

A NATURE NETWORK FOR GREATER MANCHESTER

To drive nature recovery, we need to set out the best places to act for nature across Greater Manchester.

A key purpose of the Greater Manchester Local Nature Recovery Strategy is to identify locations to create or improve habitats, where it is most likely to provide the greatest benefit for nature, communities and the wider environment. This is to enable effort to be focused where it will have the greatest impact and to encourage more collaborative actions towards habitat creation and improvement.

To focus action the Greater Manchester Local Nature Recovery Strategy sets out targeted areas for action for nature recovery – a Nature Network across Greater Manchester. You can view the Nature Network using [this link](#) and at the end of this document.

WHAT IS THE GREATER MANCHESTER NATURE NETWORK?

The Nature Network sets out a long-term spatial vision for nature recovery that we can all work towards. It sets out those areas already important for nature and opportunity areas, where there is potential to boost connectivity for nature across the city region through habitat creation or enhancement.

By targeting action for nature where it will better connect our remaining wildlife-rich spaces we can improve species movement across the city-region and drive recovery. At the same time, we can work towards a green network for people to enjoy – one that connects with areas beyond our boundaries.



NATURE NETWORK: KEY COMPONENTS

The Nature Network is made up of two components: Core Local Nature Sites and Nature Recovery Opportunity Areas.

CORE LOCAL NATURE SITES

These are our best remaining wildlife sites across the city-region (our “areas of particular importance for biodiversity”). They are sites that are already designated to some degree for their value for nature. What we can include in this category is set out by Defra in the [statutory guidance](#) and regulations for Local Nature Recovery Strategies.

For Greater Manchester they include:

- Nationally designated sites for their value to nature (including Sites of Special Scientific Interest, Special Protected Areas, Special Areas of Conservation, National Nature Reserves)
- Local Nature Reserves, locally designated Sites of Biological Importance and Local Wildlife Sites
- Irreplaceable habitats present in GM, as set out in the [Biodiversity Gain Requirements \(Irreplaceable Habitat\) Regulations 2024](#), using the Priority Habitat Inventory. The habitats that meet the Biodiversity Gain Requirements definition and are present in GM, including: blanket bog, lowland fens, ancient and veteran trees

You can explore the Nature Network by [clicking here](#).

NATURE RECOVERY OPPORTUNITY AREAS

The Nature Recovery Opportunity Areas (our “areas which could become of particular importance for biodiversity”) are areas where taking action to enhance, restore or create different types of habitats (i.e. woodlands, grasslands, moorlands, waterbodies and wetlands) would expand and better connect our Core Local Nature Sites. By prioritising action in these areas, we can focus our efforts and resources where we could have the greatest impact on reconnecting our remaining wildlife-rich spaces.

Within the Nature Recovery Opportunity Areas, specific mapped habitat actions are set out to help guide what could be delivered on the ground to help nature recover. Targeting action within the Nature Network can help build resilient spaces for wildlife and deliver new better connected green spaces for people.

For nature to recover, action is also still important outside of the Nature Network, to make our wider urban and rural landscapes more wildlife-friendly and to boost access to nature across the city-region.

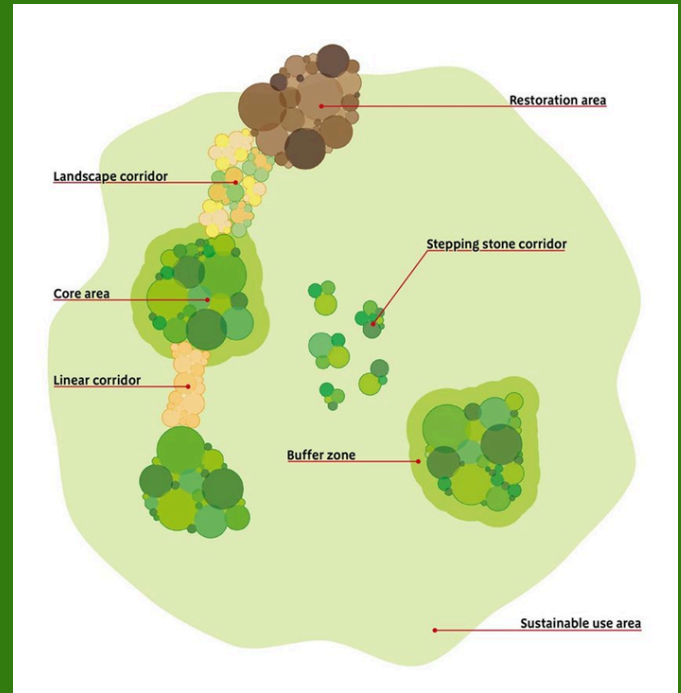
You can explore the Nature Network by [clicking here](#).

UNDERSTANDING THE NATURE NETWORK

The Greater Manchester (GM) Nature Network is based on established evidence and thinking on nature recovery in the UK. Prof. Sir John Lawton's report, "Making Space for Nature" in 2010 is a key basis for our approach as it set out straightforward recommendations for promoting nature recovery in England. In particular the Lawton Report Principles of "bigger, better, more and joined".

Following the Lawton Principles involves recognising our best remaining wildlife sites (our Core Local Nature Sites) as our best building blocks for nature recovery and then taking action to:

1. Improve their quality through better habitat management.
2. Increase their size.
3. Enhance the connections between them – through corridors or stepping stones.
4. Create new sites altogether.
5. Reduce pressures on nature by improving the wider environment.

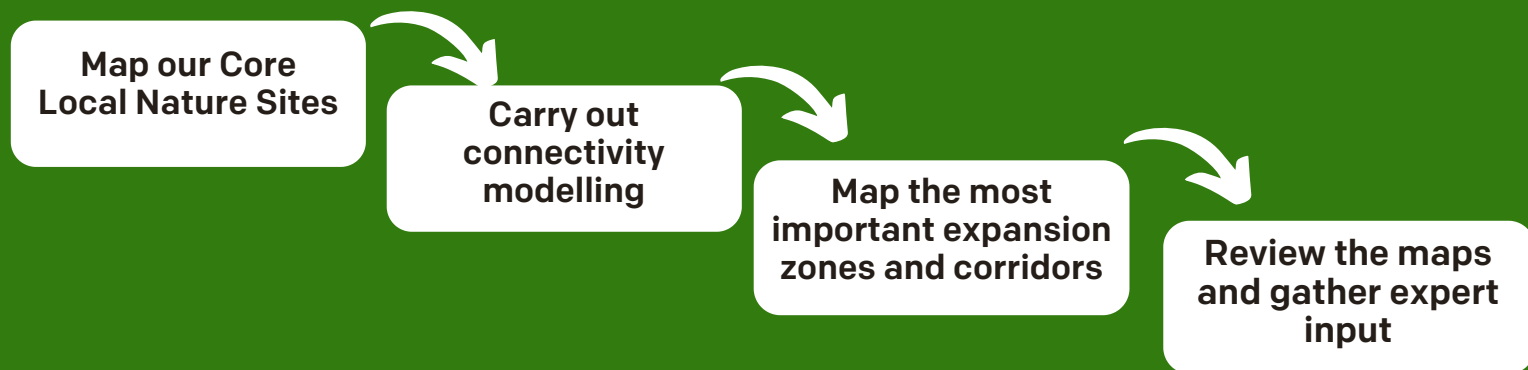


ROLE AND REMIT OF THE NATURE NETWORK

- By setting out a long-term spatial vision for nature that we can all work towards, the Greater Manchester Nature Network aims to encourage more focused, coordinated and joined-up action for nature recovery across the city-region.
- The Nature Recovery Opportunity Areas do not introduce any new designations or protection, beyond those protections already given to sites which fall within the Core Local Nature Sites.
- Instead, the Nature Network aims to have a positive influence on the growth and development of the city-region, targeting efforts by charities and helping planners and developers to understand and contribute towards nature recovery, alongside the delivery of new neighbourhoods, offices and commercial spaces.
- Development within these opportunity areas (or where it could have an impact on these areas) should seek to support and deliver on the priorities set out for these areas and help to work towards the wider ambitions of the Nature Network.

HOW HAS THE NATURE NETWORK BEEN DEVELOPED?

Following the Lawton principles, we created our Nature Network maps by developing, and then undertaking, the following four-stage process



STAGE 1. MAPPING OUR CORE LOCAL NATURE SITES

Following guidance from Defra, our first stage was to create a map which contained all of our most important sites for biodiversity.

This included the following internationally, nationally and locally defined sites within Greater Manchester:

- Special Areas of Conservation
- Special Protected Areas
- Sites of Special Scientific Interest
- National Nature Reserves
- Local Nature Reserves
- Sites of Biological Importance*
- Irreplaceable Habitats
- Ancient and Veteran Trees

* SBI are also known as Local Wildlife Sites

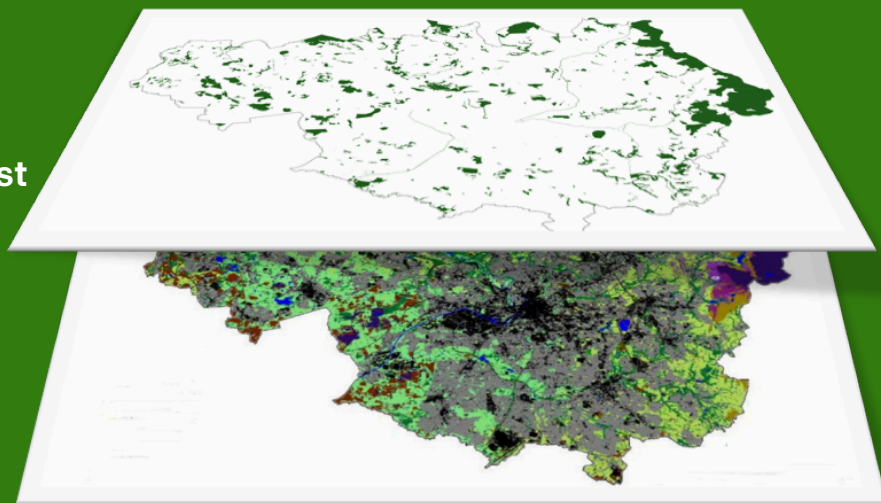


Image showing our Core Local Nature Sites superimposed over the landcover land use map

You can view this map by clicking [this link](#).

To help us to understand the land cover and habitats surrounding our Core Local Nature Sites, we also created a continuous land cover and land use map for Greater Manchester. This was developed by combining features from several authoritative mapping sources. Features came from multiple national land cover data providers, including Ordnance Survey, the Rural Payments Agency, Natural England and the Forestry Commission.

STAGE 2. CARRY OUT CONNECTIVITY MODELLING

After establishing the location of our Core Local Nature Sites, we partnered with the Lancashire and Cheshire Wildlife Trusts to research how we could identify locations to enhance ecological connections between these sites.

Lancashire and Cheshire Wildlife Trusts assessed and tested several of the most well-regarded ecological connectivity modelling tools available for creating nature recovery networks.

Through their research, we selected a toolkit called Linkage Mapper to help model the best places to boost ecological connectivity across Greater Manchester. Linkage Mapper operates by assessing the landscape between our Core Local Nature Sites in terms of how difficult, or resistant, it will be for species to move across.

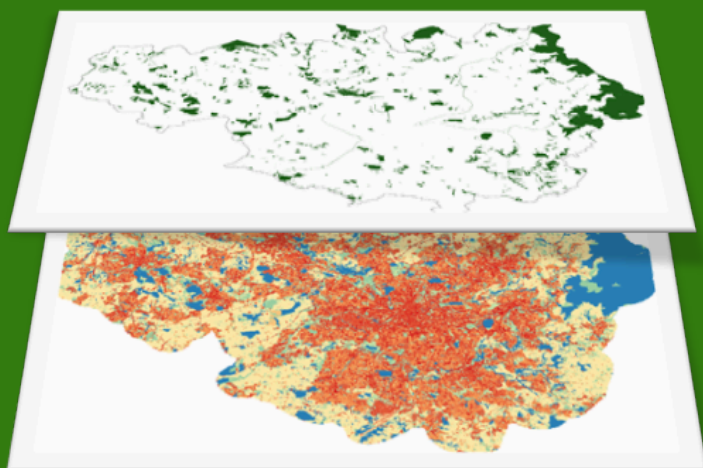
The Linkage Mapper model required two inputs:

1. Our Core Local Nature Sites - our key remaining wildlife sites
2. A 'resistance surface' - representing how difficult it is for species to move across the different land covers that make up our city-region

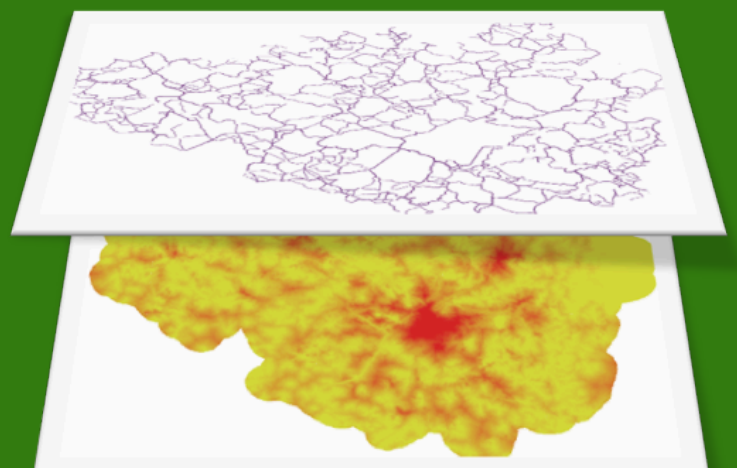
To establish a resistance surface we relied on academic expertise as well as the views and opinions of panels of local experts and specialists. Our expert panels included representatives from The University of Manchester, The Wildlife Trusts, Forestry Commission, City of Trees, Greater Manchester Ecology Unit, Natural England and others.

Linkage Mapper took our core sites map and our resistance surfaces and mapped out corridors to expand and better connect up our Core Local Nature Sites.

The input and outputs of the connectivity mapping process are illustrated below.



Inputs



Outputs

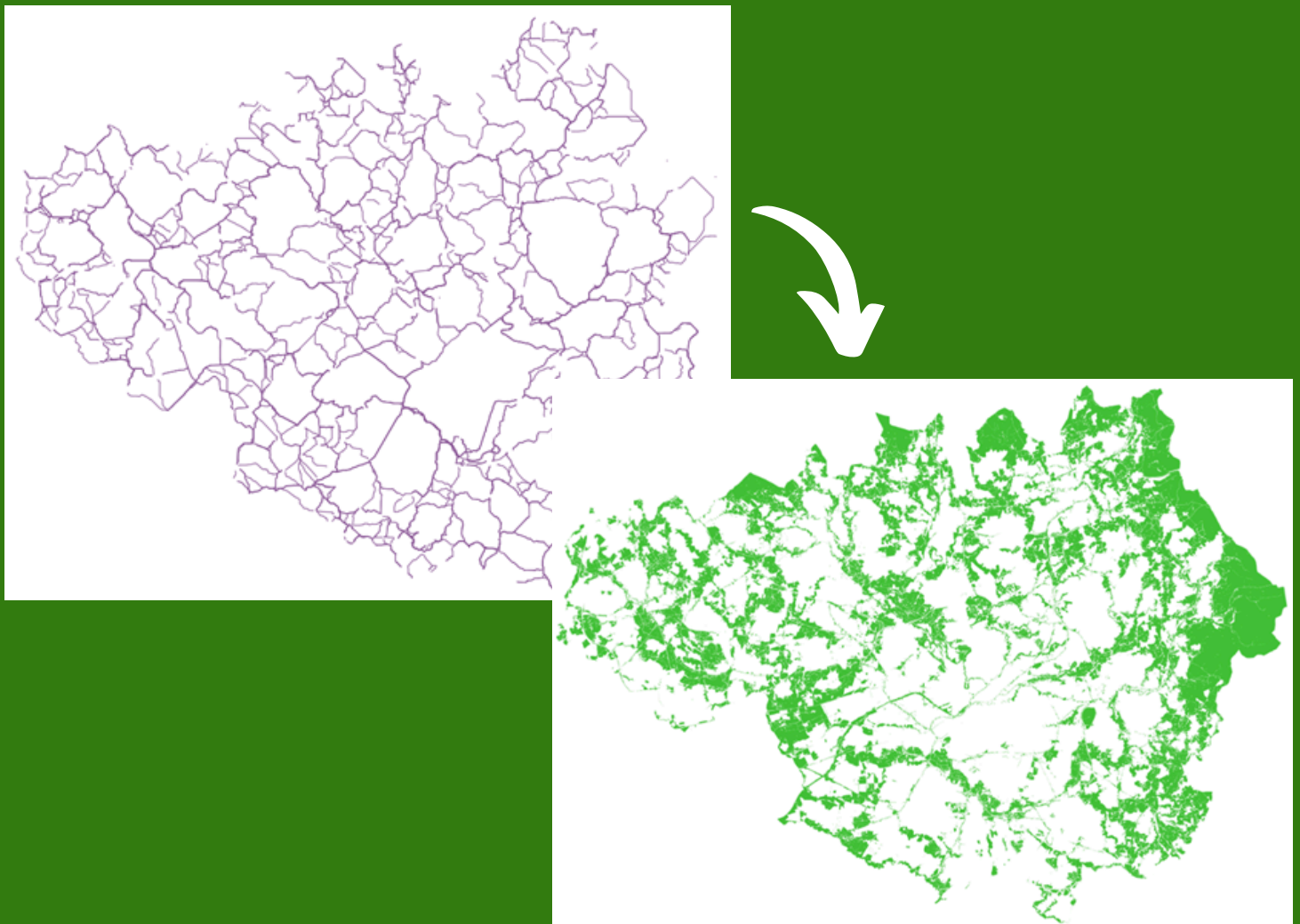
STAGE 3. MAP THE MOST IMPORTANT EXPANSION ZONES AND CORRIDORS

The outputs from Linkage Mapper include a number of possible corridors across Greater Manchester. Our next stage was to prioritise within these to help target all our efforts for Nature Recovery to the best places to benefit species over the next decade.

The Linkage Mapper toolkit included analysis tools designed to rank the relative importance of core sites and corridors for maintaining an overall nature network. The least viable and least important corridors were dropped from the models to create maps showing our most important expansion zones and corridors.

As a safeguard we also referenced recent indicator species records from Greater Manchester Local Record Centre to restore any important links that had been incorrectly dropped by the prioritisation tool.

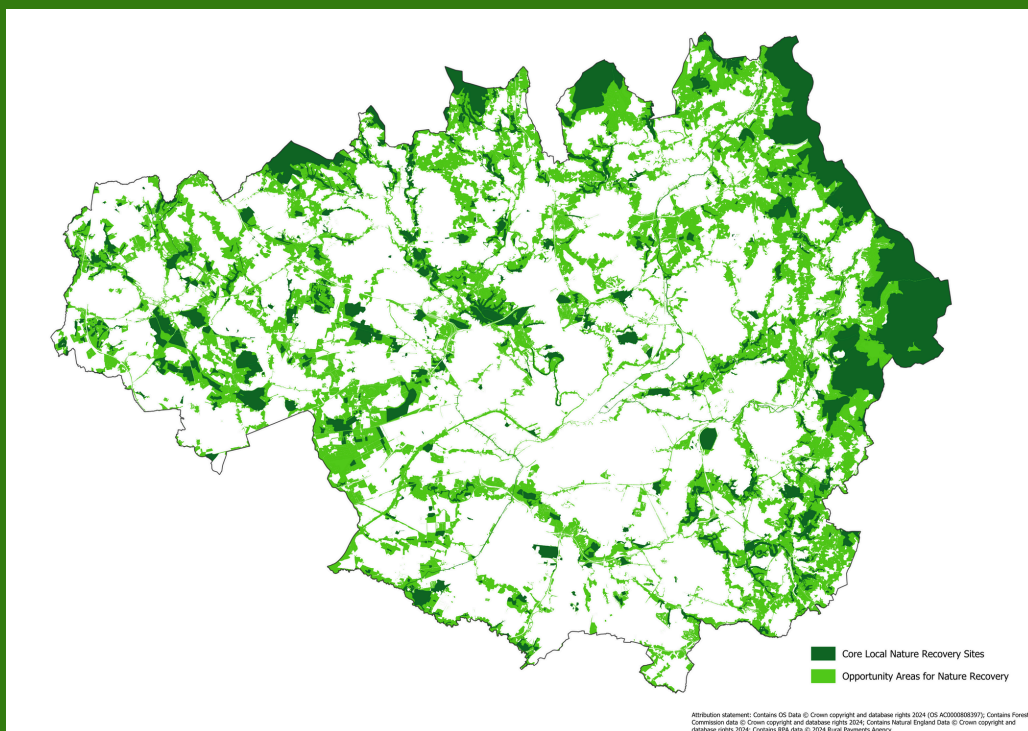
The images below illustrate the process



STAGE 4. REVIEW THE MAPS AND GATHER EXPERT INPUT

The output of the ecological connectivity mapping process was a prioritised map of corridors across Greater Manchester.

To ensure these were the right corridors we then went through a review period with partners on our Local Nature Recovery Strategy Steering Group and representatives from each of the 10 local authorities



This process produced the final Nature Network shown in our strategy. The easiest way to explore the nature network is by accessing our interactive map on [this link](#).

USING THE MAPPED ACTIONS

Within the Nature Recovery Opportunity Areas - we have also mapped a series of different possible actions for different habitat types.

This includes areas where it may be possible to take actions to enhance, expand, create and better connect:

- Woodlands
- Grasslands
- Lowland Wetlands
- Rivers, canals and waterbodies
- Upland moorlands

You can explore the mapped priority areas for each of the different actions on [this link](#). They form part of the Nature Recovery Opportunity Areas.

TELL US YOUR VIEWS

You can provide feedback on the Nature Network by participating in our public consultation or by emailing naturerecovery@greatermanchester-ca.gov.uk.

Our public consultation is live from November 15th 2024 - January 31st 2025.

You can access the consultation by visiting our website or scanning the QR code on the right:

<https://www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/our-plan-for-nature-recovery/>

