



Green infrastructure strategies

An introduction for
local authorities
and their partners

www.naturalengland.org.uk





Well designed urban drainage can provide valuable wildlife habitat

Why do we need green infrastructure?

When planning for new developments, consideration has to be made for infrastructure to service new homes and businesses. Roads, lighting, storm drainage, sewerage, schools and services are essential infrastructure components. However, the importance of the 'green' infrastructure that contributes so much to the setting and quality of people's living and working environments, and its role in generating economic benefit,

has often been overlooked. To remedy this shortcoming, the concept of green infrastructure has been developed.

The Growth Points programme has seen a total of nine new Growth Points in the West Midlands region, and this has placed green infrastructure firmly on the regional planning agenda. It is normally a requirement that Growth Point authorities produce a green infrastructure strategy.

What should green infrastructure achieve?

Natural England's green tests for new development

In July 2008 Natural England laid down a challenge for new developments. Helen Phillips, Natural England's Chief Executive said:

"All new developments must pass a simple green test. Developers would never contemplate leaving out grey infrastructure, such as sewers and mains water from developments, so why should it be acceptable to leave out green infrastructure when it's proven to improve people's health and quality of life?"

Natural England set out five green tests. New development should:

1. Provide greenspace within 300m of every home.
2. Support an increase in priority species and habitats in and around new developments.
3. Provide a wide variety of parks, wild areas and open spaces to meet the needs of both nature and people.
4. Be equipped to cope with the effects of climate change and extreme weather events.
5. Be designed to ensure it fits into any surrounding countryside and into its landscape setting.



Wildflower grassland can improve the image of an area

What is green infrastructure?

In 2006 the West Midlands Regional Assembly published 'Green Infrastructure – A Prospectus for the West Midlands Region'. The prospectus contained this definition:

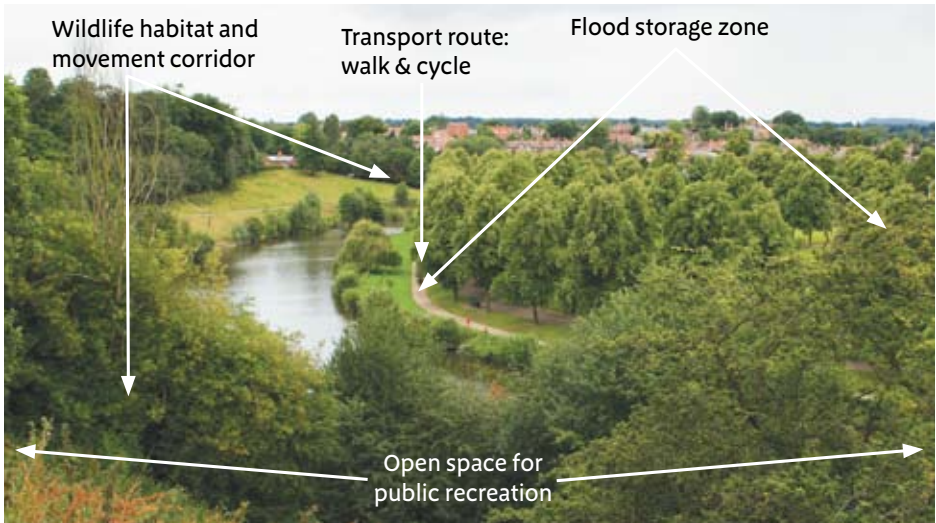
Green infrastructure is the network of green spaces and natural elements that intersperse and connect our cities, towns and villages. It is the open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, street trees, natural heritage and open countryside. Green infrastructure provides multiple benefits for the economy, the environment and people.



Green hairstreak butterfly occurs on brownfield sites in the West Midlands

This definition mentions **multiple benefits**. The concept of multi-functional areas of land is a key feature of green infrastructure. Individual spaces may have many functions such as:

- providing recreational space for healthy exercise and a relatively tranquil environment;
- providing a place for wildlife to live;
- contributing an attractive green element to the image of an area;
- raising the quality of people's every day living and working environments;
- providing flood storage space in times of flood;
- providing a transport corridor for walkers and cyclists;
- helping areas cope with the impacts of climate change; or
- providing areas for local food production.



The multifunctional role of green infrastructure, an example from Shrewsbury

Planning and implementing green infrastructure

Green infrastructure should be:

- a primary consideration in planning, developing and maintaining new development;
- provided as a varied, widely distributed, strategically planned and interconnected network;
- factored into land values and decisions on housing densities and urban structure;
- supported by a green infrastructure strategy;
- multi-functional, seeking the integration and interaction of different functions on the same site and across a green infrastructure network as a whole;
- implemented through co-ordinated planning and management that cuts across local authority departments and boundaries and across different sectors;
- able to achieve physical and functional connectivity between sites at all levels and right across a town, city or sub-region;
- implemented primarily through green infrastructure strategies and Local Development Frameworks, and it should be formally adopted within these frameworks; and
- established permanently, with financial support for continued maintenance and adaptation.

Green infrastructure strategies

Policies and decisions on development proposals should conserve and enhance valued environmental assets by seeking first to avoid loss or harm before considering the need for mitigation or compensatory measures. A green infrastructure strategy can provide the basis on which to make such decisions.

Green infrastructure strategies are much more than a strategy for the provision of the traditional 'green space' of parks and gardens. Strategies should also:

- provide off road and green routes that allow walkers and cyclists to travel to work and local services;
- consider the role of privately owned and inaccessible 'green spaces' including gardens that provide havens and interconnecting corridors for wildlife, contribute to the quality and character of the local environment;
- consider how some land can help alleviate flooding by providing storage areas at times of flood or heavy rainfall;
- consider where shade and cooler conditions can be provided in anticipation of hotter summers resulting from predicted climate change impacts;



- consider the role of trees and woodlands, and opportunities for renewable energy generation;
- consider how new development should be designed, where it should be located in the context of local landscape character, and how it can contribute to the wider green infrastructure network;
- consider how the overall allocation of land for biodiversity functions can contribute to wider ambitions for biodiversity conservation, such as the West Midlands Landscapes for Living Project;
- provide a strategic framework for identifying and protecting those brownfield sites that represent important habitats or very valuable social spaces; and
- seek physical and functional connectivity between sites at all levels and right across a town, city or sub-region, shaped by local character and distinctiveness in terms of species, habitats, landscape and townscape.

A well produced green infrastructure strategy should provide the framework for an exemplar of environmentally sustainable development, where all the green spaces of a town or city, both public and private, connect with each other and with the wider countryside.



Cover photograph: Rugeley Power Station © Forestry Commission

Page 2: © Natural England/Andy Gale

Page 3: © Wolverhampton City Council/Peter Millet

Page 4: © Natural England/Nigel Jones

Page 5: © Natural England/Nigel Jones

Page 6: © Black Country/Geological Society

Where to find out more about green infrastructure

Green Infrastructure – A Prospectus for the West Midlands Region

Green Infrastructure for the West Midlands Region: Technical Mapping Paper
– A guide to the spatial mapping and assessment of green infrastructure for public and wildlife benefit

Both documents are available as downloads from the West Midlands Regional Observatory web site at www.wmro.org, or contact Natural England/Forestry Commission for copies.



Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

© Natural England 2008

ISBN 978-1-84754-108-9

Catalogue Code: NE139

www.naturalengland.org.uk

Natural England publications are available as accessible pdfs from: www.naturalengland.org.uk/publications

Should an alternative format of this publication be required, please contact our enquiries line for more information: 0845 600 3078 or email enquiries@naturalengland.org.uk

Printed on Defra Silk comprising 75% recycled fibre.