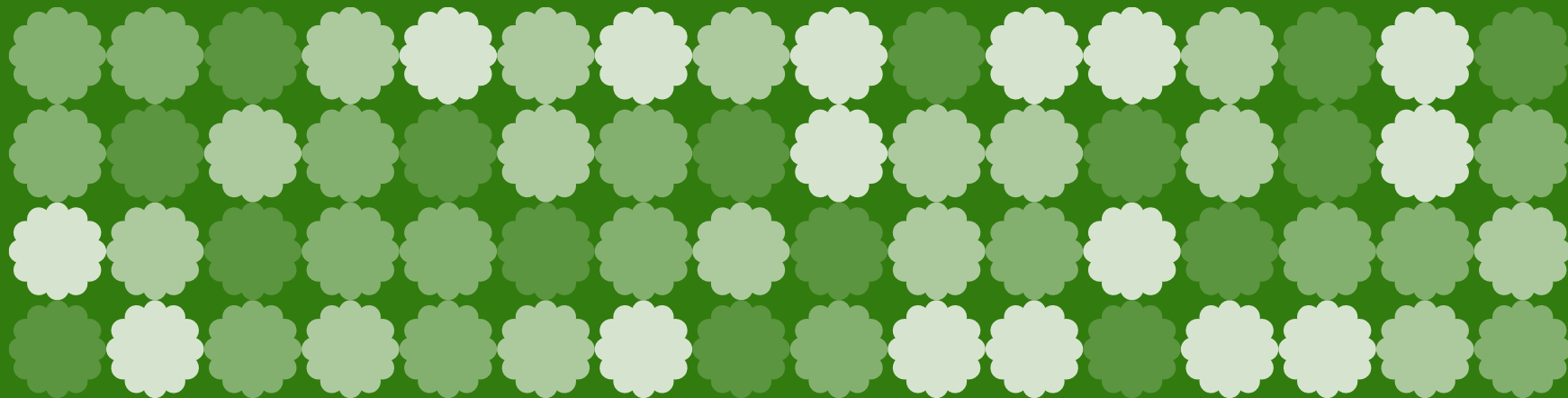




Waters of LIFE Natural Capital

29th February 2022



What is natural capital?



"The natural environment provides people and economy with many different benefits"

**Carbon
capture**

**Flood risk
management**

**Recreational
space**

Using a natural capital approach

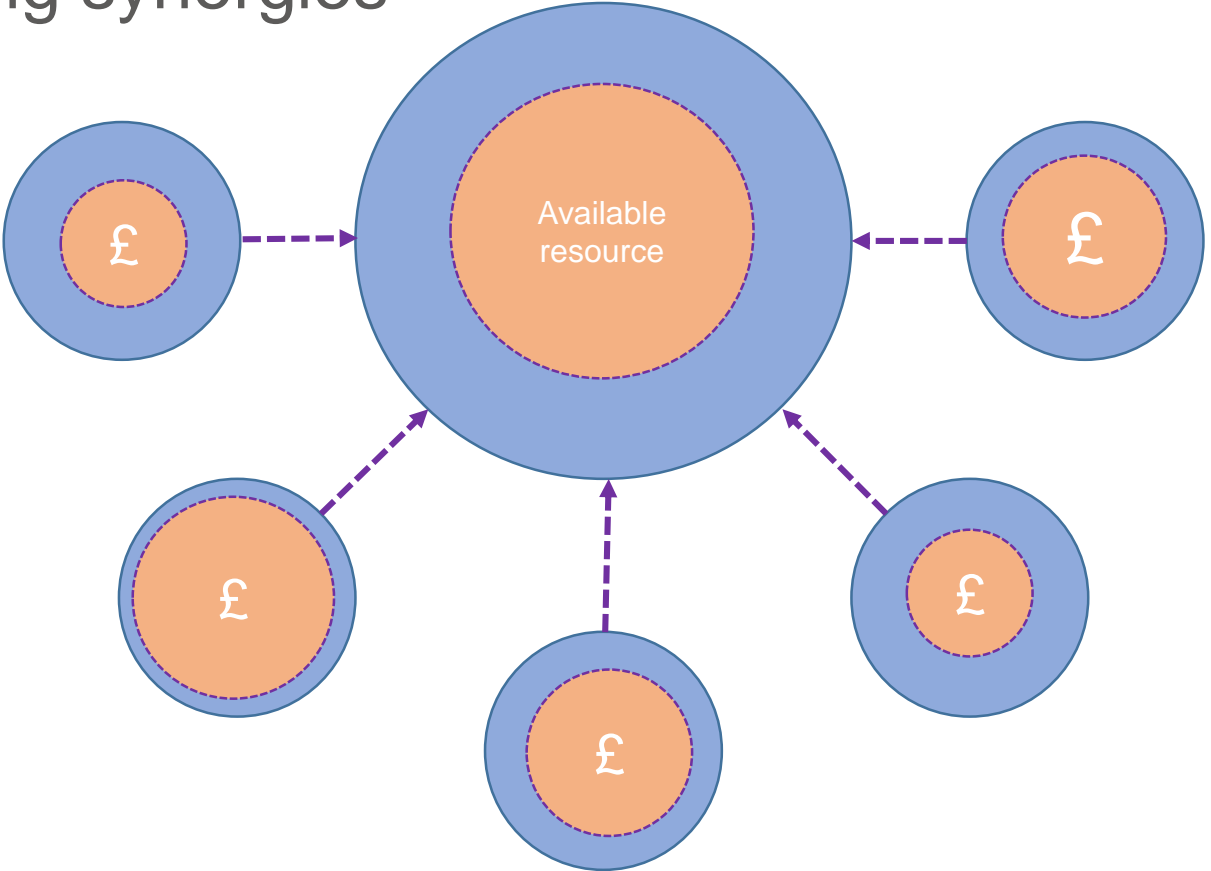


- The stock of the aspects of **UK natural capital** we are currently able to value was an estimated **£1.2 trillion** (2019)
- In terms of **climate change emissions alone**, of restoring 55% of peatlands to near natural condition were estimated to have a present value of approximately **£45 billion to £51 billion** (2019)
- The value of **health benefits** associated with outdoor recreation in the UK was estimated to be between **£6.2 billion and £8.4 billion** in 2020
- The extent of **UK urban environments increased 30%** between 1990 and 2019, while **enclosed farmland fell 5%**.



Illustration by Rachael Balsaitis
Source Ensia.com

Identifying synergies



Natural Capital Pioneer Projects

Natural Capital Committee proposed that Government create 4 Pioneer projects to:

- “help us to identify good practice and innovative solutions as we develop and begin to implement the Environment Plan.”
- “operate in four different settings so that they can test the best analytical tools, data and governance approaches in a range of situations”

3 to 4 year period

Defra Group leads:

Landscape = Natural England

Marine = Marine Management Organisation

Catchment & **Urban = Environment Agency**

Natural Capital Pioneer Projects cont'd

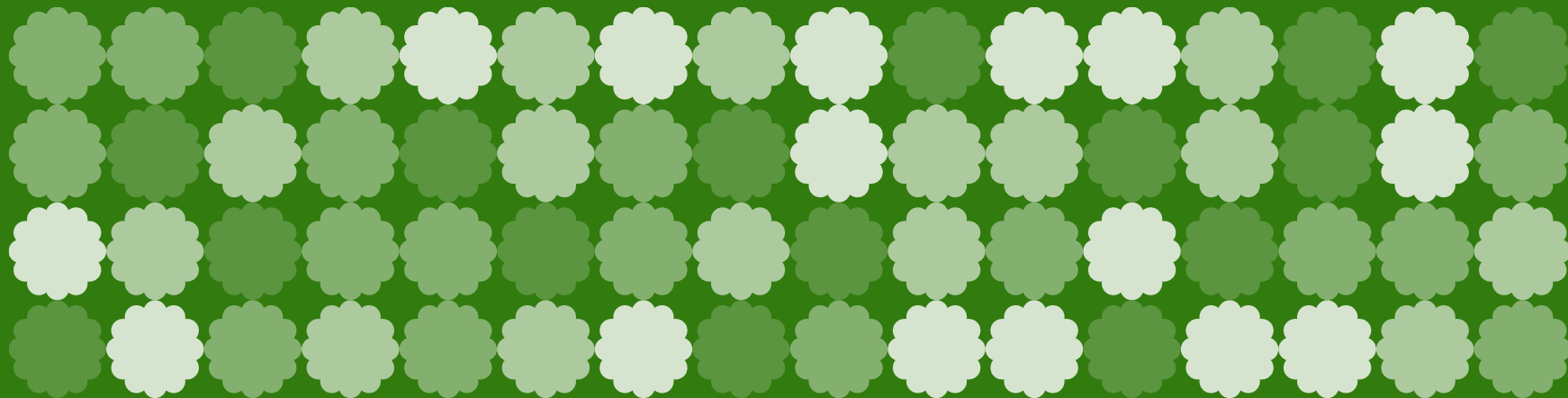
- Catchment Pioneer – Cumbria
 - Landscape Pioneer – North Devon
 - Marine Pioneer – North Devon & Suffolk
 - Urban Pioneer – Manchester
- Good geographic spread with lots of different environmental challenges
 - Areas where already lots of ongoing relevant activity and there are existing strong partnerships



Waters of LIFE

Greater Manchester's Natural Capital Journey

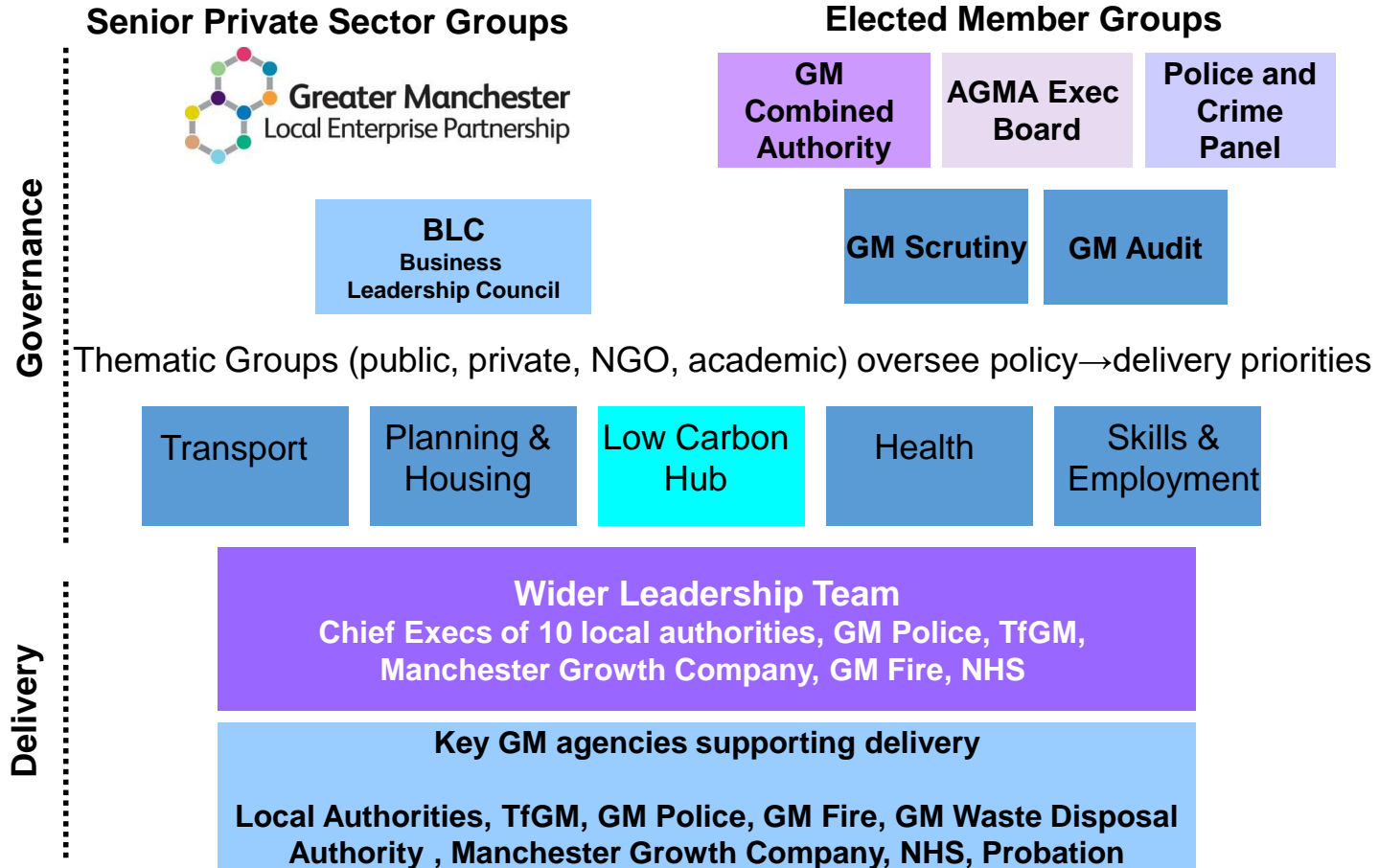
29th February 2022



Greater Manchester



Governance





Environmental Challenges and Ambitions

GM's 5-Year Environment Plan (5YEP) sets out an ambitious vision for a “clean, carbon-neutral, climate resilient city region with a thriving natural environment”, and demands urgent action to achieve this.

Threats facing GM's natural environment...

Land	Unsustainable land management; GM accounts for 3.6% of the UK's annual CO ₂ emissions
Water	Over 90% of GM's waterbodies fail to meet quality standards; over 50,000 properties at risk of flooding
Biodiversity	Biodiversity net gain approach not yet adopted across districts; lack of green space and ecological networks
Investment	Insufficient funding available to protect nature; lack of business models to attract alternative sources
Environment engagement	Lack of public recognition of the wide range of benefits that nature delivers for the economy and society

...5YEP ambitions

Plant 1m trees by 2024, 3m by 2035 Restore 50-75% of GM's peatlands by 2040 Carbon neutral city region by 2038
Improve GM waterbodies to achieve standards by 2027; shift to more nature-based solutions for flood alleviation schemes
Embed biodiversity net gain for developments and accelerate the delivery of a GM Nature Recovery Network
Develop GMEF to broaden the range of funding sources; deliver investment readiness support and proof-of-concepts
Widen engagement via volunteering and employment opportunities; build on evidence base to promote benefits

The Covid-19 pandemic has increased the importance of delivering on these ambitions to boost the local economy, create jobs, increase climate resilience and enhance the wellbeing of GM's residents.

Strategic Direction

Priority 1:
Managing our land sustainably

Priority 2:
Managing our water and its
environment sustainably

Priority 3:
Achieving a net gain in
biodiversity for new development

Priority 4:
Increasing investment into our
natural environment

Priority 5:
Increasing our engagement with
our natural environment





THE HOME IS NOT IN FOREIGN COUNTRIES

2038

RESPECT YOUR MOTHER

COLD COOL

There is no longer a right to an education

Greater Manchester's Environmental Ambitions



GM Strategy

“Greener, fairer, more prosperous city-region”

GM Environment Plan

“Protect, maintain and enhance, and take steps to achieve environmental net gain”

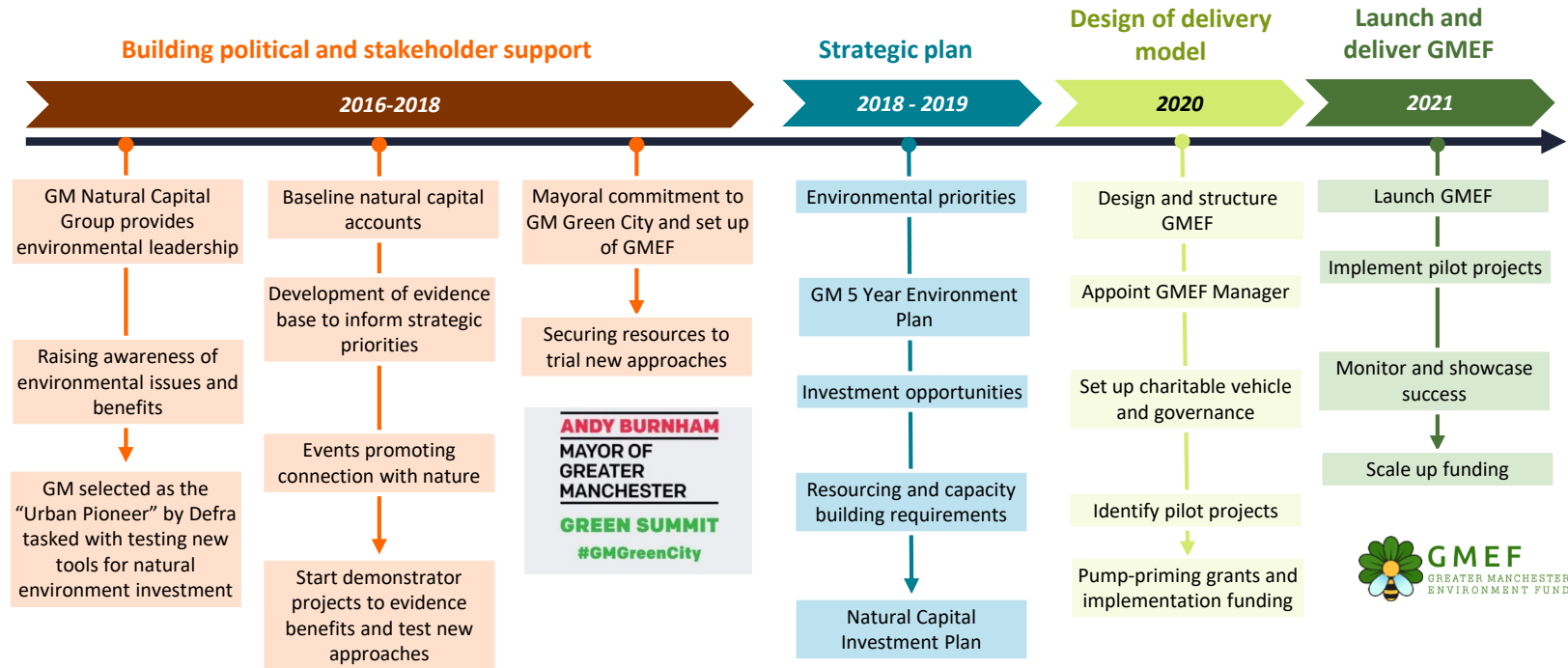
Places for Everyone

“Achieving a measurable net gain in biodiversity of no less than 10%”

Local Plans

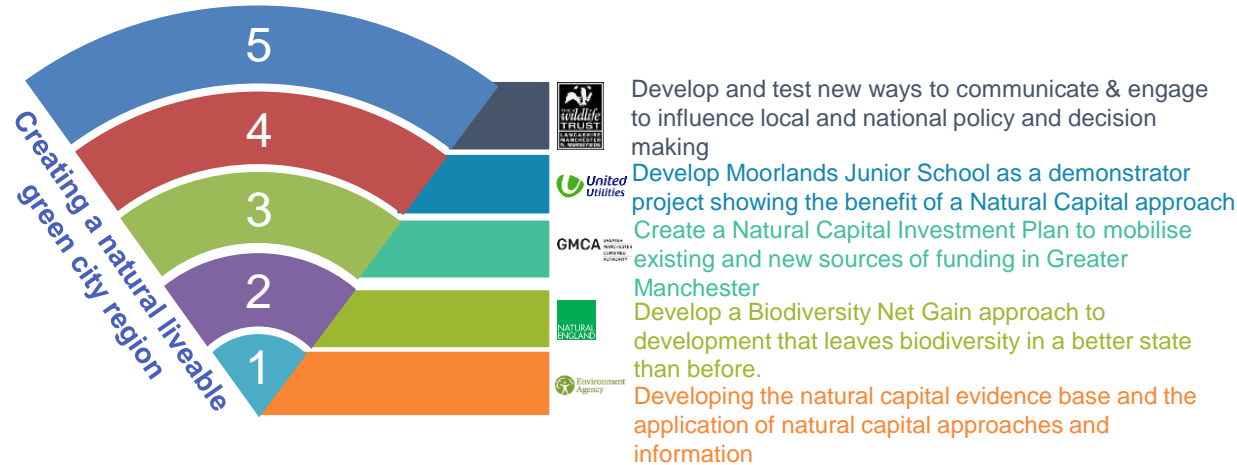
National deadline for all Local Planning Authorities to have a Local Plan in place by December 2023.

Greater Manchester: Our Natural Capital Journey



To build a structure of this scale, pump priming grants are required to bring in much needed development capacity to launch GMEF, implement pilot projects and showcase the benefits that GMEF has to offer.

Testing a Natural Capital Approach



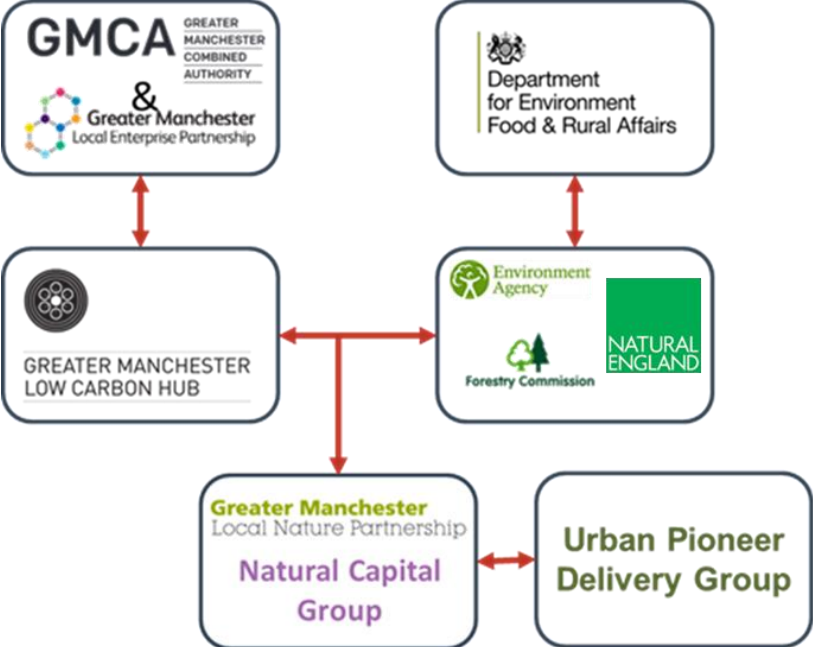
TOTAL BENEFITS

£1bn the 'conservative' estimate of the value that Greater Manchester receives from its natural capital each year from the services valued

£28bn the total asset value of natural capital to Greater Manchester over the next 60 years

URBAN PIONEER

Governance



URBAN PIONEER DELIVERY GROUP

Manchester City of Trees | Greater Manchester Local Nature Partnership

the Land Trust | GMCA GREATER MANCHESTER COMBINED AUTHORITY | Transport for Greater Manchester

NATURAL COURSE | Environment Agency | gmphnetwork Greater Manchester Public Health

University of Salford MANCHESTER | NATURAL ENGLAND | Forestry Commission | Greater Manchester Ecology Unit

MANCHESTER 1824 The University of Manchester | United Utilities | THE RIVERS TRUST | THE wildlife TRUST LANCASHIRE MANCHESTER N. MERSEYSIDE

Valuing our Natural Environment

£1bn - total annual benefit



£9bn – total value of avoided healthcare costs (over 60 yrs)



Preventing **370** hospital admissions, avoiding **1,200** life year's lost



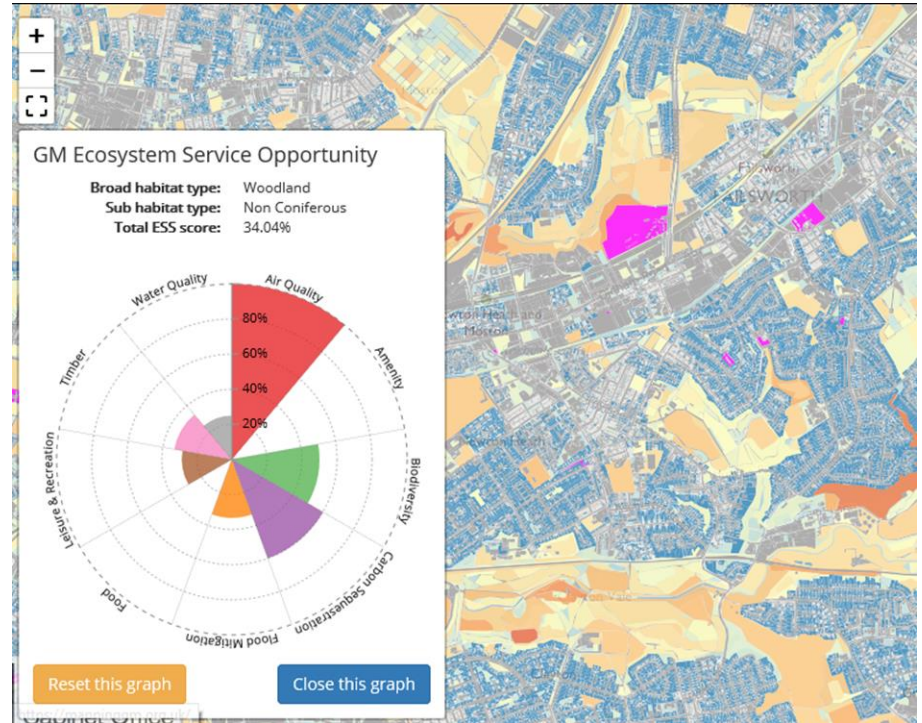
Approx. **44,000** buildings receive noise mitigation



135,000 people meet their physical activity guidelines, giving over **4,600** QALYs

Mapping our Natural Environment

- Water Quality
- Flood Mitigation
- Recreation, Physical and Mental Health
- Amenity
- Carbon Sequestration
- Biodiversity and Ecological Networks
- Air Quality

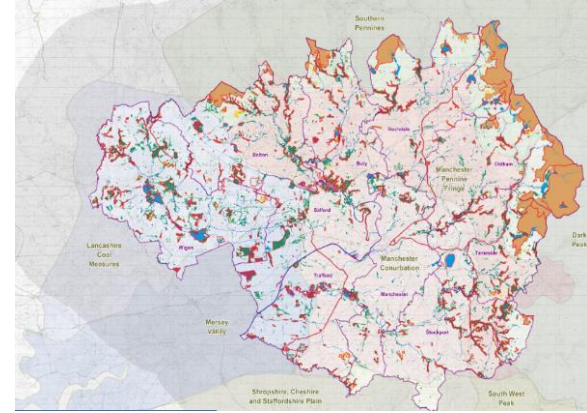
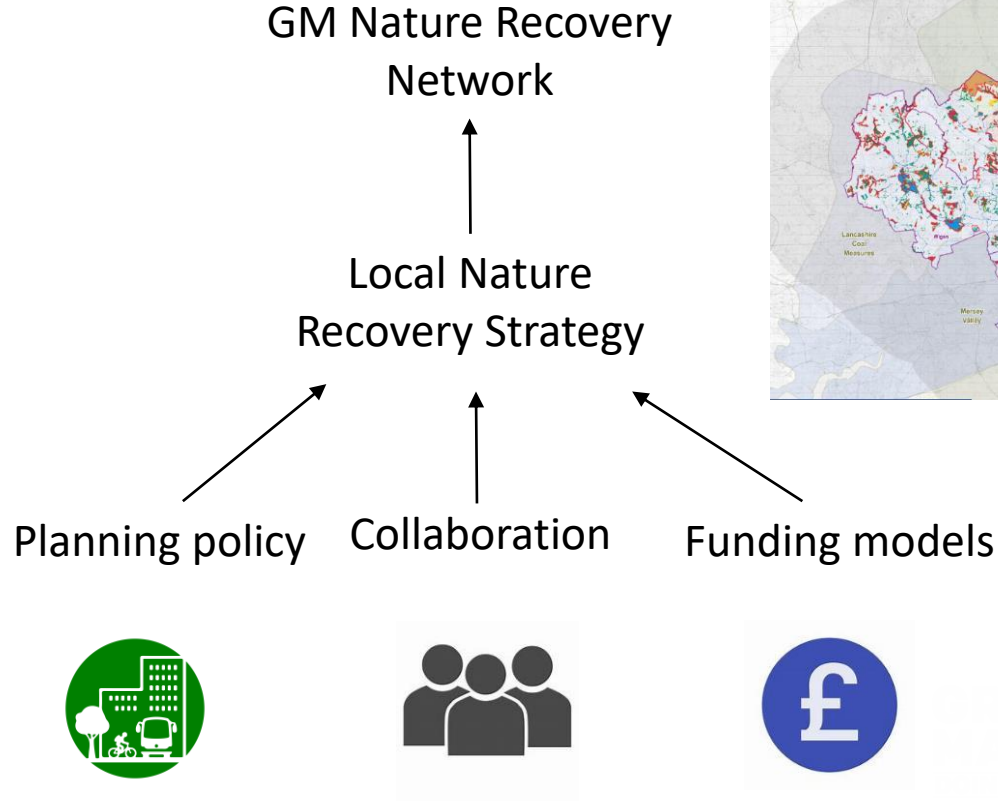


Delivering Nature's Recovery

New or improved habitat that is connected and promotes the movement of biodiversity

What are the key priorities for, where they could be delivered and how?

Mechanisms for the delivery of nature recovery



Natural Capital Investment Plan

The investment plan aims to support the agreed vision of:

“A Greater Manchester where investments in natural capital enhance the long-term social, environmental, and economic health and wellbeing of its people and businesses.”

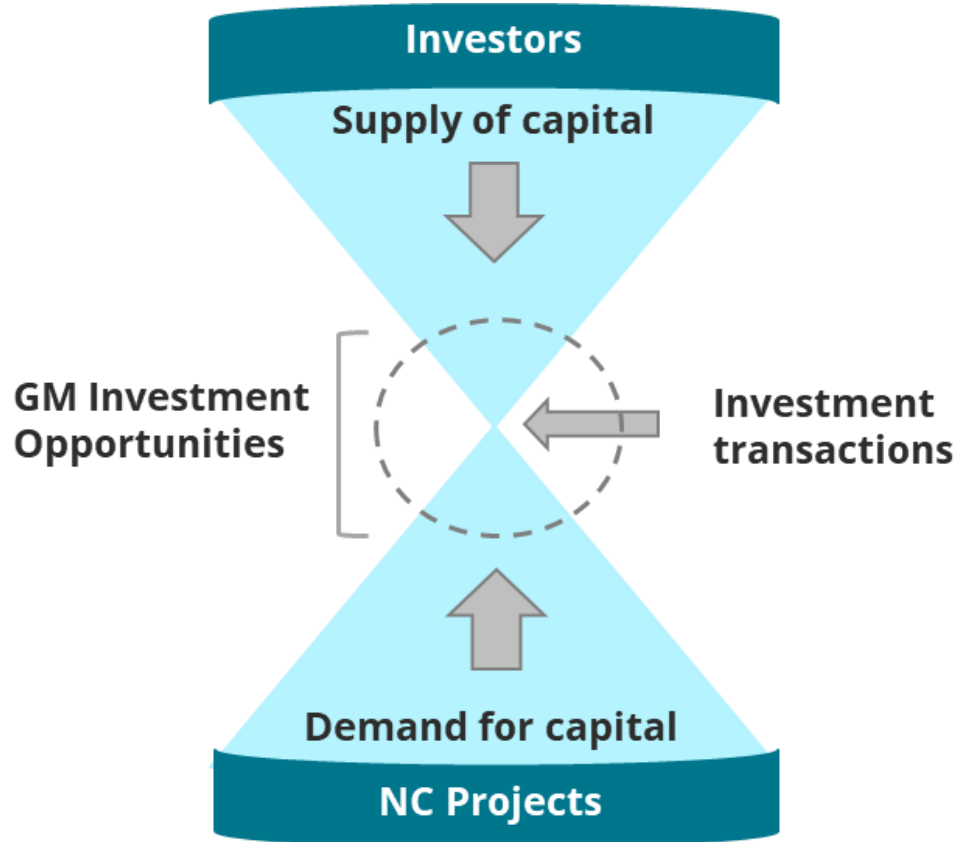
Investment in natural capital defined as:

“Funding that is intended to provide a return to the investor while also resulting in a positive impact on natural capital.”

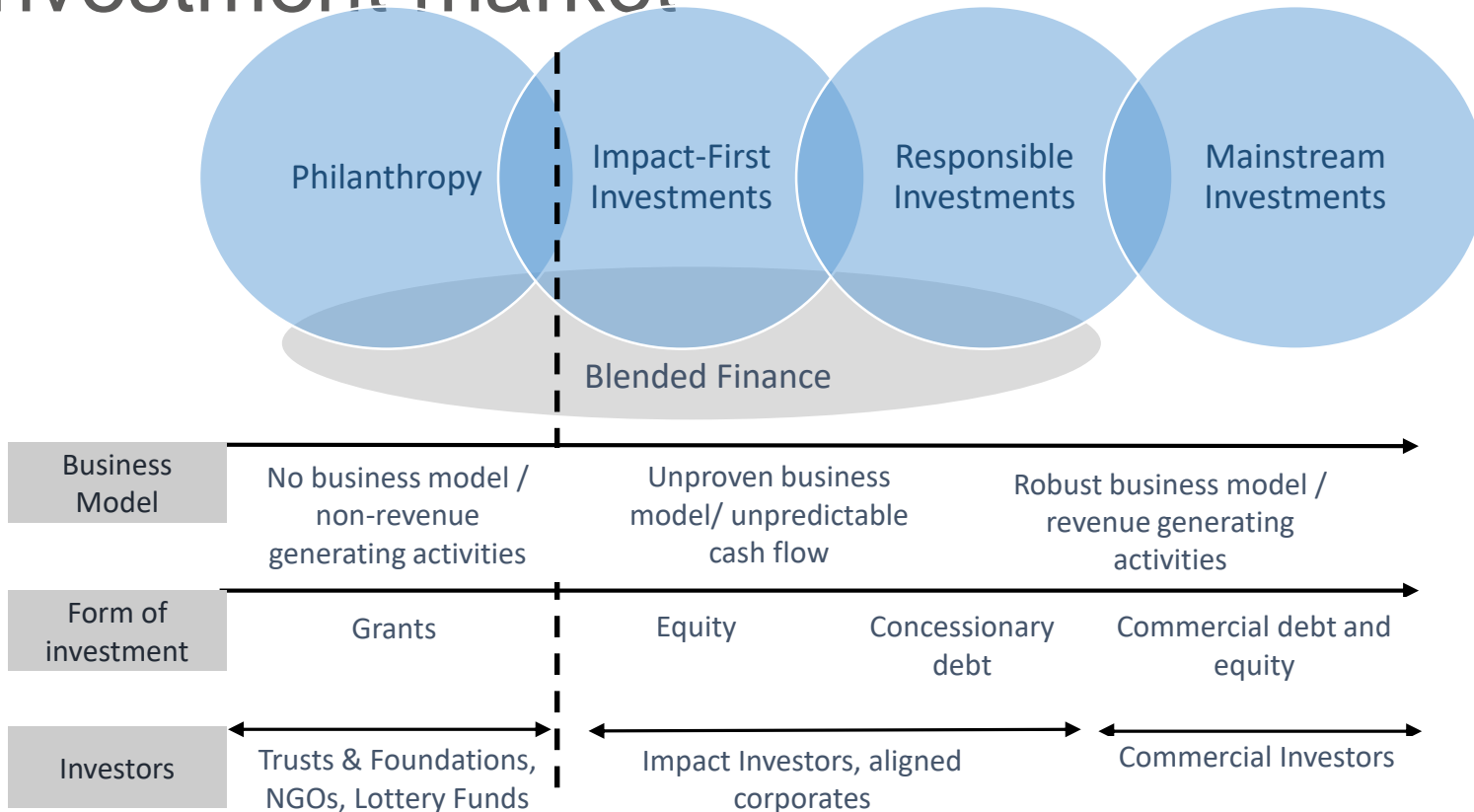
- Returns are defined predominantly, although not exclusively, in financial terms.
- Public and third sectors still have an important role to play, as enablers and innovators.



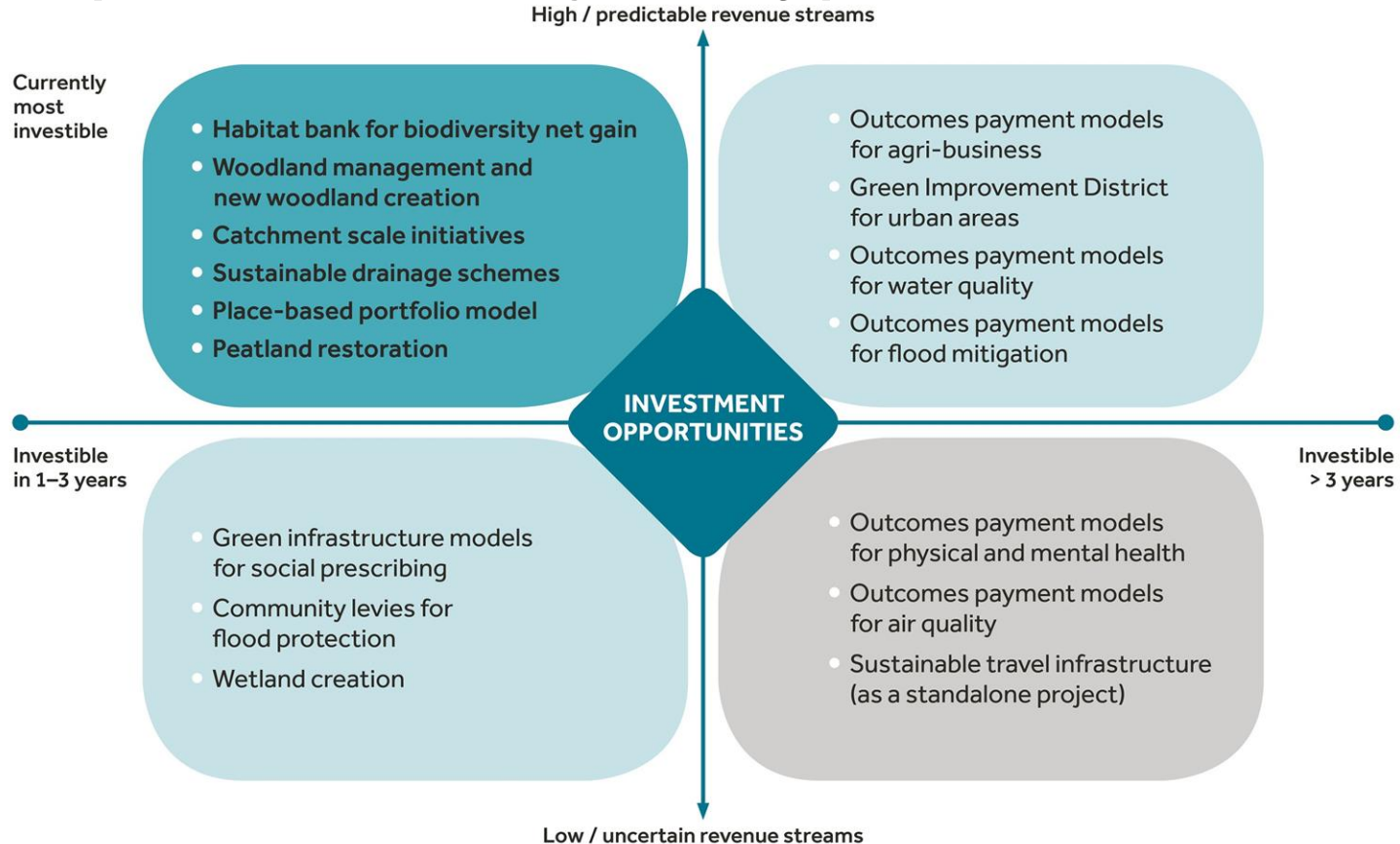
Natural Capital Investment Market



Sources of capital in the natural capital investment market



Pipeline of Project Types



Finance Models



Selected on the basis of: maturity of business case, capacity to generate revenue and investment, level of local support and alignment with natural capital objectives:

Place-Based Portfolio Models, could be created by leasing green and blue infrastructure to a Trust which could then exploit new revenue opportunities.

Habitat and Carbon Banking sell credits from additional actions that increase biodiversity or stored carbon to organisations to compensate for their unavoidable impacts.

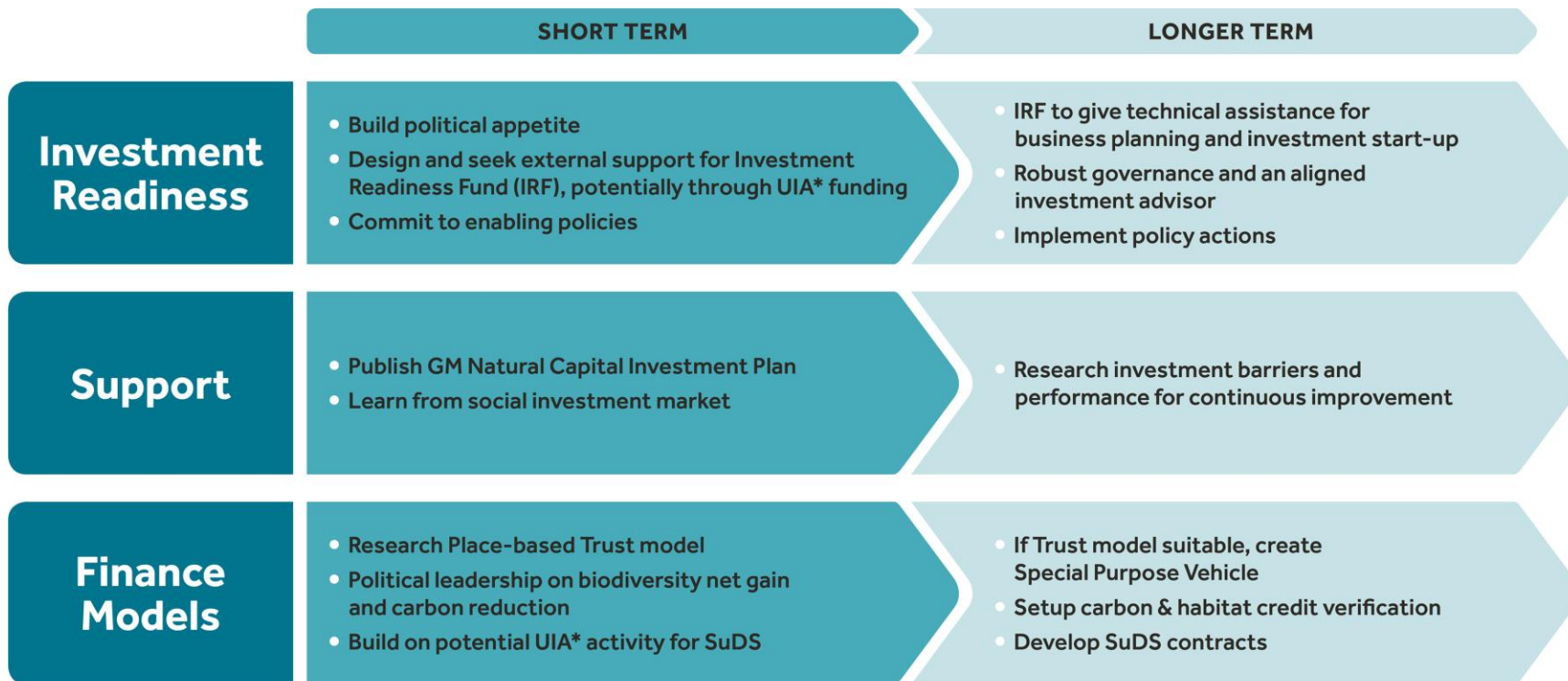
Sustainable Drainage Systems (SuDS) have an established revenue mechanism, through a reduced water company drainage connection charge for developments.

Recommendations

- **Public sector to be an investment commissioner**, developing a supporting financial environment, and business plans for specific investment opportunities.
- **GMCA and partners would need to create an Investment Readiness Fund (IRF)**. This fund is estimated to require a minimum of £1m from various sources.
- **Actions to deliver the investment plan -**
 - Develop business plans for priority investments
 - Take forward policy actions to incentivise investments
 - Define governance systems for investments



GM Natural Capital Investment Plan Summary of Actions



*Urban Innovation Action – Funding TBC

Leadership of Proposed Actions

- **Public-sector leadership** and enabling actions (low costs)
- **Existing funding** can support actions with moderate costs (e.g. Natural Course, Defra Urban Pioneer, Grants)
- **Potential funding** for Investment Readiness Fund (from Urban Innovation Action Project) to support business plans, to be confirmed
- **Other sources** to be developed (e.g. GM environment fund, habitat/carbon banking fee to support verification)

Overall the majority of actions have low cost implications for the public sector

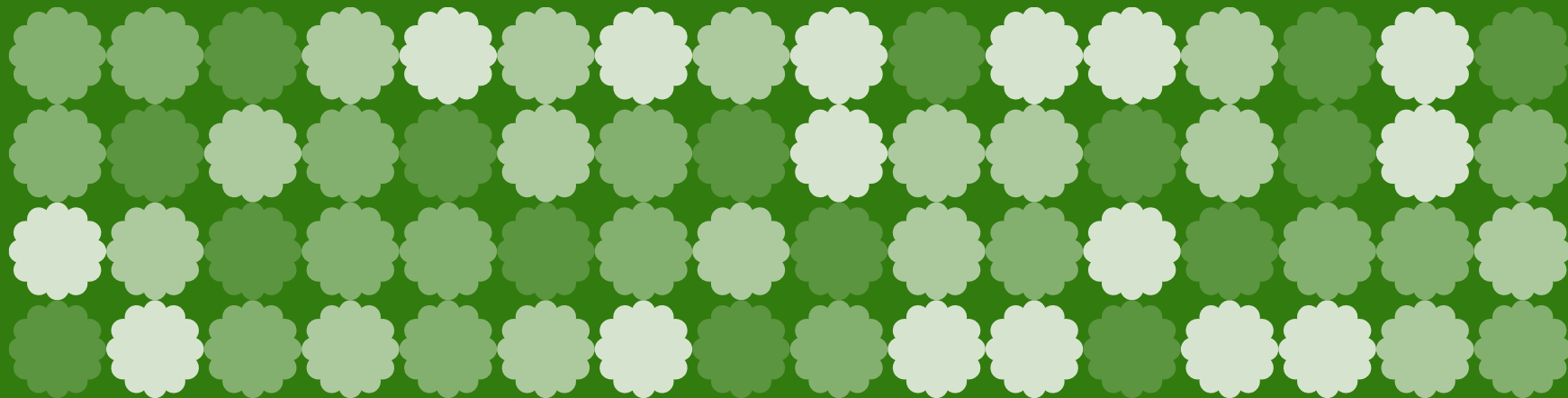
Function of Investment Readiness Fund (IRF)

- Builds on the success of the Social Investment Market
- Aims to build a pipeline of investable opportunities, by providing external project developers with direct capacity building funding and third party technical assistance to develop investment cases
- Key skills required include: finance advisory, fund management and technical assistance
- The Environment Fund (GMEF) currently being explored within Greater Manchester could act as a suitable vehicle to provide the appropriate governance and strategic support



Waters of LIFE Greater Manchester Environment Fund

29th February 2022





Lancashire,
Manchester &
N Merseyside

GMEF

FUNDING A GREENER GREATER MANCHESTER

Growing a Greener Greater Manchester

Investing in nature to cool the climate, create jobs, and boost public health



GMEF

GREATER MANCHESTER
ENVIRONMENT FUND

@gmenvfund

www.gmenvfund.org

gmenvfund@lancswt.org.uk

Growing a Greener Greater Manchester



Investing in nature to cool the climate, create jobs, and boost public health



“A thriving natural world locks away carbon, cleans our air, minimises flooding and wildfires, supports wildlife and creates welcoming nature-rich places that brighten our communities. Yet the UK is one of the most nature-depleted countries in the world.

Nature needs large-scale, long-term investment to unlock these benefits. And the solutions are on our doorstep.

The **Greater Manchester Environment Fund** will match innovative nature-based projects on the ground with sustainable investment opportunities – to grow a greener Greater Manchester before it’s too late.”

–Anne Selby, Chair of the Greater Manchester Environment Fund

THE GREATER MANCHESTER ENVIRONMENT FUND

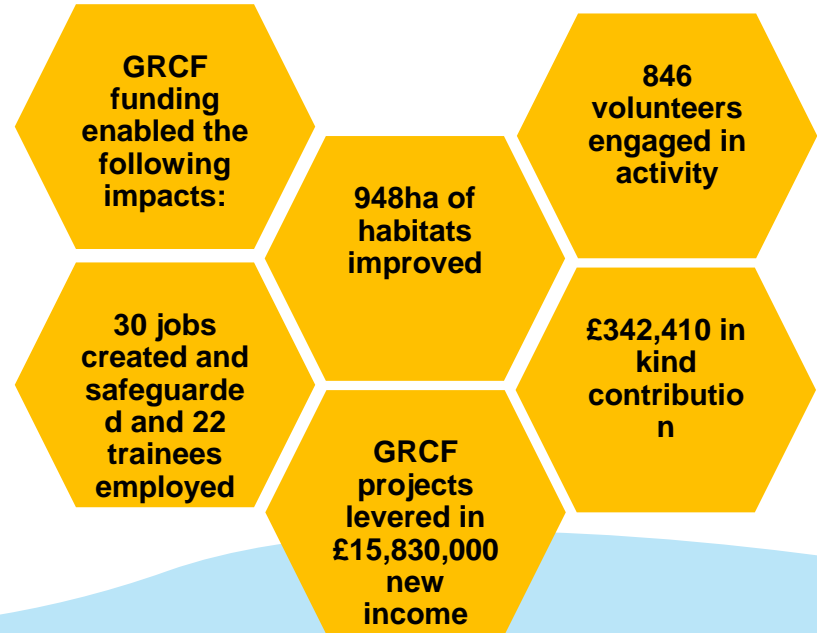


Greater Manchester's Five-Year Environment Plan sets out an ambitious vision for a "clean, carbon-neutral, climate-resilient city-region, with a thriving natural environment".

The Greater Manchester Environment Fund (GMEF) is the biggest city region-based investment opportunity for nature in the UK. It is the first of its kind.

Acting as a central funding source for projects, GMEF ensures that funds and investment has a transformational impact, demonstrates value for money, and brings benefits to all who invest.

Within the first 18 months of establishment, GMEF has transformed lives and landscapes across the city region.



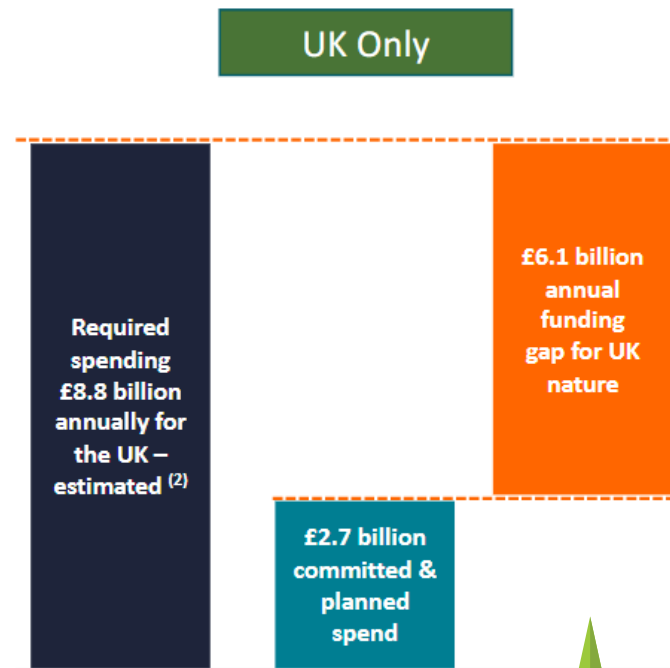
HUGE GAP IN INVESTMENT NEEDED TO REVERSE BIODIVERSITY DECLINE

We need to identify new ways to secure private investment as well as public financing. Finance is out there – we need the systems and structures to secure through effective co-ordination and prioritisation.

GMEF secured Natural Environment Investment Readiness Fund 2 in July 2022 to:

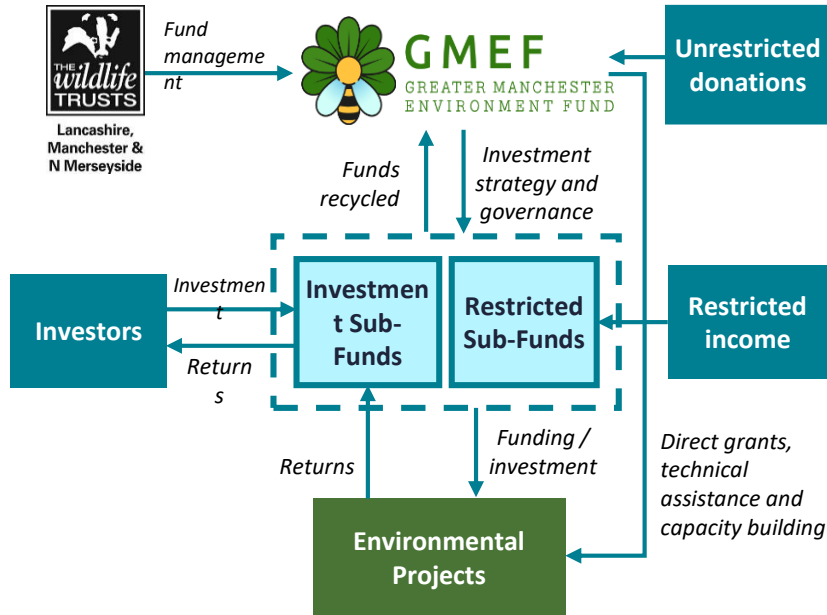
- Builds upon learning from NEIRF1 project led by GMEF
- Work with several districts to focus on barriers to progressing BNG, overcoming challenges and sharing learning.
- Focus on 'back end' challenges – legal agreements, monitoring contracts, liabilities as opposed to just identification / preparation.
- Learning to be shared amongst districts to help ensure BNG investment in GM is maximised to help address identified gap.

GMEF will be offering some services to districts to assist with maximising BNG. Type of services offered will depend upon local needs.



Global biodiversity conservation financing needs by 2030 – Paulson Institute, The Nature Conservancy, Cornell Atkinson

GMEF STRUCTURAL OVERVIEW



Overview of GMEF Approach

- GMEF is a charitable vehicle managed by Lancashire Wildlife Trust ("LWT").
- LWT provides technical expertise, local network and experience in running charitable vehicles for fund deployment.
- GMEF will collate a range of non-restricted funds (such as public and philanthropic sources) and restricted funds (such as enforcement funds) to strategically channel into delivering GM's environmental priorities.
- GMEF will use funding for:
 - Strategic direct project support; and
 - Creating specialist sub-fund subsidiaries focusing on natural capital business models that unlock restricted funding streams and mobilise private capital.
- Returns beyond those due to other investors will be recycled back into GMEF to support its aims.

GMEF provides a transparent mechanism to align funding sources and provide a governance framework to house further vehicles designed to fund specific natural capital projects in GM.

GMEF FUNDING OPPORTUNITIES HORIZON

Liaison with a broad range of GM stakeholders evidenced the significant opportunity for GMEF to raise public, philanthropic and private funds to deliver a thriving natural environment in GM and become self-sustaining over the long-term.

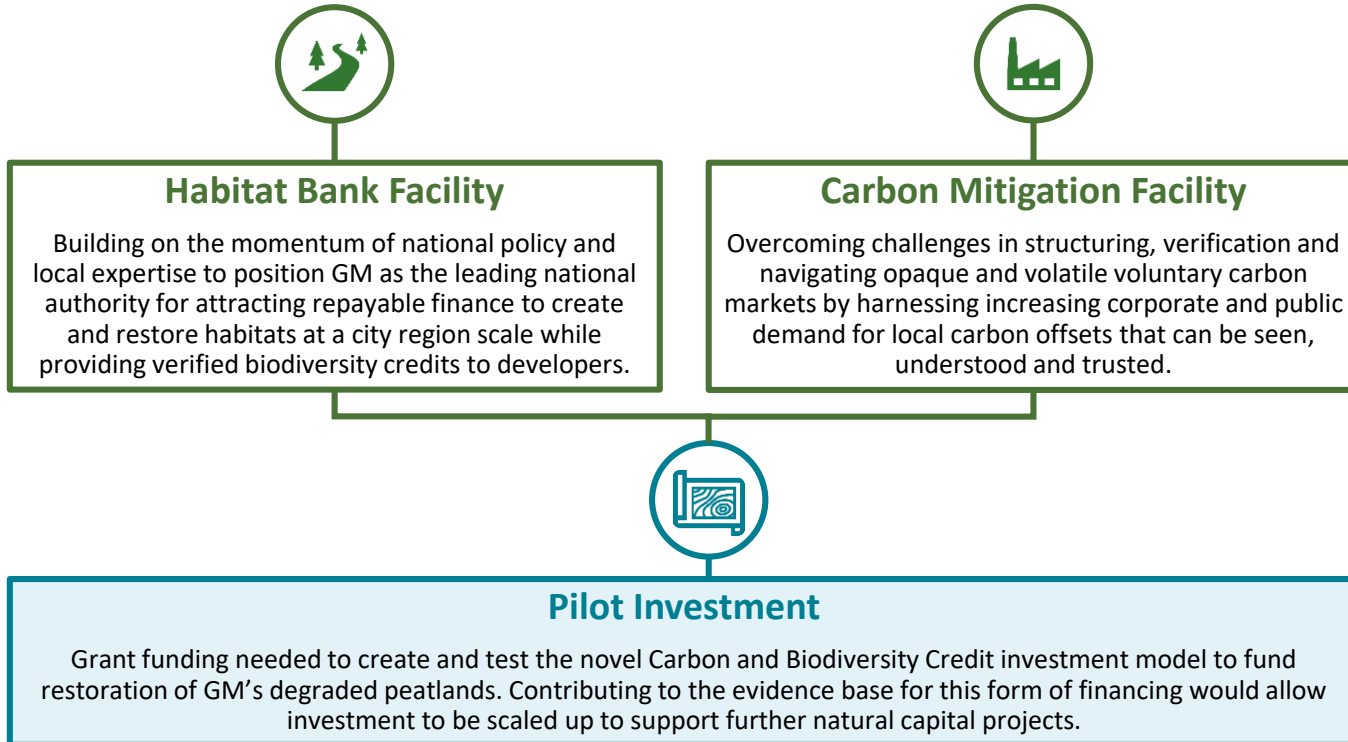
	Short Term (<1 year)		Medium Term (1-3 years)*		Long Term (3-5 years)*	
Non-repayable funding	Pump-priming public and philanthropic grants	To provide much-needed development capacity and to pilot approaches	Enforcement undertakings	Fines for pollution issued by the EA	Corporate sponsorship and individual giving	Long-term corporate partnerships and individual giving based on GMEF showcasing success
	Corporate funding programmes	Deliver corporate programmes – £200k per annum committed from Suez				Plastic bag / waste levies; business levies
Repayable investment	Habitat Bank Facility	Further detail provided on pages 18-21	Sustainable Drainage Scheme (“SuDS”) fund	Private investment mechanisms for SuDS are in development through the EU-funded IGNITION programme	Built environment carbon fund	GM is considering a mandatory carbon offsetting approach to delivering net zero carbon development
	Carbon Mitigation Facility		Environmental Impact Bonds	Results-based payment models are being explored to finance NBS	Low-carbon / circular economy	Incorporate investment funds to achieve wider low carbon ambitions

Within 5 years, GMEF aims to develop sufficient funding, levies and private investment to become a self-sustaining funding source to support the delivery of GM’s environmental ambitions.

*Further work is being undertaken by Lancashire Wildlife Trust to assess the opportunity to incorporate medium/long term funding sources within GMEF. Other funding opportunities may also become available.

INVESTMENT OPPORTUNITY DEEP DIVES

Two key investment models have been identified as the initial focus of GMEF, with the need to deliver a proof of concept pilot investment to support model scale up.




INVESTMENT MODEL 1: HABITAT BANK FACILITY


Greater Manchester has ambitious targets to embed Biodiversity Net Gain (BNG) policy within development as part of its commitment to becoming a green city region.

National BNG Policy




- 10%** ▶ **Minimum BNG requirement for all new developments** by 2022 through the incoming Environment Bill
- £200m** ▶ **Estimated future annual revenue for habitat creation** from developers in England (Defra, 2019)
- \$4bn** ▶ **Annual habitat credits transacted in the US** (Conservation Finance Network, 2020)


GM could lead the way in building this market in the UK, by attracting repayable finance to create and restore habitats at a city region scale.



 Widespread political and stakeholder support is in place to support BNG policy development and implementation in GM.

 Significant evidence base to inform strategic policies developed across a broad group of industry experts within GM Natural Capital Group

Significant Benefits of a GM BNG Approach

-  Increasing the quality and quantity of local greenspaces to benefit community well-being
-  Supporting a green city region and delivering the Mayor's zero carbon target
-  Generating new investment in strategic delivery of GM's Nature Recovery Network and ensuring funding is optimally spent

 Implementation of BNG is part of a broad range of GM green city region initiatives, including:

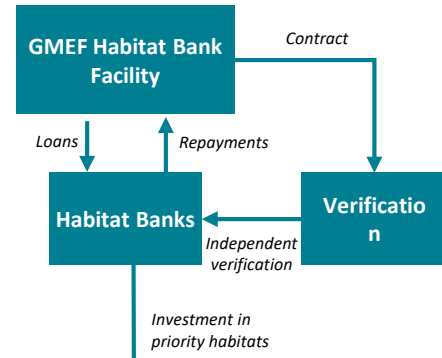
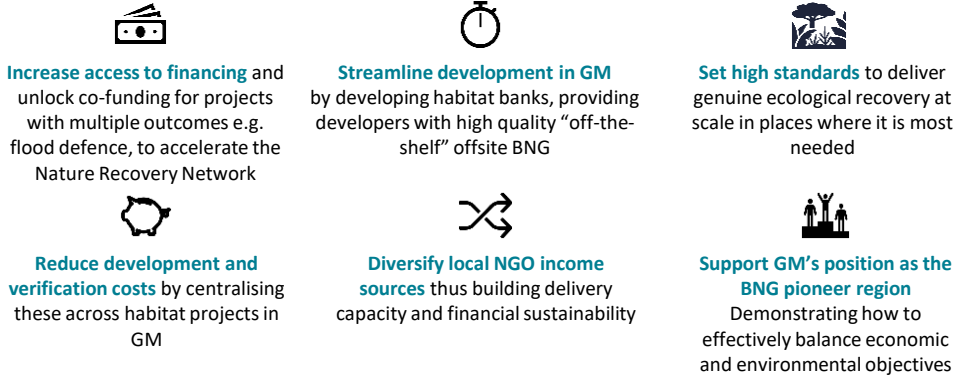
-  Prioritisation and commitment to BNG in the GM 5-Year Environment Plan
-  Salford City Council (within GMCA) is a leader in BNG and plans to introduce BNG policy in 2021 ahead of national policy

GM has been developing a BNG funding and delivery model since 2018 to inform best practice to strategically enhance biodiversity ahead of national legislation.

INVESTMENT MODEL 1: HABITAT BANK FACILITY

GM plans to lead the delivery of strategic habitat creation by setting up a dedicated Habitat Bank Facility to provide funding and support for local project developers seeking to deliver BNG at a city region scale, building on approaches in more developed markets.

Opportunity for a Habitat Bank Facility



GM market opportunity analysis

Salford	Whole GM Region
<p>Identified as the clear leader in BNG development, on track to implement ahead of national policy by early-mid 2021.</p> <p>Investment opportunity</p> <p>>£300k annual income for offsite BNG, attracting</p>	<p>BNG proof of concept pilot funding is urgently required, to provide policy development and regional learnings to scale up BNG across GM.</p> <p>£5m-£7m annual offsite BNG income reflecting a sizeable habitat bank investment opportunity</p>
<p>>£1m investment to the area</p>	



INVESTMENT MODEL 2: CARBON MITIGATION FACILITY

With GM's ambition to become carbon neutral by 2038, strong interest from GM corporates in local offsets, coupled with a major need for restoration of GM's carbon sink landscapes, there is a clear opportunity to develop a carbon investment model.

Opportunities for carbon sequestration in GM

Peatland⁽¹⁾

17,500ha

98%

140,000t

of peatland in GM with huge potential to store carbon, reduce flood risks and provide key habitats

of lowland peat has been destroyed and the remainder is badly degraded, emitting huge amounts of CO₂

potential annual reduction of CO₂eq from restoring degraded peatlands

Woodland

1 million

trees to be planted by 2024 which will:

- Lock up carbon
- Alleviate air pollution
- Reduce flood risk
- Improve biodiversity



Need for supportive market infrastructure

Market infrastructure to develop new funding mechanisms will enable restoration of these landscapes and creation of new habitats to deliver GM's carbon ambitions.



Corporate appetite for local carbon mitigation is increasing driven by growing consumer awareness and net zero commitments, providing new funding opportunities.



GM policy targets for mandatory net zero developments introduces a need for a vehicle to aggregate district offset funding and deploy into strategic projects.



Locally generated offsets have a major appeal in providing real, local benefits that can be seen, understood and trusted by corporate buyers.



Local project developers and landowners face major challenges in navigating opaque and volatile voluntary carbon markets and assessing income stacking opportunities.

(1) Natural England (2020). England Peat Strategy: Greater Manchester Peat Pilot Report for Defra

INVESTMENT MODEL 2: CARBON MITIGATION FACILITY

Engagement with local stakeholders shows there is an opportunity to provide funding and support in monetising carbon credits to developers of natural capital projects in GM. A proof-of-concept pilot is the next stage to implement and refine the business model.

A GM Carbon Mitigation Facility could...



Secure offtake agreements with corporates with carbon targets to generate more stable income streams from corporates offsetting emissions.



Attract private investment into carbon sink projects requiring funding, allowing GM to contribute to its carbon targets by restoring its natural assets.



Reduce set up and verification costs and access higher, more consistent carbon prices by aggregating local projects and centralising marketing.



Act as a regional hub for information sharing and capacity building for local organisations developing carbon capture projects.

In 2018, LWT partnered with **Heathrow Airport** to support its plans to become carbon neutral through a £94,000 investment in peatland restoration.

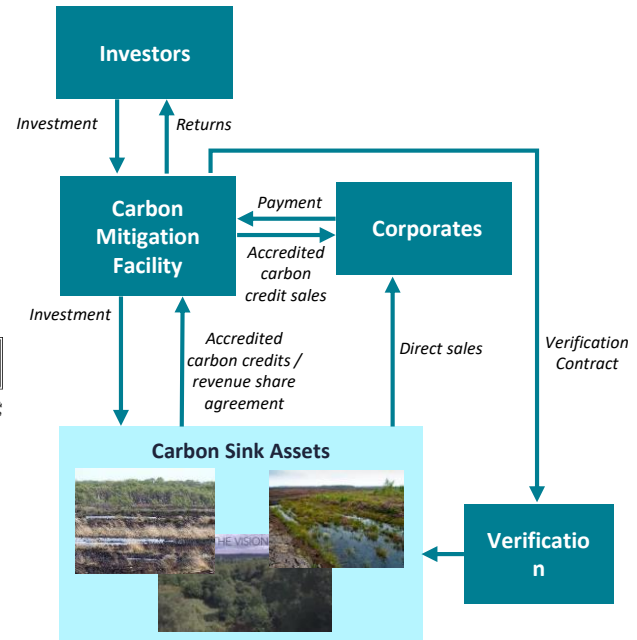
LWT's 70 ha project at **Little Woolden Moss** is expected to reduce emissions by 22,427 tCO₂e over 30 years.

Heathrow
Making every journey better



There is a significant opportunity to build on this pilot and scale up carbon projects by providing upfront capital for habitat restoration and secure long-term carbon purchase commitments from corporates.

Indicative investment structure



FUNDS SECURED



£1.8m

Green Recovery Challenge Fund For Nature Recovery projects across the GM region

£220K

Suez R4GM Community Fund For initiatives that prevent waste from going to landfill

£100k

Natural Env Inv Readiness Fund Pilot to develop natural capital investment models

£2.6m

GM Green Spaces Fund For Greening GM & Tackling inequalities in access to green spaces

Greater Manchester Green Spaces Fund

- Improve GM's green and blue spaces,
- Benefit people & nature
- Tackle the climate and biodiversity emergencies.

- Target communities where there is poor access to green spaces
- Where there is environmental risk

- Opportunities for training & skills through volunteering
- Tackle inequalities – both health and wellbeing

- Support community groups to take actions in their local areas.
- Community led action

OUTPUTS: GREEN RECOVERY CHALLENGE FUND



**948
hectares
of
habitats
improve
d**

**1.5km access
improvements
And
400 events
held**

**846
volunteers
engaged
contributing
to £342,310
Inkind time**

**12 jobs
created, 18
safeguarded
and 22
trainees**

SO WHY INVEST IN GMEF?



We are...

- Connected to decision-makers in Greater Manchester, benefiting from strong partnerships with influential organisations.
- Driving developments in biodiversity, quality green spaces and green jobs.
- Transforming the lives of 3 million people across the city region.

We will offer you...

- Bespoke investment opportunities to suit your needs
- A valuable way to contribute to the Race to Net Zero and the Local Nature Recovery Network Strategy.
- Corporate volunteering days, to help you support the communities on your doorstep.



Opportunities

- Natural Capital approach provides a unique opportunity to protect and enhance the environmental quality and resilience of the conurbation.
 - Partner collaboration is key to progressing projects that enhance and protect our natural environment as well as ensuring the region is prepared for climate change.
 - Opportunity to develop sites in a new and different way e.g. using more SuDS in areas where there is a high risk of surface water flooding.
 - Building a business case for investment in natural capital and market development for nature based solutions.
-

Challenges

- Creating a natural liveable city region – how do you deliver at a GM scale and how do you monitor this?
 - Language a key issue as general public relate more to cleaner, greener and healthier GM rather than investing in natural capital.
 - Need to build on the evidence base to fill the gaps, avoid duplication and maximise the benefits.
 - Future funding and identifying potential investment opportunities particularly through private sector investment.
 - Skills and expertise required to deliver future nature based solutions.
-



@GM GreenCity #GMGreenCity

