook			
Rivacre Brook	Moderate	Good	https://environment.data.gov.uk/catchment-
		(2027)	planning/WaterBody/GB112068060350
The Birket	Moderate	Good	https://environment.data.gov.uk/catchment-
including		(2027)	planning/WaterBody/GB112068060530
Arrowe Brook			
and Fender			

7.2 Catchment Partners

Mersey Rivers Trust	Mersey Rivers Trust: Host www.merseyriverstrust.org
Cheshire West and Chester	Cheshire West and Chester Council www.cheshirewestandchester.gov.uk

	Cheshire Wildlife Trust
Cheshire Wildlife Trust	www.cheshirewildlifetrust.org.uk
	Environment Agency (EA)
Environment Agency	www.gov.uk/government/organisations/environment-agency
*	Groundwork
CHANGING PLACES CHANGING LIVES	www.groundwork.org.uk
•	Halton Borough Council
HALTON BOROUGH COUNCIL	www.halton.gov.uk
O	Inspiring Healthy Lifestyles (IHL)
Inspiring	www.inspiringhealthylifestyles.org
healthy lifestyles	
TRUSTS Lancashire, Manchester & N Merseyside	The Wildlife Trust for Lancashire, Manchester & North Merseyside www.lancswt.org.uk

	The Mersey Forest
THE MEDOEV	www.merseyforest.org.uk
FOREST more from trees	
	The Mersey Gateway
the mersey gateway	www.merseygateway.co.uk
	National Farmers Union (NFU)
ENFU	www.nfuonline.com
	SSE
sse	www.sse.com
35	St Helens Council
St.Helens Council	www.sthelens.gov.uk
	United Utilities (UU)
United Utilities	www.unitedutilities.com

	Warrington Borough Council
WARRINGTON Borough Council	www.warrington.gov.uk
50,000,000,000	
	Wigan Council
Wigan [©] Council	www.wigan.gov.uk
	Wirral Council
⇔WIRRAL	www.wirral.gov.uk