Annex 07a

GREATER MANCHESTER

DOING THINGS DIFFERENTLY FOR THE ENVIRONMENT

Nature for All

A new plan for nature recovery for Greater Manchester

Consultation Draft - Statement of Biodiversity Priorities

2nd September 2024

Supporting organisations

This plan was written in collaboration with organisations and partnerships from across Greater Manchester, including:

- Bolton Metropolitan Borough Council
- Bury Metropolitan Borough Council
- Canals and Rivers Trust
- Cheshire Wildlife Trust
- City of Trees
- Forestry Commission
- Greater Manchester Ecology Unit
- Groundwork Greater Manchester
- Irwell Catchment Partnership
- Lancashire Wildlife Trust
- Manchester Metropolitan Borough Council
- National Farmers Union
- National Trust
- Natural England
- NHS Greater Manchester
- Oldham Metropolitan Borough Council
- Peak District National Park
- Rochdale Metropolitan Borough Council
- Royal Horticultural Society
- Salford Metropolitan Borough Council
- Southway Housing
- Stockport Metropolitan Borough Council
- Tameside Metropolitan Borough Council
- The Environment Agency
- Trafford Metropolitan Borough Council
- Transport for Greater Manchester
- United Utilities
- University of Manchester
- Upper Mersey Catchment Partnership
- Wigan Metropolitan Borough Council

Greater Manchester Combined Authority (GMCA) would like to thank all the organisations that helped create the strategy, as well as the many other organisations and people who contributed via events, workshops or surveys.

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1. Introduction

1.1. Why do we need a plan for nature recovery?

Greater Manchester is a growing, vibrant, dynamic and diverse city-region. In and around our homes, offices and businesses there are a variety of green spaces – from urban parks, community gardens and local playing fields to windswept upland moorlands and lowland mosslands, ancient woodlands, farmlands and historic parklands. Crossing these is a network of canals, rivers, lakes, wetlands and reservoirs, stretching from the peaks to the Mersey estuary and Cheshire plain.

All these spaces can play a role in supporting local wildlife. They are equally important to our local communities, residents and businesses. Our parks, urban rivers and canals provide crucial spaces for relaxation in our busy urban spaces, helping to improve our mental health and wellbeing[1]. Our woodlands, grasslands, wetlands and uplands help to store and absorb rainwater and carbon, reduce flood risk and air pollution, and help supply local food and water[2].

We all understand the importance of nature, but globally[3], nationally[4] and locally[5] we are witnessing continued decline in our wildlife. Our wildlife is struggling locally, with current and historic reports of falling wildlife populations caused by factors such as habitat loss, fragmentation, intensification of land use and pollution. Access to natural green spaces across the city-region is unequal and many people do not have access to green spaces near to where they live and work[5].

The loss and decline of nature impacts the essential benefits we currently enjoy. It reduces the nature's ability to support our health and wellbeing, to help capture air pollutants and store carbon, support food production and supply water, and can increase our risk of flooding. The loss of these benefits impacts on our everyday lives, the liveability and resilience of the city-region[6].

In recognition of the severity of this issue, Greater Manchester declared a biodiversity emergency in 2022. We know there is huge potential for nature to thrive alongside where we live and work, and we have already witnessed examples of the remarkable potential of nature to return. Former industrial sites, such as the Flashes of Wigan and Leigh, are now national nature reserves, and derelict railway bridges, such as Castlefield Viaduct, converted into vibrant gardens. As Greater Manchester continues to evolve, we all need a strategy that sets us on a pathway towards a city-region where nature can return and thrive, and our residents and businesses can enjoy the benefits of a vibrant and resilient environment.

This Local Nature Recovery Strategy sets out a long-term vision to work towards a resilient network for nature across Greater Manchester, by connecting and enhancing wild spaces so that people and nature can thrive. To drive action, we set out high level targets to help track progress, alongside priorities and actions for different habitats and species. We all need to work towards these targets, priorities and actions, to set us all on the right pathway to help realise this vision.

Over the next decade this will be the guiding strategy for nature across the city-region. Everyone has a role to play in realising this vision and creating a Greater Manchester that is resilient, greener, and more liveable for all.

The Biodiversity Emergency

Our natural world contains a huge variety of life - the plants, animals, insects and microorganisms that live on our planet - which is collectively referred to as 'biodiversity'. Nature is important for its own sake, the unique outcome of millions of years of evolution and natural processes. Nature is also essential for many aspects of our lives. We depend on nature to provide us with clean and plentiful water, produce food and pollinate crops, for medicines and mental health benefits, for the clothes we wear and the homes we build[2,6]. It also holds huge cultural value as part of the places we live and enjoy, as well as for both spiritual and religious reasons.

However, globally, nationally and locally we are seeing the loss and decline of our planet's biodiversity. At the global level, the Living Planet Index[3], a measure of wildlife population size, shows that over the last 50 years we have lost 68% of our global wildlife populations. A quarter of all species are now threatened with extinction and the current rate of global extinction is estimated to be between 100 to 1,000 times higher than natural background extinction rates[7,8].

At the national level, 1 in 6 UK species are now threatened with extinction and over the past 500 years an estimated 200 species have likely been lost[4]. For mammals the threat is higher, with 1 in 4 land mammals in the UK now facing extinction[4]. UK populations of species of greatest conservation concern have also declined by 37% since the 1970s and 25% of all species in England are at historically low levels[8,9]. The UK is now considered one of the world's most nature-depleted countries and is at the very bottom in terms of how much wildlife survives[10].

There have also been declines in key indicator species of wider ecosystem health – including a 16% decline in the average abundance in butterflies over the past 25 years and 44% in breeding birds over the past 45 years[11]. Mammals like hedgehogs are facing serious declines, with surveys in 2011 showing declines of between 25-40% over the previous decade[11].

The decline in nature we are seeing has been caused by habitats and wild spaces being lost, destroyed, fragmented or degraded, by pollution or invasive species, or overused for industry or agriculture. In turn, these changes impact on the ability of the natural environment to provide essential services and put the benefits that we receive from nature, that underpin our economy and society, at risk.

1.2. What is a Local Nature Recovery Strategy?

As Greater Manchester (GM) grows, we need a guiding strategy to set a pathway towards a city-region where nature and people are thriving - **a Local Nature Recovery Strategy**.

To respond to the biodiversity emergency and to meet local aspirations for a greener, more nature friendly, future		We need a long-term vision for what a nature-friendly city-region should look like
To help us all drive action for nature and people		We need to set out how we can all work together to help nature recover
To help us all focus our efforts for nature		We need to set out the best places we can boost action for nature, a Nature Network
To track our progress		We need to set out clear targets for nature recovery and monitor these

The Environment Act provides GMCA, as Responsible Authority, the statutory basis to co-produce a locally led, evidence-based **Local Nature Recovery Strategy**, to drive more collaborative action for nature. This document is our Local Nature Recovery Strategy for Greater Manchester and will be in place from 2025-2035.

To drive action for nature, this strategy sets out how and where across the city-region we should be taking steps to protect and enhance our natural environment. Over the next ten years, this will be the guiding strategy on the most effective actions for nature recovery and set out the best locations for nature recovery across the city-region. Everyone can play a positive role in delivering on this strategy, whether that is via small scale actions in communities, streets and gardens or large-scale actions, such as the designation of new nature reserve, new parks or as part of the development of an area.

The strategy covers the whole of Greater Manchester - all ten of our Local Authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan) and those areas within them that are part of the Peak District National Park. This strategy sits alongside a wider set of Greater Manchester policies and strategies (see appendix 1).

The LNRS is not a delivery plan – this will be produced to sit alongside the strategy in 2025. It does not override existing plans, policies, processes, best practice and protections that are already in place

for nature, nationally or locally, nor is it binding for landowners. Its preparation has been limited by the GM scale data, resources and capacity available to the GMCA.

1.3. What does this strategy contain?

This strategy is made up of key components that come together to set out how and where across our communities we should all be taking action for nature.

These components include: an overarching vision, individual priorities and targets for both habitats and species, alongside a mapped Nature Recovery Network for Greater Manchester. These key components are each shown and explained below.

State of nature: An overview and description of our natural environment and current trends in our local wildlife and environment.

Vision: An overarching vision for what Greater Manchester could look like when the strategy is delivered.

Aims: The high-level results required to achieve that vision across the city-region.

Targets: Greater Manchester specific targets, set to help us to track progress towards the overarching vision and aim.

Priorities: These are the long-term end results that the strategy is seeking to achieve in terms of habitats and species. Our habitat priorities are divided into different broad habitat types. Our species priorities cover some of the most vulnerable species across Greater Manchester.

Practical actions: The practical actions or measures that would make a positive contribution towards delivering our priorities.

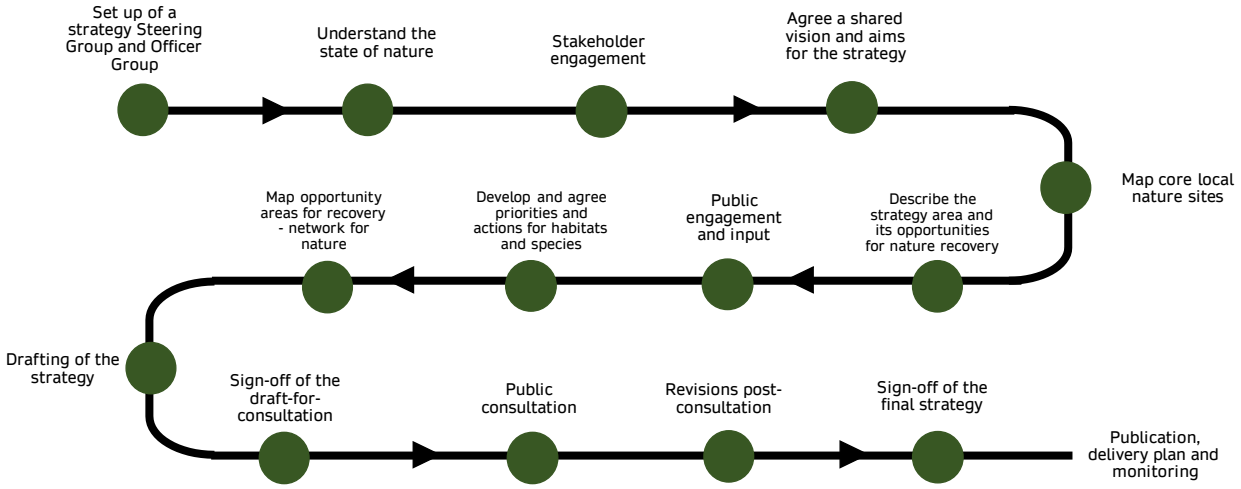
A Nature Network: Consisting of our core local nature areas and nature recovery opportunity areas.

- **Our Core Local Nature Sites** are our best remaining areas for nature across the city region, including all our designated sites and irreplaceable habitats (*these form our areas of particular importance of biodiversity).*
- **Our Local Nature Recovery Opportunity** are areas where the creation and restoration of habitat could have the greatest impact on nature's recovery**.** They represent areas where we should be more ambitious for nature alongside other land uses (*these form our areas that could become of particular importance for biodiversity).*

Together the Nature Network shows how we can connect our best remaining spaces for nature across the city region and specific practical actions within these areas *(these two components together form the Local Habitat Map for the GM LNRS).*

1.4. How has this strategy been produced?

GMCA has led the preparation of this strategy, supported by the Greater Manchester Ecology Unit, Natural England, the ten Local Authorities, the Peak District National Park and our steering group.



To help us get this strategy right for the local people who know and understand Greater Manchester, in preparing this strategy GMCA has:

- **Co-produced** the strategy with representatives from local environmental charities, infrastructure providers and local partner organisations (see section 8 and appendix 2), who have been involved in all stages of the strategy development through our GM LNRS Steering Group.
- Adopted an **evidence-based approach** by developing Greater Manchester's first State of Nature report to inform the strategy (appendix 3). The report brings together available open-access local environmental data to report on some of the major trends in nature.
- **Involved the public** and different sectors to ensure the strategy is **locally led.** The strategy has been shaped not just by expert organisations but also by the public, via a public survey and events, and by engagement with farmers and landowners, developers, infrastructure providers, environmental professionals, businesses, community groups and residents.

Who's has been involved?

- For farmers and landowners, we held dedicated in-person workshops, farm visits and worked with local nature champions in the agricultural sector.
- For businesses we held dedicated in-person workshops and roundtables to hear views.
- For residents and community groups we ran a large public survey with over 800 responses, collected views and feedback at local festivals, local events and conferences.
- For local councillors we ran webinars and developed dedicated information packs.
- For developers, social housing providers and urban regeneration experts we ran webinars.
- For the NHS, our partners ran conferences and local events to gather views.
- For nature experts and environmental charities, we set up workshops, online meetings, surveys and events to hear views and gather feedback.

Throughout the development of the strategy, we have sought to inform and engage residents and local organisations through regular newsletters, project blogs and social media activity, amplified by our partners and green communications challenge group - see appendix 4 for further information.

1.5. Who is it for and how should it be used?

Everyone can take action for nature and play a part in local nature recovery. This strategy is for everyone, whether you are a local business owner or landowner, an environmental charity, developer or planner, a local resident, parks managers or a community group.

This strategy should be used to understand how and where action should be taken to help nature recover across the city-region. It can be used to guide and inspire action by communities, residents, charities, businesses, farmers and landowners. It sets out the most effective actions and a network for nature recovery for local authorities, developers, policy makers, planners and institutions. You can read more about how you can deliver on this strategy in section 7.

This strategy should be used to:

- **Drive collaborative action**: Encourage more joined-up collaborative action.
- **Direct investment:** Set out the best places to focus action and resources and strategically significant sites for the delivery of off-site Biodiversity Net Gain.
- **Deliver multiple benefits:** Deliver benefits for society and economy, alongside boosting nature, such as reduced flood risk, improved health, local food growth and increased visitors.
- **Inform and evidence:** Understand the local state of nature and the best actions we can all take to help nature recover, alongside other land use and development.
- **Connect with nature:** Encourage people to understand, engage and get involved with local nature recovery.
- **Track progress:** Better monitor how we are tackling the biodiversity emergency.

Different organisations and groups of people will be able to use this strategy in different ways:

- **Land managers and owners** can use this strategy as a resource to plan the best actions for nature on their land and estate and show how these actions contribute towards wider nature recovery efforts.
- **Environmental organisations** can use this strategy to drive coordinated action and focus action for nature in the places it could be most effective.
- **Residents and community groups** can use this strategy to inspire local action, understand how their projects can help wider nature recovery and create more liveable spaces.
- **Local authorities** can use this strategy to plan and act on public land and estates, to meet the enhanced biodiversity duty under the Environment Act. It can also inform their local plans and identify where improving nature can support other council services and meet cross-departmental targets.
- **Businesses** can use this strategy to consider how to benefit nature, and their business, during day-to-day operation, extreme events, renovations and start up.
- **Planners and elected representatives** can use this strategy in the preparation of planning documents and inform planning decisions.
- **Developers** should have regard for this strategy in planning how they can work towards development that embraces a nature centric approach to raising building standards and values.

A detailed overview of how this strategy can be used by different audiences will follow this strategy.

2. Why nature matters for Greater Manchester

Nature is important for its own sake, the unique product of a millions of years of evolution and natural processes. For many people, connecting with nature is a source of inspiration and a meaningful reminder that they are part of something bigger, that enriches their daily lives. Nature is also essential for many aspects of our lives. Natural spaces play a vital role in making the city-region an enjoyable place to live and work, providing crucial spaces for relaxation, leisure and tranquillity – helping to boost our health and wellbeing[6]. At the same time, they provide us with vital services: storing water, reducing flooding and air pollution, storing carbon and providing us with water and local food.

2.1. What does nature do for us?

Being in nature is good for you. A huge, and growing, body of evidence tells us that spending time in nature is vital for our mental and physical health[1].

Every year, Greater Manchester residents benefit from an estimated £1bn[6] in essential services from our natural environment. Some of these services include mental health benefits (with an avoided healthcare costs for the NHS estimated at £264m) and improved physical health (£56m); opportunities for leisure, sport and recreation (£372m) and increased amenities and property values (£174m uplift for house prices). These essential benefits are particularly important for our vulnerable groups and can help reducing critical issues across the city-region, such as health inequalities and improve the lives of people with chronic illness or mental health conditions.

However, the benefits that we receive from nature are under threat given the array of challenges facing nature and the continued decline in biodiversity we are seeing. If we do not continue to protect maintain and enhance nature, we will not continue to receive these benefits, with knock-on effects for society and the economy - such as possible additional costs for the NHS.

Helping nature to recover can deliver a range of benefits and help the city-region to thrive:

The benefits for people:

- A green and healthy environment to grow up, get on and grow old
- More recreation and leisure opportunities
- Improved air quality and less noise pollution
- Improved physical health, including better heart health and healthy lifestyles
- Improved mental health, including reduce stress and reduce mental health conditions
- More resilience and adaptation to climate change, including flooding, droughts and extreme heat
- Less water pollution and safer opportunities for water-based recreation
- Greater connection to our natural and historic environment
- Stronger communities, proud of where they live and work
- Healthier soils, ensuring long term sustainability of food supplies

The benefits for businesses:

- A more attractive place to work, visit and do business, encouraging local economic growth
- Increased resilience through reduced risk of, and better adaptation to, environmental hazards
- A healthier, happier and more productive workforce
- Higher land and property values
- Increased green jobs and skills
- More visitors and sustainable tourism opportunities
- More productive land for food security and other resources that can be grown locally

The ecological benefits

- Protection of rare and threatened species and habitats
- Repaired natural cycles and natural processes
- A greater abundance and diversity of wildlife and healthier ecosystems, reversing biodiversity decline
- Capture and sequestration of carbon dioxide, helping tackle climate change
- More resilience to future changes in climate
- Greater resilience of species to pests and diseases

2.2. How do we access nature?

We know that people like to spend time in nature.

- On average **93%** residents surveyed over a 10-year period think that having open greenspace close to where they live is important to them[5,12].
- **Over half residents** (53%) surveyed report that they visit the outdoors for leisure at least once a week[12].
- When spending time in nature, residents reported they enjoyed exercising (70%), peace and quiet (73%), spotting wildlife (87%) and improving their wellbeing (77%)[13].

People from all walks of life value spending time outdoors in nature, but not everyone benefits to the same extent. With nearly three million people now calling the city-region home, our public green spaces are increasingly under pressure.

We know that access to nature looks very different across the city-region. Access to nature is unequal and many people do not have access to nature near to where they live or work. This means that the health and wellbeing benefits that we all get from our natural environment are not shared equally.

- An estimated third of Greater Manchester's population do not live within 15 minutes of a decent sized green space[14] (as set out in national standards[15]).
- Only an estimated 40% of our population live close (within 200m) of a small greenspace (0.5ha or bigger)[14].
- Echoing national trends[16], people experiencing multiple inequalities in Greater Manchester tend to live in areas with less green space, compared to more affluent areas[17].
- Communities experiencing racial inequalities are nearly twice as likely to live in areas with the least green space[14].

2.3. What action do people want?

Over 800 residents, community groups, charities, businesses, farmers and landowners across the city-region have engaged with us during the preparation of this strategy (see appendix 4 and 5.)

In our survey on developing a Greater Manchester Plan for Nature one of the most common responses was a desire for a greener, cleaner and wilder city-region – with many respondents prioritising the maintenance, protection and enhancement of our existing green and blue spaces for nature as the top action they would like to see included in this strategy.

For the future, residents envision a greener, more wooded, cleaner, more biodiverse, more natural and more accessible Greater Manchester.

Views on the state of nature

Through surveys, workshops, events and webinars, we have heard what people think about the state of our natural environment.

- Although most Greater Manchester residents (69%) are proud of their local area[18], 55% of survey respondents think that the natural environment where they live is getting worse[13].
- Almost half of survey respondents said they currently think the state of nature in Greater Manchester is poor (41%) and a further third thought it was in moderate condition (37%)[19].
- Residents stated that they are put off spending time in nature due to a lack of accessible quality green space (14%), a lack of biodiversity (16%), increasing need for land for housing and employment (16%) and green spaces in poor condition (18%)[19].

These responses indicate a strong concern about the state of Greater Manchester's natural environment and its decline.

Views on the local actions that are already helping to support nature

- Nearly a quarter of survey respondents (24%) identified community action, projects, and volunteering as the most common actions already working to support local wildlife, followed by tree planting (9%), parks and public green and blue spaces (8%), and environmental NGOs and partnerships (7%)[19].

Views on what we all need to do to best improve nature locally

- Residents expressed a desire to see action for our most vulnerable wildlife, specifically mentioning the need for action for hedgehogs, birds, bees and otters, as well as the reintroduction of lost species such as beavers[19].
- The top actions residents want to be taken across the city-region include:
    - Creation and restoration of more green spaces for nature and people
    - More wildlife-friendly development or less development
    - Maintenance, protection, and enhancement of existing green and blue spaces
    - Education and awareness raising
    - More tree planting and new woodlands
    - Improved water quality and reduced pollution
    - More wildflower meadows and verges
    - More support for community projects and volunteering
    - Less litter and cleaner areas
    - Increased habitat diversity

I would like a more nature friendly Greater Manchester to have:

- "*Opportunities for communities to meet together to look after nature"*
- *"Greener - creating valuable habitats and pockets for wildlife in an urban concrete jungle"*
- *"Wild accessible green spaces"*
- *"More green and blue environments with a diverse mix of species"*
- *"Lower air and water pollution levels"*
- *"Green architecture, with more green roofs"*

See appendix 5 for the full results of our survey.

3. Nature in Greater Manchester: Where are we now?

We know nature is struggling across the city-region. In this section, we describe the existing land and habitats in Greater Manchester and the state of these habitats (detailed descriptions of our landscapes and habitats can also be found in appendix 6), along with the main trends in our species, best sites for nature and the key pressures on nature across the city region. This section of the strategy is drawn from our Greater Manchester State of Nature Report (appendix 3).

3.1 Our habitats and species

In total, Greater Manchester extends over 127,600 hectares (ha) of land. The city-region is dominated by its urban and suburban areas, which cover around nearly half of Greater Manchester. Across the city-region, nature reserves and protected wildlife sites provide some of our best spaces for nature and act as vital refuges for wildlife. 11% of land in Greater Manchester, over 14,000 ha, is safeguarded in some way for nature through a variety of designations. These sites are often isolated or fragmented by urban areas and infrastructure, meaning that species can struggle to move between them.

Nature is not just confined to our protected sites and nature reserves. Within and around our built-up areas, Great Manchester hosts a range of different habitats including woodlands, upland heath and moorlands, grasslands, lowland mosslands and other wetlands. Rivers, waterways and waterbodies, including the River Mersey and River Irwell, canals, reservoirs, lakes and ponds, cross the city region. An estimated 30% of our land is used for agriculture, although the uptake of grants for nature-friendly farming is thought to be lower than in surrounding areas[5].

In our urban and suburban areas our ten Local Authorities are custodians of a huge array of different green spaces from public parks, local nature reserves to civic squares, cemeteries and riverbanks. Amenity and leisure spaces, such as public parks, school grounds, and sports pitches provide key urban green spaces.

Despite the biodiversity emergency we are facing, there are many reasons for optimism and stories of the successful return of nature across Greater Manchester. Many of these successes are due to the hard work and dedication of a committed network of local people, organisations and partnerships working across the city region.

3.1.1. Designated sites

Overview

Greater Manchester has 23 nationally significant Sites of Special Scientific Interest (SSSIs) covering our particularly significant areas of semi-natural grasslands, woodlands and heath, as well as some of our wetlands of lowland raised bogs, flashes and lakes. Greater Manchester hosts six Special Protected Areas (SPAs) and Special Areas for Conservation (SACs). These range from expansive upland moorland of the South Pennines to the Rochdale Canal. Alongside these are 531 Local Wildlife Sites (also called Sites of Biological Importance), as well as 78 local nature reserves and one national nature reserve. Irreplaceable habitats[20] are also found in Greater Manchester, including ancient woodlands and veteran trees, blanket bog and lowland fens.

State

Extent

Since the 1980s, the areas of land safeguarded for nature in Greater Manchester have increased, from around 5,000ha to over 14,000ha through the work of the Greater Manchester Ecology Unit, Local Authorities, Natural England, environmental charities and local communities.

Our designated sites now cover 11% of Greater Manchester, a lower proportion than achieved in Liverpool (14%) and Lancashire (24%). Over the last decade our positive trend of increasing the amount of our land designated for nature has plateaued. Although new sites have been celebrated and designated, such as the Flashes of Wigan and Leigh National Nature Reserve and Local Nature Reserves at Springwater Park in Bury – some sites, or parts of sites, are also being lost due to lack of appropriate management and land use change.

When looked at as a network, these sites are now isolated and fragmented, meaning there are large distances between them, and they are not well-connected. Many sites are small, with habitat loss the area remaining under protection is not enough to support species recovery. To enable nature to recover these sites need to not only be bigger but crucially more joined up, allowing species to move between them.

Condition

Many of our best sites for nature, are not in as good condition as they need to be to support local species.

At present only 5% of our SSSI (less than 300ha) are in “favourable” condition, with a further 75% in “unfavourable – recovering” condition. Since 2000, most of our SSSI sites have improved and have moved towards being managed for recovery rather than remaining “unfavourable – no change”. Compared to the rest of the Northwest and nationally, Greater Manchester has significantly fewer SSSIs in “favourable” condition, but more sites recovering[5].

Due to several factors, condition reporting by national organisations across our nationally and locally designated sites can be inconsistent and not up to date. These are the key building blocks for nature recovery, we need to know more about how many are in active conservation management and work with landowners and managers to bring more into active management to improve their condition.

3.1.2. Species

Despite its predominantly urban landscape, Greater Manchester has a diverse array of wildlife, including species protected by legislation like great crested newts, water voles and badgers. Even in the heart of the city peregrine falcons, swifts and swallows are known to make their homes. Six different species of bats can be found along our urban canals and rivers, while foxes use our urban gardens and tram embankments to feed and raise their cubs.

Amphibians and reptiles, newts, as well as common frog and common toad, slow worm, grass snake and common lizard, live and breed in our ponds and grasslands.

Grassland and brownfield sites are strongholds for declining insect populations, while **damselfly and dragonfly** are found across the city-region, including the banded demoiselle on many of our rivers and canals.

Mammals seen in our different districts include badger, hedgehog, bats, as well stoat and weasel, foxes, otter and rabbits, brown hare and mountain hare. Roe deer are also an increasingly common in some woodlands on the edges of Greater Manchester, whilst water voles are under threat.

Rare **plant** species can also be found in the city-region, such as carline thistle, hemp nettle and oak fern, aquatic plants like floating water plantain and several species of bog moss.

Fungi are found in all habitats, from woodland to grassland to gardens. Some of our upland sites hold nationally significant grassland fungi populations.

Birds such as herons and kingfishers are seen along our rivers. Woodpeckers in some of our urban woods and parks. Our uplands support specialist moorland birds, such as curlew, golden plover and twite. Our farmlands, particularly areas of Bury, Wigan, Trafford and Stockport, support skylark, tree sparrow and barn owl. Wigan is a stronghold for the nationally rare willow tit.

We have limited data on population trends of our local species. The data that we do have available for key species of birds and mammals, echoes the wider national picture of species decline:

- Bird populations are used to provide a good indication of the broad state of wildlife across the UK. Mirroring national trends, we have seen some worrying declines in our bird species. Between 1980-2011 individual bird species populations across a range of habitat types have shown declines of between 9-40%[5,21].
- Trends in population for our mammals are relatively poorly known in Greater Manchester and we are reliant on data for the whole of Northwest England. 25-year trends show us that Greater Manchester and its surrounding areas are losing not just rare but once common species, with reported declines in red foxes of -44%, rabbits -64%, brown hare -8% and hedgehog -24%[5,22].

These population declines are driven by a range of different factors including habitat loss, habitat fragmentation, pressure from pollution, invasive species and urbanisation, as well as new threats like climate change.

3.1.3. Urban and suburban green spaces

Overview

Urban and suburban areas dominate much of our city-region, from the dense city centres of Manchester and Salford to the many towns across Bolton, Bury, Oldham, Rochdale, Stockport, Tameside, Trafford and Wigan.

Across our urban areas are a variety of well-loved parks, gardens, rivers and playing fields, golf courses, canals and allotments, that all provide valuable open green spaces for people and refuges for wildlife. Traversing through these areas are rivers, brooks and canals, many of which have been modified and built over.

Our ten Local Authorities, schools and institutions including the NHS, are custodians of a huge array of green spaces. Even incidental public urban green spaces, found on road verges or cemeteries are managed by our local authorities and can form valuable space for wildlife across the city region. Commercial land also provides green space for businesses and their staff to operate, ranging from the large-scale office spaces and smaller scale retail and leisure spaces.

Our residential gardens account for 15% of our land. These can be fantastic urban refuges for nature, and home to species like swifts, sparrows and hedgehogs and support pollinators like bees, wasps and hoverflies.

These spaces are hugely important for local communities, providing spaces for social interaction, relaxation and leisure. They also encourage active lifestyles, helping improve our mental and physical health and reducing the burden on the NHS. They are essential to the liveability of urban areas, improve the quality of our places. At the same time, they help manage rainwater and reduce air pollution, and reduce overheating. They also provide critical transport routes for pedestrians and cyclists for commuting and leisure.

State

Our urban green spaces are of huge significance to many residents on a day-to-day basis. However, the distribution of urban green spaces across Greater Manchester is by no means equal.

Our dense urban areas often host very few parks and those that do exist are often small and serve large local populations, a legacy of historic and current growth of Greater Manchester. Those urban green spaces that we do have are often under pressure from multiple competing demands on urban land, as well restricted management due to vastly reduced public estate and park service budgets.

Access to green spaces in Greater Manchester does not currently meet national standards recommended by Natural England.

- An estimated third of Greater Manchester's population do not live within 15 minutes of a decent sized green space, as defined by national standards[5].
- Only an estimated 40% of our population live close (within 200m) of a small greenspace (0.5ha or bigger)[23].

This lack of good access to green spaces compounds health inequalities across Greater Manchester and reduces the potential for these communities to benefit from these spaces.

In denser urban areas, like Manchester, 1 in 5 (20%) of all properties do not have access to a private or shared garden. Those that do have gardens are also thought to be becoming less green. Research by the Manchester Metropolitan University has revealed that, in Manchester, only 50% of the average garden is greenspace[24].

Successes

The importance of green spaces in our urban and suburban areas is being recognised more and more and integrated into new development and regeneration schemes.

- Opened in 2022, **Mayfield Park** in Manchester was the first new city park for 100 years. The 6.5-acre parkland and new neighbourhood, brought the River Medlock back to life, removing it from its concrete culverts and daylighting it for the first time in over 50 years.
- Opened in 2024, the 2-acre **Viaduct Park** is a key part of the regeneration of Stockport town centre. The park sits above the town centre's new bus station, providing a new greenspace for residents, alongside 200 new apartments and a new cycling and walking route.
- There are many smaller scale examples of green space being made a central part of new development and infrastructure. They include the opening of **Elizabeth Park** in Bolton and **Jubilee Park** and **Chadderton Park** in Oldham, both at the heart of areas of the town centres that are being extensively regenerated. In Manchester, the **Castlefield Viaduct**, redundant for 50 years has been transformed into an urban park. In Salford, Europe's largest living wall has been built at the 12-storey **Eden Building**. Salford has also championed the addition of raingardens in their streets, at places like Liverpool Road, while Trafford has retrofitted raingardens into Altrincham high street.
- Communities and environmental charities have worked to add green spaces into our urban areas. There are some fantastic examples of **alleyway greening in Manchester's Moss Side** neighbourhood, the **Ginnel Garden project in Edgeley,** Stockport. The GMCA Green Spaces Fund has supported 86 new or improved community green spaces, including projects like the **Northern Lily GROWE Community Garden in Oldham** and the **community orchard being delivered by SNUG in Longsight**. New accessible green spaces are being developed around NHS sites in Oldham and Wythenshawe.

3.1.4. Rivers, canals and waterbodies

Overview

Greater Manchester boasts an extensive network of rivers, canals, lakes, reservoirs and other water bodies, that weave through our communities and are deeply connected to our industrial heritage. Emerging from the Pennines and Peak District, they connect our urban centres with open countryside and our uplands and lowlands, acting as vital highways for wildlife.

Totalling over 884km of rivers, 160km of canals and 400ha of lakes, our waterways not only define the landscape but provide critical habitats supporting our wildlife. While rivers like the Irwell and Mersey are well known, countless others cross the region. Like much of the rest of Greater Manchester's environment, our rivers and waterways have been extensively modified.

People across Greater Manchester still seek out rivers, reservoirs, lakes and canals to connect with the natural environment. They play a key role in local identity, culture and heritage, and many of our canals, such as the Manchester Ship Canal and Rochdale Canal, have played important roles in our industrial past and now support nature.

State

Across the city region an estimated 80% of our water bodies have been heavily modified by human activities and 112km of our rivers now lie buried or piped below our streets and buildings. There are over 1,000 obstacles and barriers to species movement in our rivers. Many of our riverbanks have been modified or canalised making them less valuable as species habitats. Invasives species are also

increasingly problematic, our riverbanks are often impacted by species such as japanese knotweed and himalayan balsam.

While our industrial heritage left many of our rivers and waterways heavily polluted, clean-up efforts beginning in the 1980s have significantly improved our river water quality, enabling fish, otters and aquatic invertebrates to return. Despite improvements over the last 40 years, none of our rivers are classed as in good ecological condition and 11% remain in poor or bad condition. As well as being a threat to aquatic wildlife, the pollution of our waterways can affect public health.

Pollution, from rural areas, towns and cities, transportation, as well as the wastewater network are all drivers of poor water quality. Built in the Victorian era our sewerage system cannot always cope with the intensity and volume of rainwater runoff our changing climate and increasing urbanisation is creating, leading to polluted water spilling directly into our waterways via storm overflows. Overflows were developed to reduce the risk of sewage backing up during heavy rainfall. Greater Manchester has 793 storm overflows, roughly 30% of all storm overflows in Northwest England. These overflows spilt an estimated 21,391 times in 2022 for an average of 4.5 hours per spill.

In Greater Manchester, between 2025-2030 United Utilities are proposing to invest to improve 100 storm overflows, to protect more of the Upper Mersey and Irwell rivers and improve water quality. Further investment is proposed for sustainable rainwater management to provide more space for rainwater in our public spaces, to further reduce spills.

Successes

Despite still facing challenges, our waterbodies have improved dramatically over the past 40 years. In the 1970s and 1980s for example, aquatic life was virtually absent from the River Mersey whereas today an increasing proportion of our rivers are moving to moderate condition. Key successes include:

- **Otters** have been sighted in over half of Greater Manchester's catchment after having dwindled to near extinction – this is a strong indication they are now resident here and increasing.
- **Fish** were equally absent from the **River Mersey** in the **1980s**, whereas they have now returned, along with mayflies, to all areas of the river.
- The **restoration of major canal routes**, including the **Rochdale canal**, have created popular recreation routes from derelict under used spaces.
- The **Medlock Valley Nature Partnership**, led by Groundwork Greater Manchester, is working towards habitat improvements along 30ha of the Medlock River valley.
- Work to install natural flood management measures including leaky dams, used to slow the flow of water and reduce flood risk, have recently been undertaken at **Moston Brook, Crompton Moor, Brownley Brook and Smithills**.

3.1.5. Woodlands, trees and hedgerows

Overview

There are estimated to be over 11.3 million trees across Greater Manchester, with a combined tree canopy covering just over 16% of city region - equivalent to 22,260 hectares[25]. Our woodlands include broadleaved mixed woodlands, ancient woodlands, clough woodlands and wet woodlands, upland oak woodlands and wood pasture, alongside veteran and notable trees, newly planted trees and plantations.

Some important woodlands have been designated as Sites of Special Scientific Interest and Local Wildlife Sites, such as Sunnybank Wood Woods, but many more woodlands are unprotected. Almost

850ha is designated as ancient and, along with a large number ancient and veteran trees, is considered irreplaceable habitat[20].

Our woodlands are mainly broadleaved – with species such as oak, sycamore, ash, birch, willow, hawthorn, hazel and holly. We have 13 commercial woodlands, covering an area of 313 ha across the city region. Smaller areas of evergreen conifers are also found – often planted on old industrial, ex-agricultural and mineral sites.

In urban areas, trees play a vital role in greening our streets. The city-region is also home to one of the UK's rarest native trees, the Manchester Black Poplar - its association originates from the industrial revolution, where it was found to be one the few trees that could cope with the high levels of pollution. Alongside providing habitat, some of our woods, hedgerows and trees are open to public access provide a wide range of other benefits, such as providing shade and shelter on streets and public spaces, sequestering and storing carbon, reducing flood risk, stabilising riverbanks and reducing soil erosion.

State

At 16% Greater Manchester's tree canopy is above the national average, but below that of other cities like London. Our tree canopy cover is not evenly distributed, and our most densely populated areas often have very low tree cover. Generally, our woodlands are fragmented, with greater concentrations along river valleys in the northwest and southeast of the city-region. There is much lower tree cover in the uplands of the South Pennines and Dark Peak, where it is generally restricted to cloughs.

Some woodlands are in good or recovering condition, however the vast majority generally remain in poor condition and funding for their long-term management is lacking. We also know that Greater Manchester has a high proportion (66%) of unmanaged woodlands. There is potential to improve the management of these woodlands to better support biodiversity and reduce the impact of key issues including disease (such as ash dieback) and high impact invasive plans (such as himalayan balsam).

Hedgerows in both our urban and rural areas can act as corridors for species – allowing wildlife to move across landscapes and providing food, shelter and homes for species such as birds, bats and small mammals. Over recent decades more and more of our hedgerows have been removed and replaced with fencing.

Significant efforts are being made to increase the number of trees and hedgerows being planted across the city-region. An estimated 917,000 trees have been planted in Greater Manchester since 2017, coordinated by City of Trees, as part of a landscape scale ambition for a northern forest[26].

Successes

- **Between 1991 and 2016, Red Rose Forest[27]** and its **six local authority** partners, **delivered over 1200 hectares of new planting totalling more than 2.4 million trees**. These schemes now provide habitats for a wide range of birds, insects, mammals and have provided urban communities with the opportunity to experience wildlife on their doorsteps.
- The schemes included projects such as: **Dainewell Woods in Trafford** where a 40ha planting scheme was delivered in 1995; a 25ha woodland at G**iants Hall in Standish Wigan** and a 15-hectare woodland planted as part of the new **Cutacre Country Park in Bolton**. **New woodlands were also planted on former landfill sites** in Salford, Bolton, Bury, Manchester and Trafford, which have adapted well to the tough site conditions and are now important places for wildlife.
- Red Rose Forest became City of Trees, expanding across the rest of Greater Manchester and building on this legacy and working towards a target to plant 3 million more trees.

3.1.6. Lowland wetlands and mosslands

Overview

Western areas of the city-region (parts of western Salford, Trafford and parts of south-eastern Wigan) are home to much of our remaining lowland wetlands and mosslands. Together with neighbouring areas, these form part of the Great Manchester Wetlands Nature Improvement Area[28].

'Mossland' is a local term for lowland raised bogs and areas that were formerly bogs, much of which have now been converted to farmland due to the highly productive underlying peat soils. They are distinctive flat, boggy, open landscapes, with remnant pockets of ecologically important lowland raised bog, alongside fen, wet woodland, wet grassland and freshwater habitats. They support a range of species, such as common lizard, brown hare, black darter dragonfly and rare sundew plants

Greater Manchester is also home to unique wetland habitats called flashes, a result of the industrial legacy of ground subsidence following mining. These former mines, along with spoil heaps have often been reclaimed by nature, creating a network of open water and lowland wetland habitats. This mosaic of wetland habitats supports an array of rare wetland species such as bittern, willow tit, water vole, as well as great crested newts and invertebrates. A variety of other habitats are also found outside of these areas, such as wet woodlands, wet heath and grasslands, former floodplain meadows, reedbeds, ponds.

Together our lowlands wetlands and mosslands form a unique and diverse landscape of water, fen, wet grassland, wet woodland and lowland raised bog and offer a rich mosaic of semi-natural landscape for wildlife.

State

These habitats were once much more extensive, however much of our original lowland raised bog (an estimated 95-97%), fens and other wetland habitats have been lost or drained for conversion to agriculture, peat extraction and development.

Now only fragments of a once extensive area remain and lowland raised bog is one of Western Europe's most threatened habitats. The significance of these remaining habitats is recognised in designations, such as the Manchester Mosses Special Area of Conservation. These designated areas are often poorly connected and there are large parts where the landscape is degraded.

Around 5,000ha of peat soils are estimated to lie underneath lowland, largely agricultural areas and remaining lowland raised bogs and wetlands[29]. Agricultural use (such as turf production, cropland, intensive grassland), on these peat soils, means that these areas are estimated to be emitting around 130,000 tonnes of CO_2-equivalent per year, contributing to the climate emergency[29].

Successes

After years of degradation, including by heavy industry and the mineral extraction, work to restore areas of our lowland wetlands and mosslands is demonstrating the power of nature to recover.

- The **Flashes of Wigan and Leigh** were formed on land that had subsided after coal mining activities. Previously a former industrial wasteland, the area is now a mosaic of wetland habitats for people to enjoy, supporting rare species such as **Bitterns** and **Willow Tits**, and declared in 2022 as an 1800-acre National Nature Reserve.
- On **Chat Moss** which spans Salford and Wigan, an area that was originally lowland raised bog (a rare and threatened habitat) has been degraded by agriculture and peat extraction. However, restoration efforts have seen nature recover in these areas, such as **Astley and Bedford Mosses**, **Cadishead Moss** and **Little Woolden Moss**. Species such as Nightjar, the Large Heath Butterfly and Sundew (one of the UK's few carnivorous plants) can now be found on the mosslands.

3.1.7. Upland moorlands

Overview

Upland areas extend along the northern and eastern edges of the city-region and form part of a much larger expanse of upland moorlands, stretching into the Peak District and Lancashire.

Our upland moorlands have been shaped not just by the underlying geology and location but also by centuries of historical clearance, industrial pollution and contemporary management practices, which has created a unique blend of habitats. Characterised by deep valleys and open moorland plateaus, our upland habitats include expanses of blanket bog and heath, clough woodlands, alongside acid grassland and freshwater areas. The importance of these habitats is reflected in a range of international, national and local designations.

The intense rural character and isolation of the uplands stand in striking contrast to our urban areas, offering panoramic vistas and a sense of remoteness. They are crucial spaces not just for nature but also for outdoor recreation, offering long-distance trails and popular reservoirs. They also remain working landscapes and managed places used for raising livestock or grouse and supplying water.

State

Our uplands have been subject to drainage, pollution, grazing, burning and management over the 20th Century. In a healthy state, many of moors surrounding Greater Manchester would be much wetter than they are now. A high-water table is critical for blanket bog habitat to become active, and grow peat rather than losing it, this helps reduce fire risk and sequester more carbon.

At present only 10% of upland moorlands, over deep peat, are thought to be in good condition, 66% needs improvement and 24% is in poor condition[29]. As a result, peat soils in our uplands are emitting an estimated 60,000 tonnes CO_2 equivalent per year, rather than locking more carbon away.

Concerted efforts are being made to restore blanket bog and a diverse mosaic of other upland habitats (including upland clough and oak woodlands), not only as space for nature but also to reduce carbon emissions, improve the quality of our water supply and reduce flood risk downstream. However, the scale of the challenge is significant and there is potential to scale up efforts to deliver better habitats for nature and vital public services for people.

Our upland habitats are particularly vulnerable to climate change and more extreme weather. With our changing climate, increased risk of wildfire will put these habitats and species, like mountain hare, under more pressure.

Successes

Some upland areas were damaged by acidification during the industrial revolution. Efforts to restore them can provide spaces for nature and people to enjoy, as well as storing more carbon and water to reduce flood risk downstream.

- At **Dovestone Reservoir**, conservation work has been carried out to make the bog wetter again, blocking the gullies and revegetating the bare peat by planting sphagnum mosses with the help of local volunteers. This prevents peat being washed out into our drinking water, helps lock in carbon to tackle climate change, and also provides habitat for upland birds.
- On **Saddleworth Moor,** conservation efforts have helped bring degraded moorlands back to life by blocking gullies and re-vegetating bare peat to benefit wildlife and reduce flood risk in urban areas. Over 2,000 dams have been installed to stabilise the peat and help establish growing conditions for moorland plants including heather, bilberry and cross leaved heath and sphagnum.

- On **Crompton**, 4,000 trees have been planted covering an area of 2 hectares and nearly 4,000 sphagnum plugs which will hold water back on the moor and help reduce flooding.
- On **Holcombe Moor**, local communities, upland farmers, environmental charities and universities are working together on innovative methods of peatland restoration. 3,500 bunds have been constructed, rewetting the deep peat plateau and creating favourable conditions to plant over 500,000 sphagnum plants. Benefits including increasing carbon and water storage.

3.1.8. Grasslands and farmland

Overview

Grasslands and farmland, including pasture for livestock and croplands, cover almost 30% of the total land in the city-region. The vast majority of this land has been altered, or modified, for other uses and could support more wildlife. Historically our agricultural land has been largely for livestock rearing and arable uses. Livestock farming still dominates the northern and eastern edges of Greater Manchester and maintains large areas of more pasture and upland acid grassland. Arable areas and croplands are largely found along the western edges of the city-region.

There are now very few remaining species-rich semi-natural grasslands (such as neutral grasslands and marshy grassland) in Greater Manchester. Species rich grasslands[30] have been less altered through reseeding, application of fertiliser or drainage and tend to have more flowers and wildlife. Those that do remain are often restricted to nature reserves, designated sites, and are found in areas like road verges, recreational sites, churchyards, and urban brownfield sites, often forming mosaics with other habitats. Despite this, those species-rich grasslands that do remain, such as former flood meadows along the Mersey, still support rare species such as orchids, wildflowers and fungi.

State

Our semi-natural grassland habitats and lowland heaths are considered some of the most threatened habitats in Greater Manchester. Despite their increasing scarcity, these remaining semi-natural grasslands are of high ecological value, hosting a variety of plant and animal species. They are often highly fragmented, making it difficult for species to move between them. Pressures from urbanisation, land-use or land management change, can also threaten these remaining habitats.

Most of our agricultural grasslands have been modified for livestock farming or crop production due to national policy and financial incentives over the last 70 years. As a result, these spaces have the potential to support more wildlife than they currently do. Greater Manchester is also known to be a historically 'cold spot' for the uptake of agricultural environment grant schemes – which pay farmers for wildlife-friendly actions. Greater uptake of these schemes could help reward farmers for more wildlife-friendly food-production.

Successes

- The **South Pennines Grasslands Project**, covering Greater Manchester and Lancashire, created 50ha of new species-rich grassland and brought 200ha into positive management.
- At the **Roch Valley**, Rochdale Council and Groundwork Greater Manchester have established 8 ha of new lowland hay meadows and new native hedgerows.
- Our Local Authorities are increasingly championing '**No Mow May'**, leaving more areas of public grasslands as urban meadows. Rochdale has created ten annual wildflower verges to attract bees. Trafford Council has introduced better habitats for insects and pollinators by creating wildlife corridors, meadows and beds in seven parks. Stockport Council has introduced differential mowing in several urban sites to increase areas for nature.

3.2. Pressures on nature

Across the city-region there are several major pressures on our natural environment.

3.2.1 Urbanisation

Land in Greater Manchester is limited and is under increasing demand to meet the variety of needs of those that live and work here. These include: to provide new affordable homes and commercial space, transport and utilities, to support energy generation, for food growing and recreation. If these activities are not carefully planned and designed with nature at their heart, they will act to further restrict space for nature. Without careful planning and decision making our remaining natural spaces will progressively become smaller and more isolated, preventing nature from adapting to changes in our climate. Making space for nature alongside other uses of our land is critical to reducing the pressure on wildlife.

3.2.2. Pollution and litter

Pollution from urban areas and agricultural land, including runoff from roads and other forms of contamination such as micro and macro plastics and phosphates, is a key problem for our water quality. An extensive network of combined sewer overflows also impacts our water quality. The 793 overflows in the city-region spilt an estimated 21,391 times in 2022. Poor water quality in turn impacts aquatic wildlife and can affect public health. Providing more space for water, through features like raingardens, can help capture and filter polluted water. Greater Manchester also has a significant legacy of land contamination and has large areas of land used as waste tips and issues around littering in our green spaces. Air and light pollution also have an adverse effect on sensitive wildlife, particularly nocturnal wildlife, such as bats and badgers.

3.2.3. Agricultural intensification

Food production is a key part of rural identity. As stewards of more than 30% of Greater Manchester's land, the agricultural sector can have a significant influence over nature recovery across the city region. Agricultural policies, subsidies and incentives, as well as low profit margins, have encouraged the intensification of agriculture, reducing space for wildlife across many of our remaining agricultural areas. Changes to these policies and the introduction of new incentives are providing new opportunities for farmers to further enhance their land for nature.

3.2.4. Climate change

Rising temperatures will impact sensitive habitats and increase the vulnerability of species, whilst more unpredictable weather and increased wildfire risk may force wildlife to move. Our upland species, adapted to cool conditions, are particularly at risk[31]. Climate change may also reduce the ability of our natural environment to provide us with benefits such as carbon storage - by reducing the area and sustainability of peat-forming bog systems. Across Greater Manchester, increased drought could also impact calcareous grasslands, especially on thin soils and may result in rivers, streams and ponds becoming more seasonal and at risk of drying up. With changing temperatures, we will also see the increasing arrival of new species.

3.2.5. Diseases and high-impact invasive species

High-impact invasive species, such as himalayan balsam, japanese knotweed and giant hogweed, and disease, such as ash dieback, are found across Greater Manchester[32] and impact upon the quality of our remaining habitats and their ability to support wildlife.

4. Vision and targets: Where do we need to get to?

Despite some progress over past decades, when looked at as a network we know that our best remaining spaces for nature are now often highly isolated and fragmented. This means that wildlife currently struggles to move between these sites, as there are often large distances between them. Many sites are also small and with habitat loss the area remaining is not enough to reverse the decline of local species. To enable nature to recover our remaining spaces for nature need to be not only bigger but crucially more joined up, allowing wildlife to move between them.

Given the continued pressures facing nature, we need to plan proactively to ensure that the city-region has resilient spaces for wildlife and people to thrive. This will help nature to bounce back and at the same time providing spaces that improve our health and well-being, reduce flood risk, improve water quality and better adapt the city-region to climate change. One of the best ways we can do this is by not just expanding those areas we have for nature but also by creating more connections between these often isolated and fragmented sites. As Greater Manchester grows, we can also grow a better network for nature, in and around our homes, offices and businesses.

The Lawton Review

This approach echoes that set out in the 2010 Lawton Review, called 'Making Space for Nature'[33]. The Lawton Review concluded that England's wildlife sites, despite their diversity, did not comprise a coherent and resilient ecological network, let alone one capable of coping with the challenge of climate change and other pressures. To address this, the Lawton Review called for the creation of a healthy ecological network operating across the landscape as a whole, not in isolated sites. To do this, Lawton says, we need to make our network of sites bigger, better and more joined up.

This means:

- Protecting and enhancing what we have, with better management
- Increasing the size of wildlife sites
- Enhancing connection by creating new wildlife corridors or stepping stones
- Creating new sites
- Reducing pressure on wildlife by improving the wider environment

The recommendations of the Lawton Review are now being taken forward across the UK, and elsewhere in the world. It is integral to the Environment Act and has shaped current national policy government ambitions for a national nature recovery network, which this strategy will form part of.

4.1. Vision

To halt, and in time, reverse local biodiversity loss and to help nature recover, we need everyone to work together and play their part. Nature needs space to be able to recover – this means enhancing and protecting our best nature rich sites and creating and restoring sites where there is opportunity. By reconnecting these sites, we can all create a network for nature and, at the same time, green spaces and recreational routes for people to enjoy.

Our collective vision for nature recovery in Greater Manchester is to work together to deliver a resilient network for nature across the city-region, connecting and enhancing wild spaces so that people and nature can thrive.

What is a nature recovery network?

Nature recovery is about enhancing and protecting our best nature rich sites and creating and restoring sites where there is opportunity. Across the city-region many of our best remaining sites

for nature are fragmented and isolated. By connecting these sites, we can all work towards corridors for nature and new green recreational routes for people to enjoy – a Nature Network.

4.2. Aims

This vision can only be achieved by working together across our city-region, with communities, developers, local authorities, businesses, charities and institutions all playing a part. To deliver on this vision we need Greater Manchester to be a place where we are all:

- **Enhance and protect:** Safeguarding, enhancing and restoring wildlife-rich spaces
- **Create and connect:** Creating more wildlife-rich resilient spaces, where they will expand and connect spaces for wildlife and people
- **Build resilience:** Managing and reducing pressures on our environment and waterways, and maximising nature's role in adapting the city-region to climate change
- **Act together:** Working together to take action for nature and embed space for nature and people to thrive across all our communities
- **Improve access:** Improving local access to nature and ensure there are more opportunities to enjoy nature, in those areas which need it the most
- **Engage and value:** Improving engagement with nature and better understanding of its value in our lives

4.3. Targets

To track progress towards our vision and aims, we need to set clear and monitorable targets.

Working with partners we have selected some headline targets for our key aims, to drive forward nature recovery over the decade and be monitored regularly. Action beyond these targets is crucial but these targets will be used to focus action and report regularly and accurately on progress.

By 2035:

Protect:

To increase the amount of land designated for nature from 11% to 15% of the city-region

Enhance:

To bring 50% of our Local Wildlife Sites into active management for nature conservation

Create:

To work towards the restoration and creation of 1,800ha of wildlife-rich land

To expand our tree canopy cover from 16.5% to 18.5%

Connect:

To target the delivery of new wildlife-rich land and tree planting within the Nature Network

Improve access:

To increase the number of residents living within 15mins of a decent green space

These are the headline targets for the strategy – a list of all the targets and monitoring framework for the strategy will be published in 2025.

5. Nature Network: Where is best for nature?

5.1. A spatial strategy for nature's recovery

To drive nature recovery, we need to set out the best places to act for nature across Greater Manchester. A key purpose of this 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 and resource to be targeted where it will have greatest impact and to encourage more coordination in habitat creation and improvement.

This section outlines a long-term spatial vision for nature's recovery, showing those areas already important for nature and areas where there are opportunities to work towards a network for nature across Greater Manchester – one that connects with areas beyond our boundaries as part of National Nature Recovery Network. Working towards a national network for nature is central to the government's goal for improving nature by joining up our remaining natural spaces across England [as outlined in the Environment Act] and achieving the biodiversity duty.

The Nature Network is based on established evidence and thinking on nature recovery in the UK, in particular the Lawton principles of "bigger, better, more and joined". This involves recognising our best remaining wildlife sites as the building blocks for our Nature Network and taking action to:

1. Improve their quality by 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.

The Nature Network aims to have a positive influence on the growth and development of the city-region, targeting efforts by charities and partnership and helping planners and developers to understand and contribute towards nature recovery, alongside the delivery of new neighbourhoods, offices and commercial spaces.

Action outside of this Nature Network is just as crucially important to reduce pressures on nature by creating a more wildlife-friendly city region. Alongside the Nature Network action can take place anywhere across the city region to help nature recovery. There are many opportunities to do this in every community and everyone can play a part in delivering action.

You can read more about how our Nature Network was developed in appendix 2.

5.2. The Greater Manchester Nature Network

5.2.1. What makes up the Greater Manchester Nature Network?

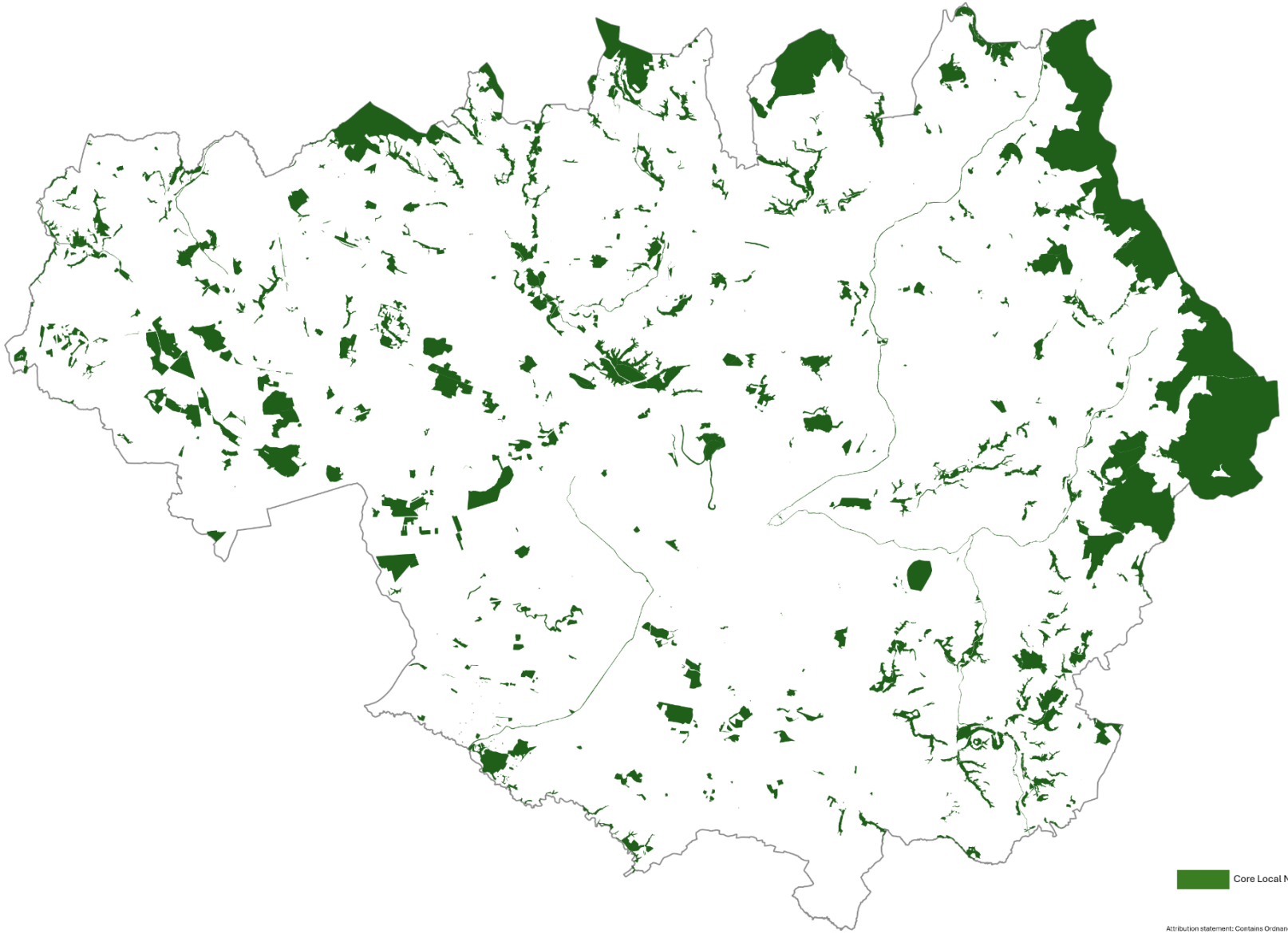
To put these principles into practice across Greater Manchester, our Nature Network is made up of our core local nature sites and opportunity areas for nature recovery, which are described in more detail below[34]. Our Nature Network shows our best areas to boost ecological connectivity – where action for nature will have the biggest impact and where funding for nature recovery should be concentrated. Targeting action within the Nature Network can help build resilient spaces for wildlife and deliver new better connected green spaces for people.

Core local nature sites:

What are they? 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. For Greater Manchester they include nationally designated sites for their value to nature, including: Sites of Special Scientific Interest (SSSIs); Special Protected Areas (SPAs), Special Areas of Conservation (SACs), National Nature Reserves (NNRS), Local Nature Reserves (LNRs), locally designated Sites of Biological Importance (SBIs), Local Wildlife Sites (LWSs) and irreplaceable habitats[20].

What we need to do? These sites cover 11% of Greater Manchester and are fragmented, poorly connected and often not in as good condition as they could be. We need to improve their condition through better management. At the same time, we need to identify opportunities to expand and better connect these sites.

GM Core local nature sites



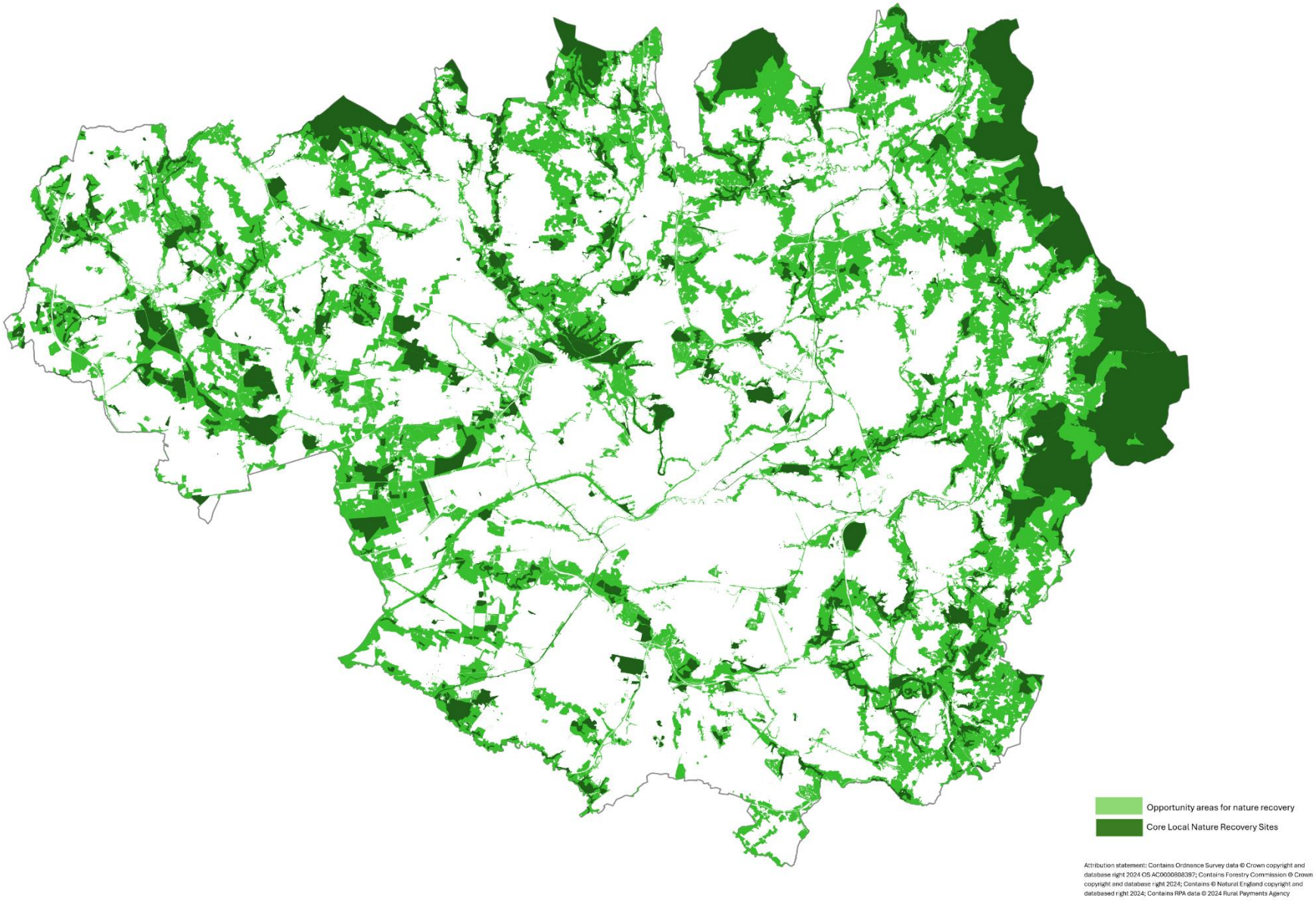
Nature Recovery Opportunity Areas:

What are they? These are areas where 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 (our "areas which could become of particular importance for biodiversity"). These are our opportunity areas for nature recovery, where more ambitious action for nature should be prioritised and are where we can have the greatest impact by planning, coordinating and focusing efforts and resources. Our opportunity areas set out specific mapped locations that are potentially suitable for carrying out different habitat actions to help achieve the priorities set out in this strategy. Only certain actions have been mapped within the Nature Network (see appendix 2), as many actions are not geographically specific and are possible and beneficial across much of the city region.

What we need to do? These are areas where the creation and restoration of habitat could have the greatest impact on nature's recovery. They are spaces that are often used and managed in a range of different ways and for different purposes (e.g. for food production or recreation). They are also strategically important for the Nature Network, and we need to deliver for nature alongside these other land uses. These areas are not designated or protected, nor are they barriers to development. 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. Some of these opportunity areas might eventually, with landowner permission and if conditions are met, become core local nature recovery areas.

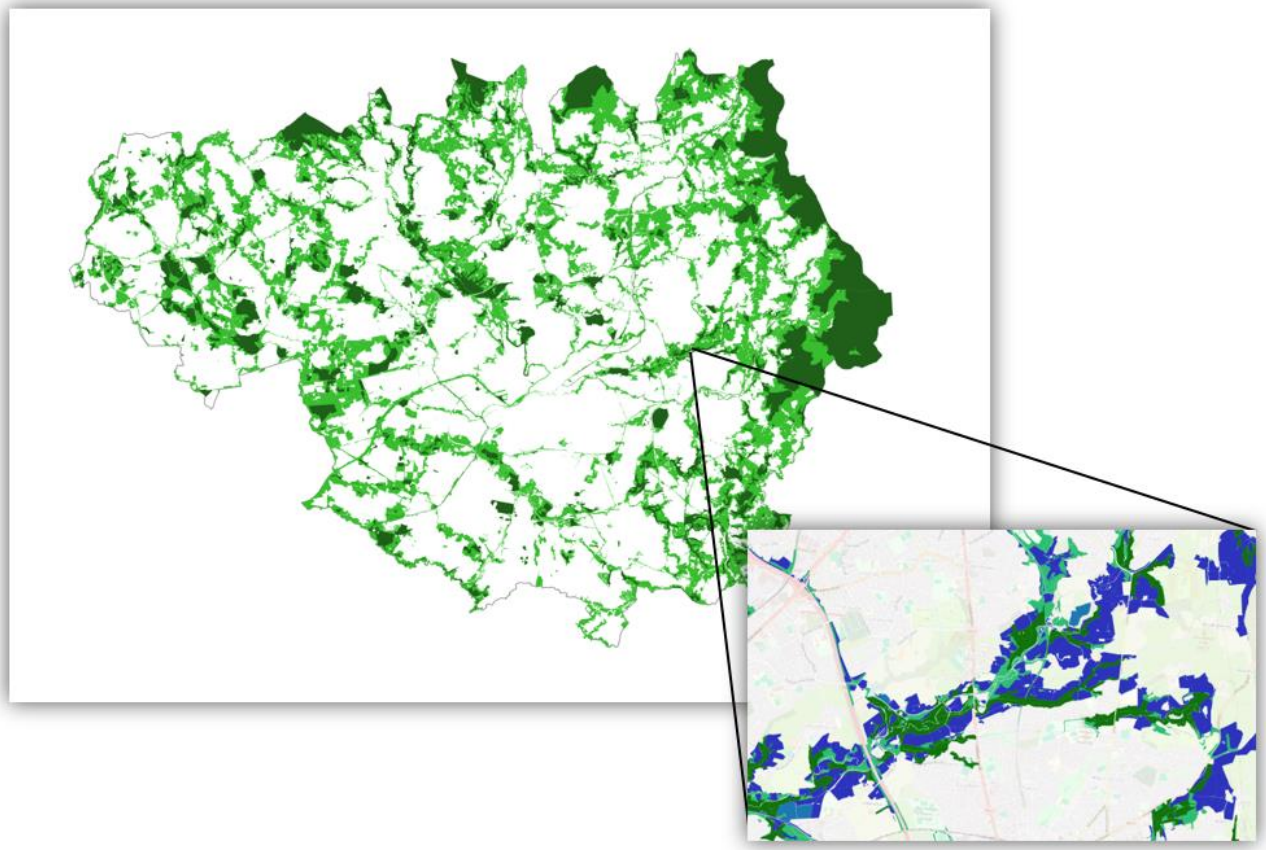
For nature to recover, action is also still hugely important outside of the Nature Network, to make our wider urban and rural landscapes more wildlife friendly and to boost access to nature across the city-region.

GM Nature Recovery Opportunity Areas



Across the opportunity areas different locations have been mapped that are potentially suitable for carrying out different habitat actions to help achieve the priorities set out in this strategy

The image below shows an example of some of detail available within the nature recovery opportunity maps for different mapped actions, using some of our woodland actions as an example. Each of the different colours shown on image denote a different mapped action, such as action to ‘safeguard, enhance and celebrate ancient, long-established and designated woodlands, veteran and notable trees’ or locations to ‘target native woodland, hedgerow, and scrub creation, where it will connect existing woodlands across urban and rural landscapes’.



5.2.2. Taking action within the Nature Network

To help guide deliver of the Nature Network we have identified and mapped where action to enhance, restore or create different types of habitats (for example woodlands, grasslands, moorlands, waterbodies and wetlands), might be possible and most beneficial.

Understanding and using our opportunity areas

- Our opportunity areas set out mapped locations that are potentially suitable for carrying out different habitat actions to help achieve the priorities set out in this strategy. For example, areas have been identified for woodland habitat creation and species-rich grassland habitat enhancement. Targeting action in this way is crucial for effort and resources to be focused where they will have the greatest impact and to encourage more coordinated action.
- When using our opportunity areas, it is still important to follow our overarching principles of habitat enhancement, creation and restoration (set out in section 6.1).
- As space is limited in the city-region, many of our opportunity areas have the potential for the delivery of actions for multiple habitat types. This means that opportunity areas for the different habitats (i.e. woodlands, wetlands and grasslands) often overlap. In locations that are good for multiple habitats, follow our habitat principles (section 6.1); undertake local site assessment; involve local ecological experts, communities and landowners; consider patchworks (or mosaics) of different habitats rather than pursuing one to the detriment of another.
- For nature to recover, action is also still hugely important outside of the Nature Network (see section 5.3), to make our wider urban and rural landscapes more wildlife friendly. Only certain actions have been mapped within the Nature Network – this is because many actions are not geographically specific, being possible and just as beneficial across much of the city region[35].
- Areas mapped for action within the Nature Network, including both the opportunity areas and the core local nature sites, are particularly suitable for the delivery of offsite biodiversity net gain and are classed as strategically significant in terms of the Defra Biodiversity Metric. For the purposes of the Statutory Guidance on Local Nature Recovery Strategies they form the Local Habitat Map for the Greater Manchester Local Nature Recovery Strategy.

5.2.3. Permissions, consultation and licences

- The opportunity areas mapped within the Nature Network do not confer permission to create or restore habitat without following appropriate existing decision-making frameworks, consultation, permissions, permits or licenses, or to in any way circumvent standard pre-existing procedures or good practice around habitat creation, restoration or enhancement.
- The opportunity areas mapped within the Nature Network are not binding for the landowner or land manager. They do not require the owners and managers of the land identified to make any changes.
- The Nature Network is not a barrier to development. The network highlights those areas where we all need to be more ambitious for nature and take steps to connect spaces for nature to deliver resilience for our wildlife. 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.

5.2.4. Planning status

The Environment Act sets out that local planning authorities and decision-makers must have regard to this LNRS in their policies, including those in their local plans. The Levelling up and Regeneration Act requires all relevant plan-makers and tiers of planning to take account of LNRS. All of this is designed to support development plans and provide closer alignment with the planning system and environmental outcomes.

Opportunity areas are not designated or protected, nor are they barriers to development. 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.

Areas mapped for action within the Nature Network are key target areas for the delivery of offsite biodiversity net gain sites across Greater Manchester. They are classed as strategically significant in terms of the Defra Biodiversity Metric.

5.3. Beyond the Nature Network

The Nature Network indicates where habitat enhancement, creation or restoration could be particularly beneficial or possible. However, that does not mean that taking this action should not be pursued in many other locations across Greater Manchester.

Action can take place anywhere across the city region to help realise the priorities in this strategy and help work towards nature recovery. There are many opportunities to do this in every community.

Everyone can play a part in delivering action whether it is via the creation of new nature reserves or pocket parks, wildlife-friendly gardening or the development of an area.

The wider environment:

What is it? These are areas that are not mapped as part of the Nature Network. However, this does not mean action there is not just as important. In the areas that are not mapped, action is still crucial for local people and wildlife and can make a huge contribution towards delivering a more sustainable and wildlife-friendly city region.

What we need to do? In the wider environment, we can still take action by making these areas more wildlife friendly and nature rich. Even small areas like gardens and streets can be made more wildlife friendly through planting street trees, creating ponds and or new community growing spaces.

6. Priorities and Actions: What do we need to do?

The priorities set out in this section are the long-term end results of the strategy that we all need to work towards. Delivering on these priorities will help us to achieve the overarching vision and aims for local nature recovery.

Each priority is an outcome (i.e. what is to be achieved). Each priority is accompanied by several practical actions or measures – these are the activities that if taken would make a positive contribution towards delivering on this priority. Each priority may have several practical actions linked to it – working towards one or a number of these actions can help achieve a priority.

To help cover the different types of places and spaces across Greater Manchester, we have divided priorities by broad habitat types and priority species. We have also included priorities for the urban buildings and urban green spaces which make up nearly 50% of the city region[36].

Our habitat priorities will be of huge benefit to many species, as well as delivering wider social and economic benefits. Some species, or groups of species, are particularly at risk locally and need bespoke action beyond wider habitat priorities set out in this strategy. It is these particularly vulnerable local species that require focused attention and have been selected as priority species for this Local Nature Recovery Strategy in section 6.2.

For some priorities, we have included further technical details in appendix 7 that may be more informative for some users of this strategy.

6.1. Habitat priorities and actions

Principles for habitat enhancement, restoration and creation

Across all our habitat priorities there are several common principles that should be followed. These principles apply to all priorities and actions.

Right habitat in the right place	Ensure that habitat restoration and creation proposals occupy suitable sites and are not to the detriment of existing or other quality habitats, by following existing principles (example: 'right tree, right place, right reason'). Ultimately, this requires using this strategy as a starting point and then undertaking site-specific assessment for what works best on the land.
Follow best practice and standards	Ensure that you use and comply with legal requirements, standards, guidance, decision frameworks and best practice, as well as any permits and licences when creating and restoring habitats (example: 'Decision Support Framework for Peatland Protection').
Think long term	Plan proactively for long term habitat management, maintenance and funding.
Aim high	When creating or restoring habitats work towards achieving good condition, well-functioning habitats that support a greater abundance of species.
Build resilience	Work proactively to build resilience against climate change, future pests and diseases.
Maximise multiple benefits	Deliver wider benefits wherever possible, such as improving health and wellbeing, storing carbon or reducing flood risk.
Involve residents and communities	Work collaboratively from the outset with local residents, communities, partnerships and business towards nature recovery.
Improve access	Support and work toward better access for residents and communities, wherever possible and appropriate.
Monitor success	Monitoring or tracking progress is crucial to understand success of efforts, this can be aided by involving communities and residents.
Support landowners and manager	Support, and work in partnership with, landowner and managers, for example on the uptake of agricultural environment schemes.

6.1.1. Urban green spaces and buildings

Opportunity

There are huge opportunities to make the urban areas where we live and work greener and more wildlife friendly. Creating space for nature has knock-on benefits in our everyday lives, improving our health and wellbeing, as well as helping to adapt the city region to climate change. Our urban green spaces already provide vital refuges for wildlife and spaces for people to relax. These spaces have significant potential to become more nature-rich and at the same time better adapted to climate change.

Over recent years we have seen some inspiring examples of the greening of disused spaces for nature and people, such as Castlefield Viaduct in Manchester, Elizabeth Park in Bolton and Jubilee Park in Oldham, helping us to better meet national green space standards. There are many more unused and unloved spaces that could be converted to new community gardens, allotments or pocket parks through community-led action, creating healthier urban spaces for our future. Installing new green spaces in our streets and public spaces will help tackle inequalities in access to green space and better adapt the city-region to climate change. As we create new infrastructure and regenerate different parts of the city-region there is potential at the same time to better connect our existing green spaces using green, resilient, active travel routes.

Actions at any scale, whether it's a street tree, swift box, community garden or a new pocket park, can make a difference for both nature and local people. Supporting and involving communities is vital to ensure the success of any newly enhanced or created green spaces.

Priorities

- More schools, hospitals, public, commercial and community buildings have nature-rich accessible spaces, better for wildlife and people
- Better parks and open spaces, enhanced and managed to be nature-rich and climate-adapted, with a range of habitats for wildlife supported by local communities
- More streets, roads, pedestrian and cycle routes are greener and tree-lined, acting as corridors for nature and adapted to climate change
- Town and city regeneration and development driving new and enhanced nature-rich green space creation, building more biodiverse, accessible and climate-adapted places
- More nature-friendly and climate-adapted gardens, balconies, yards and driveways
- More community-led creation of new nature-rich green spaces and increased opportunities for local food growing

These priorities cover a range of urban habitats and land including parks, gardens, playing fields and spaces, sports groups, urban trees, allotments, incidental urban green spaces like road verges and other urban green spaces including cemeteries, golf courses and civic spaces, that can all form

valuable space for wildlife across the city region. Many of rivers, canals and waterbodies pass through urban areas, these are covered by separate priorities on rivers, waterbodies and canals.

Wider benefits

These priorities will have benefits beyond just helping nature recover including:

- Improving our health and wellbeing
- More opportunities for social interaction and community building
- Reducing health inequalities and creating healthy resilient places to live and work
- Encouraging more visitors and supporting businesses
- Better managing extreme weather events including heavier intense rainfall
- Increasing property values and providing quality places
- Reducing air pollution

Species supported

These priorities will benefit many urban species including:

- Hedgehog
- Peregrine falcon
- Wild Cherry
- Robin
- Common Pipistrelle Bat
- Starling
- Blue Tit
- Fox

Actions

Priority	***Practical actions***
More schools, hospitals, public, commercial and community buildings have nature-rich accessible spaces, better for wildlife and people	• Enhance and increase the diversity of existing green spaces and create dedicated wilder set-aside areas for nature. • Create more nature-friendly multiple-use spaces, such as wellbeing gardens, community grow spaces or orchards, that provide habitats for urban species and benefit people. • Support species by installing homes for wildlife and reducing barriers to species movements across and between green spaces. • Create or allow more space for water and install sustainable drainage, providing water for wildlife and adaptation to climate change. • Support and involve local communities in the creation and maintenance of spaces for nature.
Better parks and open spaces, enhanced and managed to be nature-rich and climate-adapted, with a range of habitats for wildlife supported by local communities	• Enhance and increase the diversity of existing green spaces and create dedicated wilder set-aside areas for nature. • Create and maintain longer grasses and wildflower strips. • Support species by installing homes for wildlife and reducing barriers to species movements across and between green spaces. • Create or allow more space for water and install sustainable drainage, providing water for wildlife and adaptation to climate change. • Create more nature-friendly multi-use spaces, with improved access for all, such as pocket parks and community grow spaces that benefit urban species and people. • Support and involve local communities in the creation and maintenance of spaces for nature and improve public awareness of the benefits of nature recovery.
More streets, roads, pedestrian and cycle routes are greener and tree-lined, acting as corridors for nature and climate-adapted	• Enhance and increase the diversity of streets and highways verges, with longer grasses, native wildflower strips and meadows and more dedicated spaces for nature. • Create greener spaces, and more connected habitats, along existing and new streets, highways and cycleways (our Bee Network). • Create or allow more space for water and install sustainable drainage along our existing and new streets, highways and cycle paths (our Bee Network). • Reduce key barriers to wildlife movement across our major highways • Support and encourage more community involvement and more community adoption of unused green spaces

Town and city regeneration and development driving new and enhanced nature-rich greenspace creation, building more biodiverse, accessible and climate-adapted places	• Safeguard and enhance important local habitats and green spaces. • Restore, expand and connect existing local habitats and green spaces. • Create dedicated new multifunctional and inclusive green spaces as part of new development and regeneration, to meet the national Urban Greening Factors of 0.3 on commercial and 0.4 on residential development or the local authority set Urban Greening Factor[37]. • Support species by installing homes for wildlife on buildings and reducing barriers to species movements across and between green spaces. • Create dedicated space for water and wetter habitats by installing sustainable drainage and providing sufficient space for river corridors. • Support and involve communities in the design and creation of new or regenerated green spaces.
More nature-friendly and climate-adapted gardens, balconies, yards and driveways	• Plant gardens, yards and balconies that support local wildlife, using pollinator-friendly planting or planting size appropriate shrubs or trees • Support species by installing homes for wildlife and reduce barriers to species movements across and between gardens. • Manage spaces in a wildlife-friendly way by leaving areas of longer grass for wildlife in gardens or reduce mowing, reducing use of pesticides and herbicides. • Create more space for water in gardens and encourage more sustainable water use. • Boost awareness of the need for wildlife friendly gardening.
More community-led creation of new nature-rich green spaces and increased opportunities for local food growing	• Encourage or enable the creation of new community-led green spaces in our least green areas. • Enable more opportunities for community-led action and community adoption of local green spaces. • Support more opportunities for local food growing and the ‘right to grow’. • Boost awareness and skills in nature recovery and connection to nature.

6.1.2. Woodlands, trees, scrub and hedgerows

Opportunities

Woodlands, trees and hedgerows across Greater Manchester could better support biodiversity. There are opportunities to enhance and better manage existing woodlands, orchards, hedgerows, veteran and ancient trees, so they are more resilient and in better condition. Well-managed, healthier, woodlands can deliver more benefits to people and better deal with pests, disease, invasive species and climate change.

The remaining woodlands across Greater Manchester could also be better connected. Many existing woodlands and trees are fragmented; reconnecting these by creating corridors or stepping stone of new woodlands, trees, hedgerows or scrub, between them, would benefit the movement of woodland wildlife and at the same time create new green routes for people. More trees and woodlands along our river valleys are a particularly crucial way we could enhance connectivity for woodland species. Healthy well-managed and connected hedgerows can also play a key role as wildlife corridors. In rural areas, more trees across farmed land, whether through agroforestry, low density in-field planting or more small woodlands, could help make farmed areas better for woodland species, and at the same time improve animal welfare and support climate change mitigation and adaptation.

Our existing woodlands could also be more accessible, with better paths, signs and less high-impact invasive species, enabling more people to engage with nature nearby to where they live. Where more street trees can be introduced these can play a significant role in greening some of our dense urban neighbourhoods and at the same time improving air quality and regulating climate change by helping to better manage rainwater[38]. Community orchards can provide great habitats for local wildlife as well as multiuse, accessible, communal spaces for growing local food.

Priorities

- More existing woodlands, hedgerows, trees and scrub are safeguarded, restored and resilient
- Bigger and better-connected woodlands, trees and scrub, integrated with patchworks of other habitats
- New urban street trees, urban community orchards and woodlands, improving access to nature and climate adaptation
- More native hedgerows created and maintained, linking together spaces for wildlife
- More varied trees, scrub, parkland and woodland habitats incorporated into our farmlands and more productive woodlands delivering nature recovery.

These priorities cover trees, woodlands and forests, hedgerows, scrub and parkland, wood pasture and agroforestry.

Wider benefits

Our trees, woodlands, hedgerow and scrub play a particularly critical role in not just providing habitat, but also:

- Storing carbon

- Managing rainwater
- Regulating temperatures
- Reducing air and water pollution
- Improving our health and wellbeing
- Providing local sources of food and timber
- Improving livestock welfare by providing shelter and shade

Species supported

Delivering on these priorities will benefit many woodland species including:

- Bluebell
- Badger
- Tawny Owl
- Woodpecker
- Wood anemone
- Hawthorn
- Oak
- Birch
- Fly agaric

Actions

Priority	Actions
More existing woodlands, hedgerows, trees and scrub are safeguarded, restored and resilient	• Safeguard, enhance and celebrate ancient, long-established and designated woodlands, veteran and notable trees. • Enhance existing woodlands, scrub, and hedgerows and diversify, where appropriate, to increase resilience to pests, disease and climate change. • Promote better understanding of the value of woodland, scrub, trees, hedgerow, wood pasture and agroforestry habitats. • Encourage wildlife-friendly recreational use of woodlands.
Bigger and better-connected woodlands, trees and scrub, integrated with patchworks of other habitats	• Target native woodland and scrub creation where it will connect existing woodlands and scrub. • Expand existing woodland, scrub and other woodland fringe habitats. • Encourage the planting of trees, woodland and scrub where they will play a role in natural flood management, control of pollution or reduce soil erosion. • Ensure new woodlands are well managed to optimise biodiversity, accessibility and support a variety of locally appropriate woodland types, mixes and scrub. • Involve local communities in new tree planting, woodland and scrub creation.
New urban street trees, urban community orchards and woodlands, improving access to nature and adaptation to climate change	• Target urban tree and woodland planting where it will increase connectivity, climate adaptation and accessibility. • Create new and enhance old or traditional orchards and urban community woodlands, and work to ensure better access for communities. • Improve woodland path networks to diversify access for all users. • Support and engage diverse local groups with local woodlands, orchards and trees and encourage positive recreational use of woodlands.
More native hedgerows and scrub created and maintained, linking together spaces for wildlife	• Safeguard, manage, and restore the species diversity and structure of existing hedgerows. • Create more native hedgerows, particularly, where they act as corridors between existing trees and woodlands, or where they could intercept diffuse pollution or reduce soil erosion. • Encourage more mature trees in hedgerows

More varied trees, parkland, scrub and woodland habitats incorporated into our farmlands and more productive woodlands delivering nature recovery	• Enhance productive woodlands, parklands, scrub and orchards to maximise benefits to biodiversity alongside the production of timber, food and environmental benefits, such as flood risk reduction. • Encourage wildlife-friendly farm diversification opportunities which will enable more woodland, tree and hedgerow planting as well as agroforestry.

6.1.3. Rivers, canals and waterbodies

Opportunities

Improving our extensive network of rivers, canals, brooks, streams, reservoirs and ponds could help nature recover across the city-region. Our waterways and waterbodies are our remaining key nature corridors, enhancing and creating habitats along these corridors will play a crucial role in developing a local nature network. There are a range of opportunities to improve our rivers and waterbodies and better integrate them into our urban areas, to reduce flood risk and increase their value as community assets, but the scale of the challenge is significant.

Our waterbodies have been heavily modified to accommodate urban infrastructure, there are multiple barriers across them, many are also buried under roads or buildings. Uncovering or opening-up our rivers, naturalising them where feasible and removing high impact invasives would significantly help the movement of aquatic species, giving our rivers space to cope with climate change and at the same time deliver social benefits. The opening up of access to the River Medlock at Mayfield Park and the River Mersey at Stockport Interchange has provided new visitor attractions and spaces for leisure and recreation.

Improving our water quality is one of the biggest opportunities for nature recovery but also the most challenging. Multiple significant issues impact our water quality, including microplastics and litter, diffuse agricultural, urban and industrial pollution, as well as pollution from the many combined sewer overflows and landfills. Creating more spaces for water and better managing our rainwater, using natural flood management and sustainable drainage, can also play a big role in improving the quality of water entering our waterways and at the same time reducing the risk of flooding of homes and businesses.

Priorities

- More accessible and visible rivers, canals and waterbodies, with fewer barriers to species movement
- Cleaner, more natural and resilient rivers and waterbodies, that are well protected, maintained and biodiverse
- Increased habitat connectivity along our river corridors, canals and waterbodies
- More space for water and natural flood management in our communities and across catchments
- Cleaner canals, restored for nature and people

These priorities cover a range of different water bodies including rivers, streams, brooks, canals, lakes and reservoirs.

Wider benefits

Our rivers and waterbodies play a significant role in:

- Managing our rainwater and flood risk
- Opportunities for leisure and recreation
- Improving health and wellbeing
- Regulating temperatures
- Supplying our water

Species supported

Delivering on these priorities will benefit many aquatic and waterside species including:

- Otter
- Kingfisher
- Daubenton's bat
- Grey wagtail
- Marsh marigold
- Common frog
- Great crested grebe
- Hawker dragonflies
- Yellow flag iris
- Salmon

Actions

Priority	Practical actions
More accessible and visible rivers, canals, and waterbodies, with fewer barriers to species movement	• Unblock, improve, and extend rights of way along waterbodies and improve connections between these networks and our wider ecological corridors and recreational routes. • Expansion, creation or restoration of a variety of waterside habitats, including woodlands, wetlands and grasslands, where it will better connect up existing habitats along our rivers, supporting species movement. • Improve mobility for aquatic creatures by removing barriers, daylighting buried or covered waterbodies or installing by-pass structures, where feasible. • Celebrate rivers, canals, and waterbodies as part of the local identity and increase understanding of their value and management.

Cleaner, more natural and resilient rivers and waterbodies, that are well protected, maintained and biodiverse	• Make water channels more natural and complex, re-meander channels and reconnect to floodplains where feasible. • Enhance existing habitats within our waterbodies and adjacent grassland, wetland and woodland habitats to increase species richness. • Restore more natural riverbanks, in appropriate locations, and reduce invasive species. • Reduce point source pollution by identifying and tackling critical locations. • Reduce urban diffuse pollution using sustainable drainage and tackling litter and plastic pollution. • Encourage agricultural, industrial and land management practices that deliver water quality improvements.
Increased habitat connectivity along our river corridors, canals and waterbodies	• Expansion, creation or restoration of a variety of waterside habitats, including woodlands, wetlands and meadows, where they will better connect existing habitats. • Improve mobility for aquatic creatures by removing barriers, daylighting buried or covered waterbodies or installing by-pass structures, where feasible.
More space for water and natural flood management in our communities and across catchments	• Install more sustainable drainage schemes, natural flood management schemes and permeable surfaces, in areas that will benefit nature and are most at risk of surface water flooding. • Increase awareness and understanding of sustainable drainage and natural flood management schemes.
Cleaner canals, restored for nature and people	• Restoration and reconnection of habitats alongside canals, including targeted woodland creation and tree planting. • Softening manmade canal banks using natural materials and native plants. • Reduce litter and pollution in canals. • Encourage responsible recreational use of canals and maintain a good balance between more natural and diverse vegetation and keeping canals clear for recreation.

6.1.4. Lowland mosslands and wetlands

Opportunities

Lowland mosslands and wetlands form a unique and diverse landscape of water, fen, wet grassland, wet woodland and lowland raised bog and other wetland habitats.

Much of our original lowland raised bog habitat has been converted to agriculture or lost to peat extraction or development. In some post-industrial sites we have regained wetlands or flashes and wet woodlands. Working to restore more degraded areas of former lowland raised bog fens, reedbeds, bogs, wet woodland and heath, and ponds, where viable, will not only provide new spaces for people to enjoy and habitats for wildlife, but also act to reduce carbon emissions in areas with underlying peat soils and store more water.

As well as restoring lost habitats, we can also work to better connect our remaining habitats, by expanding (or buffering) existing sites, creating stepping stones and new corridors of habitats between them. This will enable the easier movement of species across these landscapes. Alongside habitat creation, there are also crucial opportunities to boost the resilience of these important habitats, by creating where possible more compatible land use surrounding them. Reducing land drainage in these surrounding areas, through the adoption of wetter farming or paludiculture, is particularly important to help maintain water levels. In turn, storing more water in these areas should help reduce flood risk to nearby communities.

Often isolated and hard to reach, our lowland mosslands are thought to be much less visited than our woodlands, rivers and uplands. Enabling more people to visit and enjoy these spaces will help encourage their management and restoration. There are opportunities to improve access to them, with new cycle ways and paths allowing more people to engage with the cultural and natural heritage of these areas.

Priorities

- More lowland bogs, fens and other wetland habitats are restored and better managed for nature, able to store more water and emit less carbon
- Bigger mosslands and wetlands, with more habitat corridors and stepping stones reconnecting and expanding remaining habitats
- More of our historic wetlands and restorable peat are wet
- Reconnect local communities to mosslands and wetlands, and their heritage
- Better quality and better-connected ponds

These priorities cover a range of wetland habitats including lowland raise bog, fen, marsh, swamp, wet woodlands, wet grasslands and ponds.

Wider benefits

- Rainwater storage and flood resilience

- Reduced carbon emission and increased storage of carbon
- Recreation and leisure
- Improved water, soil and air quality

Species supported

Delivering on these priorities will benefit many mossland and wetland species including:

- Sphagnum
- Willow tit
- Lapwing
- Curlew
- Meadowsweet
- Bitten
- Manchester Argus
- Nightjar
- Water vole
- Great crested newt

Actions

Priority	Practical actions
More lowland bogs, fens and other wetland habitats are restored and better managed for nature, able to store more water and emit less carbon	- Enhance and manage existing and remnant areas of lowland raised bog, fens and other wetland habitats over the long term, to improve diversity. - Enhance patchworks of semi-natural habitats surrounding our remaining lowland raised bog, fens and other wetland habitats to improve resilience. - Reintroduce lost species across a range of mossland and wetland communities.
Bigger mosslands and wetlands, with more habitat corridors and stepping stones reconnecting and expanding remaining habitats	- Restore degraded wetland sites and areas of restorable deep peat, particularly where they will connect remaining wetland habitats. - Create more patchworks of wetland habitats and transitional habitats, particularly around remaining and restored lowland raised bog, fens and other wetland habitats. - Maintain and enhance restored sites and new corridors over the long term to maximise benefits for nature, carbon emissions reductions and water management.
More of our historic wetlands and restorable peat are wet	- Identify former wetland habitats and investigate their potential for restoration to contribute to climate resilience and nature recovery. - Reduce land drainage and positively manage the hydrology of land adjacent to lowland raised bog, fens and other sensitive wetland habitats, to increase climate resilience - Encourage the uptake of wetter farming and commercial paludiculture.
Reconnect local communities to mosslands and wetlands, and their heritage	- Enable more well-managed recreational access to mosslands and wetlands. - Increase awareness of the importance and benefits of healthy mosslands and wetlands. - Enhance and extend networks and other access opportunities for walkers, cyclists, horse-riders and other outdoor recreational pursuits, in ways that are compatible with habitat enhancement.
Better quality and better-connected ponds	- Safeguard, enhance and appropriately manage existing ponds and encourage good connectivity to surrounding habitats. - Create a variety of new ponds, in the right places to connect existing ponds.

6.1.5. Grassland, farmland and lowland heath

Opportunities

Grassland covers an estimated 30% of land in the city-region. The vast majority of this grassland has been altered and could support more wildlife through changes in land use and land management practices. Those species-rich grasslands that do remain are predominantly found outside of agricultural land in nature reserves and designated sites, but also in areas like road verges, churchyards, and urban brownfield sites.

To act for nature, we need to safeguard remaining semi-natural grasslands and lowland heaths before they are lost. We can then enhance or restore these habitats so they can support more species, such as lapwing, grasshoppers, barn owls and bees. In rural areas, with the right incentives and support, our farmers can be at the heart of creating healthier soils and more species-rich grasslands and croplands, alongside food production. Healthy populations of pollinators and healthy soils can in turn can support food production. In our urban areas, many of our grasslands are closely mown and there are opportunities to allow areas of longer grass to flower and wilder areas, benefiting bumblebees and other pollinators and providing more food for urban birds such as swifts.

By creating or restoring grasslands, field margins or road verges, where they will connect remaining semi-natural grasslands across river valleys and between different landowners, we can create networks for grassland species alongside where we live and work.

Priorities

- Species-rich and semi-natural grasslands and lowland heath are safeguarded, well-managed and restored
- More species-rich grasslands and lowland heath created, particularly where they will connect existing habitats
- More urban meadows, with native wildflower species and longer grasses
- More dedicated spaces for wildlife integrated into farmland and buildings, alongside food production
- More biodiverse farmland, with healthier soils, better water management and fewer intensively managed areas

These priorities cover a variety of grassland habitat types, as well as croplands, pasture and lowland dry heath.

Wider benefits

- Opportunities for leisure and recreation
- Reduced carbon emission and increased storage of carbon
- Building community interaction through establishing or managing local grassland areas
- Short-term storing of rainwater and managing flood risk
- Wildlife-friendly food production, and healthier soils

Species supported

Delivering on these priorities will benefit many grassland and farmland species including:

- Orchid
- Barn owl
- Lapwing
- Kestrel
- Bumblebees
- Cinnabar (Ragwort)
- Orange-tip (Cuckooflower)
- Grasshopper
- Waxcap fungi

Actions

Priority	Practical actions
Species-rich and semi-natural grasslands and lowland heath are safeguarded, well-managed and restored	- Identify and safeguard remaining notable semi-natural grasslands. - Enhance and appropriately manage remaining semi-natural grasslands and lowland heath, including increasing species richness. - Showcase successful grassland and heath management and encourage awareness of the value of these habitats**.**
More species-rich grasslands and lowland heath created, particularly where they will connect existing habitats	- Creation or restoration of species-rich grasslands and lowland heath, particularly where they will expand or act as stepping stones or corridors. - Ensure appropriate long-term management of newly created grassland to achieve increased species-richness, and lowland heath. - Enhance and manage improved or semi-improved grasslands to boost species richness.
More urban meadows, with native wildflower	- Allow areas of urban grasslands to grow long and flower and increase species diversity through planting or other measures. - Encourage greater understanding and acceptance of long grass and less intensively managed grasslands.

species and longer grasses	
More dedicated spaces for wildlife integrated into farmland and buildings, alongside food production	- Install or enable more accessible homes for birds and bats on and around farms and rural buildings. - Set aside dedicated patches of unmanaged or uncropped areas, along field boundaries, margins, corners or less productive areas, particularly where they will connect. - Create and maintain forage areas and homes for species on farmland, alongside food production. - Grow and maintain multi-species cover crops, and cut later in the year, to provide food and cover for wildlife. - Support and collaborate with farmers, landowners and managers to enhance their land for nature, alongside food production, and involve farmers in targeted species conservation programmes.
More biodiverse farmland, with healthier soils, better water management and fewer intensively managed areas	- Manage grassland and cropland at lower intensity and with low inputs. - Reduce soil erosion, minimise bare ground and encourage soil recovery. - Support switch to diversified plant species for grazing livestock, establish and maintain herbal lays or species-rich hay meadows. - Improve water quality and pollution management on farmland, in farmyards and control livestock access to waterbodies.

6.1.6. Upland moorlands

Opportunities

Our upland moorlands, from the Peak District National Park to the West Pennine Moors, are where many residents across the city-region spend time in nature and hold significant cultural value for local communities and visitors. They are also ecologically significant, forming part of a much larger expansive upland moorland habitats stretching up to the Scottish borders. Our uplands often appear wild and untouched, but they have been subject to drainage and pollution for many decades, heavily managed and used for agriculture and sporting land uses.

As some of our biggest remaining natural spaces, our uplands could play a crucial role in large scale nature recovery. There is potential to enhance and restore more extensive areas of our uplands. Where areas of bare peat still remain, there is potential to work faster and on larger scale to revegetate, rewet and restore these areas towards active blanket bog. Greater diversity could also be encouraged by creating patchworks of different habitats, including trees, scrub and rare upland oak woodlands, in the right places.

Restoring and increasing the diversity of our upland moorlands will help deliver wider benefits and adapt the city-region to climate change. Restoring blanket bog reduces carbon emissions from peat soils and helps draw down more carbon, as well as encouraging higher water tables which reduces risk of wildfires. Areas of restored blanket bog also improve our drinking water quality and stores more water, reducing the risk of flooding downstream.

Upland communities, landowners, land managers and farmers, all of whom already shape these landscapes, have a critical role to play in the legacy of this landscape for nature. There are opportunities to support these communities to meet the multiple demands on their land, whether it is recreation, nature recovery, food production or other uses.

Priorities

- Restore and rewet bare upland peat to active blanket bog and wet heath, to retain more carbon and hold more rainwater
- More varied and well-functioning upland habitats, with patchworks of restored bog, heath, trees, springs and flushes, reducing flood and wildfire risk
- More of our upland flushes are thriving, rich with sphagnum moss, rushes and sedges, supporting a diverse range of species
- More trees, small woods and scrub are naturally regenerating, across our uplands, helping slow and store water
- More upland communities, land managers and landowners are rewarded for helping nature recover

These priorities cover a range of moorland habitats, including blanket bog, upland heath, upland springs, flushes and fens, upland woodlands and grasslands.

Wider benefits

- Carbon storage
- Recreation and leisure
- Water storage
- Water quality
- Reduced wildfire risk

Species

Delivering on these priorities will benefit many upland species including:

- Red grouse
- Brown and Mountain Hare
- Heather
- Cotton grass
- Kestrel
- Meadow Pipit
- Sphagnum
- Bilberry

Actions

Priority	Practical actions
More varied and well-functioning upland habitats, with patchworks of restored bog, heath, trees, springs and flushes, reducing flood and wildfire risk	- Stabilise, rewet and restore deep bare peat towards active blanket bog, where appropriate - Encourage more diverse native vegetation and more flower-rich habitats, in appropriate places, on existing upland moorlands. - Create transitional habitats or corridors to increase linkage between our uplands and lowland habitats, where conditions allow. - Improve wildfire risk management by creating natural fire breaks and boost awareness.

More of our upland flushes are thriving, rich with sphagnum moss, rushes and sedges, supporting a diverse range of species	- Restore more naturalised wet areas, flushes and ponds. - Create rough, diverse grasslands around flushes and wetlands, wet in some areas with rushes around flushes and springs. - Reduce and slow land drainage and encourage natural flood management.
More trees, small woods and scrub are naturally regenerating, in appropriate places, across our uplands, helping slow and store water	- Encourage the restoration and regeneration of existing upland woodlands and clough woodlands. - Increase woodland and tree regeneration and planting, in appropriate places, with varying density from closed canopy woodland in places to scattered trees in others. - Encourage moorland and clough edges to 'scrub up', in appropriate places, to improve diversity, securing soils and slowing water flow. - Target woodland creation, tree planting and the creation of leaky dams, where they will also contribute towards slowing water flow.
Restore and rewet bare peat to active blanket bog and wet heath, to retain more carbon and hold more rainwater	- Stabilise, rewet and restore deep bare peat towards active blanket bog and wet heath, where appropriate. - Work at scale to restore larger areas of remaining blanket bog faster.
More upland communities, land managers and landowners are rewarded for helping nature recover	- Support the switch to land management practices that will further enhance the diversity of upland habitats. - Encourage a reduction in the intensity of upland grazing and less intensive management of uplands. - Maintain, restore and increase upland hedgerows, hedgerow trees and field boundaries as important habitats. - Encourage sustainable recreation and reduce activities that damage upland habitats.

6.2. Species priorities and actions

Working to enhance, create and connect habitats across Greater Manchester will be of huge benefit to many species. Some species and groups of species are particularly at risk locally, needing bespoke action beyond wider habitat priorities set out in this strategy. Focused attention can help these species bounce back and avoid local species loss.

To identify priority species for this strategy, we have focused on those local species particularly at risk that need targeted action beyond our habitat priorities. Guided by a national process set out by Natural England and working with local species experts (see appendix 2), 16 priority species and species groups have been selected for this first iteration of the Local Nature Recovery Strategy. The following factors were considered in the selection of these species from a long list of over 400 species:

- **Conservation status:** Particularly threatened, vulnerable or endangered species (according to International Union for Conservation of Nature red lists, national red lists of species at risk of extinction[39] or Biodiversity Action Plan Section 41 UK lists)
- **Bespoke requirements:** Specific action required to aid these species recovery beyond the habitat priorities
- **Urgency:** Urgent action needed to stabilise species loss
- **Deliverability:** Feasibility of actions that could be delivered within Greater Manchester to aid recovery
- **National Significance:** National significance of the population in Greater Manchester
- **Wider benefits:** Benefits for other species and wider ecosystem services, such as flood risk reduction or carbon sequestration
- **Climate change:** Vulnerability to current and future climate change
- **Local significance:** Species that are locally significant in Greater Manchester

There are of course many vulnerable species beyond those that we have been able to prioritise within this strategy. We hope that actions taken to help conserve these species mean that other species can be prioritised in future updates to this strategy.

6.2.1. Priority species and actions

Species and groups of species for prioritised local nature recovery are stated below. Where several species requiring similar actions have been identified then they have been collected into a group.

Individual priority species

- Mountain hare
- Water vole
- Willow tit
- Black-necked grebe
- Hedgehog
- European hornet
- Black poplar
- Slow worm

Priority species groups

- Upland bees, butterflies and moths: *Bilberry bumblebee, Tormentil mining bee, Small copper butterfly, Wall butterfly, Small Heath butterfly, Dark green fritillary butterfly, Gypsy bumblebee, Manchester treble-bar moth*
- Urban birds: *Swift, house martin, black redstart*
- Farmland birds: *Tree sparrow, Corn bunting, Linnet, Yellow wagtail and Yellow hammer*
- Grassland fungi: *Pink waxcap, Jumbilee waxcap, Oliver earthtongue, Powdercap strangles, Volet coral*
- Migratory fish: *Atlantic salmon, European Eel*
- Grassland ground-nesting birds: *Curlew, Lapwing, Twite, Skylark, Golden plover, Dunlin, Snipe*
- Brownfield insects: *Dingy skipper, Common blue, Trifurcula cryptella*
- Mossland insects: *Large Heath, Crambus hamella, Gelechia cuneatella, Glyphipterix haworthana, Lampronia fuscatella, Large red-belted clearwing, Monochroa suffusella, Phiaris schulziana, Purple-bordered gold*

Priority species or species groups	Practical actions
Mountain hare	*Bespoke actions:* • Protection from predators and livestock using fencing or other exclusion methods • Identification and monitoring of population hotspots and breeding areas • Reduction in barriers to movement across key roads and railways near population hotspots • Landowner and land manager engagement and support *General habitat actions that will support recovery:* • Stabilise, rewet and restore any remaining deep bare peat towards active blanket bog. • Encourage more diverse native vegetation and more flower-rich habitats, in appropriate places, on existing upland moorlands and heath • Improve wildfire risk management by creating natural fire breaks and boosting awareness.
Water vole	*Bespoke actions:* • Identification, monitoring and safeguarding of key remaining population strongholds and breeding areas • Protection from predators (Mink) and livestock • Carefully management of water bodies and water courses or ditches where water vole populations are present *General habitat actions that will support recovery:* • Enhance existing habitats within our waterbodies and grassland, wetlands and woodlands habitats alongside waterbodies. • Restore more natural riverbanks, in appropriate locations, and reduce invasive species. • Improve water quality by reducing point source and diffuse pollution
Willow tit	*Bespoke actions:* • Identification and safeguarding of key remaining nesting sites and population strongholds • Monitoring of key population strongholds, particularly for the impacts of competition or predation • Increase availability of specialist nest sites in key population strongholds • Creation and maintenance of young wet woodlands, with a dense under canopy and availability of dead wood

	• Improvement in connectivity of remaining populations through targeted creation of young wet woodlands
Black-necked grebe	*Bespoke actions:* • Safeguarding of existing breeding sites • Bespoke wetland habitat creation and management, including management of water levels, creation of shallow water areas and reedbeds, removal of high-impact invasive species • Protection from disturbance, particularly from water sports or recreation at breeding sites • Protection from predation • Reduced litter at key breeding areas and population strongholds *General habitat actions that will support recovery:* • Improve water quality by reducing point source and diffuse pollution
Hedgehog	*Bespoke actions:* • Creation of habitat piles or hedgehog homes • Reduced barriers to movement through the creation of hedgehog highways between gardens, with 13cm square gaps in fences to allow movement between gardens • Reduction in light pollution and litter in parks and gardens • Increased awareness and education *General habitat actions that will support recovery:* • Manage spaces in a wildlife-friendly way by leaving areas of longer grass for wildlife in gardens or reduce mowing, reducing use of pesticides and herbicides. • Create greener spaces, and more connected habitats, along existing and new streets, highways and cycleways
European hornet	*Bespoke actions:* • Increased awareness raising and education • Increased monitoring and identification of population strongholds • Reduced nest disturbance or destruction
Manchester black poplar	*Bespoke actions:* • Identification, safeguarding and monitoring of existing trees

	• Good management of existing trees, including management of pests and diseases • Increased planting of black poplar in the right locations, using locally appropriate source stock • Improvement of genetic variability in newly planted trees
Slow worm	*Bespoke actions:* • Increased awareness and education • Identification, monitoring and safeguarding of population hotspots • Creation of hibernation refuges or shelters • Creation of sunny shelter basking spots • Reduced light pollution in population hotspots
Upland bees, butterflies and moths: *Bilberry bumblebee, Tormentil mining bee, Small copper butterfly, Wall butterfly, Small Heath butterfly, Dark green fritillary butterfly, Gypsy bumblebee, Manchester treble-bar moth*	*Bespoke actions:* • Identification and monitoring of population hotspots • Specialist habitat creation and management to ensure forage areas and nesting sites (such as south facing embankments) and good variation in heath age and structure or hedgerows • Landowner and land manager engagement and support to avoid use of pesticides, herbicides and nitrates • Avoidance of overgrazing and recreational pressures in population hotspots • Prevention of wildfires *General habitat actions that will support recovery:* • Encourage more diverse native vegetation and more flower-rich habitats, in appropriate places, on existing upland moorlands and heath
Urban birds: *Swift, house martin, black redstart*	*Bespoke actions:* • Increased awareness and education • Identification, monitoring and safeguarding of nesting sites • Installation of species-appropriate nesting boxes, such as swift bricks or boxes, house martin nesting cups • Creation of bog gardens and areas of long grass *General habitat interventions that will support recovery:* • Manage spaces in a wildlife-friendly way by leaving areas of longer grass for wildlife in gardens or reduce mowing, reducing use of pesticides and herbicides.

	• Support species by installing homes for wildlife on buildings.
Farmland birds: *Tree sparrow, corn bunting, linnet, yellow wagtail and yellow hammer*	*Bespoke actions:* • Supplementary feeding stations over the winter • Sow winter bird seed crops • Avoid mowing or crop harvesting during periods where nests will be impacted *General habitat interventions that will support recovery:* • Grow and maintain multi-species cover crops, and cut later in the year, to provide food and cover over the winter. • Set aside dedicated patches of unmanaged or uncropped areas with tall grasses, along field boundaries and margins, field corners or less productive areas, particularly where they will connect. • Install homes for birds on and around farms and rural buildings, to improve farmland species diversity. • Safeguard, manage, and restore the species diversity and structure of existing hedgerows. • Create more native hedgerows
Migratory fish: *Atlantic salmon, european eel*	*Bespoke actions:* • Maintain and encourage in river plant communities and remove high-impact invasive species • Encourage more natural river geomorphology that will deliver a mixture of water speeds (areas of slower and faster flow) and riverbed substrates • Avoid impacting White Clawed Crayfish *General habitat interventions that will support recovery* • Improve mobility (restoring migratory pathways upstream) by removing barriers such as weirs, daylighting buried or covered waterbodies or installing by-pass structures, where feasible. • Improve water quality by reducing point source and diffuse pollution
Grassland fungi: *Pink waxcap, jubilee waxcap, oliver earthtongue, powdercap strangler, violet coral*	*Bespoke actions:* • Identification, safeguarding and monitoring of important remaining sites • Landowner and land manager engagement and support *General habitat interventions that will support recovery*

	• Enhance and appropriately manage remaining semi-natural grasslands to good condition, including avoiding use of pesticides, herbicides and nitrates and appropriate grazing and livestock management • Showcase successful grassland management and encourage awareness of the value of our remaining semi-natural grassland
Grassland ground nesting birds: *Curlew, lapwing, twite, skylark, golden plover, dunlin, snipe*	*Bespoke actions:* • Identification, safeguarding and monitoring of nesting sites • Protection of nesting sites from predators, livestock and human disturbance using fencing, signage or other exclusion methods • Landowner, land manager and public awareness, engagement and support *General habitat interventions that will support recovery* • Encourage more diverse native vegetation and more flower-rich habitats, in appropriate places • Improve wildfire risk management by creating natural fire breaks and boosting awareness.
Brownfield insects: *Dingy skipper, common blue, trifurcula cryptella*	*Bespoke actions:* • Identification and monitoring of important sites • Landowner and land manager engagement and support
Mossland insects: *Large heath, crambus hamella, gelechia cuneatella, glyphipterix haworthana, lampronia fuscatella, large red-belted clearwing, monochroa suffusella, phiaris schulziana, purple-bordered gold*	*Bespoke actions:* • Identification, safeguarding and monitoring of important remaining sites • Specialist habitat creation and management to ensure good availability of flower-rich areas as pollen and nectar sources, forage areas and nesting sites • Landowner and land manager engagement and support • Appropriate grazing and livestock management *General habitat interventions that will support recovery* • Encourage more diverse native vegetation and more flower-rich habitats, in appropriate places • Manage land at lower intensity and with low inputs, reduce herbicide, pesticide use and minimise use of nutrients.

6.2.2. Reintroductions

Alongside prioritising action to help vulnerable species, there is public interest in the reintroduction of lost species. In a public survey of priorities for this strategy, the reintroduction of lost species was the second most requested action for species (see appendix 5).

Reintroductions are possible in urban areas. For example, over the last decade the Greater Manchester Wetland Partnership have successfully reintroduced the Manchester Argus Butterfly (Large Heath Butterfly) at Astley Moss in Wigan and are working towards further species reintroductions. Based on responses to the public survey the most popular species for local reintroduction is the Beaver. Alongside Beavers, other popular candidates for reintroduction included the Red Squirrel, Pine Marten and large birds of prey such as the Red Kite or Hen Harrier.

- **Beaver:** Successful reintroductions of Beavers have taken place in several locations nearby to Greater Manchester, including at the Hatchmere Nature Reserve in Cheshire, Willington Wetland Nature Reserve in Derbyshire, and Cors Dyfi Nature Reserve in Montgomeryshire. The development of a reintroduction group, concerted landowner engagement and the identification of viable reintroduction sites would all be key actions on the journey to reintroduce this species.
- **Birds of prey:** The reintroduction of large birds of prey species such as the Red Kite have been successfully undertaken in Leeds, Oxfordshire, Gateshead and Cumbria over the last 20 years. Based on records of Red Kite sightings since the initial reintroductions in Yorkshire, Cumbria and Gateshead populations of Red Kite have successfully expanded across northern England and should eventually reach Greater Manchester. The development of a supportive reintroduction group for large birds of prey to track and monitor progress, as well as pubic and landowner engagement and education, could help to ensure the successful return of this species to Greater Manchester.
- **Pine marten:** Pine martens are not currently thought to be present in Greater Manchester. Initial translocation and release projects are underway in the UK to boost remaining remnant population in Wales and the creation of a new population nearby in the Forest of Dean. Pine martens are thought to be slowly naturally recolonising northern England from existing Scottish populations, with sightings in Kielder Forest, Northumberland and the North York Moors over recent years. Action now to boost the size, condition and connection between our woodlands will help future recovery efforts, either through reintroduction or natural recolonisation.
- **Red squirrel:** Significant populations of grey squirrel across the city-region mean that a reintroduction of red squirrels would be unlikely to be successful due to the high risk of squirrel pox transfer from grey to red squirrels. For a reintroduction to be considered in the future, grey squirrel populations would have to undergo significant population management.

7. Delivery: How you can deliver on the strategy

7.1. Who can do what?

We want this strategy to inspire everyone across Greater Manchester to take action to help nature's recovery. The smallest actions – at home and in our local communities – can add up to make a big difference and make space for nature in every community. Larger initiatives can also have a transformational impact, providing space at a landscape-scale for nature to recover.

What each of us can do will vary – we all have different ways we can support the implementation of the strategy. Below, we cover the following:

- Those who own or manage land;
- Those who are involved in developing land for new homes or commercial spaces;
- Those who run or manage businesses or other organisations;
- Those who are involved in community-led groups and action;
- Those who run or manage environmental charities or partnerships; and
- Those of us who live, study or work in Greater Manchester.

The actions set out and the areas for which they are identified are not intended to be prescriptive; instead, they can help guide existing or planned nature recovery activities.

7.1.1. Landowners and land managers:

Why?

Those who own and/or manage land in Greater Manchester can make a significant contribution to implementing the strategy, particularly those responsible for agricultural land (32% of GM's land use), amenity spaces (19% of GM's land use) and transport infrastructure, like roads and railways (13% of GM's land use). This land might be used for another primary purpose – such as growing food, providing transport routes or providing space for leisure activities or for people to enjoy – but with opportunity to provide more space for nature alongside this.

How?

Landowners and land managers can use the strategy to:

- Understand how their land fits within the Nature Network;
- Inform the actions they could carry out on their land; and
- Inform and support applications for funding and delivery of projects on their land.

7.1.2. Developers and planners:

Why?

There are plans to build over 175,000[40] homes over the next decade and a half within the nine local authorities[41] part of the Places for Everyone Joint Development Plan, as part of a wider strategy to bring forward development at a scale which can drive transformational change across the city-region and play a role in delivering on the ambitions for a Nature Network[42]. Future growth and development of the city-region will rely on a healthy natural environment and provides an opportunity to fully integrate nature into plans for how we grow and develop the city-region.

How?

Developers and planners can use the strategy to:

- Support the integration of nature into the planning and development process;
- Understand how development sites fit within the Nature Network;
- Deliver for nature alongside the development of the land;
- Inform the selection of on-site and off-site Biodiversity Net Gain sites; and
- Inform the selection, master planning and design of development sites.

Under the Environment Act 2021, local planning authorities and decision-makers must have regard to this Local Nature Recovery Strategy in their policies, including those in their local plans (see section 5.2.4 for further details). Taking account of the LNRS proposed developments can help developers move more smoothly through planning process.

7.1.3. Businesses:

Why?

There is substantial evidence of the multiple benefits a healthy natural environment can have on for businesses and other organisations. Premises can benefit from features such as green walls and green roofs (e.g. in reducing energy use and providing natural cooling), employee retention, wellbeing and productivity, as well as beneficial marketability if nature is incorporated into the workplace. Installing SuDS such as raingardens near businesses can reduce the risk of flooding[43].

How?

Businesses and other organisations can use the strategy to:

- Inform their own corporate plans for their contribution to nature recovery;
- Create or enhance green space or raingardens on their premises, involving the local community; and
- Support community-led projects in the local area that deliver nature recovery.

7.1.4. Community groups:

Why?

Community groups across Greater Manchester are at the forefront of action to help nature recover. In coming together to improve their local natural environment, they bring people together to help them connect with nature, gain new skills, strengthen the community and improve the places where they live. This has wider benefits for people's health and wellbeing, as well as providing spaces for nature in people's communities.

How?

Community groups can use the strategy to:

- Understand how their local natural environment (e.g. green spaces) fit within the Nature Network;
- Inform the actions they could carry out in their local community; and
- Support applications for funding and delivery of projects.

7.1.5. Environmental charities and partnerships:

Why?

Environmental charities and partnerships, such as the Greater Manchester Wetlands Partnership, the Great North Bog Partnership or the Irwell Catchment Partnership, are already undertaking crucial work to help wildlife bounce back and empower communities and landowners to take action. These organisations are at the forefront of driving forward action for nature across the city-region, helping to bring forward new projects and initiatives to restore habitats, reintroduce species and work with communities. Many of these charities have been closely involved in development of this strategy.

How?

Environmental charities can use this strategy to:

- To target funding and investment towards the Nature Network;
- To build collaborative projects and coordinate action;
- To inform their priorities and actions; and
- To work with and engage communities, businesses, local authorities and landowners.

7.1.6. The NHS, schools and other local institutions:

Why?

Organisations and institutions like the NHS, local schools and other local institutions such as universities are often significant land owners and managers, with large estates and campuses which could become assets for nature and people to enjoy. For organisations like the NHS, schools and universities, promoting the health benefits of spending time in nature and integrating nature in estates can help to boost the wellbeing of patients and students, improve recovery times and learning outcomes, as well as wider mental health and wellbeing benefits.

How?

The NHS, schools and other local institutions can use this strategy to:

- To inform how they create or enhance green space or gardens on their premises, such as a therapeutic or sensory gardens;
- To build and inspire nature based educational or health programmes, such as green social prescribing programmes;
- To inform how they could change the management of their green estate to benefit nature; and
- To engage local communities with action for nature on their estates.

7.1.7. Residents:

Why?

With a population of nearly three million people, Greater Manchester's residents carry huge potential to contribute to nature recovery. Private gardens - which make up around 15% of total land use in the city-region - are ideal spaces to take action. Yards, balconies and alleyways can also be greened and act as valuable space for nature, particularly pollinators. Working together with neighbours and the local community can help improve bigger areas and support initiatives to improve a variety of spaces for nature across neighbourhoods.

How?

Residents can use the strategy to:

- Understand how their local natural environment (e.g. green spaces) fit within the Nature Network;
- Understand what they can do to take action or expand on existing activities.; and
- Inspire them to get involved in local community initiatives to support nature's recovery.

7.2. What more do we need to be successful?

There are several key factors that will enable successful implementation of the strategy. These include the need for funding, skills and capacity and partnerships to deliver.

7.2.1. Funding

Delivering the priorities in this strategy will require funding. To do this, we need to maximise the extent and impact of any public funding in the city-region. However, given the scale of action required, nature recovery cannot be achieved through public funding alone (such as agricultural environment schemes and grant funding), and accessing private finance will be crucial. Integrated approaches for ambitions like water quality improvement, flood risk reduction and benefits for nature and people, will need to make the most effective use of public money. To maximise private funding, we need to:

- Develop business models to facilitate other sources of funding, focussing on initiatives such as on-site and off-site Biodiversity Net Gain, carbon offsetting particularly through private finance;
- Continue to develop and implement policies locally that incentivise funding into the natural environment; and
- Put in place the right governance arrangements to facilitate the involvement of different funders and provide evidence and confidence in delivery on the ground.

7.2.2. Skills and capacity

Delivering the strategy will require a range of skills and capacity across a range of sectors, including:

- Practical habitat creation, restoration and management work;
- Integrating the natural environment into a range of other sectors, including housing development, infrastructure planning, engineering, development and healthcare; and
- Developing knowledge of the natural environment in other supporting sectors to support delivery, such as financial and legal.

7.1.3. Partnerships

There is a strong record of private, public and voluntary/community (VCSFE) sectors working together to deliver improvements to the natural environment. This spans from the strategic city-region wide partnerships like the Greater Manchester Local Nature Partnership, to partnerships on specific projects and in particular locations. We need to continue to deepen and strengthen these partnerships to deliver this strategy.

7.3. How will we know if we're successful?

Over the next ten years, monitoring the delivery of the targets and ambitions in this strategy will be crucial in understanding our progress in tackling the biodiversity emergency. To track progress a monitoring framework will enable us to track progress towards some of the most important elements of this strategy

GMCA will set up a monitoring group on the delivery of the strategy as part of the Natural Capital Group (Local Nature Partnership) and work with the Greater Manchester Ecology Unit and partner organisations to monitor progress on this strategy. This group will monitor and track progress on the main targets set out in the strategy and monitoring framework. Annual updates will be produced to report on progress against the targets and delivery of the strategy.

8. Acknowledgements

GMCA would like to thank all those who contributed their time and effort to help co-produce this strategy for Greater Manchester.

We would particularly like to thank the contributions made by those in our -

Steering Group:

- Canals and Rivers Trust
- City of Trees
- Envance
- Greater Manchester Ecology Unit
- Groundwork Greater Manchester
- Irwell Catchment Partnership
- Lancashire Wildlife Trust
- National Farmers Union
- National Trust
- Natural England
- NHS Greater Manchester
- Peak District National Park
- Royal Horticultural Society
- Southway Housing
- The Environment Agency
- The Forestry Commission
- Transport for Greater Manchester
- United Utilities
- University of Manchester
- Upper Mersey Catchment Partnership
- Wigan Metropolitan Borough Council

Officers Group:

- Bolton Metropolitan Borough Council
- Bury Metropolitan Borough Council
- Manchester Metropolitan Borough Council
- Oldham Metropolitan Borough Council
- Rochdale Metropolitan Borough Council
- Salford Metropolitan Borough Council
- Stockport Metropolitan Borough Council
- Tameside Metropolitan Borough Council
- Trafford Metropolitan Borough Council
- Wigan Metropolitan Borough Council
- Greater Manchester Ecology Unit
- Natural England

Species Expert Advisory Group:

- David Earl, GM, Lancashire and North Merseyside County Recorder, BSBI
- Gary Hedges, Liverpool Museum
- John Harrison, Assistant Vice County Recorder, South Lancashire Bat Group
- Steve Hindle, National Trust Grassland Fungi Project Officer
- Karen McCartney, County Recorder for aculeate Hymenoptera for Greater Manchester, BWARS
- Kevin Nash, the Environment Agency

- Lorna Drake, Species Recovery and Reintroductions Higher Officer for Cheshire to Lancashire, Natural England
- Martyn Walker, Lancashire Wildlife Trust
- Paul Barrington, Greater Manchester Ecology Unit
- Stephen Palmer, Lancashire Vice County Recorder, Lancashire Moths
- Steve Atkins, County Bird Recorder Greater Manchester
- Stuart Fraser, Greater Manchester Ecology Unit
- Tony Parker, Cheshire, Merseyside, Lancashire, Greater Manchester Mammal Recorder, Mammal Society

9. List of Appendices

Appendix 1. Relationship between the GM LNRS and other GM policies and strategies

Appendix 2. Evidence and processes used in preparing the GM LNRS

- Appendix 2a. Process and evidence used to develop priorities and actions (measures) for the GM LNRS
- Appendix 2b. Outline of key inputs and process involved in developing the species priorities and actions (measures)
- Appendix 2c. Processes and key steps in mapping opportunity areas for the GM LNRS
- Appendix 2d. List of mapped actions (measures) in the GM LNRS opportunity areas
- Appendix 2e. List of existing strategies and plans used to inform the priorities and actions in the GM LNRS

Appendix 3. Greater Manchester State of Nature Report

Appendix 4. Stakeholder Engagement undertaken for the GM LNRS

Appendix 5. Greater Manchester Plan for Nature Public Survey Results

Appendix 6. Detailed Description of Greater Manchester landscapes and habitats.

Appendix 7. Greater Manchester Habitat Priorities and Actions, including technical details

References and notes

[1] **Lamont and Hinson. (2024).** A narrative review of reviews of nature exposure and human health and well-being in the UK. Natural England. Available on the Natural England Access to Evidence website (external link).

[2] **Natural England. (2020).** Managing Ecosystem Services Evidence Review (Formerly Ecosystem Services Transfer Toolkit). Available on the Natural England Access to Evidence website (external link).

[3] The **Living Planet Index (LPI)** is a measure of the state of the world's biological diversity, based on average percentage change in population sizes of vertebrate species from terrestrial, freshwater and marine habitats. The LPI is adopted by the UN Convention of Biological Diversity as an indicator of progress. The Living Planet Index is one indicator among many which demonstrates the global decline in our biodiversity. Available on the Living Planet Index website (external link).

[4] **The State of Nature Partnership. (2023).** State of Nature 2023. Available on the State of Nature Partnership website (external link).

[5] **GMCA. (2024).** Greater Manchester State of Nature Report, Available on the GMCA website (external link) and appendix 3.

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