



Green Infrastructure Prospectus 2010

A Prospectus for Green Infrastructure - underpinning the sustainable development of Northwest England.



Green infrastructure is crucial to the sustainable development of the Northwest. High quality green infrastructure will help improve the Northwest as a place to live, to work in and support adaptation to challenges such as climate change and population trends.

Green infrastructure contributes to economic security and provides essential ecosystem services that underpin the region's economy.

This prospectus sets out one big idea – that green infrastructure should be treated as a critical infrastructure like roads or waste disposal – interpreted through five actions that can be applied at the regional level to four strategic priorities.

What is green infrastructure?

Green infrastructure is the Northwest's life support system – the network of natural environmental components and green and blue spaces that lies within and between the region's cities, towns and villages. It regulates the quality of our air, water and soil, provides raw materials for our economy, sets the scene for investment and underpins the wellbeing of all who live and work in the region.

The Northwest's regional spatial and economic strategies support green infrastructure through a range of policies¹. Its importance in terms of planning and implementing government policies has been recognised by national agencies and government departments².

The context

Nobody today questions the need to plan critical infrastructures such as energy and communications. Previous generations understood that better sewage systems or transport networks, for example, would not just benefit health and quality of life but also the economy.

We need to start thinking in the same way about green infrastructure. Like water, waste disposal, flood and coastal defences, green infrastructure and the natural

processes that deliver ecosystem services are essential to a sustainable future³.

Our approach to green infrastructure must ensure it continues to provide multiple benefits, contributing to economic stability, sustainable growth and quality of life and place. This will stimulate a virtuous circle in which the natural environment too is a winner. The better the environmental quality, the greater the benefits.

The Northwest has many natural assets, including some of the finest landscapes and biodiversity in Europe. However, it also has areas of very low environmental quality, including derelict land, and rivers with poor quality water. And despite significant investment, it lags behind the rest of the UK in terms of economic growth⁴. In common with the rest of Europe it also faces three long term challenges: climate change, demographic shifts and energy security.

The Northwest's regional strategy seeks to identify and build a 'distinctive competitive offer' as a basis

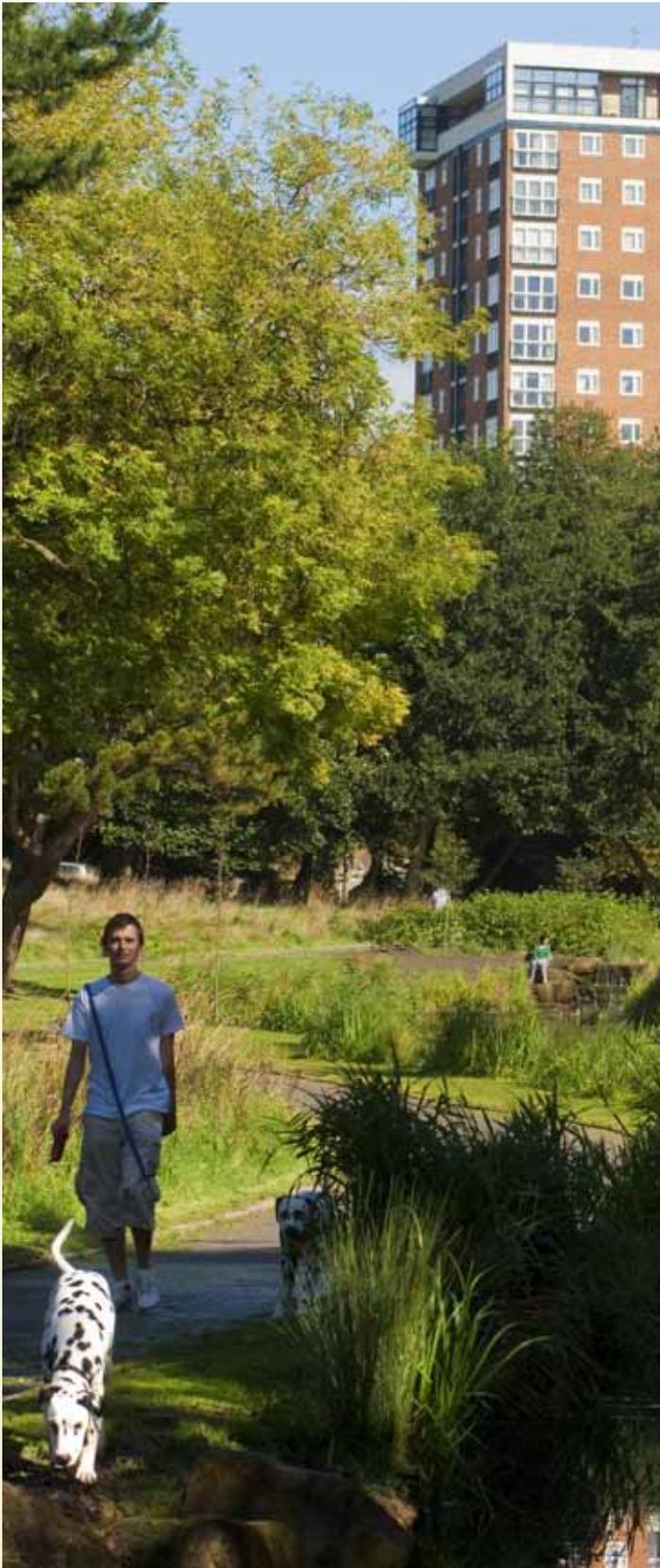
for sustainable economic growth. High quality green infrastructure is an essential part of this 'competitive offer'.

The Northwest approach to understanding green infrastructure provides a comprehensive process and framework for relating the planning, creation and management of natural environments to social and economic benefits. It offers a way of combining the economy, sustainable communities, and ecosystem services agendas. It can also use the outputs and aspirations from other environmental, social and economic frameworks – such as the housing and regeneration strategies, NW Landscape Framework⁵, and the delivery of biodiversity targets - to bring sectors together to develop aligned action-plans, making best use of limited resources.

The financial crisis has raised important questions about how we should grow our economy in the future. A proactive and planned approach will ensure that the region's natural assets work as hard for the sustainable



Salford Quays, Salford. Good planning ensures space to deliver a wide range of the benefits of green infrastructure alongside space for business. Picture by Martin Moss.



Sefton Park, Liverpool. Green spaces improve town and city life, lowering temperatures, filtering out pollutants and raising the activity levels of local people. Picture by McCoy & Wynne.

recovery of the Northwest as its other assets do, while delivering net gain in their quality and functionality.

The green infrastructure approach ensures that the natural environment and its natural processes can make the best possible contribution to help achieve the region's aspirations for sustainable economic growth, environmental quality, and quality of life.

Why green infrastructure matters – key facts

- A study by the Environment Agency⁶ shows that more than £32bn will be required to maintain, operate and develop environmental infrastructure across the Northwest over the next 20 years. The infrastructure will be used to prevent floods, as well as manage waste and sewage. A green infrastructure approach could not only reduce this bill but also make the money work harder by making interventions more effective.
- Around 20 per cent of our areas for strategic investment have challenges (sometimes described as 'investment pinches') that could inhibit development⁷. Examples include Salford, where an extensive housing programme coincides with a growing flood risk. Green infrastructure could be key to resolving these issues.
- Green spaces improve town and city life, lowering temperatures, filtering out pollutants and raising the activity levels of local people. Increasing the exercise levels of just 1 per cent of the UK's population would deliver nearly £1.5bn in healthcare savings.⁸
- Upland and lowland management to restore floodplains and improve water quality has demonstrated benefit-cost ratios of up to 4:1.⁹
- Research commissioned by Natural Economy Northwest shows that green infrastructure produces 11 identifiable economic benefits, including a thriving tourist industry, a more productive workforce, and quality of place¹⁰.

The track record in the Northwest

The Northwest has developed approaches to partnership working and planning for green infrastructure that are increasingly viewed as national good practice. For example, the *Northwest Green Infrastructure Guide 2008*¹¹ won an award from the Royal Town Planning Institute, while *Green Infrastructure for the Liverpool and Manchester City-Regions*¹² won an award from the Landscape Institute. Publications from Natural England, Defra and CABE also quote the best practice in the Northwest. The region has led the field in developing

better understanding of the economic benefits of green infrastructure through the Natural Economy Northwest programme¹³.

While a great deal of progress has been made at the policy, strategic and project delivery levels, there is still much to do. It is essential to continue the momentum of engagement between the environmental, planning and economic sectors in order to make the most of investment and achieve sustainable economic growth.

Key green infrastructure issues for the next five years

1. Five actions, four places

We have prioritised **five essential green infrastructure regional actions** for the Northwest.

These actions have been identified from assessments of key regional strategies and policies. Actions not on this list may be of similar importance, but better undertaken at a sub-regional or local level.

The five actions

- Sustainable economic recovery and competitiveness
- Supporting the development of sustainable, healthy communities and improving health and wellbeing
- Building greater resilience to climate change
- Support for the land economy to develop greater food and fuel security
- Repairing, protecting and managing landscape, biodiversity and ecosystem services where the natural environment is vital to sustainable economic development and tourism.

We recognise we have to focus on priority areas for intervention, and have identified four types of area that should be addressed first.

Two areas are driven by opportunity:

- Areas that will experience major change by virtue of their economic priority and/or housing growth. Green infrastructure will need to be integrated into these areas to support their sustainable development.
- Areas where enhancement could lead to improved economic performance and quality of life gains. Green infrastructure can help give a boost to places that have scope to play a bigger role in the region's future.

Two areas are driven by need (see 'pinch point' and environment index maps):

- Areas where green infrastructure can support regeneration, development and action on climate change by helping to overcome 'pinch points' for sustainable growth.
- Areas of known environmental deficit. These areas frequently experience the combined impacts of deprivation, health inequalities and poor environmental quality, all of which are a drag on the economy.

To support the implementation of these priorities, two additional proposals, outlined below, should be considered.

2. Supporting and promoting the green infrastructure knowledge base

The next regional strategy – RS2010 – has the potential to be the springboard for promoting green infrastructure across the region. The strategy should advocate the continued development and promotion of the necessary leadership, coordinating and specialist support services currently focused in the Northwest Green Infrastructure Unit (GIU) and the expertise associated with the unit.¹⁴

RS2010 should aim to ensure green infrastructure is planned, managed and developed on a par with other critical infrastructures. Such planning and investment should be integrated at every level in the Northwest (regional, sub-regional and local) and be compatible across administrative boundaries. The GIU should be empowered to promote, co-ordinate and support activity, and should also monitor a range of indicators to demonstrate the effectiveness of this approach.

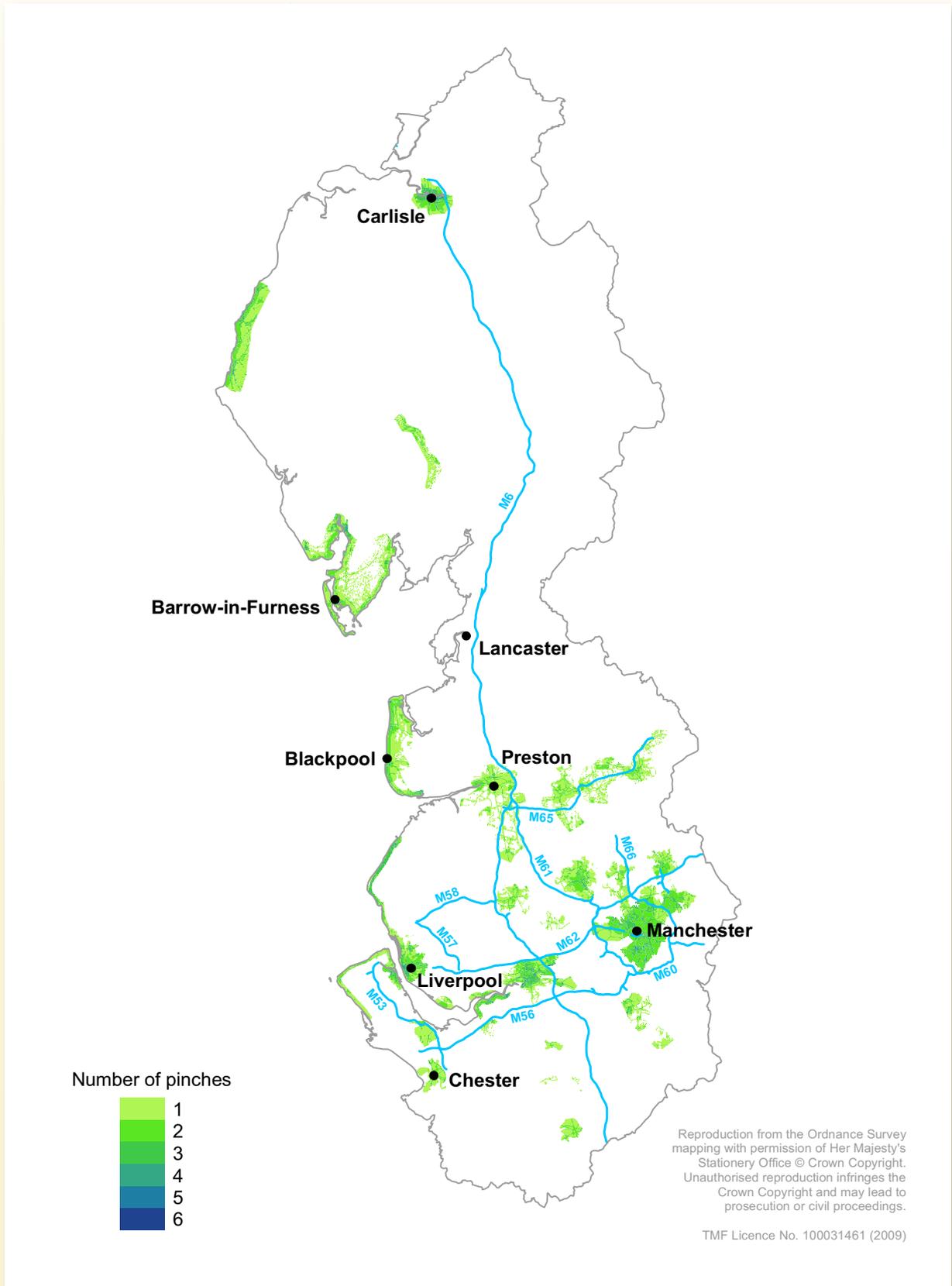
3. Put green infrastructure at the heart of decision making

Strategies at every level should put green infrastructure assets and their natural services at the core of sustainable development and regeneration activity. To explain the rationale for this, they should draw on the evidence base of economic benefits compiled through the Natural Economy Northwest programme.

To complement this, planners and practitioners should continue to develop and use the Sustainability Checklist for Developments, into which green infrastructure should be firmly embedded. A programme of training and support should be developed to equip public agencies and their staff to plan, maintain and develop green infrastructure. Green infrastructure needs to be integrated into business advice to enable businesses to be part of the solution and to benefit wherever possible¹⁶.



Holcolmbe Moor, above Ramsbottom. Space for recreation, healthy lifestyles and biodiversity. Picture by Martin Moss.



There are many 'pinch points' in the Northwest, where green infrastructure can reduce risks and other impediments to development such as noise, poor air quality, flooding, soil erosion and the loss of carbon storage. The map shows the concentration of pinch points in relation to motorways and major towns.



The Mersey Forest, pictured from Frodsham Hill in Cheshire, with Fiddlers Ferry power station in the background. A recent study of European Objective 1 funding for the Mersey Forest shows that for every £1 invested, the region can expect to reap more than £10 worth of benefits. Photo by Mike Roberts.

References

- ¹ These include the regional green infrastructure policy - Regional Spatial Strategy, Policy EM3, page 94; and Transformational Action 113 of the current Regional Economic Strategy.
- ² See, for example, Natural England guidance 2009, and Environment Agency Position Statement 2009.
- ³ Draft CLG guidance on Regional Strategies 2009. Ecosystem services include the provision of food and water; the regulation of climate and disease; support systems such as crop pollination; and benefits to culture and wellbeing.
- ⁴ http://www.nwregionalstrategy.com/files/Long_Term_Forecast_-_April_2009.pdf
- ⁵ The NW Landscape Character Framework brings together information about geology, landform, biodiversity, history and land use to provide an integrated geographic framework for the North West. See http://www.naturalengland.org.uk/regions/north_west/ourwork/landscapecharacterframework.aspx
- ⁶ Environment Agency, 2009. Using Science to Create a Better Place: Costs of Environmental Infrastructure needs to meet the North West Regional Spatial Strategy, http://www.surf.salford.ac.uk/cms/resources/uploads/File/SCHO0709BQRR_Main_Report.pdf
- ⁷ See: http://www.greeninfrastructurenw.co.uk/resources/Critical_GI_23rd_March_lores.pdf
- ⁸ No Charge? Valuing the natural environment, Natural England, <http://naturalengland.etraderstores.com/NaturalEnglandShop/NE220>
- ⁹ *ibid.*
- ¹⁰ The Economic Value of Green Infrastructure, Natural Economy Northwest, 2008, <http://www.naturaleconomynorthwest.co.uk/resources+reports.php>
- ¹¹ <http://www.greeninfrastructurenw.co.uk/resources/GIguide.pdf>
- ¹² See http://www.greeninfrastructurenw.co.uk/resources/GI_for_the_Liverpool_&_Manchester_city-regions.pdf
- ¹³ <http://www.naturaleconomynorthwest.co.uk/resources+reports.php>
- ¹⁴ A full description of the regional structures that have developed in the Northwest is available from www.ginw.co.uk
- ¹⁵ North West Development Agency (2009) Checklist North West. <http://sdchecklist-northwest.org.uk/>
- ¹⁶ See Natural Benefits for Business, <http://www.naturaleconomynorthwest.co.uk/resources+reports.php>

How improved green infrastructure will support the Northwest's economy

Overarching policy					
Green infrastructure will be established as a comprehensive framework contributing to the sustainable economic development of the region by supporting :					
The five prioritised essential regional actions:	Sustainable economic recovery and competitiveness.	Supporting the development of sustainable, healthy communities.	Building greater resilience to climate change.	Support for the land economy to develop greater food and fuel security.	Repairing, protecting and managing landscape, biodiversity and ecosystem services.
Long term vision:	The Northwest has a global reputation for GI design and planning that supports an excellent quality of life and attracts investment.	The Northwest has prosperous and healthy communities where people value the role of quality GI in underpinning society.	GI is our main urban air conditioning system and plays a key role in water and flood management strategies.	The Northwest has a vibrant, high tech, sustainable farming and forestry sector that supports fuel and food security and the rural economy.	GI is recognised as a critical infrastructure and planned strategically. High quality, rich rural and urban landscapes provide functioning ecosystem services.
Five year implementation priorities:	Programmes that support economic recovery for the three city regions, five sub-regions, the Mersey Belt and Energy Coast/ Morecambe Bay all feature high quality GI. Key routes assessed for opportunities to enhance image and implement GI programmes.	Programmes of GI interventions developed to support housing growth and regeneration in agreed priority areas, as well as making best use of quality GI for improving health and wellbeing. GI is key mechanism for sustainable development and job creation.	Programme of interventions in priority vulnerable communities. New investment considers impact of 'urban heat islands'. Land management and sustainable urban drainage reduces flood risks.	Coordinated land use and economic development planning promotes rural areas and rural/urban interdependencies. Improved coordination of public investment in rural areas.	Coordinated programmes of delivery that focus on GI function, landscape and ecosystem services in the areas identified as a priority through RS2010 and regional biodiversity action plan.



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Find out more

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