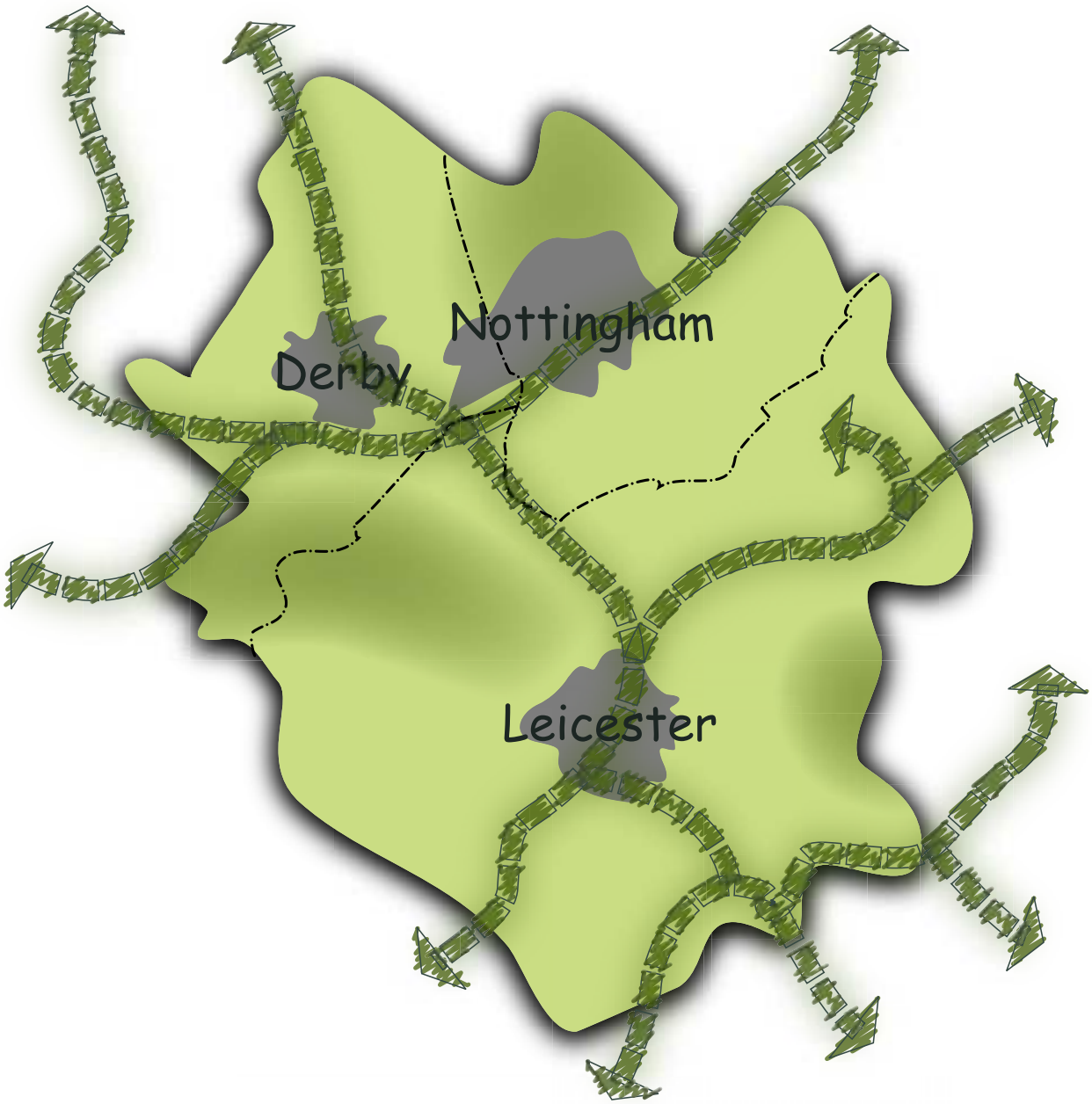
KS/GIN/02

GREEN INFRASTRUCTURE

Green Infrastructure Strategy

Volume 1

Sub-Regional Strategic Framework



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FOREWORD

The East Midlands region faces an unprecedented scale of growth over the coming years, especially in the 6C's sub-region. In light of the scale and number of new houses that are planned, we recognised the need to develop a strategic approach to provision of Green Infrastructure (GI) as an environmental life support system for healthy communities and ecosystems. We wanted to maximise the potential of GI to bring about multifunctional holistic solutions to achieve wide ranging environmental, economic and social benefits, including climate change adaptation and mitigation.

The 6C's partnership have been working together with key players across the area for the last two years to produce this exciting and important Strategy. The challenge is now to deliver and manage GI along with the "grey infrastructure" needed to support sustainable communities in the sub-region. This Strategy represents a major step forward to achieve this by:

- Giving the strategic spatial framework needed to safeguard, manage, and extend networks of GI in local planning documents;
- Showing how the benefits of GI to economics, climate change, health, biodiversity and landscape can be realised;
- Significantly reducing the amount of data required to produce local policy documents; and
- Identifying funding sources and mechanisms for the delivery of GI and the priorities for investment.

I cannot commend enough the monumental achievement of the 6Cs Strategic GI Project Board, and also the overall 6Cs Partnership, in producing this sub-regional GI Strategy.

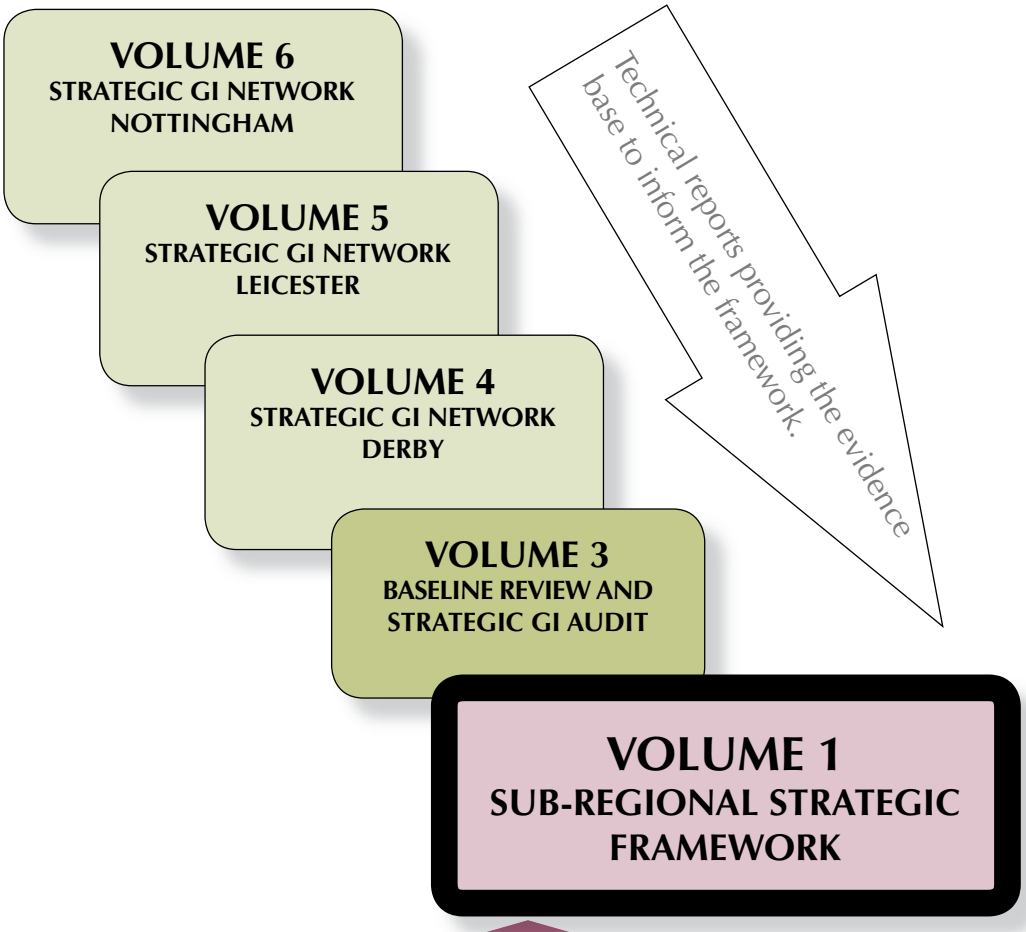
It provides a framework for all those working to plan and deliver sustainable development, and GI delivery in particular, within the sub-region and elsewhere around the East Midlands Region over the forthcoming years.

Alison Hepworth
Chair, 6Cs Strategic GI Project Board

STRATEGY STRUCTURE

STRATEGY

Long-term vision for the strategic GI network across the 6Cs Sub-Region



VOLUME 2
ACTION PLAN

Key actions required to deliver the Strategic Objectives: promotion, advocacy and partnership working

Projects and initiatives to deliver the Sub-Regional GI Network

DELIVERY

Implementation of the Strategy to be reviewed regularly to reflect changing priorities and emerging delivery opportunities

1.0 INTRODUCTION TO GREEN INFRASTRUCTURE

1.1 Background and Context

The 6Cs Growth Point

1.1.1 The Three Cities (Derby, Leicester, and Nottingham), and the Three Counties (Derbyshire, Leicestershire and Nottinghamshire), known as the '6Cs' Growth Point (hereafter referred to as the 6Cs sub-region), is one of 29 areas proposed nationally under the Sustainable Communities Plan for significant housing growth. The East Midlands Regional Plan therefore makes provision for 177,600 new homes to be built in the area by 2026. Local authorities and other partner organisations in the 6Cs sub-region have been successful in receiving increased levels of funding from Central Government for necessary infrastructure to support anticipated higher levels of growth.

1.1.2 The 6Cs sub-region has a population of 1.9m people. Proposals for significant future growth under the East Midlands Regional Plan (March 2009)[1] in this area are focused on the three cities, plus the towns of Coalville, Hinckley (including Barwell and Earl Shilton), Hucknall, Ilkeston, Loughborough (including Shepshed), Market Harborough, Melton Mowbray and Swadlincote.

1.1.3 The Three cities represent around half the economy of the region and their labour and housing markets, shopping catchments and travel patterns overlap to varying degrees. They are also home to some of the most deprived communities in the country and have areas that need urgent regeneration, both within the inner cities and in outlying housing estates. Other parts of the sub-region have distinctive and important features of sub-regional importance with areas such as Charnwood Forest, Sherwood Forest and The National Forest being of significant biodiversity, cultural, recreational and landscape value. These resources are in close proximity to high levels of population, and cross administrative boundaries.

1.1.4 Growth Point status is conditional upon fulfilling certain requirements including ensuring that growth is sustainable. The delivery of high quality Green Infrastructure (GI) consistently across the area is a key component of this. With such a large and growing population, and the wide range of local authorities and other stakeholder organisations within the 6Cs sub-region, a strategic, sub-regional approach towards planning for future GI provision is essential. This approach can help to ensure that GI needs, both within and beyond the Growth Point, are planned for, delivered and managed in a coordinated and integrated manner.

[1] http://www.gos.gov.uk/goem/planning/regional-planning/

1.1.5 The 6Cs sub-region is shown on **Figure 1.1**. It encompasses the following local authority areas:

- **Derbyshire – Derby, Amber Valley, Erewash and South Derbyshire;**
- **Leicestershire – Leicester, Blaby, Oadby & Wigston, Harborough, Melton, Charnwood, Hinckley & Bosworth and North West Leicestershire; and**
- **Nottinghamshire – Nottingham, Gedling, Rushcliffe, Broxtowe and Ashfield (the Hucknall wards only).**

1.2 What is Green Infrastructure?

Definition of GI

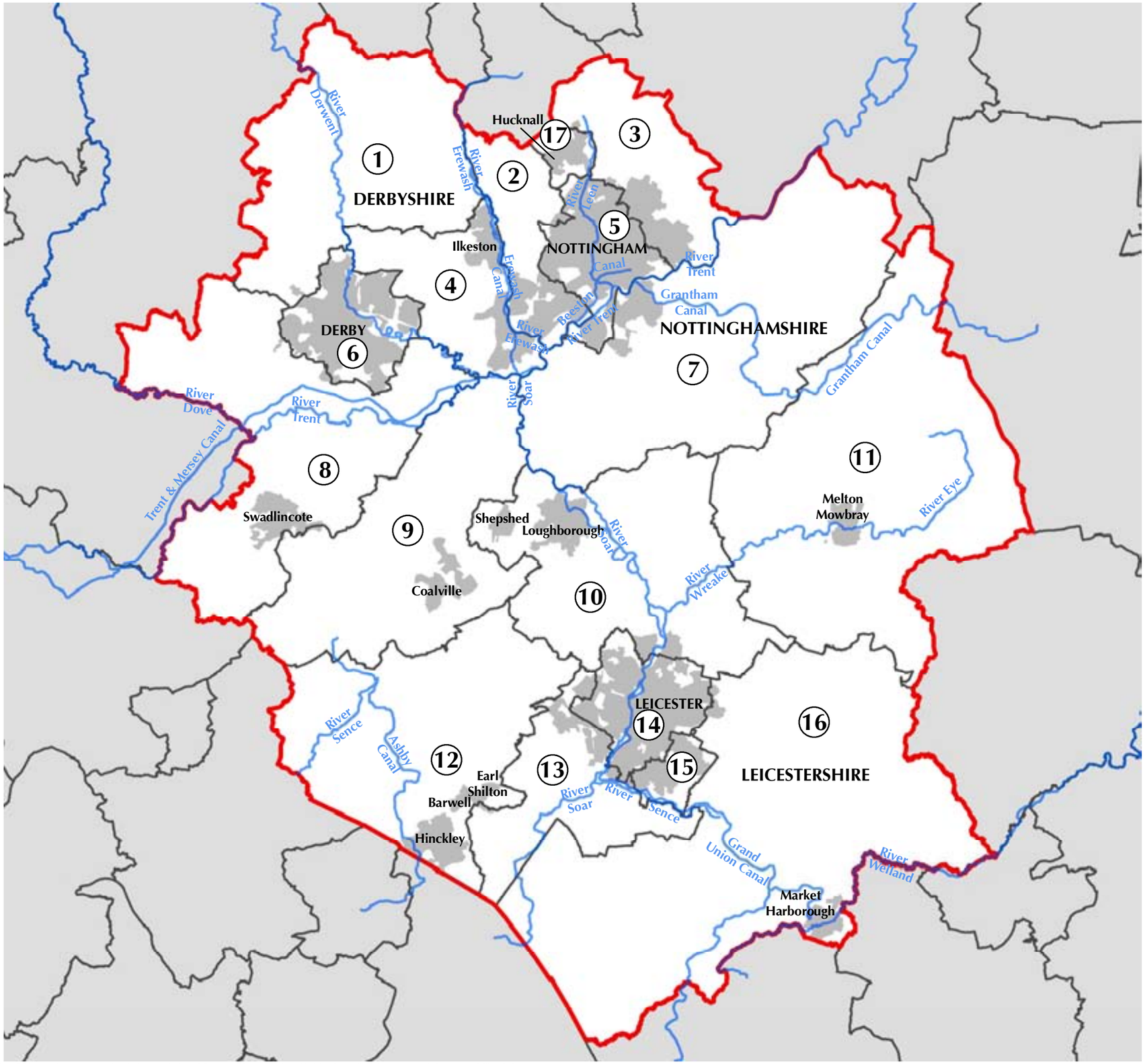
1.2.1 The Green Infrastructure Guide for the East Midlands (2008) describes GI as *'the term which has evolved in recent years within Government social and regeneration policies to describe the network of greenspaces and natural elements that intersperse and connect our cities, villages and towns. In urban situations, GI complements and balances the built environment; in rural settings it provides a framework for sustainable economies and biodiversity. In between, it links town and country and interconnects wider environmental processes. GI is a holistic approach to viewing the natural environment which acknowledges the multiple benefits and vital functions it provides for the economy, wildlife, local people, communities and cultural assets alike.'*

1.2.2 In line with the Brief, the definition of GI adopted by this Strategy is as described in the East Midlands Plan:

'Green Infrastructure comprises the networks of multifunctional greenspace which sit within, and contribute to, the type of high quality natural and built environment required to deliver sustainable communities. Delivering, protecting and enhancing these networks require the creation of new assets to link with river corridors, waterways, woodlands, nature reserves, urban greenspace, historic sites and other existing assets.'

1.2.3 In this context, it is important to recognise that **'multifunctionality'** – the potential for GI to have a range of functions that can deliver a broad range of benefits or services in relation to economic, environmental and social policy priorities – lies at the core of the GI concept. Whilst multifunctionality can apply to individual sites and routes, a fully multifunctional GI network will best be achieved when the variety of functions provided by sites and links are considered together.

1.2.4 GI can also play a key role in **place-making**. This is the process of recognising the character, distinctiveness and sensitivities of different places, and ensuring that policies, programmes and



KEY

6Cs Sub-Region

Principal Urban Areas and Sub-Regional Centres

District/Borough Boundaries

1 Amber Valley Borough Council
2 Broxtowe Borough Council
3 Gedling Borough Council
4 Erewash Borough Council
5 Nottingham City Council
6 Derby City Council
7 Rushcliffe Borough Council
8 South Derbyshire District Council
9 North West Leicestershire District Council
10 Charnwood Borough Council
11 Melton Borough Council
12 Hinckley and Bosworth Borough Council
13 Blaby District Council
14 Leicester City Council
15 Oadby and Wigston Borough Council
16 Harborough District Council
17 Ashfield District Council

Principal Rivers and Canals

0 2 4 km

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Figure 1.1
The 6Cs GI Strategy Area

proposals respond accordingly to landscape and townscape character, vernacular and sense of place.

GI Typology

1.2.5 GI, as defined by the East Midlands Plan, refers to many different types of greenspaces. Informed by both the Green Infrastructure Guide for the East Midlands (2008) and the Natural England Green Infrastructure Guidance (2009), a typology of GI assets has been developed. For the purposes of this Strategy, GI includes the following public and private assets, with and without public access, in urban and rural locations:

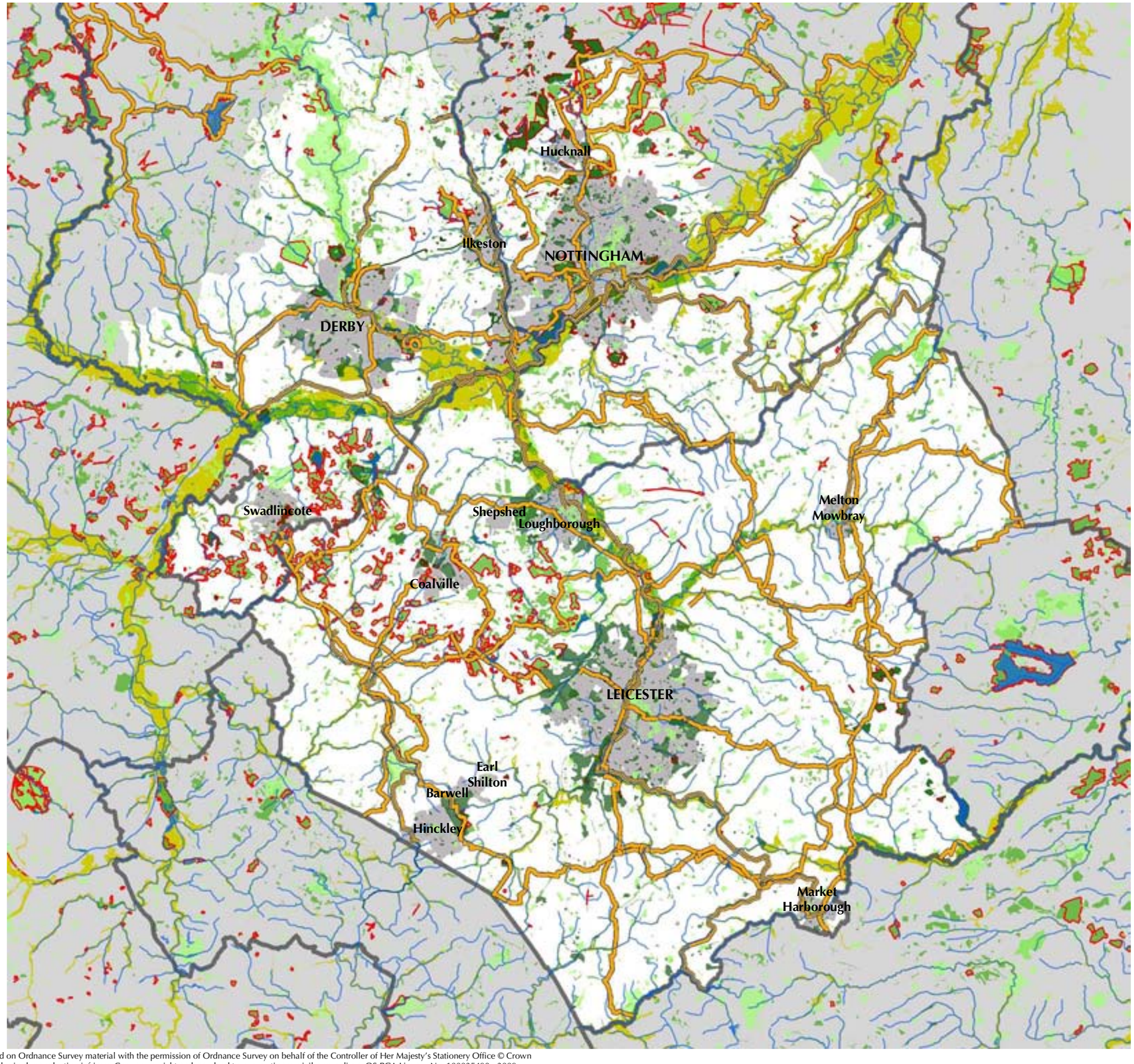
- **Parks and Gardens** – urban parks, pocket parks, Country and Regional Parks, formal gardens and country estates;
- **Amenity Greenspace** – informal recreation spaces, children's play areas, playing fields, communal green spaces within housing areas, domestic gardens, village greens, urban commons, other incidental space, green roofs;
- **Natural and Semi-natural Greenspaces** – woodland and scrub, grassland, heath or moor, wetlands, open water bodies (including flooded quarries) and running water, wastelands and disturbed ground, bare rock habitats;
- **Green Corridors** – rivers and canals including their banks, road and rail corridors/verges, hedgerows, ditches, cycling routes, pedestrian paths, and rights of way; and
- **Other** – allotments, community gardens, city farms, cemeteries and churchyards, registered commons, heritage sites, development sites with potential for open space and links, land in agri-environmental management.

1.2.6 This typology is generally reflected in the strategic level mapping of GI Assets within the 6Cs sub-region, the broad distribution of which is shown indicatively on **Figure 1.2**[2].

1.2.7 As advised by the Natural England Green Infrastructure Guidance (2009), it is important to make a distinction between planning for GI (as defined above) and planning for open space (as reflected in green/open space strategies based on the typology of recreational, amenity and public open spaces identified by *PPG17: Planning for Open Space, Sport and Recreation, 2002*). The Guidance draws a distinction in the following terms:

- *'GI goes beyond the site specific, considering also the 'big picture' – landscape context, hinterland and setting, as well as strategic links of sub-regional scale and beyond;*
- *GI considers private as well as public assets;*
- *GI provides a multifunctional, connected network delivering ecosystem services;*
- *Whilst PPG17 compliant studies consider typologies beyond sports and amenity greenspace, spaces are considered primarily from access, quality and management perspectives, rather than consideration of wider environmental benefits and services. These green spaces are, however, important constituents of a GI network.'*

[2] The extent to which the assets identified in the GI typology have been considered in the mapping and analysis underpinning this Strategy was dependant on the availability of data within the timescales of the project. See **Volumes 3-6** for details of data used in the study.



KEY

- Existing Natural Greenspace
- Existing Strategic Accessible Natural Greenspace
- Existing Strategic Countryside Access Routes
- Existing Open Space and Green Wedges
- Designated Historic Environment Assets
- Predominantly Undeveloped Natural Floodplain
- Watercourses and Waterbodies
- Principal Urban Areas and Sub-Regional Centres
- County Boundaries

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. The Plan illustrates indicative GI assets at a strategic level, which do not necessarily indicate a constraint on development.

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Figure 1.2
Existing Strategic GI Assets

Policy Support for GI

1.2.8 A full review of the existing and emerging policy context providing support for GI planning and delivery in the 6Cs sub-region can be found in Section 1.0 of the baseline Information Review (see **Volume 3**). In summary, the need to provide GI in support of sustainable communities and climate change adaptation is increasingly recognised in various aspects of national planning policy:

- **PPS1 Delivering Sustainable Development** (2005) requires that development should ensure an appropriate mix of uses, including the incorporation of green space. The supplement to PPS1, **Planning and Climate Change** (2007), states that spatial strategies and any development should help deliver, amongst other things, GI and biodiversity as part of a strategy to address climate change mitigation and adaptation.

- **PPS12 Local Spatial Planning** (2008) requires local planning authorities to assess GI requirements. It notes that *'…core strategies should be supported by evidence of what physical, social and green infrastructure is needed to enable the amount of development proposed for the area, taking account of its type and distribution. This evidence should cover who will provide the infrastructure and when it will be provided. The core strategy should draw on and in parallel influence any strategies and investment plans of the local authority and other organisations.'* PPS12 also notes that *'Good infrastructure planning considers the infrastructure required to support development, costs, sources of funding, timescales for delivery and gaps in funding….The infrastructure planning process should identify, as far as possible: infrastructure needs and costs; phasing of development; funding sources; and responsibilities for delivery'*.

1.2.9 A number of other planning policy statements are also relevant in relation to green infrastructure. These include **PPS7 Sustainable Development in Rural Areas** (with regards to landscape character conservation and enhancement, and woodlands); **PPS9 Biodiversity and Geological Conservation**; **PPS25 Planning and Flood Risk**; and **PPS22 Renewable Energy**. Importantly, the **Consultation Draft PPS on Planning for a Natural and Healthy Environment** sets out the Government's new integrated approach to planning for the natural environment, green infrastructure, open space, sport, recreation and play.

1.2.10 At the regional level, GI is at the heart of the **East Midlands Regional Plan** (March 2009), which provides the Regional Spatial Strategy for the East Midlands to 2026. Policy 1 of the Core Strategy promotes GI as a means of protecting and enhancing the environmental quality of urban and rural settlements, whilst Policy 2 requires that the design of new development should take account of the need to develop GI networks.

1.2.11 Policy 12 outlines the development strategy for the Three Cities Sub-area (which broadly relates to the 6Cs sub-region) stating that: *'Development should support the continued growth and regeneration of Derby, Leicester and Nottingham, and maintain and strengthen the economic, commercial and cultural roles of all three cities…This will be achieved by ensuring*

that…provision is made for: the protection, development and enhancement of green infrastructure to address past environmental degradation and contribute to the development of sustainable communities.'

1.2.12 In setting regional priorities for natural and cultural resources, the Regional Plan recognises that provision of enhanced GI is a key challenge facing the Region, stating *'The area of statutory sites important for biodiversity in the Region is well below the national level. Overall there has been a significant decline in biodiversity and to compensate for past losses, regional habitat restoration and creation targets through the delivery of 'green infrastructure' needs to be proportionally greater than in other regions. The particularly low regional proportion of woodland cover offers a specific opportunity for habitat creation.'* In response to this, a specific policy setting out regional priorities for GI is included in the Regional Plan. Policy 28 (Regional Priorities for Environmental and Green Infrastructure) states**:**

'Local Authorities, statutory environmental bodies and developers should work with the voluntary sector, landowners and local communities to ensure the delivery, protection and enhancement of Environmental Infrastructure across the Region. Such infrastructure should contribute to a high quality natural and built environment and to the delivery of sustainable communities. Local Authorities and those responsible for the planning and delivery of growth and environmental management across the Region should work together to:

- *assess the capacity of existing Environment Infrastructure to accommodate change in order to inform decisions on the scale, location and phasing of new development. Account should be taken of current deficits and likely future demands, including those likely to result from climate change, to identify any further needs or constraints;*
- *select appropriate indicators and targets to monitor the condition of Environmental Infrastructure and to ensure that its capacity to accommodate change is not breached;*
- *ensure that the provision and design of new Environmental Infrastructure is considered and its delivery planned through environmental capacity analysis at the same time as other infrastructure requirements;*
- *within Local Development Frameworks develop 'green infrastructure plans' based on character assessments of existing natural, cultural and landscape assets and the identification of new assets required to meet the needs of existing and expanding communities;*
- *increase access to green space that can be used for formal and informal recreation, educational purposes and to promote healthy lifestyles, without increasing pressures on sensitive sites, especially those designated under the European Habitats Directive; and*
- *identify delivery and funding mechanisms for the creation and future management of Green Infrastructure, including from the planning system and other funding sources such as EU funded Environmental Stewardship Schemes.'*

1.2.13 In addition to above policy, the Regional Plan contains a number of natural and cultural resources policies that are also relevant to the delivery, protection and enhancement of multifunctional GI assets, and which can provide a range of social, economic and environmental benefits for underpinning sustainable development in the 6Cs sub-region. For

example: Policy 27 (Regional Priorities for the Historic Environment) requires Local Planning Authorities to *'recognise the opportunities for enhancing existing tourism attractions and for developing the potential of other areas and sites of historic interest as part of Green Infrastructure, having regard to potential impacts on biodiversity';* Policy 30 (Regional Priorities for Managing and Increasing Woodland Cover) states that *'Opportunities should be taken to secure sustainable management of all woodland, and to increase public access to high quality multifunctional woodland close to communities as part of the development of Green Infrastructure.';* Policy 33 (Regional Priorities for Strategic River Corridors) sets out that *'Local Authorities and other relevant public bodies should work together across regional boundaries to protect and enhance the multifunctional importance of strategic river corridors as part of the Region's Green Infrastructure, including for wildlife, landscape and townscape, regeneration and economic diversification, education, recreation, the historic environment including archaeology, and managing flood risk.'*; and Policy Three Cities SRS 5 (Green Infrastructure and National Forest) states that '*in considering major development proposals, especially those associated with the New Growth Point proposals, Local authorities and implementing agencies will co-ordinate the provision of enhanced and new GI*' and 'in *The National Forest, Local Authorities should work with other agencies across regional boundaries to promote the development of The National Forest in ways that generate environmental, economic and social benefits of both local and national significance.*'

1.2.14 The proposed GI Strategy underpins the East Midlands Regional Plan by establishing the strategic priorities and actions for GI investment that are required to support sustainable development within the sub-region.

1.3 The Benefits of Green Infrastructure

1.3.1 GI performs a variety of functions or services at all spatial scales, from individual sites within urban centres through to the landscape scale in the wider countryside. As **Table 1.1** demonstrates, GI can deliver a wide range of benefits for society through the range of functions it can fulfil. These include:

- Access, recreation, movement and leisure;
- Habitat provision and access to nature;
- Landscape setting and context for development;
- Energy production and conservation;
- Food production and productive landscapes;
- Flood attenuation and water resource management; and
- Countering the 'heat island' effect of urban areas.

1.3.2 Investment in well designed and connected multifunctional GI networks can provide benefits that will help achieve many of the Government's sustainable development policy priorities, including:

- **Economic priorities** – economic growth and employment;
- **Environmental priorities** – protect and enhance cultural heritage; protect and enhance the landscape, geodiversity and natural environment; biodiversity conservation and enhancement; and climate change adaptation and mitigation; and
- **Social priorities** – community cohesion and life long learning, volunteering; healthy communities; health and well being, and access and recreation.

Table 1.1 - GI Benefits and Policy Priorities[3]

	ECONOMIC	ENVIRONMENTAL					SOCIAL	
	Economic growth and employment	**Protect and enhance cultural heritage**	**Protect and enhance the landscape, geodiversity and natural environment**	**Biodiversity conservation and enhancement**	**Climate change adaptation and mitigation**	**Promoting sustainable transport and reducing the need to travel by car**	**Community cohesion and life long learning; volunteering**	**Healthy communities; health and well being**
ACCESS, RECREATION, MOVEMENT AND LEISURE	Green economy, including: Making attractive places for living and working.	Opportunities for education and interpretation, and to safeguard sites.	Opportunities for education and interpretation, and to safeguard sites.	Opportunities for education and interpretation, and to safeguard sites.	Sustainable and appropriate design e.g. access routes/ greenways in the floodplain or riverside parks designed to seasonally flood.	Increased permeability of urban areas for walking, cycling and horse riding. Providing recreational opportunities closer to residential areas.	Places for meeting and events; reducing the perception of crime through enhanced permeability and accessibility.	Healthy communities; health and well being. Opportunities for exercise (passive and active recreation), relaxation and improved mental health.
HABITAT PROVISION AND ACCESS TO NATURE	Green economy, including: Making attractive places for living and working, and to visit; Potential for increased property values.	Opportunity for interpretation of historic landscape features and habitats e.g. distinctive pollarded trees and historic hedgelines.	Alleviate pressures on sites through provision of alternative access to nature.	Opportunity to conserve, enhance and reinforce habitats (contribution to BAP targets). Increasing overall size of habitats may enhance their ability to absorb carbon (e.g. Fenland); Opportunities to create buffers and links, and to safeguard designated sites.	Linking sites to reverse habitat fragmentation; creating buffers.	Designing access routes to avoid sensitive sites/areas but provide 'visual' access to nature (physical access is not always necessary for benefits to be gained).	Community involvement and participation in creation and on-going management; Opportunities for education and interpretation.	Physical and psychological benefits of access to nature ('visual' access as well as physical); Opportunities for practical 'green gym' type activities.

key
Government Policy Priorities
GI Functions
GI Benefits

[3] Derived from Natural England's Green Infrastructure Guidance (2009)

	ECONOMIC	ENVIRONMENTAL					SOCIAL	
	Economic growth and employment	**Protect and enhance cultural heritage**	**Protect and enhance the landscape, geodiversity and natural environment**	**Biodiversity conservation and enhancement**	**Climate change adaptation and mitigation**	**Promoting sustainable transport and reducing the need to travel by car**	**Community cohesion and life long learning; volunteering**	**Healthy communities; health and well being**
LANDSCAPE SETTING AND CONTEXT	Green economy, including: Making attractive places for living and working, and to visit; Potential to increase property values.	Making attractive places for living and working, and to visit.	Opportunity to provide enhanced landscape setting and to relate development to landscape character, place and context.	Opportunities for habitat enhancement and creation.	Opportunity to use water management for flood attenuation and for enhanced landscape setting, and for SUDS to link development to landscape context.	Creating attractive settings in keeping with landscape setting for walking and cycling (e.g. greenways).	Community involvement and participation; interpretation and education.	Places for meeting and events; provide a sense of place and identity.
ENERGY PRODUCTION AND CONSERVATION	Green economy, including: Making energy efficient and sustainable places to live and work.	Opportunities for traditional woodland management techniques – e.g. wood fuels, etc.		Contribution of biomass fuel planting to biodiversity.	Provide the setting for renewable energy generation; Opportunities for climate change adaptation.	Promote sustainable transport routes and fuel/energy conservation.		Increased use of green energies/ biomass fuels etc leads to improved air quality.

key

Government Policy Priorities
GI Functions
GI Benefits

	ECONOMIC	ENVIRONMENTAL					SOCIAL	
	Economic growth and employment	**Protect and enhance cultural heritage**	**Protect and enhance the landscape, geodiversity and natural environment**	**Biodiversity conservation and enhancement**	**Climate change adaptation and mitigation**	**Promoting sustainable transport and reducing the need to travel by car**	**Community cohesion and life long learning; volunteering**	**Healthy communities; health and well being**
FOOD PRODUCTION AND PRODUCTIVE LANDSCAPES	Green economy, including: Making attractive and sustainable places to live and work.	Opportunity to conserve elements of the historic landscape, such as orchards, allotments and small holdings.	Opportunity to enhance the landscape through appropriate design and management (e.g. community orchards, which make reference to landscape character).	Opportunities to incorporate conservation features within agricultural areas.	Contribute to a carbon efficient approach to living.	Contribute to a carbon efficient approach to living – low 'food miles'.	Opportunities for food growing on allotments and community gardens, community involvement in planting and maintenance; education.	Places for people to meet and gather. Contribution to health through diet and exercise. Managing rights of way within agricultural areas to facilitate public access.
FLOOD ATTENUATION AND WATER RESOURCE MANAGEMENT	Reduced economic and insurance risk in light of enhanced water resource management.	Opportunities for education and interpretation in relation to wetland - understanding of place and context.	Opportunities to provide enhanced landscape setting and to relate riparian development to place and context.	Opportunities to create and restore wetland habitats.	Opportunities to link and create new wetland habitats.		Opportunities for access to water for informal and formal recreation activities, and community involvement in conservation work.	Decreased risks of flooding reduces psychological costs/impacts on communities living in vulnerable areas.
COUNTERING THE 'HEAT ISLAND' EFFECT OF URBAN AREAS	Green economy, including: Making attractive and comfortable places for living and working; Potential for more economically efficient buildings, through green roofing and associated insulation.		Opportunities for provision of shading and cooling to restore and enhance landscape character and biodiversity, such as new tree, woodland and meadow planting, and also through green roofs and green walls.	Opportunities to provide habitat connectivity to assist species migration; and for planting of native species during urban tree planting programmes to provide urban cooling.	Opportunities for tree planting for carbon sequestration; Also creation of microclimates through structural landscape planting.	Providing greenways/traffic free routes to promote more local journeys on foot/cycle and therefore reduce the need for car use in urban centre.		Physical and psychological benefits.

key

Government Policy Priorities
GI Functions
GI Benefits

2.0 THE STRATEGY

2.1 Who was Involved?

2.1.1 The 6Cs Strategic Green Infrastructure Project Board is a partnership of local authorities and environmental organisations with responsibility for overseeing the planning and delivery of GI needs across the 6Cs sub-region. The Project Board's work complements and supports the three Housing Market Area Boards tasked with delivering sustainable development for the Three Cities and surrounding Counties.

2.1.2 In August 2008, the 6Cs Strategic Green Infrastructure Project Board commissioned environmental planning consultants Chris Blandford Associates (CBA) to work in partnership with them in developing a GI Strategy to guide their work in the sub-region. Day-to-day preparation of the Strategy was overseen by a Steering Group comprising organisations drawn from the Board's membership, with the assistance of the 6Cs Growth Point GI Development Co-ordinator.

2.1.3 The Project Board recognised that it was crucial to obtain full partnership working across administrative boundaries in order to achieve a consistent approach and enable 'buy in' from a wide range of sectors and ensuring a strong voice for GI investment. In this context, the GI Development Co-ordinator, working in conjunction with CBA, facilitated input over a 12 month period from over 100 local stakeholders/partners involved in planning, managing and delivering GI and sustainable development across the 6Cs sub-region (see **Section 2.3** for further details).

2.2 Project Aims, Objectives and Scope

Project Aims

2.2.1 The overall aim was to provide a bold, visionary and action based GI Strategy to help inspire stakeholder involvement, and focus action on the ground where it is most needed and would achieve most benefit. As an integral part of the development of sustainable communities, the Brief required a long-term vision and action plan for the planning and delivery of GI across the sub-region that would both assist in attracting future development and the achievement of multi-purpose public benefits for a rapidly expanding population.

2.2.2 The Strategy is to be used in conjunction with local GI studies and strategies to assist directly in the delivery and management of high quality GI within the 6Cs sub-region , and to inform the preparation of spatial plans at the local level through the Local Development Framework

process. The Brief required that the GI Strategy should assist in delivering a wide range of environmental, social and economic benefits within the 6Cs sub-region. In more detail, the Brief specified that GI in the sub-region should:

- Be an integral part of moving towards sustainable development throughout the 6Cs area;
- Provide an attractive setting for new development, to help integrate it within the landscape and enhance the built environment;
- Help to build a sense of community and 'place making' in areas subject to major new growth;
- Enhance the quality of life of local residents and visitors to the area including by being a focus for local community development work and cultural activities, such as public art;
- Make the optimum use of all green space to achieve multi-purpose benefits, including climate change and flood management;
- Respect existing landscape and townscape character by enhancing existing GI and adding new GI that respects the differing elements making up the character of local landscapes and townscapes;
- Protect and enhance biodiversity assets, extend and create new habitats and reverse habitat fragmentation by restoring connectivity between them;
- Achieve more effective functional links between urban areas and the surrounding countryside for people and wildlife;
- Provide opportunities for the conservation, restoration and enhancement of historic assets and landscapes within GI networks, including public parks and create new opportunities for public access to sites; and
- Achieve a GI system which is sustainably managed.

2.2.3 In the context of the above, the GI Strategy is intended to form the bedrock of a long-term and coordinated approach to protecting, enhancing and increasing GI assets across the area. In this respect, many of the Strategy's recommendations would still be applicable in the absence of Growth Point status.

Project Objectives

2.2.4 The Strategic GI Project Board set the following objectives and strategic purposes for the 6Cs GI Strategy:

- The creation of a long-term (to at least 2026) strategic vision for the provision and sustainable management of GI across the 6Cs area;
- Achieving a GI framework that operates at a strategic sub-regional level and focuses in more detail on key urban areas where major growth is planned;
- Identifying locations where new GI investment would be best targeted;
- Identifying existing and new strategic large-scale GI initiatives which can serve the whole sub-region;
- Guiding the three HMA Boards and the relevant Local Planning Authorities in planning for GI investment in relation to locations for growth across the area;
- Identifying mechanisms for securing the long term sustainable management and maintenance of GI;
- Providing a framework to help make the case for future funding bids for GI investment;
- Aligning the framework used for assessing potential GI projects for Growth Point funding to the findings and recommendations of the Strategy; and
- Providing a strategic framework for steering coordinated approaches to maintaining the integrity of the whole GI network, through cross-boundary connectivity of GI planning and delivery activities.

Scope of the GI Strategy

2.2.5 The Brief required that the GI Strategy be undertaken at two levels:

- **Sub-Regional level** – to assess strategic GI requirements required to meet the needs of growth across the whole 6Cs sub-region. This included consideration of the strategic role of existing areas and projects which serve large parts of the sub-region and beyond, such as Charnwood Forest, the Greenwood Community Forest, the Stepping Stones Project, On Trent, and The National Forest, as well as the strategic river corridors of the Derwent, Soar and Trent and their tributaries; and
- **City-scale level** – to provide more focussed assessments of GI requirements which relate to the main settlements earmarked for growth (the principal urban areas and sub-regional centres), in the form of a series of diagrammatic spatial plans which take into account existing guidance and strategies.

2.3 Developing the Strategy

Consultation Draft Strategy

2.3.1 The Consultation Draft Strategy 'Towards a GI Strategy for the 6Cs Growth Point' was developed between autumn 2008 and late summer 2009 in three distinct but related stages that reflected the project's aims, objectives and scope. As noted above, stakeholders were involved in contributing to each stage of work. This involved two major workshops in Stage 1 to inform the Strategic GI Audit (see **Volume 3** for details); three workshops in Stage 2 to inform the development of the Strategic GI Networks for the Three Cities (see **Volumes 4**, **5** and **6** for details), and one-to-one dialogue with individual stakeholder organisations throughout the process to identify key information and data.

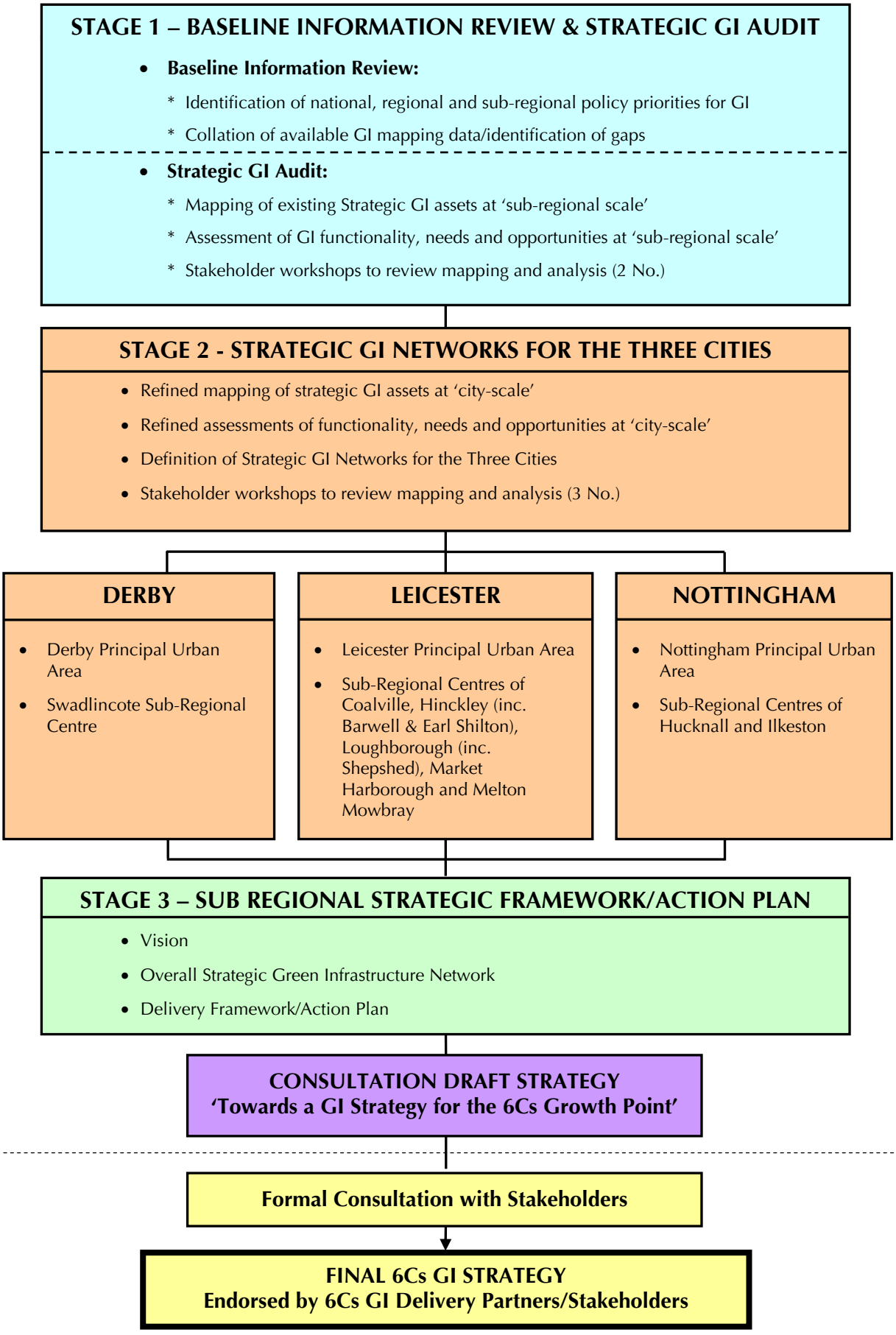
2.3.2 The stages are illustrated on **Figure 2.1** and described below.

Stage 1 – Baseline Information Review & Strategic GI Audit

2.3.3 This initial stage involved a review of relevant existing baseline information to inform the development of the GI Strategy. It also involved the mapping of strategic GI assets at the 'sub-regional scale' across the 6Cs area as a whole, and a strategic level assessment of their functionality, deficiencies in provision and opportunities for addressing identified needs. This work involved:

- Summarising briefly the relevant existing policies, studies and strategies within the sub-region, so that their contents can be taken into account in the strategy;
- Identifying and classifying current GI assets using existing baseline data by bringing together and filling in gaps in existing data to ensure all relevant baseline data needed to make evidenced based recommendations for the strategy for the whole area is of a common standard and quality;

Figure 2.1 - Strategy Preparation Process



- Audit of issues and features such as: landscape character and historic landscape character; strategic non-vehicular access networks; visitor attractions/destinations; key biodiversity and geological/ geomorphological sites/habitats and corridors; built and cultural heritage sites, features and remains; strategic transport corridors including future long term rail and highway improvement initiatives; current and future mineral extraction and waste disposal sites; indicative floodplain information and areas at risk of flooding; key land based leisure recreation and tourism facilities, including Country Parks, Local Wildlife Sites, Nature Reserves and other areas of semi-natural habitat used for recreation. This included, where appropriate, cross boundary data outside the sub-region;

- In areas where current GI baseline data has been identified as insufficient (particularly in locations planned for major growth), collection of sufficient data to allow the making of evidenced based recommendations in the GI Strategy. ;

- From all the above work, in conjunction with key stakeholders, evaluating the current quality and importance of strategic landscape, biodiversity and cultural heritage and other environmental assets across the area and their multifunctional value and potential;

- Identifying and mapping, in conjunction with key stakeholders, existing and potential GI deficiencies across the area and those areas where GI is relatively well provided for to serve existing and future communities. This had reference to existing GI provision related to settlements and future GI needs related to general directions of growth in and around the principal urban areas and the sub-regional centres. It included mapping the distribution of major strategic corridors, environmental and heritage assets, and considered the potential to address the connectivity needs both for wildlife and people; and

- Identifying areas requiring protection and opportunities to extend and enhance the GI network. This included strategic areas and initiatives that can provide a sub-regional resource for the whole area; and local areas and initiatives that meet the needs of specific growth areas which together may make significant contributions to the overall GI network. This also included mapping opportunities to create new and improved linkages at a sub-regional scale and at the city-scale in the form of 'green corridors' and improvements to recreational routes to reach the assets. In doing so, particular reference was given to linking urban and countryside areas to make GI more accessible for all communities and to the identification of opportunities for water management (such as flood risk management and sustainable drainage schemes).

Stage 2 – Strategic GI Networks for the Three Cities

2.3.4 Drawing on the Stage 1 GI mapping work, and enhanced as necessary by further data identified in consultation with stakeholders, Stage 2 involved identification of accessible and biodiverse greenspace networks at the 'city-scale' that intersperse and connect the cities of Derby, Nottingham and Leicester with towns, villages and GI assets in the surrounding countryside. Strategic GI Network plans were prepared for the following locations, which are subject to significant future growth under the Government's Sustainable Communities Plan and the East Midlands Regional Plan:

- Derby principal urban area[4] and the sub-regional centre[5] of Swadlincote;
- Leicester principal urban area and the sub-regional centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough and Melton Mowbray; and
- Nottingham principal urban area and the sub-regional centres of Hucknall and Ilkeston.

2.3.5 The study areas for each Strategic GI Network were agreed with the 6Cs GI Strategy Steering Group. The development of the Strategic GI Networks was informed by consultations with relevant stakeholders within the respective study areas.

Stage 3 – Sub-Regional Strategic Framework/Action Plan

2.3.6 This final stage involved preparation of a Strategic Framework and Action Plan for the coordinated planning and delivery of GI provision across the 6Cs area to meet identified needs. This work involved developing a shared vision for the 6Cs sub-region, a strategic GI network, a delivery plan, and an action plan.

Consultation Draft Strategy and Formal Consultation with Stakeholders

2.3.7 The Strategic GI Project Board released the consultant's recommendations in October 2009 as a Consultation Draft version of the Strategy ('Towards a GI Strategy For the 6Cs Growth Point') with a two month window for wider stakeholder review, giving partners the opportunity to respond to the findings and recommendations presented. The Strategy Steering Group, appointed by the 6Cs Strategic GI Project Board, reviewed submitted responses and additional data and information during December 2009/January 2010 and recommended changes to be made to the Strategy. CBA were re-commissioned to action the changes.

Final 6Cs GI Strategy

2.3.8 The Final 6Cs GI Strategy was signed-off by the 6Cs Strategic GI Project Board. It comprises 6 volumes as follows:

- **Volume 1: Sub-Regional Framework** – defines the GI network for the 6Cs sub-region. It is a long term aspiration and sets out the key principles involved in achieving the GI network. The framework will require updating on a regular basis to ensure that the evidence base remains appropriate and is kept up-to-date;

[4] Principal Urban Areas (PUAs) are identified within the East Midlands Regional Plan as settlement conurbations that can develop into sustainable urban communities where people will wish to live, work and invest. There are five PUAs in the East Midlands centred on Derby, Leicester, Nottingham, Lincoln and Northampton.
[5] Sub Regional Centres (SRCs) are identified within the East Midlands Regional Plan as settlements that perform a complementary role to the PUAs, selected on the basis of their size, the range of services they provide, and their potential to accommodate further growth.

- **Volume 2**: **Action Plan** - focuses on how to implement the recommendations contained within the Sub-Regional Framework. The action plan will require updating and review on a shorter timescale than the Framework and will respond to changing priorities and opportunities; and

- **Volumes 3-6:** provide the supporting analysis and evidence of the level, type and distribution of GI needed to support sustainable development in the 6Cs sub-region.

  - **Volume 3: Baseline Information Review and Strategic GI Audit;**
  - **Volume 4: Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote;**
  - **Volume 5: Strategic GI Network for the Leicester Principal Urban Area and the Sub-Regional Centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough and Melton Mowbray; and**
  - **Volume 6: Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston.**

2.3.9 The GI Strategy is available via the 6Cs Green Infrastructure website (www.emgin.co.uk/6cs), which is hosted within the East Midlands Green Infrastructure Network (EMGIN) (www.emgin.co.uk).

3.0 A SHARED VISION FOR THE 6CS

3.1 Strategic Aims

3.1.1 The overarching strategic aims for the 6Cs GI Strategy are to:

- Develop the GI approach as an 'environmental life-support system'[6] for healthy communities and ecosystems;
- Provide a long term environmental framework for sustainable development that achieves wide ranging environmental, economic and social benefits; and
- Maximise the potential of GI to bring about multifunctional holistic solutions to environmental concerns, including climate change adaptation and mitigation.

3.2 Strategic Objectives

3.2.1 The strategic objectives for the 6Cs GI Strategy are to:

1. Promote an inspirational vision to encourage the support of local communities and decision-makers for GI principles;
2. Promote a common approach to GI planning across boundaries by local authorities and partners to deliver an inter-connected multifunctional network connecting existing and new communities;
3. Promote the direct and indirect economic and social, as well as environmental, benefits of GI investment to senior decision-makers in both the public and private sectors, including volume house-builders;
4. Promote a planned approach to the long-term funding and management of GI;
5. Promote partnership approaches to the innovative design, delivery and management of GI at the sub-regional, city and local scales to strengthen the connectivity of GI assets;
6. Develop robust delivery plans, evidence and analysis to justify investment in the scale, location and type of GI provision required to meet future needs in growth locations across the 6Cs sub-region;
7. Promote the planning of GI networks as an integral feature of the design and layout of all major new developments;
8. Promote retrofitting of GI in urban environments;
9. Promote GI as a solution to sustainable water management, as a means of addressing water quality and resource issues and as an approach to adapting to and mitigating against the effects of climate change;
10. Stimulate development of GI policies and allocations in Local Development Documents that respond to locally identified needs and sub-regional, regional and national priorities;
11. Reflect GI needs in the strategic visions of Local Strategic Partnerships and Sustainable Community Strategies, and related Multi Area and Local Area Agreement targets;
12. Promote the protection and management of landscape character to provide enhanced landscape settings for the built environment and to ensure that new development and GI relates to landscape character, place and context;
13. Promote the protection and management of natural and cultural heritage, including archaeological sites, historic landscapes, geodiversity and industrial heritage; and

[6] The plethora of processes and resources that are supplied by natural ecosystems for human benefit. These services include products such as food and clean drinking water, and processes such as regulating the quality of air, water and soil.

14. Reverse the decline in biodiversity by countering habitat fragmentation through investment in substantial habitat restoration and creation, informed by biodiversity opportunity mapping methods.

3.3 A Vision for the 6Cs

3.3.1 The **proposed Vision for GI in the 6Cs sub-region** seeks to embrace the multiple functions of GI and show how these can provide important benefits for the 6Cs sub-region in relation to national, regional and local policy priorities. It also reflects opportunities for strategic GI provision at the sub-regional level identified by stakeholders who are responsible for GI planning and delivery in the area.

The long term Vision for GI in the 6Cs sub-region is to maintain, enhance and extend a planned multifunctional green infrastructure network. This will comprise existing and new greenspaces, natural and cultural features and interconnected green links in and around the three cities of Derby, Leicester and Nottingham, connecting with their surrounding towns and villages as part of the sustainable growth of the sub-region. The river valleys of the Trent, Soar and Derwent and their tributaries provide the 'backbone' of the network, linking the three cities with each other.

A major step-change in the scale, quality and connectivity of GI assets will be required to match the scale of new growth planned, and deliver environmental, economic and social benefits. This will be achieved through the commitment of stakeholders involved in planning, delivering and managing GI and sustainable development across the 6Cs sub-region working in partnership to establish the network as a lasting legacy for future generations.

The network will provide increased opportunities for communities in and around the three cities to access a variety of greenspaces on their doorsteps and in the wider countryside. It will be set within, and contribute to, a high quality natural, cultural and built environment that provides substantial quality of life benefits for residents and visitors, and is a focus for attracting and retaining economic investment in the area.

The network will be a framework for delivering biodiversity benefits on a landscape scale, and as appropriate to the local landscape character, by protecting, connecting and creating a diverse range of wildlife habitats and providing ecological corridors for species dispersal and migration.

Investment in the network will contribute to our environmental, economic and social adaptation and mitigation to the challenges of climate change.

3.3.2 A spatial framework for the strategic planning and delivery of GI within the 6Cs sub-region is proposed in **Section 4.0**. This is designed to focus attention on areas where investment in GI can deliver the greatest range of benefits in the context of government policy priorities.

4.0 THE STRATEGIC GREEN INFRASTRUCTURE NETWORK

4.1 The Green Infrastructure Spatial Planning Hierarchy

4.1.1 Many issues critical to the planning and delivery of GI are of a strategic nature, and GI networks can cover large spatial scales that do not respect local authority boundaries. This makes the spatial planning of GI for an individual city, district or site in isolation a difficult task. In this context, a hierarchy has evolved for the spatial planning of GI as illustrated on **Diagram 1** overleaf.

4.1.2 At the **Regional Scale**, Policy 28 of the East Midlands Regional Plan sets out the regional priorities for GI in the context of polices for the protection, appropriate management and enhancement of the Region's natural and cultural heritage resources.

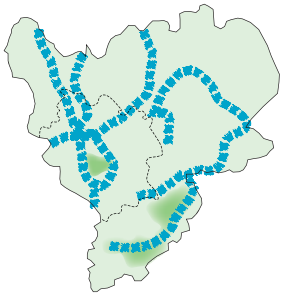
4.1.3 Within the context of regional priorities for GI, the proposed 6Cs GI Strategy sets out: (i) a **Sub-Regional Scale GI Network** to provide a framework for setting priorities for GI investment across the sub-region as a whole; and (ii) **City-Scale GI Networks** that provide frameworks for establishing GI priorities in and around the principal urban areas and sub-regional centres within the 6Cs sub-region.

4.1.4 To meet the requirements of the East Midlands Regional Plan Policy 28, more detailed GI studies and strategies are needed at the **Local Scale GI Networks** level to add local detail to the overarching framework of the sub-regional and city-scale networks defined in the 6Cs GI Strategy. At this scale of GI planning, local priorities for GI investment and action can be established to guide integration of GI into Local Development Frameworks, and GI requirements identified in relation to the masterplanning and design process for individual development schemes at the **Site Scale**.

4.2 Setting Priorities for Green Infrastructure Investment

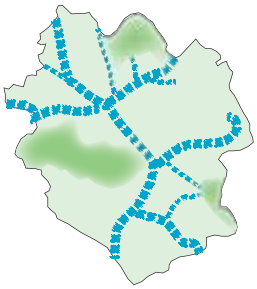
4.2.1 At the heart of the long term Vision for GI in the 6Cs sub-region is the creation of a planned multifunctional network of greenspaces, natural features and interconnected green links in and around the three cities of Derby, Leicester and Nottingham. The backbone of the network is provided by the existing strategic GI assets shown on **Figure 1.2**. Together with the analysis of opportunities and needs for the protection, enhancement and expansion of GI provision set out in **Volumes 3**, **4**, **5** and **6**, this provides the evidence base for developing a sub-regional 'Strategic GI Network' to provide a spatial context for the delivery of the overall Vision for GI in the 6Cs sub-region, as proposed in **Section 3.0**.

INTERCONNECTED NETWORK OF GI AT ALL SPATIAL SCALES



REGIONAL GI

- Strategic River Corridors
- Regional Parks



SUB-REGIONAL GI

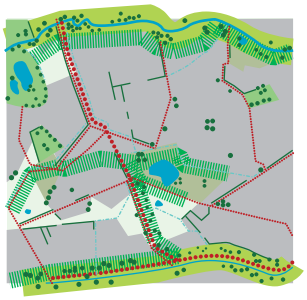
- Strategic River Corridors and Tributaries
- Landscape-scale Forest Initiatives

CITY GI

- Main Watercourses
- National Cycle Network
- Greenways
- Country Parks
- Flood Alleviation Schemes
- Major Historic Sites

LOCAL GI

- Watercourses
- Public Parks
- Pedestrian Paths and Rights of Way
- Conservation Areas
- Road and Rail Corridors/Verges



SITE GI

- Domestic Gardens
- Footpaths
- Sustainable Drainage Systems
- Trees, Hedges and Ponds
- Allotments
- Green Roofs
- Cemeteries and Churchyards

Diagram 1
Green Infrastructure Spatial Planning Hierarchy

4.2.2 The Strategy provides a spatial representation of the overall Strategic GI Network illustrated through the conceptual corridors and linkages, providing a 'bigger picture' for the delivery of large-scale GI within the 6Cs sub-region that connects communities and wildlife at the sub-regional and city-scales. It is intended to help focus attention or priority on land that needs to be safeguarded, managed or secured in positive ways to create a multifunctional network of greenspaces and assets for which investment can deliver the greatest range of benefits. It is not a rigid approach; the Strategic GI Network is intended to be flexible and responsive to opportunities - such as changing land ownership, community aspirations, access to funding, development opportunities, policy considerations, etc - that may change priorities for investment over time.

4.2.3 The intention is to ensure that the integrity of the overall Strategic GI Network is not compromised by inappropriate development and land management. This means that there needs to be flexibility, and in cases where there is an unavoidable need to trade off existing GI assets to meet social and economic needs, this should be offset by mitigation and compensation measures to enhance the functionality of other GI assets elsewhere within the Strategic GI Network. However, some semi-natural habitats, such as ancient woodlands, are irreplaceable and need protection. Where development is planned within or in close proximity to a GI corridor, it should become an integral feature to the design and 'identity' of the development site to ensure that the connectivity of the network for both public benefit and biodiversity is retained and enhanced.

4.2.4 The GI concept applies across the whole of the 6Cs sub-region, and it can occur at any scale. However, the proposed Strategic GI Network identifies locations where targeting investment in GI is most likely to deliver multiple benefits across a range of key environmental, social and economic policy areas. The main considerations in steering investment priorities are:

- To focus investment on GI provision and management to address current deficits of provision/needs;
- To meet the GI needs of communities in and around the 6Cs sub-region who are likely to experience major growth-related pressures in the period to 2026; and
- To protect, enhance and manage existing valuable GI assets that are under current or future pressure, in particular accessible natural greenspaces, biodiversity sites and river valleys/wetlands.

4.2.5 In response to the above, the proposed Strategic GI Network identifies broadly defined corridors and zones, within which it is recommended that investment in new and enhanced GI provision be prioritised and delivered over the next 15-20 years. These corridors and zones reflect the identified opportunities and needs for enhancing the connectivity and accessibility of the greenspace network for biodiversity and public benefit at the sub-regional and city - scales. They provide the context for development of GI initiatives and projects that would

provide, in many cases, multiple functions and benefits to meet a range of social, economic and environmental needs. GI related proposals within and adjacent to the corridors and zones would focus on the enhancement and restoration of existing GI assets, as well as the creation of new resources.

4.2.6 Spatial priorities within the 6Cs sub-region where investment in GI provision has the greatest potential to deliver benefits were defined in consultation with stakeholders. The spatial priorities are:

- **Sub-Regional GI Corridors** (see **Figure 4.1**) – broadly defined corridors which reflect significant wildlife habitat corridors/areas that link with strategic GI in surrounding areas at the sub-regional level, and have an important role to play in maintaining the overall integrity of the 6Cs GI Network in the long term;

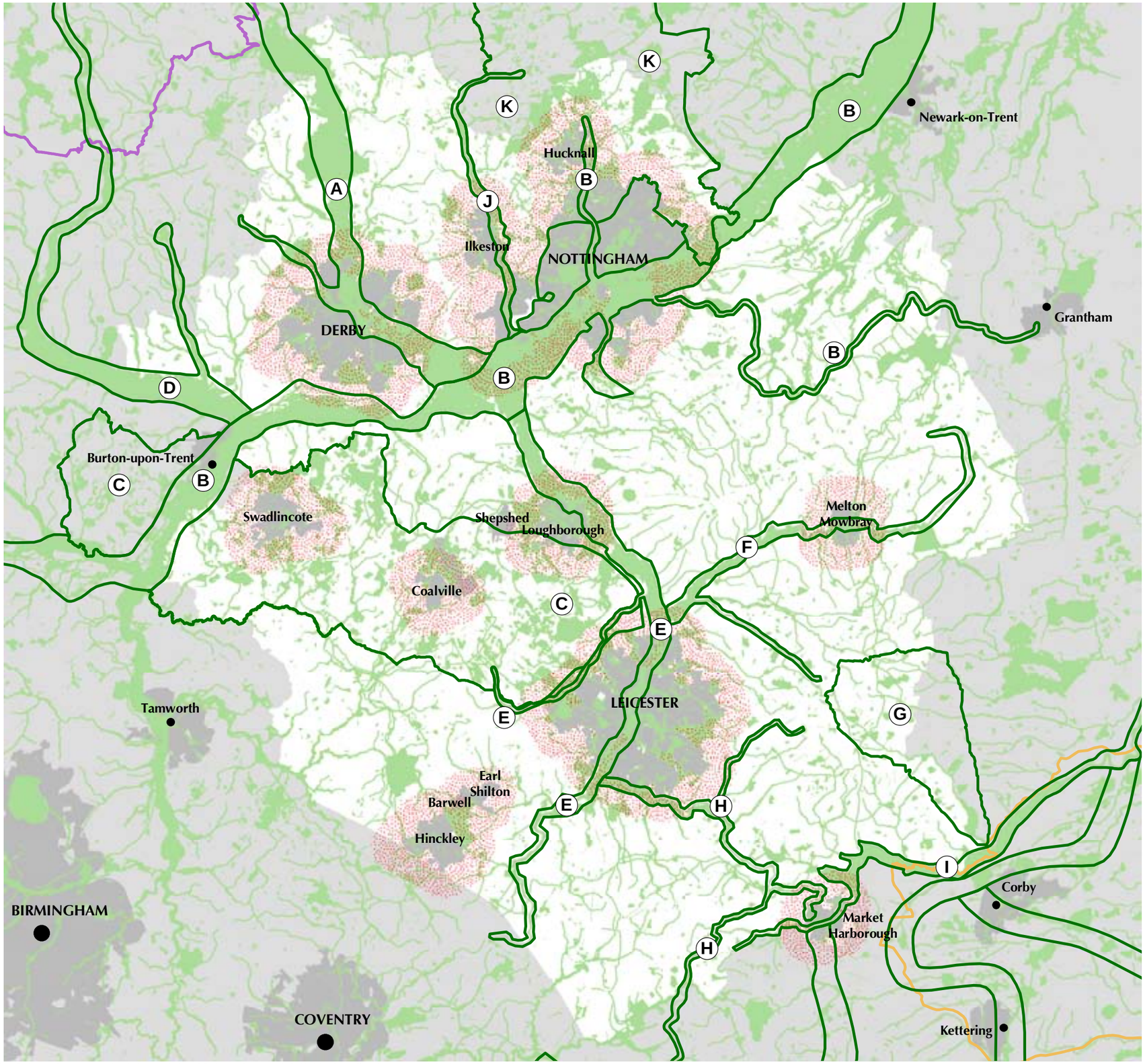
- **Urban Fringe GI Enhancement Zones** (see **Figures 4.1**, **4.2**, **4.3** and **4.4**) – broadly defined Zones that form the immediate landscape setting to and encompass the countryside in and around the principal urban areas and sub-regional centres. Taking into account the 6Cs sub-region's existing demographic patterns, and the spatial pattern of changes in population arising from the future growth proposed under the Government's Sustainable Communities Plan and the East Midlands Regional Plan, these Zones have the greatest demand, and therefore need, for enhanced provision of existing and new GI; and

- **City-Scale GI Corridors** (see **Figures 4.2**, **4.3** and **4.4**) – collectively, these broadly defined corridors connect the Sub-Regional GI Corridors, the Urban Fringe GI Enhancement Zones and the principal urban areas and sub-regional centres. City-Scale GI Corridors provide linkages for people and wildlife through the countryside between settlements, extending into the urban areas;

4.2.7 While the proposed 6Cs Strategic GI Network gives particular emphasis to the above spatial priorities, investment in GI provision within other areas that may also have potential to deliver benefits would be considered where appropriate.

4.2.8 Beyond the corridors and zones, the proposed objective is for targeted environmental and access improvements in the wider countryside to strengthen the GI network. These improvements would complement and support the sub-regional priority areas for investment within the Strategic GI Network, by focusing environmental land management schemes on addressing needs and opportunities identified in **Volumes 3**, **4**, **5** and **6** for increasing the multi-functionality of the countryside. These aims could be achieved through schemes for:

- Conservation and enhancement of landscape character;
- Enhanced management, protection, accessibility and interpretation of the historic environment and geodiversity resources;
- Habitat enhancement, linkage and creation - particularly farmland BAP habitats and species;
- Enhanced connectivity of the local rights of way network to the strategic access route network (including public transport) and to accessible greenspaces to promote sustainable modes of travel; and
- Productive landscapes – sustainable food and renewable energy crops production.



KEY

Sub-Regional Green Infrastructure Corridors

- A - Derwent Strategic River Corridor
- B - Trent Strategic River Corridor and River Leen, Grantham Canal, Trent & Mersey Canal and Beeston Canal
- C - National Forest and Charnwood Forest
- D - Dove Strategic River Corridor
- E - Soar Strategic River Corridor
- F - Wreake Strategic River Corridor
- G - Leighfield Forest
- H - Sence Strategic River Corridor and Grand Union Canal
- I - Welland Strategic River Corridor
- J - Erewash Strategic River Corridor and Erewash Canal
- K - Greenwood Community Forest

Urban Fringe Green Infrastructure Enhancement Zones

Combined Existing Strategic Green Infrastructure Assets (See Figure 1.2)

Principal Urban Areas and Sub-Regional Centres

Peak District National Park

Rockingham Forest (as digitised by CBA)

Strategic GI Networks for the Three Cities within the 6Cs Sub-Region (See Figures 4.2, 4.3 and 4.4)

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. The Strategic GI Network Plan illustrates indicative GI assets at a strategic level, which do not necessarily indicate a constraint on development.

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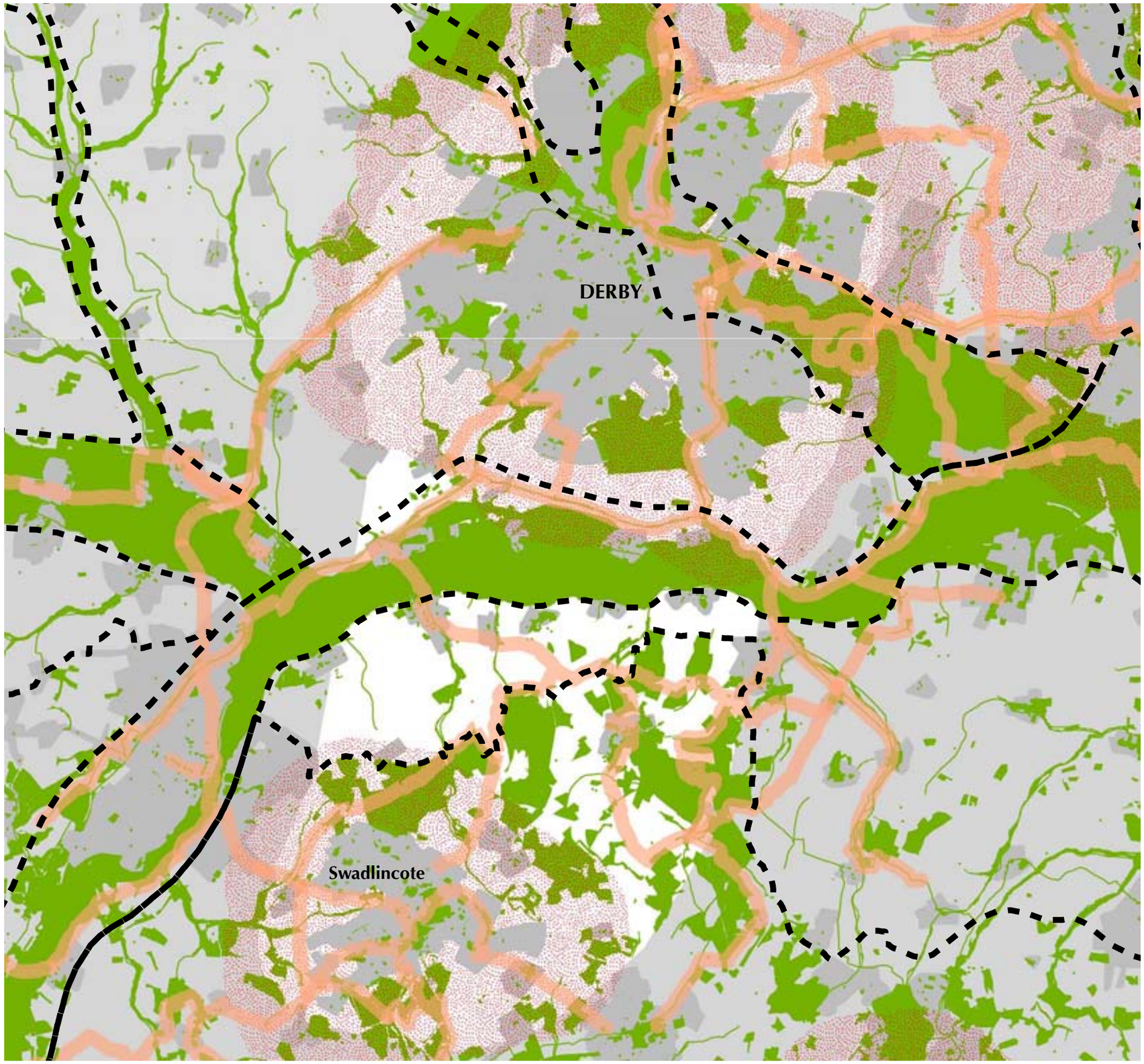
Figure 4.1
Proposed Strategic GI Network



KEY

- Sub-Regional Green Infrastructure Corridors
- Urban Fringe Green Infrastructure Enhancement Zones
- City-Scale Green Infrastructure Corridors
- Combined Existing Strategic Green Infrastructure Assets
- Existing Urban Areas

Strategic GI Network Study Areas for the Three Cities within the 6Cs Sub-Region

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

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Figure 4.2
Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote

KEY

- Sub-Regional Green Infrastructure Corridors
- Urban Fringe Green Infrastructure Enhancement Zones
- City-Scale Green Infrastructure Corridors
- Combined Existing Strategic Green Infrastructure Assets
- Existing Urban Areas

Strategic GI Network Study Areas for the Three Cities within the 6Cs Sub-Region

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

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Figure 4.3
Strategic GI Network for the Leicester Principal Urban Area and the Sub-Regional Centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough and Melton Mowbray

KEY

- Sub-Regional Green Infrastructure Corridors
- Urban Fringe Green Infrastructure Enhancement Zones
- City-Scale Green Infrastructure Corridors
- Combined Existing Strategic Green Infrastructure Assets
- Existing Urban Areas

Strategic GI Network Study Areas for the Three Cities within the 6Cs Sub-Region

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

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Figure 4.4
Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston

4.3 Sub-Regional Green Infrastructure Corridors

4.3.1 **Sub-Regional GI Corridors** comprise a mosaic of land uses, natural, built heritage and archaeological resources and settlements, and are intended to become fully multifunctional zones with the ability or potential to deliver a range of economic, environmental and social benefits related to the GI functions listed in **Section 1.3**. Although of major sub-regional significance, in many cases these corridors are also of regional significance - and in the case of The National Forest, it is both a regional and national policy initiative. The Sub-Regional GI Corridors encompass:

- *Strategic River Corridors* – these form the 'backbone' of the proposed Sub-Regional Strategic GI Network for the 6Cs sub-region, providing continuous and interconnected corridors for the dispersal of wildlife and movement of people between the urban centres of the Three Cities and the surrounding countryside;
- *Forests and Woodlands* – the proposed Sub-Regional Strategic GI Network for the 6Cs sub-region includes substantial areas of forests and woodlands, which provide large-scale multifunctional greenspaces and offer major opportunities for strategic woodland creation[7] and environmental improvements of degraded landscapes, including potential for habitat enhancement, restoration and creation on a landscape scale; and
- *Regional Parks* – the proposed sub-regional Strategic GI Network for the 6Cs sub-region includes potential Regional Parks, distinctive and extensive areas where management and spatial planning can bring about regionally significant economic, environmental and social benefits based on local characteristics, needs and aspirations.

4.3.2 The Sub-Regional GI Corridors on **Figure 4.1** form the backbone of the Strategic GI Network:

A. Derwent Strategic River Corridor
B. Trent Strategic River Corridor and River Leen, Grantham Canal, Trent & Mersey Canal and Beeston Canal
C. National Forest and Charnwood Forest
D. Dove Strategic River Corridor
E. Soar Strategic River Corridor
F. Wreake Strategic River Corridor
G. Leighfield Forest
H. Sence Strategic River Corridor and Grand Union Canal
I. Welland Strategic River Corridor
J. Erewash Strategic River Corridor and Erewash Canal
K. Greenwood Community Forest

[7] Woodland creation represents 60% of the grant aid administered by the Forestry Commission. However, to realise the potential for 2050, a big increase in woodland creation is needed. The Government will support a new drive to encourage private funding for woodland creation. By creating an additional 10,000ha of woodland a year for 15 years, up to 50 million tonnes of carbon dioxide could be removed between now and 2050. Well-targeted woodland creation can also bring other benefits, including a recreational resource, employment opportunities, flood alleviation, improvements in water quality, and helping to adapt our landscapes to climate change by linking habitats to support wildlife. The government will ensure that woodland creation policies continue to respect the benefits and demands of landscape, biodiversity and food security. This will allow businesses and individuals to help the UK meet its carbon budgets, while delivering the other benefits that woodlands can bring.

4.3.3 While The National Forest and Charnwood Forest represent a combination of two different types of sub-regional corridor, their unique characteristics and GI assets should be recognised in their own right. This is reflected by the role of The National Forest as a major delivery body for new GI over the last 15 years, and the emerging regional park status for Charnwood Forest. Additionally, it is the overlap and spatial connectivity between The National Forest and Charnwood Forest that make this an important east-west corridor for the 6Cs sub-region. It provides a crucial landscape-scale connection, offering opportunities to extend Charnwood Forest eastwards to link with the River Soar Sub-Regional GI Corridor; and extend The National Forest westwards beyond the 6Cs sub-region into the Burton-upon-Trent Growth Point and the wider West Midlands.

4.4 Urban Fringe Green Infrastructure Enhancement Zones

4.4.1 As stated previously, taking into account the 6Cs sub-region's existing demographic patterns, and the spatial pattern of changes in population arising from the future growth proposed under the Government's Sustainable Communities Plan and the East Midlands Regional Plan, the countryside in and around the principal urban areas and sub-regional centres has the greatest demand, and therefore need, for enhanced provision of existing and new GI. These include areas of land that represent a significant resource for urban communities in the sub-region, comprising dynamic and complex mosaics of land uses and habitats. They are the immediate landscape setting for principal urban areas and sub-regional centres, have a critical role to play in linking town and country, and will experience major planned growth. By their definition, Sustainable Urban Extensions are likely to be located within these areas. For example, the zone around Greater Nottingham covers many of the potential locations for Sustainable Urban Extensions as identified in the Sustainable Urban Extension Study.[8] Existing GI resources in such areas are already experiencing urban edge issues, and are therefore likely to come under increasing pressure in the future.

4.4.2 In recognition of their strategic importance for delivery of GI from a sub-regional perspective, the countryside in and around the following settlements has been defined as **Urban Fringe Green Infrastructure Enhancement Zones** (see **Figure 4.1**):

- Derby Principal Urban Area;
- Swadlincote Sub-Regional Centre;
- Leicester Principal Urban Area;
- Coalville Sub-Regional Centre;
- Hinckley (including Barwell and Earl Shilton) Sub-Regional Centre;
- Loughborough (including Shepshed) Sub-Regional Centre;
- Market Harborough Sub-Regional Centre;
- Melton Mowbray Sub-Regional Centre;

[8] Sustainable Urban Extension Study for Greater Nottingham (Tribal Urban Studios, June 2008)

- Nottingham Principal Urban Area;
- Hucknall Sub-Regional Centre; and
- Ilkeston Sub-Regional Centre.

4.4.3 The indicative extent of the Zones defined on **Figure 4.1** is generic, and is simply intended to schematically illustrate the transition between urban and rural land uses around the principal urban areas and sub-regional centres.

4.4.4 Through investment in GI provision, the Urban Fringe Green Infrastructure Enhancement Zones have the ability or potential to deliver a range of economic, environmental and social benefits related to the following GI themes or functions[9]:

- **A bridge to the country** - linking housing, schools, health centres and hospitals, bus and train stations in urban centres to the existing/enhanced access network to connect with accessible greenspaces in the wider countryside;
- **A gateway to cities and towns** - providing an improved image, experience and sense of place through investment in an improved environmental quality for public rights of way and spaces;
- **A health centre** - contributing to health improvements and well-being through schools, hospitals and health centres promoting opportunities to access greenspaces for exercise as part of health programmes;
- **An outdoor classroom** - opportunities to provide environmental education through parks, nature reserves and farm-based activities;
- **A recycling and renewable energy centre** - helping address climate change through sustainable management of waste, water and pollution, production of energy crops and creation of woodland to act as carbon sinks;
- **A productive landscape** – recognising the role of urban fringe farmland in food production, processing of local produce and retail (farm shops) for urban areas;
- **A cultural legacy** - increasing awareness of historic features in the urban fringe landscape and how they contribute to sense of place for local communities;
- **A place for sustainable living** - ensuring that future development links with the urban area and addresses issues such as fly-tipping, indistinct boundaries, poor accessibility, fragmented landscapes, etc;
- **An engine for regeneration** – providing quality of life benefits through opportunities for community involvement through volunteering or gaining new skills in environmental improvement work, particularly within areas of multiple deprivation; and
- **A nature reserve** - strengthening biodiversity, geological and geomorphological conservation management for sites in and around urban areas.

4.4.5 Within the Urban Fringe Green Infrastructure Enhancement Zones, land is widely used by urban communities as a resource for informal, and often unauthorised, recreation leading to conflicts with other land uses. Additionally, the poor permeability of some built up areas can be a barrier to accessing the surrounding countryside. These Zones would benefit from the adoption of a strategic and co-ordinated approach to managing access for urban communities into the surrounding countryside. It is envisaged that the Urban Fringe Green Infrastructure Enhancement Zones would encompass a network of interlinked and multifunctional greenspaces that connect with city/town centres, public transport nodes, and major

[9] Key functions as described in Countryside Agency's vision for the Countryside in and around Towns (2005)

employment and residential areas, including new sustainable urban extensions. A careful balance will need to be struck between creation of new GI and the need to safeguard existing natural and cultural features that contribute to the character and value of the wider agricultural landscape.

4.4.6 Urban Fringe GI Enhancement Zones have an important role to play in relation to improving linkages and connectivity between principal urban areas/sub-regional centres and the wider GI network of Sub-Regional and City-Scale GI Corridors. In particular, Sustainable Urban Extensions will need to protect the integrity of the wider GI network, and support existing urban areas, by maintaining and enhancing GI within the Urban Fringe GI Enhancement Zones. Further work is required at the local level to identify specific opportunities for integrating GI provision into local development and delivery plans within individual Zones.

4.5 City-Scale Green Infrastructure Corridors

4.5.1 Within the context of the broad Sub-Regional GI Corridors, there are more localised networks of greenspaces, natural features and interconnected green links in and around the three cities of Derby, Leicester and Nottingham, which connect with their surrounding towns and villages. These networks exist at an intermediate 'city-scale' level, which sits between 'sub-regional scale' and 'local scale'.

4.5.2 A network of **City-Scale GI Corridors** is proposed (see **Figures 4.2**, **4.3**, and **4.4**) that links up with the Sub-Regional GI Corridors to create the overall Strategic GI Networks in and around the Three Cities. They comprise a mosaic of land uses, natural and built heritage resources and settlements and have the primary function of providing access, movement and recreational route linkages for public benefit with opportunities for biodiversity enhancement. The City-Scale GI Corridors require substantially more resources to improve their multifunctionality than the Sub-Regional GI Corridors. The intention is to increase the range of uses within each City-Scale GI Corridor to improve their multifunctionality and increase benefits close to both new and existing communities.

4.5.3 The City-Scale GI Corridors provide linkages between Sub-Regional GI Corridors, and between Sub-Regional GI Corridors and settlements. In many cases, the City-Scale GI Corridors extend into the urban areas, providing key elements of the Urban Fringe GI Enhancement Zones. While these corridors are indicative, they demonstrate the priority that should be given to achieving a connected network of green links within and between urban areas. A number of City-Scale GI Corridors run along rivers through the centre of towns and cities, which provide opportunities to integrate GI into regeneration projects that can help reduce flood risk, improve water quality and provide quality of life benefits to local residents.

4.5.4 With investment, the City-Scale GI Corridors are intended to be managed to deliver economic, environmental and social benefits related to one or more GI functions (see **Section 1.3** for details). They provide a spatial framework for partnership working at the city-scale, including the development and use of more detailed local GI studies and strategies to inform Local Development Frameworks and related guidance.

4.5.5 While the City-Scale GI Corridors defined on **Figures 4.2**, **4.3**, and **4.4** are illustrated schematically as being of a uniform width, these are intended to be flexible and should respond to local circumstances. For example, it will be important for the City-Scale GI Corridors to, wherever possible, provide adequate space in order to reduce the potential negative "edge effects" on wildlife from surrounding intensive land uses by buffering and extending existing valuable habitats[10].

The Derby Strategic GI Network

4.5.6 **Figure 4.2** shows the proposed Strategic GI Network for the Derby Principal Urban Area and the Sub-Regional Centre of Swadlincote. The definition of the City-Scale GI Corridors is based on the analysis of the GI assets, needs and opportunities presented in **Volume 4** of the 6Cs GI Strategy. The City-Scale GI Corridors are key elements of the Urban Fringe GI Enhancement Zones.

The Leicester Strategic GI Network

4.5.7 **Figure 4.3** shows the proposed Strategic GI Network for the Leicester Principal Urban Area and the Sub-Regional Centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough and Melton Mowbray. The definition of the City-Scale GI Corridors is based on the analysis of the GI assets, needs and opportunities presented in **Volume 5** of the 6Cs GI Strategy. The City-Scale GI Corridors are key elements of the Urban Fringe GI Enhancement Zones.

The Nottingham Strategic GI Network

4.5.8 **Figure 4.4** shows the proposed Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston. The definition of the City-Scale GI Corridors is based on the analysis of the GI assets, needs and opportunities presented in **Volume 6** of the 6Cs GI Strategy. The City-Scale GI Corridors are key elements of the Urban Fringe GI Enhancement Zones.

[10] The Woodland Trust has outlined how this can be achieved in 'Space for Nature' (see www.woodland-trust.org.uk), which outlines adaptive strategies to help give ancient woodland a sustainable future. These include expanding and buffering existing ancient woodland, through woodland creation using native species or preferably natural regeneration, to help increase their core area and making them more robust against the pressures of environmental change (such as pollution and climate change).

5.0 THE DELIVERY FRAMEWORK

5.1 Green Infrastructure Planning and Delivery Principles

5.1.1 The Strategy proposes that planning and delivery of GI in the future will best be achieved by the various different organisations and stakeholders adopting a common set of principles to guide GI provision in the 6Cs sub-region. The Green Infrastructure Guide for the East Midlands (2008) sets out the following overarching principles, which are recommended for guiding GI planning and delivery in the Sub-Region:

'Green Infrastructure should:

- *Contribute to the management, conservation and enhancement of the local landscape*
- *Contribute to the protection, conservation and management of historic landscape, archaeological and built heritage assets*
- *Maintain and enhance biodiversity to ensure that development and implementation results in a net gain of Biodiversity Action Plan habitats*
- *Provide connectivity and avoid the fragmentation of habitats, sites and natural features, to increase the potential for natural regeneration and the migration of species of flora and fauna, which may be affected by changing climatic or other conditions*
- *Be designed to facilitate sustainable longer-term management*
- *Be delivered through enhancement of existing woodlands and also by the creation of new woodlands and forest areas*
- *Create new recreational facilities particularly those that present opportunities to link urban and countryside areas*
- *Take account of and integrate with natural processes and systems*
- *Be managed and funded in urban areas to accommodate nature, wildlife and historic and cultural assets, and provide for sport and recreation*
- *Be designed to high standards of quality and sustainability to deliver social and economic, as well as environmental benefits*
- *Provide a focus for social inclusion, community development and lifelong learning.'*

5.1.2 These overarching principles should be read in conjunction with the Green Infrastructure Guide for the East Midlands. The Guide expands on these principles and provides supporting explanations with accompanying case studies in relation to the following aspects of GI planning and delivery:

- Landscape character/historic environment (6Cs case study: Derwent Valley Mills World Heritage Site);
- Biodiversity (6Cs case studies: Strategic Partnerships Along River Corridors, East Midlands; Mercaston & Markeaton Brooks Project, Derby);
- Woodland (6Cs case study: Heart of The National Forest, Ashby Woulds);
- Sport & recreation (6Cs case studies: Watermead Country Park, Leicestershire; Trent Valley Greenway, Long Eaton);
- Natural processes & environmental systems;
- Managing open spaces (6Cs case study: Stepping Stones Project, Central Leicestershire);
- Design (6Cs case study: The EcoHouse, Leicester);
- Community involvement (6Cs case study: Greenwood Community Forest, Nottinghamshire);
- Landscape scale connectivity; and
- Strategic framework & delivery programme.

5.1.3 It is proposed that the principles set out in the Green Infrastructure Guide for the East Midlands are reflected as necessary in local GI strategies within the 6Cs sub-region. For example, the GI principles underpinning the approach to planning for growth in The National Forest area strongly echo these principles, providing a firm foundation for decision-making in relation to future GI provision in the Forest. These principles also underpin the Stepping Stones GI Delivery Plan in Central Leicestershire centred on the Leicester principal urban area.

5.2 Governance and Delivery Co-ordination Arrangements

Governance and Strategic Steering

5.2.1 A concerted effort over a long period is necessary to ensure that the vision for GI is delivered, meeting the needs of new and existing communities, the environment (including, biodiversity, landscape and heritage), climate change impacts and underpinning the economic stability and growth of the sub-region. Priorities for successful planning and delivery of GI include:

- Championing the importance, benefits and principles of GI to a wide audience – including the public, private and voluntary sectors;
- Influencing and enabling delivery of GI;
- Marketing and advocacy to promote GI;
- Advising on the identification and selection of GI projects for funding;
- Establishing partnerships for the funding, delivery, management and ownership of specific GI projects;
- Identifying and disseminating information on best practice approaches to GI delivery; and
- Liaising with GI partnerships in neighbouring growth areas to co-ordinate cross-boundary delivery of projects at the sub-regional scale.

5.2.2 The work of the 6Cs Strategic GI Project Board has, and continues to be, critical to achieving the above. Established in 2007, the Project Board commissioned and led the development of the 6Cs GI Strategy to provide a strategic sub-regional framework and direction for guiding GI planning and delivery in the context of the growth agenda. The 6Cs Strategic GI Project Board has a key role to play in:

- Leading in the establishment and long term maintenance of high quality GI, contributing to the development of sustainable communities within the 6Cs sub-region;
- Championing GI and integrating its development throughout the 6Cs sub-region, including within/through the Programme Management Board and Housing Market Area (HMA) Partnership Boards and constituent local authority boundaries ensuring that GI best practice in implementation and long term maintenance is delivered to consistently high standards across the Sub-Region;
- Approving and monitoring budgets on capital and revenue expenditure on strategic GI;
- Assessing projects submitted for strategic GI funding through a transparent project appraisal process (see **Section 5.6**); and
- Monitoring the implementation of GI, promoting good practice and reporting on annual progress to strengthen the overall GI network.

5.2.3 Board membership is composed of local authorities and senior level officers from other organisations. The current Chair for the Board is a representative from the East Midlands Councils[11] (EMC). The following principal authorities form the core membership of the Board:

- Leicestershire County Council;
- Leicester City Council;
- Nottinghamshire County Council;
- Nottingham City Council;
- Derby City Council; and
- Derbyshire County Council.

5.2.4 The following environmental and regional organisations constitute the remainder of the Board membership:

- Natural England;
- Environment Agency;
- Forestry Commission;
- Landowners (Country, Land and Business Association);
- NGOs (East Midlands Environment Link);
- GreenSpace East Midlands;
- East Midlands Biodiversity Partnership; and
- East Midlands Development Agency.

5.2.5 In addition to this core membership, additional organisations are encouraged to make input as appropriate to the work of the GI Board, including: GOEM, Groundwork East Midlands, Rural Community Councils, Greenwood Community Forest, The National Forest Company, The Leicestershire Stepping Stones Project and the Strategic River Corridors Initiative. These additional organisations form the nucleus of a wider reference group, whose expertise is drawn upon by the GI Board as appropriate.

Strategic Coordination

5.2.6 Given the complexities of the 6Cs sub-region, the ongoing strategic coordination role of the 6Cs GI Development Coordinator is particularly important. This is a dedicated post which coordinates the development and promotion of GI in the Sub-Region working with, supporting and developing the capacity of local authorities and other partner organisations under the guidance of the 6Cs Strategic GI Project Board. The main roles of the 6Cs GI Development Coordinator include:

- In conjunction with partner organisations, working to ensure that GI is fully integrated and has a high profile within the wider work of local authorities within the sub-region, including Local Area Agreements;

[11] The East Midlands Councils replaced the East Midlands Regional Assembly in April 2010

- In conjunction with partner organisations, promoting, disseminating and giving assistance and advice on the integration of GI and the GI Strategy for the sub-region into local authority documents, plans policies and programmes, including Sustainable Urban Extension masterplanning;

- Assisting partner organisations, especially the HMA Partnership Boards, in prioritising action on GI that will deliver high quality and sustainably managed GI consistently across the sub-region;

- Organising and managing relevant meetings of partner organisations, especially the Strategic GI Project Board, wider stakeholder consultation, public exhibitions and meetings to promote the GI Strategy;

- Assisting partner organisations and other stakeholders in sourcing funding for specific schemes and elements for the implementation of the GI Strategy; and

- Working with partner organisations, including the East Midlands Green Infrastructure Network and Greenspace East Midlands, to capture and disseminate GI good practice within the sub-region.

Future Strategic GI Delivery Co-ordination

5.2.7 There is a demonstrable need for effective strategic governance, leadership and coordination at the regional/sub-regional level to retain the strategic overview and ability to plan, manage and deliver GI across administrative boundaries. The roles of the Strategic GI Project Board and the GI Development Coordinator outlined above are critical to this, and they, or alternative arrangements which achieve the same objectives, need to continue beyond the current funding programme which ends March 2011. In this respect, it is proposed that funding is secured to extend this post for a minimum of 5 years up to March 2016. There is also a need to continue the 6Cs GI website as a key communication tool.

5.2.8 It is estimated that funding in the region of £325,000 would be required to fund a 5 year extension for the continuation of the GI Development Coordinator post, the running of the Strategic GI Project Board and the website, with a small revenue resource to fund further communication, promotion and advocacy work to embed the 6Cs GI Strategy into relevant planning and other policy documents.

5.2.9 There is a clear need for a strong 'GI Champion' to advocate strategic and coordinated planning and delivery of GI across the Sub-Region as there is no mainstream funding for GI. It is proposed that one of the partner organisations with a national remit such as Natural England or the Environment Agency would be well placed to perform this role.

Local GI Delivery Coordination

5.2.10 At the local level, it is important that appropriate delivery mechanisms are in place that focus on community-scale involvement and long-term maintenance of facilities. Established in 1992, the Stepping Stones Project in Central Leicestershire is an example of a partnership with a proven track record of delivering smaller-scale GI projects. Its strengths include excellent community engagement and securing longer term, locally based site management, and has the benefit of a secure, trusted and well-regarded partnership. The local engagement and long-term management strengths of the Stepping Stones Project partnership provide a good model for other GI delivery initiatives within the Sub-Region.

5.2.11 The National Forest provides another example of successful local GI Delivery coordination. Over 6,000ha of new woodland and other habitat creation have been achieved, with 85% having some form of public access. The Forest's creation also involves around 20,000 adults and 40,000 children each year in Forest-related voluntary activities. The scale of the Forest's delivery makes it the largest current deliverer of new GI across the East and West Midlands (around 200ha achieved annually).

5.3 Funding Options

Current Growth Point Funding

5.3.1 Local authorities and other partner organisations in the 6Cs sub-region have been successful in receiving increased levels of funding from the Government, to assist in the advance delivery of elements of infrastructure needed to support anticipated higher levels of growth.

5.3.2 Around 10% of the total 6Cs Growth Fund has been allocated for strategic GI investment to help achieve the major step change in GI provision that is required to meet the increased demands generated by the growth agenda in the sub-region. This includes preparation of the GI Strategy and the GI Co-ordinator's post, plus funding through the HMA Programme Boards for more local GI work. In total, £2.6m Growth Point Funding has been secured for GI during 2008/09 - 2009/10, and approximately £1m has been provisionally allocated for 2010/2011.

5.3.3 The dedicated 'single pot' Growth Fund has provided the initial impetus or 'kick start' of investment for getting projects up and running for key parts of the GI Network. Beyond 2010/2011, the continued availability of funding from the Homes and Communities Agency, in conjunction with contributions from developers and other sources, will be critical in supporting the ambitious scale of GI provision set out in this Strategy in response to growth pressures.

5.3.4 It should be noted that priorities and funding mechanisms change over time. Going forward it is proposed that:

- The 6Cs Strategic Green Infrastructure Project Board prioritise their available resources to support delivery of the Sub-Regional GI Corridor Network;
- The Housing Market Area Boards prioritise their available resources to support delivery of the City GI Corridor Networks; and
- The 6Cs Strategic Green Infrastructure Project Board and the Housing Market Area Boards resources are combined to support delivery of GI in the Urban Fringe GI Enhancement Zones.

Funding Sources

5.3.5 Reflecting the multi-dimensional nature of GI, and the potential for multiple social, economic and environmental benefits (see **Section 1.3** for details), there is a wide range of funding streams and governance models for securing the design, implementation and maintenance of GI. The most relevant of these are highlighted below.

5.3.6 Future sources of GI funding may include developer contributions related to individual developments secured via Section 106 planning agreements, or potentially through inclusion of GI requirements within local authority Infrastructure Delivery Plans and Community Infrastructure Levy[12] charging schedules. However, it should be noted that over-reliance on developer contributions may not result in the anticipated funding in the current economic climate. In these circumstances, the Strategic GI Project and HMA Programme Boards will need to adopt a creative approach to the use of public and private sector grants and funding, which includes consideration of the following potential sources of funding that may be available to support GI provision[13]:

Major Funding Sources

- Aggregates Levy Sustainability Fund;
- Landfill Tax Communities Fund;
- Established area-based delivery vehicles and partnerships - such as The National Forest Company and the Greenwood Forest Partnership;
- Major public sector owners of accessible GI land – e.g. the County Councils, Forestry Commission;
- Lottery funding – e.g. Heritage Lottery Fund's Heritage Grants and Landscape Partnerships support schemes;
- European funding initiatives – e.g. the INTERREG IVB programme and other similar initiatives;
- Natural England funding - 'Access to Nature' grants.

[12] Community Infrastructure Levy (CIL) is a new mechanism for delivering investment in local infrastructure, including green spaces, involving a standard change that local planning authorities will be able to levy on most types of new development.
[13] This is not a definitive list and other sources of funding and support/advice may be available now and in the future.

- English Heritage funding – historic buildings, monuments and designed landscapes grant scheme;
- Environmental Stewardship with focused and enhanced grant support that will deliver GI objectives; and
- Forestry Commission English Woodland Grant Schemes – targeting of woodland creation grants and biodiversity and access grants through a challenge fund.

Other Funding Sources

- Small scale funding grants for community-based environmental projects in support of strategic GI objectives – e.g. Big Lottery Fund's 'Changing Spaces' environmental programme and Sport England's Community Investment Fund;
- Renewable energy grant-aid schemes;
- Private sector funding through property and financial endowments;
- Co-operative ownership of amenity greenspace/allotment space/community orchards via 'gifts' from developers;
- Greenspace management companies to produce revenue for maintenance;
- Business sponsorship of sites and projects;
- Other public sector owners of accessible GI land – e.g. District, Town and Parish Councils;
- Conservation trusts – e.g. The National Trust and the County Wildlife Trusts;
- Groundwork Trusts, BTCV and other environmental bodies;
- Primary Care Trust funding linked to the health agenda – e.g. the Walk Your Way to Health initiative; and
- Safer Neighbourhood funding streams linked to using GI to tackle, for example, anti-social behaviour and providing safe routes for communities.

Sources of Support and Advice

- Provision of conservation advice and legislative support for farmers and landowners – from the Farming and Wildlife Advisory Group, the National Trust, Natural England, The Royal Society for the Protection of Birds and The Wildlife Trusts, among others; and
- Advice and support on delivery issues from Government agencies and NGOs– e.g. Natural England, English Heritage, Environment Agency, Sport England, CABESpace, Sustrans, etc.

5.3.7 Further details of GI funding and governance models are provided in Appendix 3 of Natural England's Green Infrastructure Guidance (2009)[14].

5.3.8 The 6Cs Strategic GI Project Board will consider the contribution of potential sources of funding for GI as part of the development of a Business Plan. In particular, the Project Board will play a key role in identifying opportunities and facilitating partnerships for working with the private sector to deliver GI, including promoting the funding and delivery of GI through developer contributions associated with development opportunities. The overarching sub-regional strategic framework and long-term plan for GI set out in this document has an important role to play in coordinating effective action in the context of the wide range of different funding sources and partners. The long term approach is also of value as the Strategic

[14] http://naturalengland.etraderstores.com/NaturalEnglandShop/Product.aspx?ProductID=cda68051-1381-452f-8e5b-8d7297783bbd.

GI Network is likely to be delivered incrementally, facilitated by, and in step with, major development.

Sustainable Greenspace Management

5.3.9 It is widely acknowledged that securing revenue funding for the management of capital greenspace schemes is difficult, and will become even more so in the future. It is important that sustainable management and funding is established up front at the planning stage of a capital scheme to ensure its long-term delivery of GI benefits.

5.3.10 Research undertaken by Groundwork[15] identified that 'traditional' approaches to the long-term management and maintenance of greenspace are no longer sufficient on their own, and that new thinking is required to identify and develop alternative models and mechanisms which provide more reliable or more permanent solutions. Groundwork's research suggests that generating revenue and engaging communities are fundamental prerequisites for ensuring the sustainability of greenspaces.

5.3.11 The National Forest model, operated through its Changing Landscapes Scheme (CLS) of rolling 10 year contracts (up to 30 years in total), provides an example of an alternative management and maintenance approach. The CLS offers a generous level of funding to any landowner for the creation of new woodlands and associated habitats. It is unique to The National Forest and pays 100% of costs for woodland and habitat creation and its management for 10 years. This model entails specifying capital revenue costs at the outset. Whether funding is from one source or several, the principle of contracts to deliver and maintain GI projects could be more widely used. In effect this could mean accepting less capital funding to allow provision for more long term revenue funding to be allocated as part of an overall project budget.

5.3.12 There are a number of options that may be relevant for the delivery and future management of greenspace. The main options are management by:

- Local Authorities;
- Existing or new Charitable Trusts;
- Management Companies;
- Partnerships;
- Voluntary and Public/Private Sector Agreements;
- Community Interest Companies;
- Social Enterprises.

5.3.13 Each of the options has advantages and disadvantages, and the option that is the most appropriate for the management of a particular greenspace will vary depending on the

[15] Sustaining Green Space Investment – Issues, Challenges and Recommendations (Groundwork UK, February 2006).

characteristics of the site itself and proposed use of the greenspace; arrangements for long term finance and income streams; organisational capacity; and the attitude and intentions of the landowner. Whichever option, or combination of options, is selected it is particularly important that all parties have a positive, pro-active and co-operative approach to the creation, management and maintenance of the greenspace, both in the short and the long term and that local authorities adopt a corporate approach.

5.3.14 There is a need to ensure that there is an adequate funding arrangement in place, including long term security of income, and to agree what the funding is expected to cover. A package of financial arrangements may be preferable rather than relying on one option. The greatest scope for providing ongoing revenue for long-term greenspace management is considered to be those mechanisms that, either alone or in combination, best capture and articulate the wider outcomes achieved through maintaining high quality and accessible green infrastructure. Innovative approaches[16] also have the potential to encourage businesses to fund environmental improvements of local greenspaces that contribute to their trading environments.

5.3.15 Based on investigations from around the world, CABE Space's 'Paying for Parks: Eight models for Funding Urban Green Spaces' recommends models for both revenue and capital funding that could be used in England[17].

5.4 Strategic Delivery Mechanisms

5.4.1 It is proposed that GI is incorporated into relevant strategic documents related to the social, economic and environmental agenda, including new documents as they emerge and reviews of existing strategies.

5.4.2 Many of the opportunities to deliver improved or extended GI in the 6Cs sub-region lie not only with the local planning authority, but also with other partners. For example, providing cycle routes within green links could help to meet objectives within a Local Transport Plan for more sustainable travel and objectives within a local health strategy to increase the amount of exercise taken by local people. In this respect, it is important that GI objectives are embedded in the following strategic mechanisms that have a key role to play in the planning and delivery of GI.

[16] Examples of innovative approaches include local management agreements with private sector companies, imaginative use of S106 planning agreements, and the inclusion of greenspace management funding in initiatives such as business improvement districts.
[17] www.cabe.org.uk/publications/paying-for-parks.

Regional Strategy

5.4.3 Building on the approach set out in the current Regional Spatial Strategy (the East Midlands Regional Plan), GI should be embedded into the new integrated East Midlands Regional Strategy[18]. The new Regional Strategy will streamline policy making in the East Midlands by drawing together spatial, economic, social and environmental strategies into a single document to set a new long-term vision for the region. The Strategy will contain policies that guide sustainable economic development, help to meet housing need, improve the region's infrastructure and help mitigate and adapt to climate change. It will also form part of the statutory development plan and inform planning decisions taken by local authorities.

Sustainable Community Strategies

5.4.4 GI should be embedded in the Sustainable Community Strategy (SCS) - the overarching strategy for promoting and improving the health and well-being of an area for local communities prepared by the Local Strategic Partnership (LSP). The SCS provides the vision to inform the spatial planning process (including the Local Development Framework), towards which GI has an important contribution to make.

Local Area Agreements and Multi-Area Agreements

5.4.5 GI should inform the priorities for a local area set out in Local Area Agreements (LAAs)[19]. There is scope for local authorities to link GI delivery to a variety of the 198 national indicators (for example those related to health, climate change, flood risk management and improved local biodiversity), plus local targets chosen by LSP partners can help achieve priorities more directly linked to GI delivery.

5.4.6 Multi-Area Agreements (MAAs)[20] are also relevant as a key strategic driver to the future delivery of GI. MMAs are currently being developed in the 6Cs sub-region with central Government. For example, within the Leicester and Leicestershire HMA, the new MAA structure covers housing, transport and infrastructure.

[18] The main bodies involved in the preparation of the new Regional Strategy are emda and the East Midlands Leaders' Board (EMLB). From 1 April 2010, the first Regional Strategy will be formed by bringing the existing Regional Economic Strategy and Regional Spatial Strategy together. Going forward, emda and the EMLB will work together with partners across the East Midlands to develop a new Regional Strategy.

[19] Local Area Agreements are contracts between central government and a local area (local authorities and local strategic partnerships), which set out the priorities for a local area and identity funding streams.

[20] Multi Area Agreements are contracts between central government and a group of local authorities/local strategic partnerships, which set the priorities for a designated area and identity funding streams.

Local Development Frameworks

5.4.7 The planning system provides an important framework within which different components of GI can be safeguarded and enhanced. It has a central role to play in the delivery of GI through Section 106 agreements, Planning Conditions and the forthcoming Community Infrastructure Levy. The potential to deliver GI when a strong policy context is put in place is demonstrated by The National Forest's development planting guidelines and minerals restoration policies, through which 1,300ha of Forest creation have been achieved and a further £1.2m has been secured in commuted sums.

5.4.8 Crucially, GI should be embedded into the plan-making process at the earliest stage possible. However, Local Development Frameworks within the 6Cs sub-region are at various stages of preparation, with many development plan documents yet to be adopted. This provides both opportunities and potential delays for embedding GI into development plans.

5.4.9 Local Planning Authorities should set a clear and robust planning framework for the creation, management and maintenance of GI within their Local Development Frameworks. This framework should include general policies for GI, as well as policies and proposals for specific GI sites. It is important that local planning policies and guidance relating to GI are set in the context of the proposed Strategic GI Network, and informed by robust evidence bases relating to specific aspects of GI (e.g. open space studies, greenspace strategies). Specialist advice from statutory conservation bodies should be sought at an early stage in the planning process to reduce conflicts of multifunctionality in the delivery of GI.

5.4.10 GI should be embedded in the plan making process through the following stages:

- At the early strategic visioning stage;
- When an evidence base is being compiled;
- In the development of spatial options and policy; and
- At the delivery stage.

5.4.11 Detailed advice on how to incorporate GI into the plan-making process can be found in Natural England's Green Infrastructure Guidance (2009)[21]. GI requirements should also be reflected in the sustainable access polices and proposals of Local Transport Plans prepared by the Highway Authorities within the 6Cs sub-region.

5.4.12 Some of the key areas where GI requirements should be reflected in Local Development Documents are highlighted below.

[21] http://naturalengland.etraderstores.com/NaturalEnglandShop/Product.aspx?ProductID=cda68051-1381-452f-8e5b-8d7297783bbd.

Core Strategies

5.4.13 To support the priorities and strategic aspirations for the District/Borough set out in the proposed 6Cs GI Strategy, the vision, objectives, policies and key diagram within a Core Strategy should reflect the following requirements:

- Make reference to the vision for GI in the 6Cs sub-region within the Core Strategy vision;
- Include specific reference to securing a net gain in GI as a key objective of the Core Spatial Strategy;
- Identify Sub-Regional GI Corridors, Urban Fringe GI Enhancement Zones and City-Scale GI Corridors on the key diagram;
- Reflect the multifunctional nature of GI and its potential to deliver a broad range of benefits or services in relation to economic, environmental and social policy priorities;
- Include a specific GI policy that seeks to safeguard and enhance the role of Sub-Regional GI Corridors, Urban Fringe GI Enhancement Zones and City-Scale GI Corridors in connecting locations of natural and cultural heritage, green spaces, biodiversity or other environmental interest in urban and countryside areas through:
  * not permitting development that compromises their integrity and therefore that of the overall GI Network
  * using developer contributions to facilitate improvements to their quality and robustness
  * investing in enhancement and restoration where the opportunities exist, and the creation of new resources where necessary;
- Include supporting text to the GI policy that highlights the opportunities provided by proposed growth to plan for a GI network, explaining that new development located within the Sub-Regional Scale GI Network (the Sub-Regional GI Corridors and the Urban Fringe GI Enhancement Zones) is expected to contribute towards enhancing it; and
- Include reference in policy for Sustainable Urban Extensions and other major developments to the need for masterplans to make provision for a network of green spaces linking the area to the wider GI Network.

Site Allocations

5.4.14 The identification of land for new housing/employment and land that is to be protected against future development should reflect the proposed Strategic GI Network, and be informed by local GI studies/strategies and other more detailed information at the site specific level.

Area Action Plans

5.4.15 The detailed policies and site proposals for areas where significant change is needed should take into account opportunities to incorporate GI into development and regeneration schemes, identified through site-specific investigations and assessments.

Supplementary Planning Documents

5.4.16 Supplementary planning documents (SPDs) can provide more detailed information about delivery of GI through new development, and planning briefs/development briefs adopted as

SPD to guide future development of important sites should reflect GI needs. There is value in seeking to develop a model or detailed guidance for SPDs, which would provide consistent guidance for individual Local Development Frameworks.

5.4.17 Cases studies will be developed to show how the information contained within local GI studies/strategies can be embedded into Local Development Documents, and promoted via the 6Cs GI website.

Development Management

5.4.18 The development management (development control) process affords considerable potential to promote and deliver GI. Most significant development and land use change requires planning permission, and large-scale proposals often present the greatest opportunities for GI enhancement and challenges for protection of existing GI assets. Specific GI requirements will vary considerably according to the application. Individual planning applications can contribute to GI delivery by increasing functionality of GI through the protection, restoration and enhancement of existing GI assets; creation of new GI; and by the linking of GI assets.

5.4.19 The Green Infrastructure Guide for the East Midlands (2008), and the Town and Country Planning Association's Eco-towns GI worksheet, provide principles related to incorporation of GI into new development, which are useful for evaluating planning applications.

Green Infrastructure Standards

5.4.20 The following are examples of standards that can be used by local planning authorities in assessments of GI provision to inform spatial planning, and to define contributions from housing developers towards the provision and long-term management of high quality GI assets required by future populations. As GI covers more than simply open space, and is often in multiple use, a wide variety of quantitative and qualitative standards need to be considered. Where used, national standards should be adapted as necessary in developing locally appropriate standards for GI provision.

National GI Standards

5.4.21 Providing networks of accessible and high quality greenspaces that deliver benefits for the health and quality of life for people is at the heart of the GI Strategy's proposed vision. This can best be achieved through use of standards for the delivery of greenspaces in respect of:

- **Service standards** for core services and facilities for each greenspace site type;
- **National quality standard** for management of greenspaces (the Green Flag Award scheme); and

- **Accessibility and quantity standard** to ensure provision of accessible greenspaces at a range of sizes within walking distance and sustainable transport distances of people's homes (e.g. Natural England's Accessible Natural Greenspace Standards or the Woodland Trust's Woodland Access Standard[22]).

5.4.22 Full details of these standards can be found in Natural England's Green Infrastructure Guidance (2009). The standards in the Town and Country Planning Association's Eco Towns Worksheet are commended for inclusion in all major developments[23].

Sub-Regional Standards

5.4.23 A minimum standard for the provision of woodland and habitat creation related to different scales and types of development has been developed by The National Forest Company. In light of the increasing priority to meet the needs of sustainable urban extensions (including both residential and employment sites) within the Forest, planning applications for large-scale developments over 10 ha are required to provide a GI footprint of 30% to cover:

- Creation of new GI assets;
- Upgrading of existing green spaces; and
- Creating or enhancing linear green corridors or access routes to establish linked GI networks across larger areas.

5.4.24 In exceptional circumstances where the GI standards cannot be fully met on site, there is also provision for developers to provide a commuted sum towards buying land, planting a woodland (or creating other habitats), providing public access and maintaining the site for at least five years.

Local Standards

5.4.25 The companion guide to PPG17: Planning for Open Space, Sport and Recreation recommends the development of locally appropriate standards at a local authority level related to the provision of open space (in terms of quantity, quality and accessibility) derived from assessments of needs and opportunities. These standards are a key driver for delivering GI provision at a local authority level.

[22] The Woodland Trust's Woodland Access Standard is a complementary accessibility standard to ANGSt endorsed by Natural England (see www.woodlandtrust.org.uk for details).
[23] Eco-towns are intended to be exemplars of good practice in new development, meeting the highest standards in terms of sustainable development and minimising carbon footprints, social justice and inclusive communities. The Eco-Town Worksheet provides planning guidance on the range of subject areas to be addressed and the standards to be met when planning an 'eco-town'.

Design Quality

5.4.26 Raising the standard of building and landscape design quality is a priority for the GI Strategy. Good GI design should work with existing features (e.g. retaining hedgerows to define a greenway network or using existing drainage ditches to define a sustainable urban drainage system scheme), and be appropriate to the desired primary and secondary functions for GI in the locality (e.g. balancing biodiversity and access, landscape character and flood risk management, etc).

5.4.27 Local authorities should consider adopting CABE's Building for Life standards[24], developed in conjunction with the House Builders Federation, which promote use of sustainable building materials; renewable energy; green design principles (green roofs, grey water recycling, energy efficiency); and sustainable urban drainage systems in housing developments.

5.4.28 Other sources of useful advice and good practice pointers for GI design at the site masterplan scale can be found in Natural England's Green Infrastructure Guidance, MKSM's Green Infrastructure by Design Guide[25] and The Town and Country Planning Association Guide 'Biodiversity by Design'. Within the 6Cs sub-region, North West Leicestershire District Council has adopted its own design policy and standards based upon CABE's standards, which make strong reference to The National Forest.

5.4.29 Developers should also be encouraged to consider applying to accreditation schemes, such as The Wildlife Trust's 'Biodiversity Benchmark', to gain recognition of the quality of their work.

Greenspace Management and Maintenance Quality

5.4.30 Raising the standard of greenspace management and maintenance is also a priority for the GI Strategy. Investment in new or improved GI must be supported by a long-term commitment to its maintenance. Recent research commissioned by CABESpace[26] has highlighted the shortage of landscape architectural and horticultural skills in the greenspace management and maintenance sector in England. Additionally, the availability of adequate resources for maintaining the quality of publicly accessible greenspaces continues to be a significant challenge for local authorities throughout the country.

[24] http://www.buildingforlife.org.
[25] Green Infrastructure by Design : Adding Value to Development – a guide for sustainable communities in Milton Keynes South Midlands (prepared by Chris Blandford Associates for MKSM partners, April 2010).
[26] www.cabe.org.uk/files/green-space-skills-2009.pdf.

5.4.31 'Towards an Excellent Service for Parks and Open Spaces'[27] is a framework developed by CABESpace, the Institute for Sport, Parks and Leisure (ISPAL) and the Improvement and Development Agency (IDeA) to enable greenspace management organisations to benchmark their service against a model of excellence and plan improvements.

Developing the Evidence Base

5.4.32 GI evidence bases comprise various sources of data drawn together to build up a picture of GI provision in an area. In the process of undertaking this strategic study, a number of gaps in baseline data have been identified. These gaps are identified below and it is recommended that future work is done to address these gaps so that a consistent evidence base exists across the 6Cs sub-region as a whole.

5.4.33 This Strategy provides the framework for the development of more detailed studies/strategies to contribute to the further development of the evidence base for informing decision making at the more local and site/project specific scale. To ensure a coordinated and joined up approach to the planning and delivery of GI provision across local authority boundaries, the scope for joint working on evidence bases should be considered where appropriate. This could include the joint preparation of GI studies by two or more District/Borough Councils, with support from partners and stakeholders involved in GI delivery. This work would build on and develop the strategic assessments of GI assets, needs and opportunities undertaken at the sub-regional scale for this project (see **Volumes 3**, **4**, **5** and **6**).

5.4.34 Assessing the capacity of settlement edge landscapes to accommodate change is considered to be particularly important for informing decisions on the scale, location and phasing of Sustainable Urban Extensions around the Principal Urban Areas and Sub-Regional Centres. Further examples of studies that can help inform GI planning and delivery include:

- Open Space Studies;
- Greenspace Strategies;
- Greenway Strategies;
- Landscape Character Assessments;
- Townscape Character Assessments;
- Historic Landscape Characterisation; and
- Biodiversity Audits.

Derby and Derbyshire

5.4.35 At the time of writing, suggested requirements for further work to strengthen the evidence base underpinning the local planning and delivery of GI are:

[27] http://www.idea.gov.uk/idk/core/page.do?pageId=8722765.

- **Greenspace Strategy** for Derby (Derby City Council);
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Derby Principal Urban Area (Derby City Council in conjunction with Amber Valley Borough Council, Erewash Borough Council, South Derbyshire District Council and Derbyshire County Council); and
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Swadlincote Sub-Regional Centre (South Derbyshire District Council in conjunction with Derbyshire County Council, North West Leicestershire District Council and Leicestershire County Council).

Leicester and Leicestershire

5.4.36 At the time of writing, suggested requirements for further work to strengthen the evidence base underpinning the local planning and delivery of GI are:

- **Greenway Strategy for Leicestershire** (Leicestershire County Council);
- **Updated Landscape Character Assessment** for Leicestershire consistent with Derbyshire/Nottinghamshire methodology (Leicestershire County Council);
- **Greenspace Strategy** for Blaby District (Blaby District Council);
- **Greenspace Strategy** for Harborough District (Harborough District Council);
- **Greenspace Strategy** for Melton Borough (Melton Borough Council);
- **Greenspace Strategy** for North West Leicestershire District (North West Leicestershire District Council);
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Leicester Principal Urban Area (Leicester City Council, Oadby and Wigston Borough Council, Blaby District Council, Charnwood Borough Council, Harborough District Council and Leicestershire County Council);
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Coalville Sub-Regional Centre (North West Leicestershire District Council in conjunction with Leicestershire County Council);
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Loughborough (including Shepshed) Sub-Regional Centre (Charnwood Borough Council in conjunction with Leicestershire County Council);
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Market Harborough Sub-Regional Centre (Harborough District Council in conjunction with Leicestershire County Council, Kettering District Council, Daventry Borough Council and Northamptonshire County Council) and
- **Settlement Edge Landscape Capacity Study** for Melton Mowbray Sub-Regional Centre (Melton Borough Council in conjunction with Leicestershire County Council).

Nottingham and Nottinghamshire

5.4.37 At the time of writing, suggested requirements for further work to strengthen the evidence base underpinning the local planning and delivery of GI are:

- **Greenway Strategy** for Nottinghamshire (Nottinghamshire County Council);
- **Updated Historic Landscape Characterisation Data** for Nottinghamshire consistent with Derbyshire/Leicestershire methodology (Nottinghamshire County Council);
- **Greenspace Strategy** for Gedling Borough (Gedling Borough Council);
- **Greenspace Strategy** for Rushcliffe Borough (Rushcliffe Borough Council); and
- **Townscape Character Assessment and Settlement Edge Landscape Capacity Study** for Nottingham Principal Urban Area & Sub-Regional Centres of Hucknall and Ilkeston (Nottingham City Council, Ashfield District Council, Gedling Borough Council, Rushcliffe

Borough Council, Broxtowe Borough Council, Nottinghamshire County Council, Erewash Borough Council, Amber Valley District Council and Derbyshire County Council).

5.5 Local GI Delivery Plans

5.5.1 Local GI Delivery Plans are needed to guide delivery of GI in key growth locations within the 6Cs sub-region. It is recommended that GI Delivery Plans are prepared for the three Principal Urban Areas and eight Sub-Regional Centres (as set out in **section 2.3.4**). In addition, in locations where the development of a local GI network is required to support the planning and delivery of a Sustainable Urban Extension, it is recommended that a local GI Delivery Plan is developed in partnership by the local planning authority, relevant public sector GI delivery organisations and the private sector developer. In cases where a Sustainable Urban Extension crosses two or more local authority boundaries, joint working is encouraged to ensure a consistent approach to GI planning and delivery.

5.5.2 Local GI Delivery Plans should be based upon an analysis of existing provision, deficiencies and need, identify priorities and highlight opportunities for GI creation, enhancement and investment. The Plan should set out clear delivery and governance mechanisms, supported by a prioritised and costed Action Plan.

5.5.3 The GI Delivery Plan for the Stepping Stones Project in Central Leicestershire and The National Forest Strategy and Delivery Plan provide good practice 'models' for the preparation of a local GI Delivery Plan. See boxes below:

GI Delivery Plan for the Stepping Stones Project

The Stepping Stones Project area covers an area of approximately 294 square kilometres, with a widely varied landscape comprising heavily urbanised areas (such as Leicester City, Oadby, Wigston, Glenfield, Blaby, Narborough and Thurmaston) surrounded by large tracts of open farmland (covering over 43% of the Project area). Although generally perceived as 'green', much of the landscape suffers from a marked ecological deficit, predominantly as a consequence of intensive agricultural practices resulting in the loss of features such as hedgerows, woodlands and ponds. The area has one of England's lowest levels of woodland cover at just over 3%. Despite the lack of high quality ecological sites, the Stepping Stones Project area has significant environment assets which provide good opportunities to enhance the natural environment through a planned and managed approach to GI delivery.

Development of the Stepping Stones Project as a GI delivery facilitator was seen as an opportunity to place the Project in a good position to drive GI forward in partnership with other organisations within the sub-region. The Stepping Stones Project GI Delivery Plan provides information and guidance on conserving, enhancing and extending the GI resource, focusing on GI delivery, to create multifunctional networks which will deliver public benefits in conjunction with achieving the vision for the Project area. The Plan also functions as a source of information and guidance for Local Authorities preparing Local Development Plan Documents for their Local Development Frameworks.

The National Forest Strategy 2004-14 and Delivery Plan 2009-14

The National Forest covers an area of approximately 518 square kilometres. Linking the remnant ancient forests of Needwood and Charnwood, the Forest also covers a substantial area of the former Leicestershire and South Derbyshire Coalfield, the attractive farmland landscapes of South Derbyshire, the industrialised Trent Valley corridor and a number of towns and other settlements. The idea is to create, within this setting, a vast new forested landscape for the nation that frames a mosaic of farms, open land, towns and villages. From its original 6% woodland cover, the eventual wooded area will spread over about a third of the area. The Forest is creating a major wooded environment where new trees and woodlands make a significant contribution to enriching landscapes and wildlife habitats; stimulating a new woodland-related economy; providing for recreation, tourism and community involvement; and contributing to global environmental objectives such as reducing carbon dioxide in the atmosphere.

The Delivery Plan sets out how The National Forest will continue to be created to 2014 and beyond, implementing the government endorsed National Forest Strategy 2004 – 2014. The Strategy is backed up by the resource of The National Forest Company and an annual project budget of approximately £2.5m. This will continue to be the prime mechanism for creating The National Forest and thus delivering the vision for GI in The National Forest part of the 6Cs sub-region.

5.6 Project Appraisal Framework

5.6.1 Interim criteria for selecting projects to go forward for strategic GI funding in the 6Cs sub-region have been developed by the 6Cs Strategic GI Project Board. These criteria are based on identifying the level of potential multifunctional public and environmental benefits that would be delivered. In light of the proposed Strategy set out in **Sections 3.0** and **4.0**, it is recommended that the criteria are refined to give priority to funding multifunctional GI projects located within or adjacent to the proposed Strategic GI Network's Corridors and Zones (see **Figures 4.1**, **4.2**, **4.3** and **4.4**). These are the broad locations within the 6Cs sub-region where targeting investment in GI is considered to deliver multiple benefits across a range of key environmental, social and economic policy areas on a large-scale.

5.6.2 The GI initiatives in the proposed Action Plan (see **Section 5.7** and **Volume 2**) provide a starting point for consideration and appraisal by the 6Cs Strategic GI Project Board. However, other projects of a more local nature, both within and beyond the Strategic GI Network's Corridors/Zones should also be considered where they bridge crucial gaps or provide strategically placed 'stepping stones' in the strategic network, and where the potential to deliver significant multiple benefits across a wide range of GI functions can be demonstrated. GI projects that are intended to deliver only limited or single benefits should not be discounted, as these may be crucial in achieving specific aims and objectives for GI and can help support more multifunctional projects. Maximising the multifunctional nature of the GI Network as a whole, where a mosaic of primary and complementary secondary functions deliver the greatest GI benefits, is the long-term ambition of the Strategy.

5.6.3 The proposed criteria for selection of multifunctional GI projects are set out below.

1. Contribution to Delivery of Strategic GI Networks
1A - Does the proposed project lie within or immediately adjacent to a Sub-Regional GI Corridor shown on **Figure 4.1**?
1B - Does the proposed project lie within or immediately adjacent to an Urban Fringe GI Enhancement Zone shown on **Figure 4.1**?
1C - Does the proposed project lie within or immediately adjacent to a City-Scale GI Corridor shown on **Figures 4.2**, **4.3** or **4.4?**

5.6.4 Subject to demonstrating alignment with the above criteria, GI Projects should also demonstrate how they contribute to the following criteria:

2. Contribution to GI Planning and Delivery Principles
2A - Would the proposed project provide new or enhanced GI that serves new housing development and existing communities?
2B - Would the proposed project be designed to a high quality that responds to its location's local distinctiveness and sense of place?
2C - Can the proposed project demonstrate how it will be delivered through a partnership approach?
2D - Would the proposed project be designed to deliver multiple benefits?
2E – can the proposed project demonstrate how it links with Regional Policies and how it will contribute to delivering regional priorities and aspirations?
2F – Does the proposed project include adequate provision for sustainable long-term management?

5.6.5 A GI Guide and Toolkit has been recently developed by the East Midlands Development Agency (emda) to support GI projects[28]. The Toolkit explains the rationale for investment in GI and offers a consistent evaluation and assessment framework to help with decision making in relation to the development, delivery, monitoring and evaluation of GI projects. The approach set out in the Toolkit is relevant to a range of existing funding streams, and is also likely to remain relevant as and when new funding streams and investment programmes come on board.

5.7 Action Plan

5.7.1 An Action Plan setting out a programme of action for implementation of the GI Strategy is provided as **Volume 2**. The Action Plan is related to the growth agenda and its timetable to ensure that GI is developed as growth happens. It is primarily intended to provide a framework for coordination of GI planning and delivery at the sub-regional level by the 6Cs Strategic GI Project Board. However, it is also likely to be of value for facilitating coordinated action by local partnerships and stakeholders in the public, private and voluntary sectors involved in the delivery and management of specific GI assets or sites.

[28] http://www.emda.org.uk/environment/default.asp

APPENDIX A1
ACKNOWLEDGEMENTS

ACKNOWLEDGEMENTS

The 6Cs Strategic GI Project Board partners:

Country Land and Business Association
Derby City Council
Derbyshire County Council
East Midlands Biodiversity Partnership
East Midlands Councils (from April 2010)
East Midlands Development Agency
East Midlands Environment Link
East Midlands Regional Assembly (to March 2010)
Environment Agency
Forestry Commission
GreenSpace East Midlands
Leicester City Council
Leicestershire County Council
Natural England
Nottingham City Council
Nottinghamshire County Council

The 6Cs GI Strategy Steering Group:

Alison Hepworth (East Midlands Regional Assembly to March 2010/East Midlands Councils from April 2010)
Dave Lepper (Natural England)
David Bole (Forestry Commission)
David Slinger (Derby City Council)
Lesley Eddleston (Leicestershire County Council)
Malcolm Hackett (Greenwood Community Forest)
Tony Lockley (Leicestershire County Council)

The 6Cs GI Development Co-ordinator:

Sharon Jefferies (to February 2010)
Greg Phillips (from March 2010)

Other Stakeholder Organisations:

Amber Valley BC
Ashfield DC
Blaby DC
Broxtowe BC
Charnwood BC
Erewash BC
English Heritage
Gedling BC
Government Office East Midlands
Groundwork East Midlands
Harborough DC
Hinckley & Bosworth BC
Melton BC
National Farmers' Union
North West Leicestershire DC
Oadby & Wigston BC
Rural Community Councils
Rushcliffe BC
South Derbyshire DC
The Leicestershire Stepping Stones Project
The National Forest Company
The Strategic River Corridors Initiative
Trent River Park

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Chloé Cova
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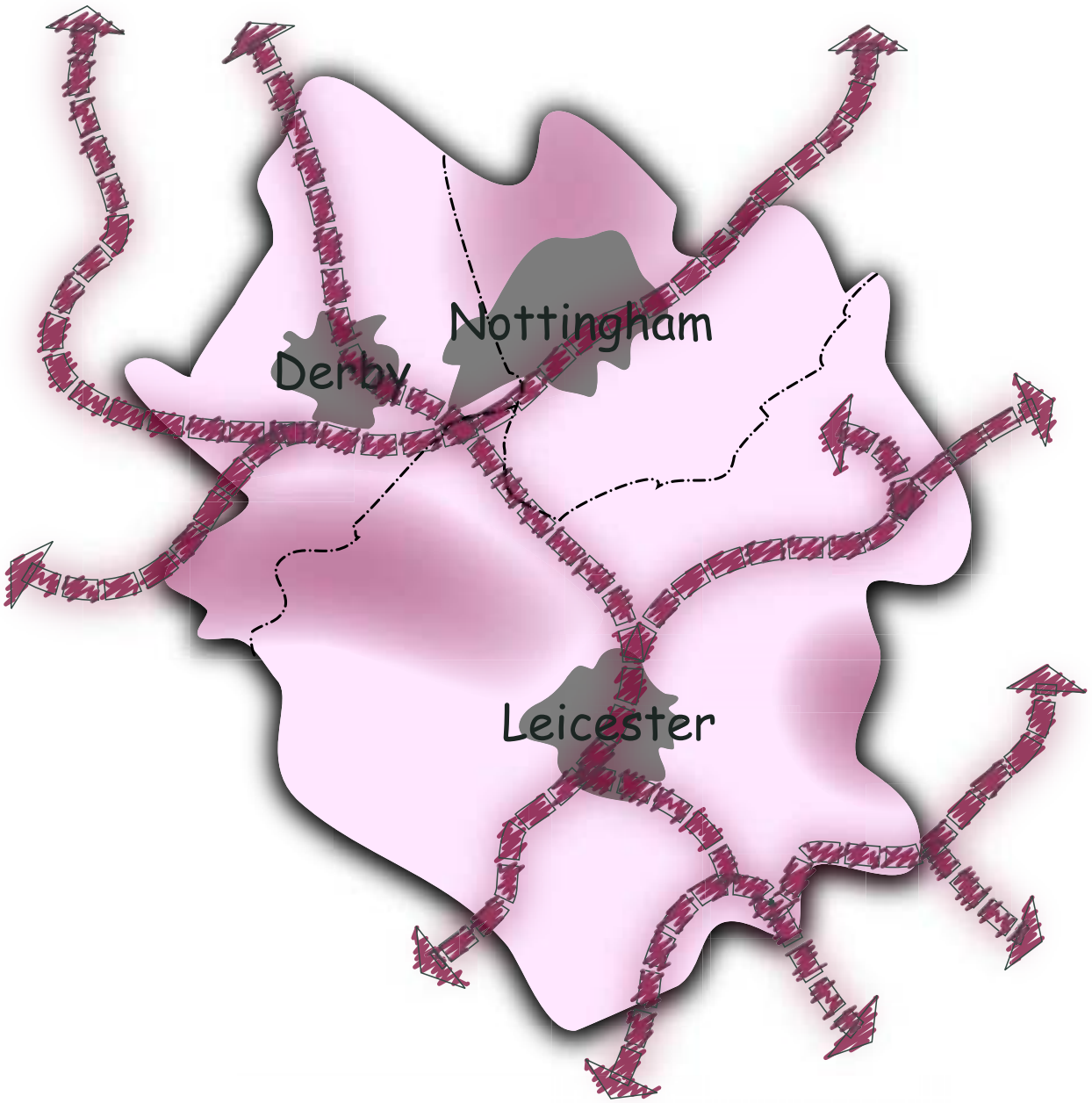
Sarah de Vos
Richard Bickers
Emma Clarke
Ollie Kelly

www.emgin.co.uk/6Cs

Green Infrastructure Strategy

Volume 2
Action Plan



2010

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FOREWORD

The East Midlands region faces an unprecedented scale of growth over the coming years, especially in the 6C's sub-region. In light of the scale and number of new houses that are planned, we recognised the need to develop a strategic approach to provision of Green Infrastructure (GI) as an environmental life support system for healthy communities and ecosystems. We wanted to maximise the potential of GI to bring about multifunctional holistic solutions to achieve wide ranging environmental, economic and social benefits, including climate change adaptation and mitigation.

The 6C's partnership have been working together with key players across the area for the last two years to produce this exciting and important Strategy. The challenge is now to deliver and manage GI along with the "grey infrastructure" needed to support sustainable communities in the sub-region. This Strategy represents a major step forward to achieve this by:

- Giving the strategic spatial framework needed to safeguard, manage, and extend networks of GI in local planning documents;
- Showing how the benefits of GI to economics, climate change, health, biodiversity and landscape can be realised;
- Significantly reducing the amount of data required to produce local policy documents; and
- Identifying funding sources and mechanisms for the delivery of GI and the priorities for investment.

I cannot commend enough the monumental achievement of the 6Cs Strategic GI Project Board, and also the overall 6Cs Partnership, in producing this sub-regional GI Strategy.

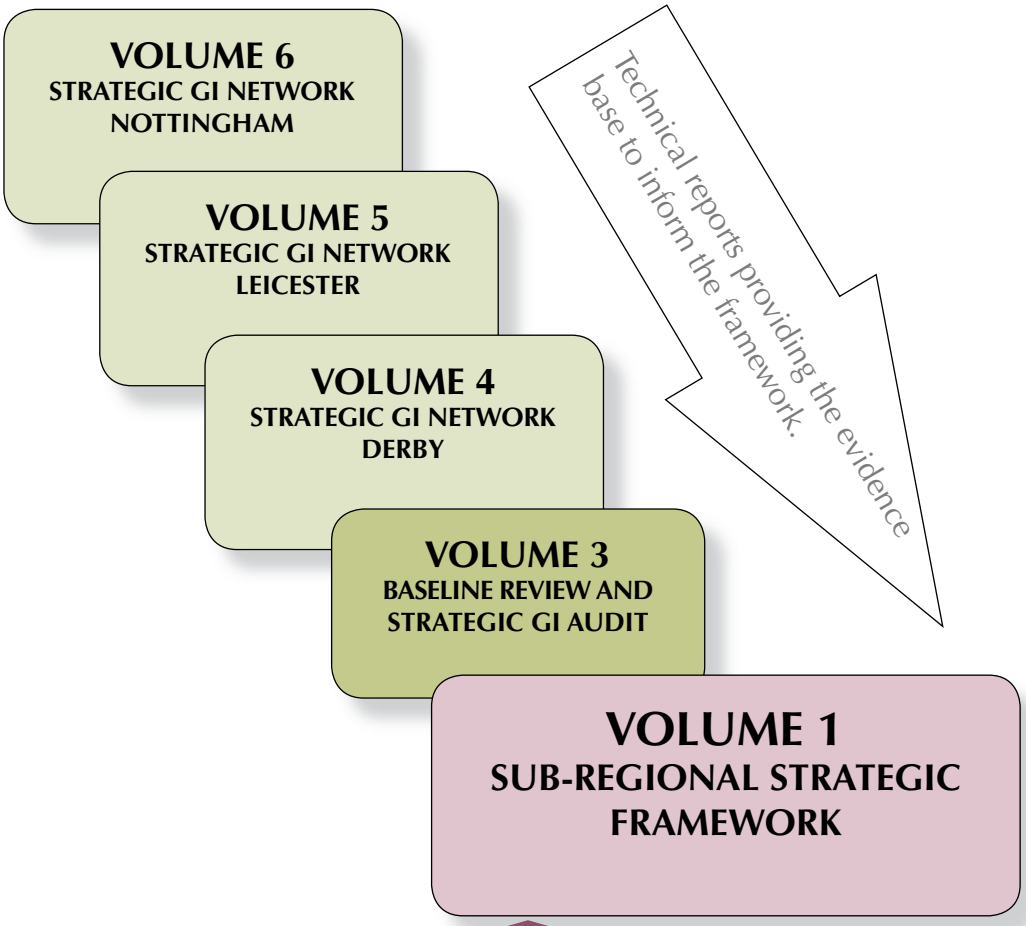
It provides a framework for all those working to plan and deliver sustainable development, and GI delivery in particular, within the sub-region and elsewhere around the East Midlands Region over the forthcoming years.

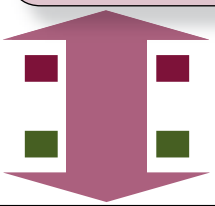
Alison Hepworth
Chair, 6Cs Strategic GI Project Board

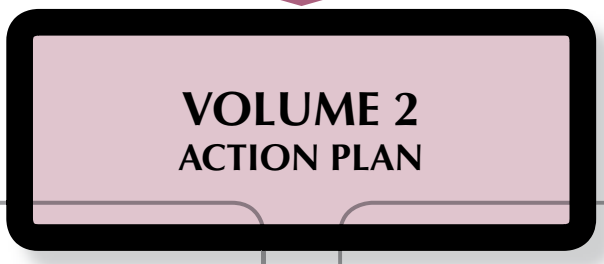
STRATEGY STRUCTURE

STRATEGY

Long-term vision for the strategic GI network across the 6Cs Sub-Region







Key actions required to deliver the Strategic Objectives: promotion, advocacy and partnership working

Projects and initiatives to deliver the Sub-Regional GI Network

DELIVERY

Implementation of the Strategy to be reviewed regularly to reflect changing priorities and emerging delivery opportunities

1.0 INTRODUCTION

1.1 General

1.1.1 The Action Plan sets out a programme of action for implementation of the GI Strategy and should be read in conjunction with the Sub-Regional Strategic Framework (**Volume 1**). The Action Plan is related to the growth agenda and its timetable to ensure that GI is developed as growth happens.

1.1.2 The Action Plan is primarily intended to provide a framework for coordination of GI planning and delivery at the sub-regional level by the 6Cs Strategic GI Project Board. However, it is also likely to be of value for facilitating coordinated action by local partnerships and stakeholders in the public, private and voluntary sectors involved in the delivery and management of specific GI assets or sites. The Action Plan will be updated and reviewed on a shorter time-scale than the Sub-Regional Strategic Framework and will respond to changing priorities and opportunities.

1.2 Overarching Priorities

1.2.1 The 6Cs Strategic GI Project Board consulted potential partners on the suggested priorities prior to finalisation of the Strategy. The overarching priorities for action are embodied in the strategic aims for GI in the 6Cs sub-region:

- Develop the GI approach as an 'environmental life-support system'[1] for healthy communities and ecosystems;
- Provide a long term environmental framework for sustainable development that achieves wide ranging environmental, economic and social benefits; and
- Maximise the potential of GI to bring about multifunctional holistic solutions to environmental concerns, including climate change adaptation and mitigation.

1.2.2 These aims provide the context for the Strategic Objectives in Section 3.2 of the Sub-Regional Strategic Framework set out in **Volume 1**. Within this framework, **Section 2.0** of the Action Plan sets out suggested actions required to achieve the Strategic Objectives, which relate to promotion and advocacy of GI principles. **Section 3.0** of the Action Plan focuses on existing and proposed strategic GI initiatives for delivering the proposed Strategic GI Network across the 6Cs sub-region in the context of the Sub-Regional Corridors, Urban Fringe GI Enhancement Zones and City-Scale GI Corridors.

[1] The plethora of processes and resources that are supplied by natural ecosystems for human benefit. These services include products such as food and clean drinking water, and processes such as regulating the quality of air, water and soil, as well as improved physical and mental well being.

1.2.3 The Action Plan identifies the lead agencies/partners with responsibilities for GI delivery and management to take forward each action, and where appropriate highlights indicative costs for informing future funding bids. Priorities for action and targets for implementation related to the growth agenda timetable are identified as follows:

- Immediate (as specified);
- Short Term (2010/2011);
- Medium Term (2011-2016); and
- Longer Term (2016-2026).

1.3 Growth Locations

1.3.1 Going forward, the locations of strategic growth within the Housing Market Areas (HMAs) will have an impact on the prioritisation of resources and investment in the proposed GI Network. The current position with regards to the planning of strategic development sites within each HMA is summarised below as at April 2010.

Derby HMA

1.3.2 The three Derby Housing Market Area Local Authorities - Derby City, Amber Valley and South Derbyshire - are currently consulting on strategic options for development. Consultation on this 'Options' stage ends in May 2010[2]. The next stage will involve choosing and consulting on the preferred option, including strategic site allocations. Subject to acceptance by the Planning Inspectorate, it is anticipated that the aligned Core Strategies will be adopted during 2011. A Housing Market Area Sustainable Urban Extension Study is due to be completed in the summer of 2010.

Greater Nottingham HMA

1.3.3 The Greater Nottingham authorities (Ashfield, Broxtowe, Erewash, Gedling, Nottingham City and Rushcliffe) supported by Nottinghamshire and Derbyshire County Councils, have been working together to develop aligned Core Strategies[3]. Potential locations for Sustainable Urban Extensions have been identified in a Sustainable Urban Extension Study[4]. During June and July 2009, the authorities undertook public and stakeholder consultation on an 'Issues and Options' Report. This sought comments on a number of alternatives to shape future development within Greater Nottingham. The councils have considered the consultation responses and

[2] The aligned Core Strategy consultation Options documents can be found at:
http://sddc.consultationsonline.co.uk/frontpage.aspx.
http://www.derby.gov.uk/Environment/Planning/LandUsePlanning/CoreStrategy OptionsPaper.htm.
http://www.ambervalley.gov.uk/services/environment/landandpremises/planningtownandcountry/structureplans/localdevelopmentplans/corestrategyissuesandoptionsconsultation.htm.
[3] For more detail visit http://www. gngrowthpoint.com.
[4] Sustainable Urban Extension Study for Greater Nottingham (Tribal Urban Studios, June 2008).

government guidance and have developed an extensive technical evidence base (including for example flood risk and housing need studies) to draw up a more detailed strategic 'Option for Consultation'. Ashfield District Council will consult on a separate 'Preferred Option' report covering the whole of the Ashfield area. The Greater Nottingham Core Strategy's 'Option for Consultation' report sets out an overall spatial vision for Greater Nottingham and strategic policies, and sets out a number of strategic sites and sustainable urban extensions which could accommodate the housing growth targets required by the East Midlands Regional Plan. Consultation for the 'Option for Consultation' report ended in April 2010.

Leicester and Leicestershire HMA

Blaby District Council

1.3.4 The submission version of the Blaby District Core Strategy was the subject of consultation between 30th July and 10th September 2009. Following representations from statutory consultees and the public, it was considered that further evidence was required and work is currently taking place. While the Council has not withdrawn its support for the potential location for a Sustainable Urban Extension[5], the site may be considered as a 'broad area' rather than as a specific allocation in any future iteration of the Core Strategy.

Charnwood Borough Council

1.3.5 The Charnwood Local Development Framework Core Strategy Further Consultation Report (October 2008)[6] identified preferred locations for growth to the west of Loughborough and another to the east of Thurmaston/north of Hamilton. These are for two Sustainable Urban Extensions - one of 3,500 dwellings (Loughborough) and another of 5,000 dwellings (Thurmaston). The consultation indicated that the Sustainable Urban Extensions would be brought forward by two specific allocations in the Core Strategy, and would be complemented by the specific strategic allocation of a Science Park extension for Loughborough. The Council has not made a decision on the directions for growth yet.

Harborough District Council

1.3.6 Harborough District Council is proposing a strategic development area of at least 1,000 dwellings to the north west of Market Harborough as the principal focus for future development of the town (the Airfield Farm area)[7]. The area has been identified in the Local Development

[5] As shown on http://idocs.blaby.gov.uk/external/planning-building/planning/consultation/cs-proposals-map.pdf.
[6] The Core Strategy can be accessed at http://www.charnwood.gov.uk/pages/further_consultation_october_2008.
[7] As shown on http://www.harborough. gov.uk/downloads/Strategy_Key_Diagram_V6.pdf.

Framework Core Strategy document "Towards a Final Draft". The Core Strategy Development Plan Document is due for pre-submission approval by the Council in July 2010 and formal consultation in September.

Hinckley and Bosworth Borough Council

1.3.7 Hinckley and Bosworth Borough Council adopted their Core Strategy in December 2009[8] and have now begun work on masterplanning their two Sustainable Urban Extensions at Barwell and Earl Shilton through a joint Area Action Plan Development Plan Document. The Council are preparing a preferred options version of the document and currently intend to consult on this during 2010 with adoption in September 2011. The Barwell and Earl Shilton Sustainable Urban Extension Area Action Plan will set the masterplan and policies which will be applied alongside the Core Strategy to guide and determine delivery of these growth areas.

Leicester City Council

1.3.8 The Leicester Local Plan and emerging Core Strategy identifies two main growth areas in the City. Ashton Green is a proposed Sustainable Urban Extension to the north of the City, which will accommodate approximately 15% (3,500 dwellings) of all housing growth in the City up to 2026[9]. The other main growth area is the Strategic Regeneration Area (SRA) which is planned to provide around 54% (12,000) of all new housing in the city up to 2026[10], with priority being given to Abbey Meadows and Waterside as the focus for new housing in and close to the city centre. Leicester City Council is also working jointly with Charnwood and Blaby Councils on Sustainable Urban Extensions in their respective districts, which are located on the edge of Leicester city.

Melton Borough Council

1.3.9 At an Extraordinary Council meeting in November 2009, Councillors agreed to support the building of 1,000 new homes as an urban extension to the north of Melton Mowbray[11], which will incorporate a partial bypass and the development of 30ha of employment land to the west of Melton Mowbray. This proposed development is to be incorporated within the Melton Local Development Framework Core Strategy. However, the final submission version of this document has yet to be confirmed by Full Council and the final round of consultation undertaken before submission to the Secretary of State.

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[8] For more detail visit www.hinckley-bosworth.gov.uk.
[9] Further information is available at www.leicester.gov.uk/ashtongreen.
[10] Further information and plans can be found in the adopted 2006 Local Plan (available at www.leicester.gov.uk/localplan) and the 2009 Submission Core Strategy (available at /www.leicester.gov.uk/corestrategy).
[11] An indicative map of the proposal can be found at www.melton.gov.uk/pdf/Northern% 20Growth%20Option%20-20Housing%20Option% 20C.PDF.

2.0 STRATEGIC OBJECTIVES: KEY ACTIONS

2.1 General

2.1.1 This Section of the Action Plan sets out suggested actions required to achieve the Strategic Objectives of the 6Cs GI Strategy, which relate to promotion and advocacy of GI principles. Abbreviations used in **Table 2.1** are provided in **Appendix A1**.

Table 2.1 - Strategic Objectives: Key Actions (June 2010)

Ref	Strategic Objective	Action	Suggested Lead Agency	Suggested Partners	Indicative Cost	Priority for Action
1	**Promote an inspirational vision to encourage the support of local communities and decision-makers for GI principles.**	1.1 Hold an event to launch Consultation Draft of the proposed GI Strategy document and provide opportunity for stakeholder comment via the 6Cs GI website (www.emgin.co.uk/6cs)	6Cs SGIPB	n/a	£5-10k	Completed October 2009
		1.2 Design a non-technical/'glossy'/well illustrated leaflet to help promote GI vision to local communities and decision-makers	6Cs SGIPB	n/a	£5-10k	Immediate (next 3 months)
		1.3 Promote GI vision to professional audiences through presentations at relevant conferences and seminars and through articles in appropriate journals	6Cs SGIPB (GI Coordinator)	n/a	tbc	Short Term
		1.4 Raise wider public awareness of the vision through a launch event to promote the endorsed GI Strategy, linked to progress reports from SGI funded projects and their contribution to the Strategic GI Network	6Cs SGIPB (GI Coordinator)	n/a	tbc	Short Term
2	**Promote a common approach to GI planning across boundaries by local authorities and partners to deliver an inter-connected multifunctional network connecting existing and new communities.**	2.1 Endorse overall GI Strategy document as the agreed sub-regional framework for guiding GI planning, provision and management	6Cs SGIPB	All partners EMGIN	n/a	Short Term
		2.2 Work with County Access Forums to facilitate communication and closer cross-boundary working between access planning agencies	6Cs SGIPB (GI Coordinator)	NE, County Access Forums/ Rights of Way Teams, Access Interest Groups	tbc	Ongoing
		2.3 Standardise approaches to data collection and storage to facilitate cross-boundary working. For example, data from the 6Cs GI Strategy to be made available in GIS format to allow local authorities to incorporate it into emerging Core Strategies	GOEM	All partners	tbc	Short Term
3	**Promote the direct and indirect economic and social, as well as environmental, benefits of GI investment to senior decision makers in both the public and private sectors,**	3.1 Develop illustrated case studies evidencing where/how GI investment has provided cross-sector benefits for the 6Cs area and promote via 6Cs GI website and a programme of awareness raising to professional audiences	6Cs SGIPB (GI Coordinator)	EMDA EMGIN Relevant Local Planning Authorities,	£5-10k	Short Term

Ref	Strategic Objective	Action	Suggested Lead Agency	Suggested Partners	Indicative Cost	Priority for Action
	including volume house-builders.			Other government agencies, Third sector bodies		
		3.2 Organise a GI Developers event to raise awareness of strategic context of Green Infrastructure in the 6Cs sub-region, share current knowledge, experience and practical steps to achieving GI and how to use the 6Cs GI Strategy and incorporate it into masterplans.	6Cs SGIPB (GI Coordinator)	EMDA, HCA, EMC, NE	£5-10k	Short term
4	**Promote a planned approach to the long-term funding and management of GI.**	4.1 Secure funding for minimum of 5 years beyond current funding commitments for the 6Cs Strategic Green Infrastructure Project Board/GI Development Coordinator to support critical roles in facilitating strategic coordination of GI planning and delivery	6Cs SGIPB	EMDA, HCA, NE,EA	£325,00 for 2011/16	Short-Medium Term
		4.2 Monitor progress of the Government's proposed Community Infrastructure Levy as a potential mechanism for securing long-term funding for GI requirements linked to needs arising from the growth agenda.	6Cs SGIPB	GOEM, EMC, EMDA	n/a	Short-Medium term
		4.3 Work with partners to facilitate targeting of EU funded Environmental Stewardship Schemes in ways that enhance the functionality of the Strategic GI Network.	6Cs SGIPB	NE	tbc	Ongoing
5	**Promote partnership approaches to the innovative design, delivery and management of GI at the sub-regional, city and local scales to strengthen the connectivity of GI assets.**	5.1 Promote role of the 6Cs SGIPB as the Sub Regional GI Delivery Partnership	6Cs SGIPB	n/a	tbc	Short-Medium Term
		5.2 Work with existing and established partnerships to support role of the Central Leicestershire Stepping Stones Partnership as the Leicester PUA GI Delivery Partnership	6Cs SGIPB	CLSSP	tbc	Short-Medium Term
		5.3 Work with existing and established partnerships to facilitate the establishment of GI Delivery Partnerships for Derby and Nottingham PUAs	6Cs SGIPB	tbc	tbc	Short-Medium Term
		5.4 Develop illustrated case studies to demonstrate	6Cs SGIPB	Local Planning	tbc	Short–Medium

Ref	Strategic Objective	Action	Suggested Lead Agency	Suggested Partners	Indicative Cost	Priority for Action
		how GI sites can be designed to avoid or reduce land use conflicts between functions/priorities, and promote via 6Cs GI website	(GI Coordinator) EMGIN	Authorities, NE, CABE		Term
6	**Develop robust delivery plans, evidence and analysis to justify investment in the scale, location and type of GI provision required to meet future needs in growth locations across the 6Cs sub-region.**	6.1 Encourage and support preparation of GI Delivery Plans for Derby, Leicester and Nottingham PUAs	6Cs SGIPB	Local GI Delivery Service Provider	tbc	Short-Medium Term
		6.2 Encourage and support preparation of GI Delivery Plans for all SRCs (see **Volume 1** Section 5.5)	6Cs SGIPB	Local GI Delivery Service Provider	tbc	Short-Medium Term
7	**Promote the planning of GI networks as an integral feature of the design and layout of all major new developments.**	7.1 Work with partners to identify a proposed Sustainable Urban Extension as an exemplar for demonstrating GI site planning and design principles, develop a good practice guide and promote via 6Cs GI website	6Cs SGIPB (GI Coordinator)	Relevant Local Planning Authority, HMA Boards, EMDA	tbc	Short Term
		7.2 Promote use of 'Concept Statements' as a key tool for facilitating high quality place-making in relation to site specific development schemes via 6Cs GI website	6Cs SGIPB	NE, CABE, Local Planning Authorities, EMDA	tbc	Short-Medium Term
8	**Promote retrofitting of GI in urban environments.**	8.1 Develop illustrated case studies evidencing how retrofitting of GI has provided benefits (e.g. use of brownfield land for biodiversity and recreational uses, addressing green space deficiencies in urban areas, assisting climate change mitigation), including indicative costs, and promote via 6Cs GI website	6Cs SGIPB (GI Coordinator)	Developers, CABE, EMDA Local Planning Authority	tbc	Short-Medium Term
9	**Promote GI as a solution to sustainable water management as a means of addressing water quality and resource issues and as an approach to adapting to and mitigating against the effects of climate change.**	9.1 Work with partners to identify strategic opportunities for sustainable flood risk and water management projects as part of multifunctional GI provision in urban and rural environments.	6Cs SGIPB	EA, NE, BW	tbc	Medium-Longer Term
10	**Stimulate development of GI policies and allocations in Local Development Documents that respond to locally identified needs and sub-regional, regional and national priorities.**	10.1 Develop 'model GI policies' for inclusion in LDDs and promote via 6Cs GI website	6Cs SGIPB	Local Planning Authorities, NE	tbc	Short term
		10.2 Promote the concept of strategic GI and the 6Cs GI Strategy to development control officers through training seminars	6Cs SGIPB	Local Planning Authorities, NE, EA, FC, EMC	tbc	Short-Medium term

Ref	Strategic Objective	Action	Suggested Lead Agency	Suggested Partners	Indicative Cost	Priority for Action
		10.3 Promote the adoption by local authorities of quality standards for GI provision.	6Cs SGIPB	Local Planning Authorities, NE, GEM	tbc	Short-Medium term
11	**Reflect GI needs in the strategic visions of Local Strategic Partnerships and Sustainable Community Strategies and related Multi Area and Local Area Agreement targets**	11.1 Work with GI Delivery Partnerships to embed GI into SCS documents and LAA targets for all PUAs and SRCs	6Cs SGIPB	Local GI Delivery Service Provider	tbc	Ongoing
12	**Promote the protection and management of landscape character to provide enhanced landscape settings for the built environment and to ensure that new development and GI relates to landscape character, place and context.**	12.1 Work with partners to facilitate development of consistent approaches to characterisation-based assessments of existing natural and cultural landscape.	6Cs SGIPB	NE, EH, County Councils. EMLP	tbc	Short-Medium Term
		12.2 Promote the use of landscape character assessments to underpin strategic and local GI planning and delivery, via the 6Cs GI website and partner actions such as training seminars.	6Cs SGIPB	NE, EH, BGS, County Councils, EMLP	tbc	Short-Medium term
		12.3 Work with partners to ensure that local GI planning includes consideration of local and historic landscape character	6Cs SGIPB	EH, County Councils, EMLP	tbc	Ongoing
13	**Promote the protection and management of natural and cultural heritage, including archaeological sites, historic landscapes, geodiversity and industrial heritage.**	13.1 Work with partners to identify opportunities for the restoration or recreation of cultural heritage, historic landscapes, geodiversity and industrial heritage, including increased physical and educational access and interpretation.	6Cs SGIPB	NE, EH, BGS, County Councils	tbc	Short-Medium term
14	**Reverse the decline in biodiversity by countering habitat fragmentation through investment in substantial habitat restoration and creation, informed by biodiversity opportunity mapping methods**	14.1 Work with partners to identify opportunities for large-scale habitat restoration and creation projects to strengthen landscape connectivity and deliver Biodiversity Action Plan priorities.	6Cs SGIPB	NE, TWTs, FC, NFC, GFP, EMBP	tbc	Short-Medium Term
		14.2 Work with partners to take forward the recommendations of the 6Cs Biodiversity Opportunity Mapping Pilot Study to develop a robust methodology for identifying potential of land for habitat restoration and creation	6Cs SGIPB	NE, EMBP	tbc	Short Term

3.0 EXISTING AND PROPOSED SUB-REGIONAL GI INITIATIVES

3.1 General

3.1.1 This Section of the Action Plan focuses on existing and proposed strategic GI initiatives for delivering the Strategic GI Network across the 6Cs sub-region. The priority areas for action are seen as:

- **Sub-Regional Corridors** - Sub-Regional Corridors form the backbone of the Strategic GI Network. They link with strategic GI in surrounding areas at the sub-regional level and include strategic river corridors, forests and woodlands, and regional parks. They are intended to become fully multifunctional zones with the ability or potential to deliver a range of economic, environmental, and social benefits:

  - *Strategic River Corridors* – these form the 'backbone' of the proposed Sub-Regional Strategic GI Network for the 6Cs sub-region, providing continuous and interconnected corridors for the dispersal of wildlife and movement of people between the urban centres of the Three Cities and the surrounding countryside;

  - *Forests and Woodlands* – the proposed Sub-Regional Strategic GI Network for the 6Cs sub-region includes substantial areas of forests and woodlands, which provide large-scale multifunctional greenspaces and offer major opportunities for strategic woodland creation[12] and environmental improvements of degraded landscapes, including potential for habitat enhancement, restoration and creation on a landscape scale; and

  - *Regional Parks* – the proposed Sub-Regional Strategic GI Network for the 6Cs sub-region includes potential Regional Parks, distinctive and extensive areas where management and spatial planning can bring about regionally significant economic, environmental and social benefits based on local characteristics, needs and aspirations;

- **Urban Fringe GI Enhancement Zones** – the proposed 6Cs Sub-Regional Strategic GI Network includes Urban Fringe Enhancement Zones, which would be managed to create a network of interlinked, multifunctional and high quality accessible greenspaces in the urban fringe connecting with city/town centres, public transport nodes, and major employment and residential areas, including new sustainable urban extensions, and sustainable access routes linking town and country; and

- **City-Scale GI Corridors –** providing key connections between sub-regional corridors, the urban fringe and the urban cores related to specific Principal Urban Areas and Sub-Regional Centres.

[12] Woodland creation represents 60% of the grant aid administered by the Forestry Commission. However, to realise the potential for 2050, a big increase in woodland creation is needed. The Government will support a new drive to encourage private funding for woodland creation. By creating an additional 10,000ha of woodland a year for 15 years, up to 50 million tonnes of carbon dioxide could be removed between now and 2050. Well-targeted woodland creation can also bring other benefits, including a recreational resource, employment opportunities, flood alleviation, improvements in water quality, and helping to adapt our landscapes to climate change by linking habitats to support wildlife. The government will ensure that woodland creation policies continue to respect the benefits and demands of landscape, biodiversity and food security. This will allow businesses and individuals to help the UK meet its carbon budgets, whilst delivering the other benefits that woodlands can bring.

3.1.2 These initiatives are considered to be priorities for investment within the context of the growth agenda. This list is not exhaustive; it is intended to provide an indication of the scale and nature of GI provision required to support sustainable growth and respond to climate change within the 6Cs sub-region. Abbreviations used in **Table 3.1** are provided in **Appendix A1**.

Table 3.1 - Existing and Proposed Sub-Regional GI Initiatives to Deliver the 6Cs GI Strategic Network

3.1a: Strategic Priority – Sub-Regional Corridors						
Existing initiatives						
Ref (see Volume 1 Figure 4.1)	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
A, B, D, E, F, H, I, J	**Blue Corridor Vision** *Initiative providing a holistic approach to managing flood risk associated with the 6Cs Rivers alongside delivering additional environmental and social benefits in line with DEFRAs 'Making Space for Water'.*	9, 12-14	EA	6Cs SGIPB, EMDA, Local Authorities	£1.9m – 3.1m	Short-medium term
B, J	**Trent River Park** *Creation of a Trent River Park to provide an amenity of regional significance within the Nottingham PUA for residents, visitors and tourists; providing an exemplar for conservation and sustainability of the natural environment and acting as a catalyst for regeneration, sustainable development and job creation.*	9, 12-14	TRP	EMDA, STW Ltd, BW, NCC, Notts City Council, Gedling BC, Rushcliffe BC, EA, OTP, Broxtowe BC, GNP, GGN	£1m per annum to implement the Trent River Park Strategy	Short, medium to longer term
E	**River Soar and Grand Union Canal Project** *Improving access to, from and along the River Soar and Grand Union Canal providing better connectivity to existing historic, natural and leisure assets, make space for water, improve biodiversity and maximise opportunities for use of the waterways as sustainable transport routes and a driver for urban regeneration.*	9, 12-14	WaT	EMDA, Leic City Council, LP, Charnwood BC, Blaby DC, Oadby and Wigston BC, EA	tbc	Short-medium term
E	**River Soar and Grand Union Canal** *First stage of implementation of the River Soar and Grand Union Canal Strategy, 2009, phase focused on River Soar throughout Leicester PUA and Loughborough SRC. Proposals include the development of visitor hubs, improving linkages, for people and wildlife, along the waterway and promotion of the waterway as a destination. Other benefits include flood alleviation, improved tourism/recreational offer, improved sustainable transport route.*	9, 12-14	LCC	LCC, Charnwood BC, LRWT, BW, 6Cs GI	£1.2m	Short term
B	**Willington Wetlands** *Restoration of the River Trent floodplain, biodiversity and access improvements.*	9, 12-14	DWT	EA, NE, DCC, LDBP, OTP, South Derbyshire DC, GOEM, 6Cs SGIPB, BW	£365,000	Short term

3.1a: Strategic Priority – Sub-Regional Corridors						
Existing initiatives						
Ref (see Volume 1 Figure 4.1)	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
A	**Derwent River Park** *Creation of a multifunctional riverside park linking existing GI sites within Derby City to provide a gateway to the Derwent Valley Mills World Heritage Site.*	9, 12-14	Derby City Council	EA, DC Ltd, DVMWHSP, 6Cs SGIPB	£850,000	Short term
C	**National Forest Cycling Centre** *Development of a multi-user cycling centre and associated trails to lead to the creation of a GI hub within the Heart of The National Forest.*	12-14	NFC	FC, TWTs, HNFF, DCC LCC, S Derbs DC, Sustrans	£1.4m	Short term
J	**Erewash Valley Trail** *Formation of a walking and cycling 25 mile circular trail focused around the Erewash Valley. The proposal consists of improved access and interpretation and biodiversity enhancement.*	12-14	Broxtowe BC	BW, NCC, NHS N'shire, Notts & D'shire Wildlife Trusts, DCC, Erewash BC, 6Cs GI	£521,135	Short term
B	**Papplewick Leen Corridor** *Acquisition of a stretch of the strategic Leen Corridor route as part of S106 agreement.*	9, 12-14	Ashfield DC	n/a	n/a	Dependent on development progression
C	**Heart of The National Forest Vision** *NFC project to achieve 200-250ha of woodland creation and related public benefits (mechanisms include Changing Landscape Scheme, land acquisition and small-scale environmental grant schemes).*	12-14	NFC/HNFF	LCC, North West Leicestershire DC, DCC, S Derbs DC, FC, EMC, LPC, Private and Voluntary Sectors, Landowners and the Public	NFC annual project budget of around £2.5m	Ongoing
A	**Derby City Greenway** *Creation of a multifunctional riverside park linking existing GI sites within Derby City to provide a gateway to the southern edge of the Derwent Valley Mills World Heritage Site.*	12-14	Derby City Council	EA, DVMWHSP, DC Ltd, 6Cs GI	£1m	Short term
A/B	**Derwent Valley Greenway** *Project to deliver the starting section of Greenway linking Derby City and Leicestershire along the Derwent Valley building on work done by British Waterways in the construction of the Long Horse Bridge crossing the Trent and linking to the Trent and Mersey canal towpath.*	12-14	Derbyshire County Council	BW, S Derbs DC, 6Cs GI	£181,000	Short term

3.1a: Strategic Priority – Sub-Regional Corridors						
Existing initiatives						
Ref (see Volume 1 Figure 4.1)	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
B	**South Hucknall Green Infrastructure-Making the Connections** *Creation of greenways to existing GI resources and connecting city-scale and strategic GI corridors. Works include creation of 'gateways' access improvements, new/improved footpaths (including SUDS and boardwalks), signage and way marking, interpretation, habitat creation and enhancement.*	12-14	Ashfield DC	NCC, Notts City Council, Notts Wildlife Trust, 6Cs GI	£237,000	Short term
B	**Leen Corridor (Hucknall) Enhancement Project** *Project to enhance the accessibility (to and between existing GI resources), recreation value and biodiversity of a 3km stretch of the River Leen as phase 1 of a wider strategic initiative to create a cohesive, multifunctional River Leen GI route from Nottingham into N. Notts. Project includes improvements to existing greenspaces and implementation of SUDS techniques.*	9, 12-14	NCC	Ashfield DC, Notts City Council, Gedling BC, Notts Wildlife Trust, 6Cs GI	£408,000	Short term
Proposed Initiatives						
B	**OnTrent: Mineral Restoration Strategy** *Study to provide a coordinated strategy for restoration with the aim of providing optimum benefit for biodiversity, landscape, heritage, recreation, agriculture, economic regeneration and flood management.*	9, 12-14	The OnTrent Initiative	6Cs SGIPB, EA, IWA, BW, EMDA, Local Authorities	£100,000	Short –medium term
K	**Sherwood Forest Regional Park** *Feasibility study to examine potential of establishing a Regional Park.*	12-14	SRPPMB	NT, TWTs, EMDA, Gedling BC,	tbc	Short term
B	**River Trent to Cotgrave Green Infrastructure Strategy** *Reconnecting the Grantham Canal to the River Trent.*	12-14	NCC, GCP	NE, BW, EMDA, IWA, Rushcliffe BC	tbc	Medium term
C	**Charnwood Forest Regional Park** *Establishment of Charnwood Forest as a Regional Park.*	12-14	LCC	GOEM, EMC, EMDA, BGS, EH, NE, North West Leicestershire DC, Hinckley & Bosworth BC, Charnwood BC, NFC, LRWT, FWAG	tbc	Short, medium to longer term

3.1a: Strategic Priority – Sub-Regional Corridors						
Proposed Initiatives						
Ref (see Volume 1 Figure 4.1)	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
C	**Multi-User Trails Linking with the Conkers Circuit** *Completion of a network of multi-user recreational trails linking the CONKERS circuit to LCC and DCC Greenways and linking Ashby Measham and Swadlincote; complemented by transformation of former mineral extraction sites and enhancement of visitor facilities and accommodation.*	12-14	NFC/HNFF	LCC, North West Leicestershire DC, DCC, S Derbs DC, FC, EMDA, LPC	tbc	Medium term
A	**Lower Derwent Valley Landscape Partnership** *Initiative looking at the natural elements of the Derwent Valley Mills World Heritage Site, including woodlands, grasslands and wetlands. The initiative aims to conserve, manage and enhance these natural elements as well as link local communities with their local landscapes.*	9, 12-14	NE	Derbyshire Wildlife Trust, WT, DCC, Derby City Council, FC, EA, EH, LDBP	£1-2m	Medium Term
A-K	**A Greener Future** *This Woodland Trust project is looking to plant 50,000 trees across a range of sites throughout the 6Cs and HMA areas, with the aim to i) build more sustainable communities and enrich people's lives through an inspirational programme of GI, community engagement and education activities, while increasing access to new quality greenspace; ii) improve biodiversity by linking and buffering ancient and SSSI woods; and iii) ensure that everyone is given the chance to enjoy and value woods and trees.*	12-14	WT	Stepping Stones	£250,000	Short-Medium Term
C	**Ashby Canal Restoration** *An ongoing GI initiative with an established delivery plan (supporting partners include BW, North West Leicestershire DC, NFC, LP, ACA, ACT, HNFF, and ICH Ltd). It includes the proposed restoration of the Ashby Canal from Snarestone to Moira, providing a green gateway to The National Forest and Heart of The National Forest Park, linking recreational and greenspace/tourism facilities, improving the environment and advancing economic development.*	12-14	LCC	BW, North West Leicestershire DC, NFC, LP, ACA, ACT	£13m	Medium term

3.1b: Strategic Priority – Urban Fringe GI Enhancement Zones						
Existing initiatives						
See Volume 1 Figure 4.2	**Wild Derby** *Initiative to work with community and friends groups on their local nature reserves and other sites.*	14	Derby City Council	Local friends and residents groups, Derbyshire Wildlife Trust, NE, Groundwork, BTCV, LDBP	£20,000 pa	Ongoing
See Volume 1 Figure 4.3	**The Central Leicestershire Stepping Stones Project** *Implementation of the Stepping Stones Delivery and Action Plan: individual initiatives include 'Plant a Parish' scheme, local GI Project Fund, urban fringe green gym.*	12-14	CLSSP	LCC, Charnwood BC, Oadby and Wigston BC, Blaby BC, BTCV, LPA, HBBC	£1.5m	Short to medium term/ongoing
	Enhancement to Burbage Common *Project identified in HBBC's Green Space Strategy which lies within the Hinckley, Barwell and Earl Shilton sub-regional centre.*	12-14	HBBC	LCC	Phase 1: £156,000 Phase 2: £118,000	Short, medium to longer term
See Volume 1 Figure 4.4	**Gedling Colliery Tip** *Acquisition and restoration of colliery tip site to create country park.*	12-14	Land Restoration Trust	NCC, Gedling BC, EMC, UK Coal	£1.5m	Medium Term (dependent on adjacent development)
	Shipley Lakeside Nature Reserve *Land adjacent to the existing Shipley Country Park and DWT Mapperley Wood Nature Reserve. The site will form the largest Nature Reserve in Derbyshire outside the Peak District National Park. The bid also includes establishing a conservation grazing regime, interpretation and practical habitat works providing a link between Shipley Country Park and the Erewash valley. Areas of grassland, woodland and open water will be managed in perpetuity for wildlife, with local populations strategically linked via the Nuttbrook Trail and Erewash Valley Trail. There is potential for this Nature Reserve, together with Shipley Country Park and the Nuttbrook Trail to form a branch of a sub-regional corridor in the future.*	9, 12-14	DWT	DCC, LDBP, NE, 6Cs GI	£879,000	Short to medium term

3.1b: Strategic Priority – Urban Fringe GI Enhancement Zones						
Proposed initiatives						
Ref	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
See Volume 1 Figures 4.2, 4.3, & 4.4	**Urban Fringe GI Enhancement Initiatives** *Undertake feasibility studies to examine potential for developing GI enhancement initiatives around each of the 6Cs PUAs and SRCs (with exception of Leicester PUA).*	12-14	Local County or District/Borough Council or NFC where relevant	Remaining Local Authorities, 6Cs SGIPB, local HMA Board, NFC (where relevant)	Total £220,000 - £330,000 (approx £20-30k per study)	Short term
3.1c: Strategic Priority – City-Scale GI Corridors Derby PUA and sub-regional centre of Swadlincote						
Existing initiatives						
See Volume 4 Figure 2.9	**Derbyshire Greenway Strategy** *Implementation of the Derbyshire County Council proposed network of greenways*	12-14	DCC	Local District/ Borough Councils	tbc	tbc
Proposed initiatives						
See Volume 4 Figure 2.9	3 - Proposed Markeaton to Kedleston Hall Greenway	12-14	DCC	Local District/ Borough Councils	tbc	tbc
	7 - Proposed River Derwent to Borrowash, Spondon, and Derby (part of the Derby to Sandiacre aspirational greenway) Greenway	12-14	DCC	Local District/ Borough Councils	tbc	tbc
	9 - Proposed Findern to Normanton Greenway	12-14	DCC	Local District/ Borough Councils	tbc	tbc
	25 - Proposed North Swadlincote to Hartshorne and Repton Shrubs Greenway	12-14	DCC	Local District/ Borough Councils	tbc	tbc
	31 - Proposed Ashby-de-la-Zouch to Woodville Greenway	12-14	DCC	Local District/ Borough Councils, LCC	tbc	tbc
3.1d: Strategic Priority – City-Scale GI Corridors Leicester PUA and sub-regional centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough and Melton Mowbray						
Proposed initiatives						
See Volume 5 Figure 2.9	1 – Lutterworth to Blaby, Leicester, Loughborough and towards Long Eaton	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	2 – West Hinckley to Market Bosworth, Ravenstone, Whitwick, Osgathorpe and Loughborough	12-14	LCC	Local District/ Borough Councils	tbc	tbc

3.1d: Strategic Priority – City-Scale GI Corridors Leicester PUA and sub-regional centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough and Melton Mowbray						
Proposed initiatives						
Ref	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
See Volume 5 Figure 2.9	3 – Market Harborough to Melton Mowbray and towards Grantham	12-14	LCC	Local District/ Borough Councils, DCC	tbc	tbc
	4 – Market Bosworth to south east Bagworth and Whitwick	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	5 – North Ratby to Newtown Linford and Loughborough linking with Ashton Green Sustainable Urban Extension	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	6 – Melton Mowbray to north Syston and the River Soar	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	7 – Rearsby to Sileby and the River Soar	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	8 – Mountsorrel to Woodhouse Eaves, Coalville and Ibstock	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	9 – Beaumont Leys to Newtown Linford, Markfield and Thornton	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	10 – Goadby to Leicester, Thornton, Nailstone and Odstone	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	11 – South of Owston to Tilton-on-the-Hill and east Leicester	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	12 – Desford to Newtown Unthank and Ratby Burroughs	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	13 – Earl Shilton to Leicester Forest East and south east Ratby	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	14 – Earl Shilton to Kirkby Mallory and Newbold Verdon	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	15 – Dunton Bassett to east Hinckley and the Ashby Canal	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	16 – Market Harborough to south Leicester, Narborough, Earl Shilton and Barwell	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	17 – Leire to Broughton Astley, Countesthorpe, Blaby and the Grand Union Canal	12-14	LCC	Local District/ Borough Councils	tbc	tbc
	18 – East Hinckley towards Nuneaton	12-14	LCC	Local District/ Borough Councils	tbc	tbc

3.1e: Strategic Priority – City-Scale GI Corridors Nottingham PUA and sub-regional centres of Hucknall and Ilkeston						
Proposed initiatives						
Ref	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
See Volume 6 Figure 2.9	1 – Proposed Long Eaton to Ilkeston and Ironville Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	2 – Proposed Eastwood to Hucknall and Mansfield Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	3 – Proposed north-east Nottingham to Bestwood Village, Hucknall and Newstead Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	4 – River Leen north of Bestwood Village, to Hucknall and towards Ravenshead Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	5 – Proposed River Erewash (south of Long Eaton) to River Leen, Nottingham, south-east Hucknall and Sansom Wood Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	6 – Proposed Calverton towards Southwell Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	7 – Proposed south-east Hucknall to north Kimberley, Eastwood, Heanor, and Shipley Country Park Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	8 – Proposed north-east Eastwood to High Park Woods Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	9 – Proposed north-west Nottingham to Hucknall Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	10 – Proposed north-east Nottingham to Woodborough and Calverton Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	11 – Proposed north-east Ilkeston to east Eastwood Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	12 – Proposed west Nottingham to east Kimberley Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	13 – Proposed West Hallam to Mapperley and Shipley Country Park Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	14 – Proposed Stoke Bardolph to Burton Joyce Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	15 – Proposed west Ilkeston to West Hallam and towards Little Eaton Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	16 – Proposed Stapleford to Kimberley and Eastwood Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc

3.1e: Strategic Priority – City-Scale GI Corridors Nottingham PUA and sub-regional centres of Hucknall and Ilkeston						
Proposed initiatives						
Ref	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
See Volume 6 Figure 2.9	17 – Proposed Colwick Country Park Gap Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	18 – Proposed Cotgrave Country Park to Holme Pierrepont , and Adbolton Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	19 – River Trent to the Grantham Canal, Cotgrave Country Park and towards Cropwell Bishop Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	20 – Proposed Trent to Cotgrave Canal link to West Bridgford Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	21 – Proposed Breaston to Long Eaton and Erewash Canal Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	22 – Proposed Attenborough to Long Eaton Greenway	12-14	NCC	Local District/ Borough Councils, DCC	tbc	tbc
	23 – Proposed Ruddington to West Bridgford and River Trent Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	24 – Proposed Keyworth to Tollerton and Edwalton Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	25 – Proposed Normanton-on-the-Wolds to Cotgrave and Cotgrave Country Park Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	26 – Proposed Barton-in-Fabis to Clifton and River Trent Greenway	12-14	NCC	Local District/ Borough Councils	tbc	tbc
	27 – Proposed Long Eaton to River Soar and towards Keyworth Greenway	12-14	NCC	Local District/ Borough Councils, DCC	tbc	tbc
	28 – Proposed Ruddington towards Loughborough Greenway	12-14	NCC	Local District/ Borough Councils, LCC	tbc	tbc
	29 – Proposed Keyworth towards Melton Mowbray Greenway	12-14	NCC	Local District/ Borough Councils, LCC	tbc	tbs

3.1e: Strategic Priority – City-Scale GI Corridors Nottingham PUA and sub-regional centres of Hucknall and Ilkeston						
Proposed initiatives						
Ref	**GI Initiative**	**Strategic Objectives**	**Lead Partner for delivery**	**Supporting partners**	**Indicative cost**	**Implementation time-scale**
N/A	**South Hucknall GI Project** *Improve access to (and quality of) natural greenspace for Hucknall residents and sustainable routes between deprived neighbourhoods and employment/services in Hucknall and Nottingham*	12-14	Ashfield DC	NCC, Notts City Council	240K	2010-11
N/A	**Nottinghamshire Strategic Cycle Network** *Provision and enhancement of recreation routes across Nottinghamshire through acquisition of linear routes, sourcing funding restoration, management and promotion.*	12-14	NCC	District Councils, Sustrans	£0.5-1.5m p/a	Ongoing

4.0 MONITORING AND REVIEW

4.1 General

4.1.1 Monitoring the outcome of the 6Cs GI Strategy is essential to demonstrate achievements against the proposed vision, and to learn lessons from implementation of initiatives to inform future decision making and funding applications.

4.2 Monitoring

4.2.1 The SGIPB will monitor the implementation of the GI Strategy by:

- Monitoring the progress of the Action Plan through the production of annual progress reports on work achieved and identification of priorities for the following year; and
- Assessing the effectiveness of action in achieving the vision and reviewing the overall direction of the Strategy in response to changing priorities and needs.

4.2.2 It is important that the 6CS GI Strategy is seen to be effective. An essential part of the monitoring process should therefore be to highlight and publicise achievements of the Strategy through newsletters, the website and events.

4.3 Review

4.3.1 It is intended that the Strategy is kept under review, and updated as necessary in light of changing circumstances and new thinking, to continue providing a coherent sub-regional framework for GI planning and delivery in the 6Cs sub-region.

4.3.2 The Sub-Regional Strategic Framework (**Volume 1**) and its supporting technical documents (**Volumes 3**, **4**, **5** and **6**) will require updating from time-to-time to ensure that the evidence base remains appropriate. It is proposed that this will be reviewed on a five yearly basis.

4.3.3 The Action Plan will require updating and review on a shorter timescale than the Sub-Regional Strategic Framework and should respond to changing priorities, opportunities, and pressures, particularly those linked to major new strategic development sites (>3000 dwellings) once locations and delivery timelines for these come forward through the Core Strategy process. It is proposed that the initial formal review of the Action Plan will be undertaken in 2011/12 following the first phase of Growth Point funded project delivery, and annually thereafter.

APPENDIX A1
ABBREVIATIONS

ABBREVIATIONS

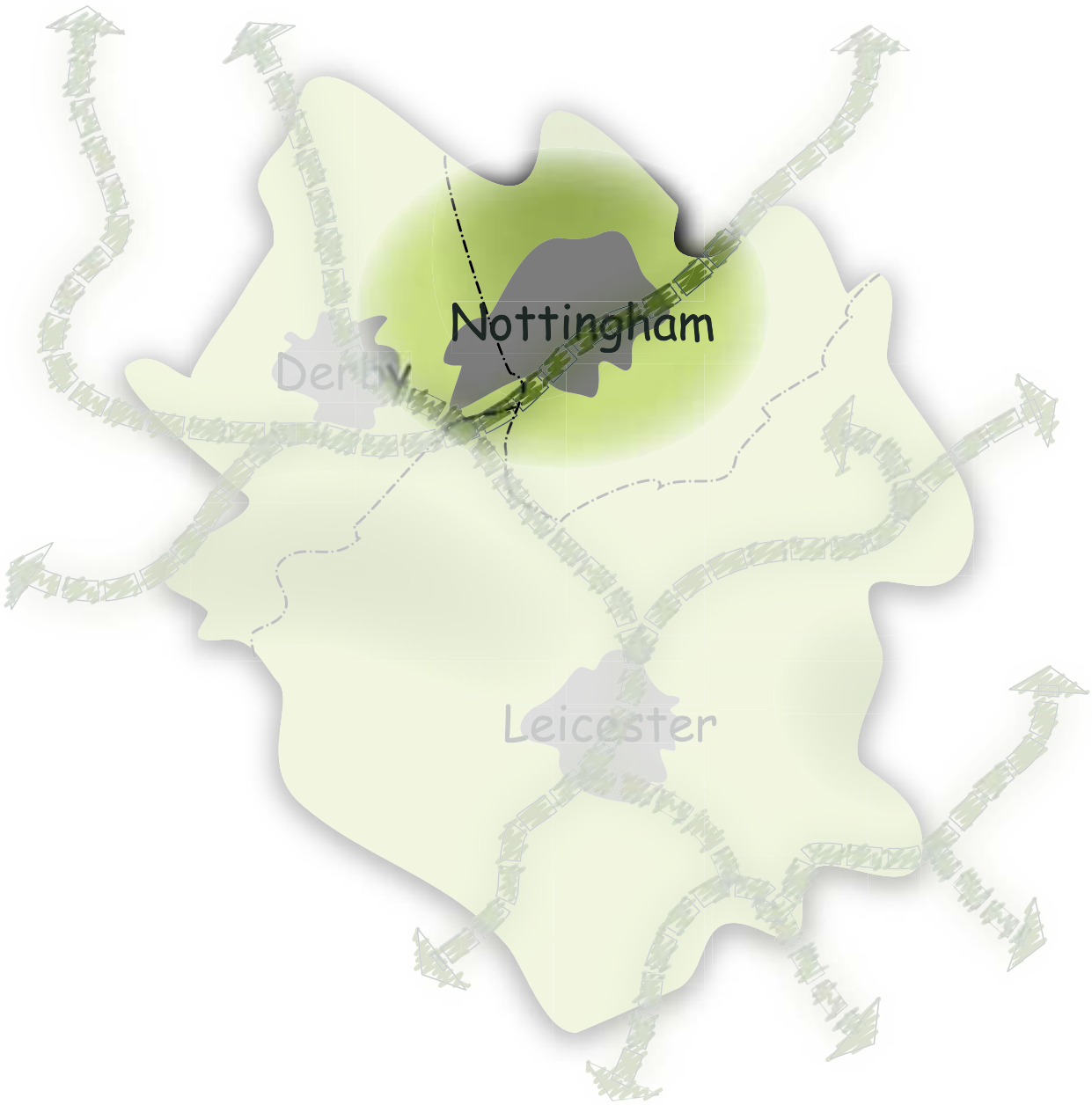
6Cs SGIPB	6Cs Strategic Green Infrastructure Project Board
ACA	Ashby Canal Association
ACT	Ashby Canal Trust
BGS	British Geological Survey
BTCV	British Trust for Conservation Volunteers
BW	British Waterways
CABE	Commission for Architecture and the Built Environment
CLSSP	Central Leicestershire Stepping Stones Partnership
DC Ltd	Derby Cityscape Ltd
DCC	Derbyshire County Council
DVMWHSP	Derwent Valley Mills World Heritage Site Partnership
DWT	Derbyshire Wildlife Trust
EA	Environment Agency
EH	English Heritage
EMBP	East Midlands Biodiversity Partnership
EMC	East Midlands Councils (replaced the East Midlands Regional Assembly from April 2010)
EMDA	East Midlands Development Agency
EMGIN	East Midlands Green Infrastructure Network
EMLP	East Midlands Landscape Partnership
FC	Forestry Commission
FWAG	Farming and Wildlife Advisory Group
GCP	Grantham Canal Partnership
GEM	Greenspace East Midlands
GFP	Greenwood Forest Partnership
GGN	Groundwork Greater Nottingham
GNP	Greater Nottingham Partnership
GOEM	Government Office East Midlands
HBBC	Hinckley and Bosworth Borough Council
HCA	Homes and Communities Agency
HMA Boards	Housing Market Area Boards
HNFF	Heart of The National Forest Foundation
ICH Ltd	Ideal Country Homes Ltd
IWA	Inland Waterways Association
LAA	Local Area Agreement
LCC	Leicestershire County Council
LDBP	Lowland Derbyshire Biodiversity Partnership
LP	Leicestershire Promotions
LPC	Local Parish Councils
LRWT	Leicestershire and Rutland Wildlife Trust
NCC	Nottinghamshire County Council
NE	Natural England
NFC	National Forest Company
NHS N'shire	National health Service Nottinghamshire
NT	National Trust
OTP	OnTrent Partnership
PUA	Principal Urban Area
SCS	Sustainable Community Strategy
SRC	Sub-Regional Centre
SRPPMB	Sherwood Regional Park Project Management Board
STW Ltd	Severn Trent Water Ltd
TRP	Trent River Park
TWTs	Wildlife Trusts
WaT	Waterways Trust
WCC	Warwickshire County Council
WT	Woodland Trust

www.emgin.co.uk/6Cs

Green Infrastructure Strategy

Volume 6

Strategic GI Network for the Nottingham Principal Urban Area and Sub-Regional Centres



2010

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FOREWORD

The East Midlands region faces an unprecedented scale of growth over the coming years, especially in the 6C's sub-region. In light of the scale and number of new houses that are planned, we recognised the need to develop a strategic approach to provision of Green Infrastructure (GI) as an environmental life support system for healthy communities and ecosystems. We wanted to maximise the potential of GI to bring about multifunctional holistic solutions to achieve wide ranging environmental, economic and social benefits, including climate change adaptation and mitigation.

The 6C's partnership have been working together with key players across the area for the last two years to produce this exciting and important Strategy. The challenge is now to deliver and manage GI along with the "grey infrastructure" needed to support sustainable communities in the sub-region. This Strategy represents a major step forward to achieve this by:

- Giving the strategic spatial framework needed to safeguard, manage, and extend networks of GI in local planning documents;
- Showing how the benefits of GI to economics, climate change, health, biodiversity and landscape can be realised;
- Significantly reducing the amount of data required to produce local policy documents; and
- Identifying funding sources and mechanisms for the delivery of GI and the priorities for investment.

I cannot commend enough the monumental achievement of the 6Cs Strategic GI Project Board, and also the overall 6Cs Partnership, in producing this sub-regional GI Strategy.

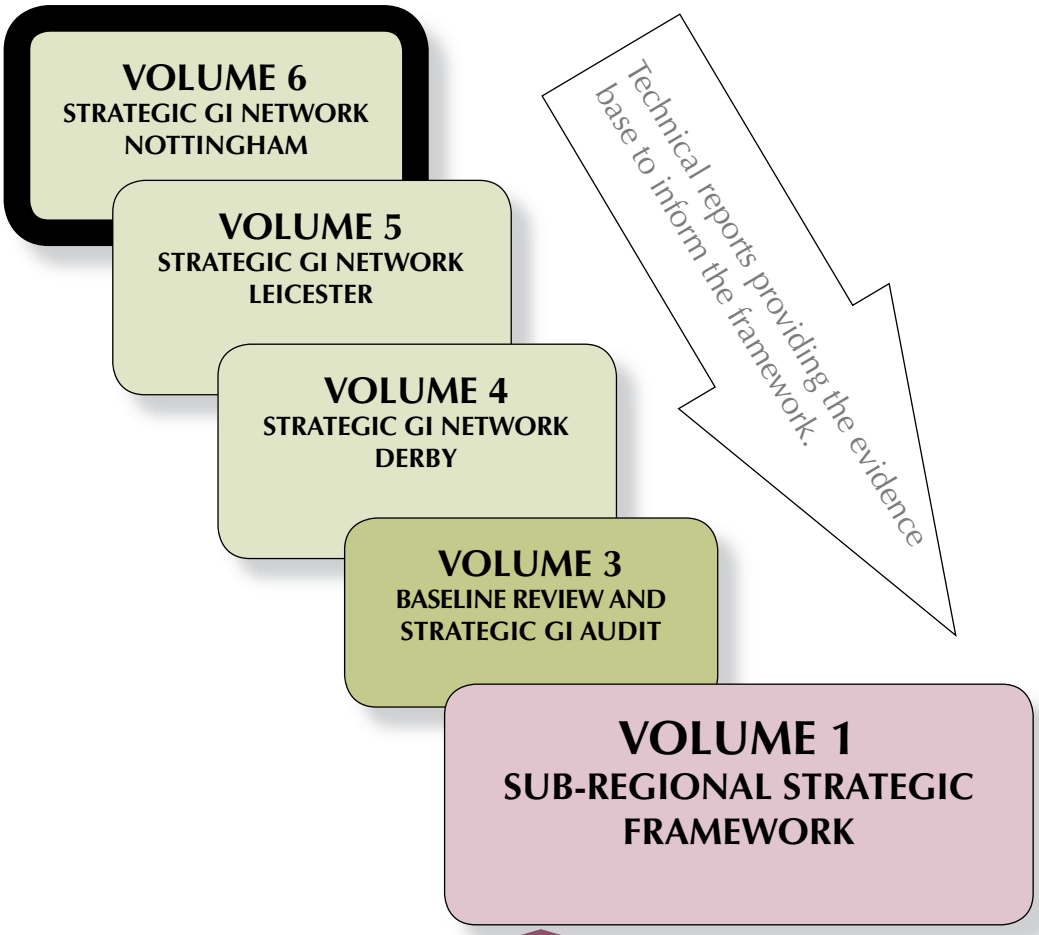
It provides a framework for all those working to plan and deliver sustainable development, and GI delivery in particular, within the sub-region and elsewhere around the East Midlands Region over the forthcoming years.

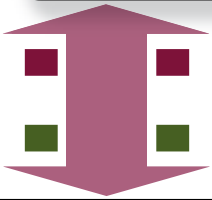
Alison Hepworth
Chair, 6Cs Strategic GI Project Board

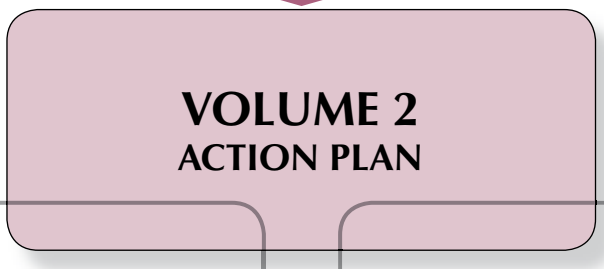
STRATEGY STRUCTURE

STRATEGY

Long-term vision for the strategic GI network across the 6Cs Sub-Region







Key actions required to deliver the Strategic Objectives: promotion, advocacy and partnership working

Projects and initiatives to deliver the Sub-Regional GI Network

DELIVERY

Implementation of the Strategy to be reviewed regularly to reflect changing priorities and emerging delivery opportunities

1.0 INTRODUCTION

1.1 Study Area and Context

1.1.1 **Figure 1.1** shows the Study Area for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network.

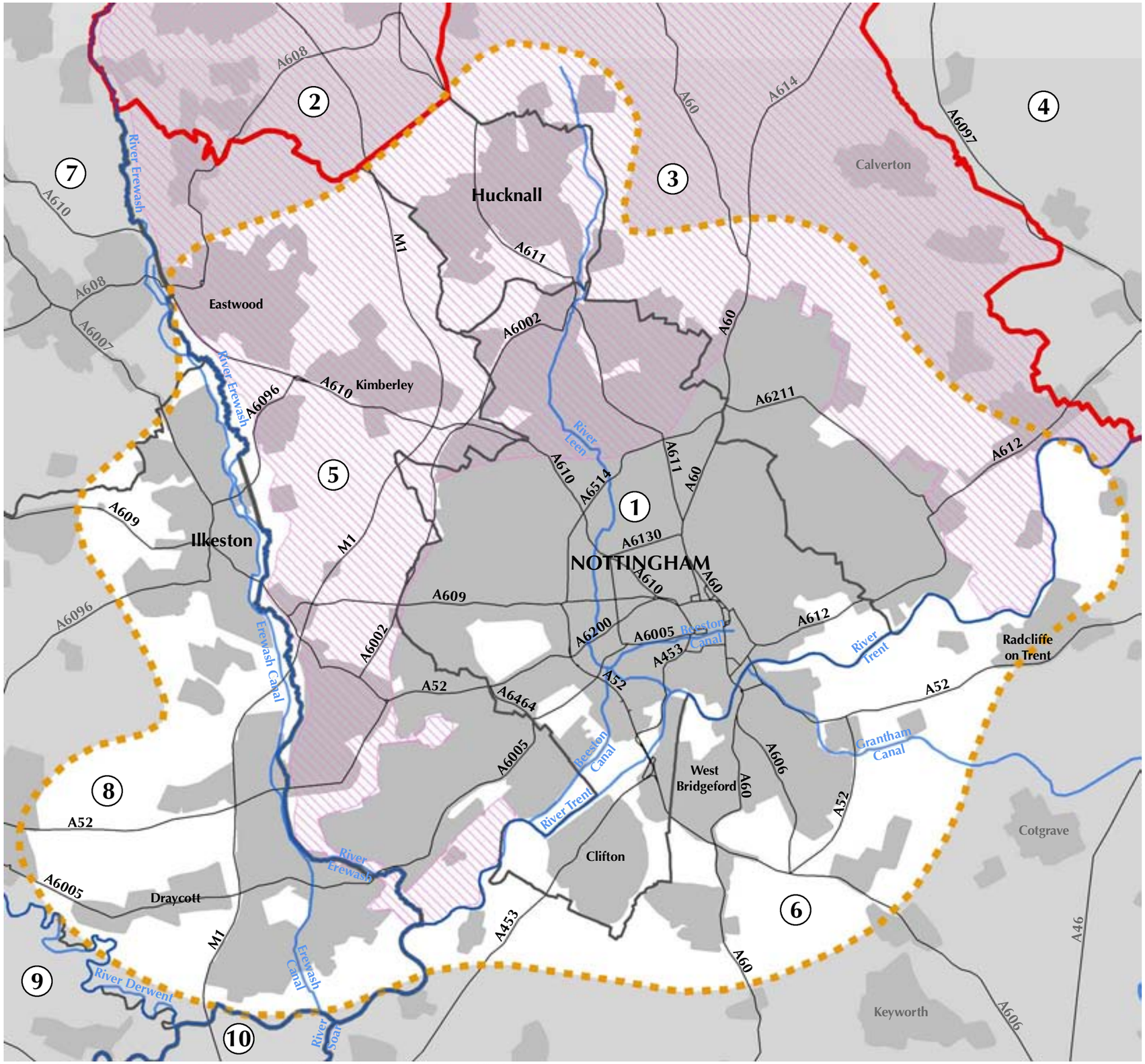
1.1.2 This report should be read in conjunction with:

- **Volume 1:** The Sub-Regional Strategic Framework (particularly **Section 3.0** – The Shared Vision, **Section 4.0** - The Strategic Green Infrastructure Network, and **Section 5.0** - The Delivery Framework);
- **Volume 2:** The Action Plan;
- **Volume 3:** The Baseline Information Review and Strategic GI Audit for the sub-region;
- **Volume 4:** The Strategic Green Infrastructure Network for the Derby Principal Urban Area and the Sub-Regional Centre Swadlincote; and
- **Volume 5:** The Strategic Green Infrastructure Network for the Leicester Principal Urban Area and the Sub-Regional Centres of Coalville, Hinckley (including Barwell and Earl Shilton), Loughborough (including Shepshed), Market Harborough, and Melton Mowbray.

1.1.3 The locations of strategic growth within the Greater Nottingham Housing Market Area (HMA) will have an impact on the prioritisation of resources and investment in the proposed GI Network. The current position with regards to the planning of strategic development sites within the HMA is summarised below as at April 2010[1].

1.1.4 The Greater Nottingham authorities (Ashfield, Broxtowe, Erewash, Gedling, Nottingham City and Rushcliffe) supported by Nottinghamshire and Derbyshire County Councils, have been working together to develop aligned Core Strategies[2]. Potential locations for Sustainable Urban Extensions have been identified in a Sustainable Urban Extension Study[3]. During June and July 2009, the authorities undertook public and stakeholder consultation on an 'Issues and Options' Report. This sought comments on a number of alternatives to shape future development within Greater Nottingham. The councils have considered the consultation responses and government guidance and have developed an extensive technical evidence base (including for example flood risk and housing need studies) to draw up a more detailed strategic 'Option for Consultation'. Ashfield District Council will consult on a separate 'Preferred Option' report covering the whole of the Ashfield area. The Greater Nottingham Core Strategy's 'Option for Consultation' report sets out an overall spatial vision for Greater Nottingham and strategic policies, and sets out a number of strategic sites and sustainable urban extensions which could accommodate the

[1] See Section 1.3 of **Volume 2** for updated information.
[2] For more detail visit http://www. gngrowthpoint.com.
[3] Sustainable Urban Extension Study for Greater Nottingham (Tribal Urban Studios, June 2008).



KEY

Indicative GI Network Areas

- Derby GI Network
- Nottingham GI Network
- Leicester GI Network

- Urban Areas
- 6Cs Growth Point
- District/Borough Boundaries

1 Nottingham City Council
2 Ashfield District Council
3 Gedling Borough Council
4 Newark & Sherwood District Council
5 Broxtowe Borough Council
6 Rushcliffe Borough Council
7 Amber Valley Borough Council
8 Erewash Borough Council
9 South Derbyshire District Council
10 North West Leicestershire District Council

- County Boundaries
- Greenwood Community Forest
- Principal Rivers and Canals
- Main Roads

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

0 1 2 km

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Figure 1.1
Study Area and Context

housing growth targets required by the East Midlands Regional Plan. Consultation for the 'Option for Consultation' report ended in April 2010.

1.2 Scope

1.2.1 The Strategic GI Network report comprises the following:

- **Assessment of Strategic GI Assets, Needs and Opportunities** – drawing on the Stage 1 GI audit, enhanced by selected relevant additional data as appropriate; and

- **Strategic GI Network** – a 'key diagram' type plan, plus supporting explanatory text, identifying a proposed 'aspirational' multifunctional strategic GI network that connects communities and wildlife at the sub-regional and City-Scales. It is intended to help focus attention on land that needs to be safeguarded, managed or secured in positive ways to create a multifunctional network of greenspaces and assets for which investment can deliver the greatest range of benefits.

1.3 Key Documents

1.3.1 The key documents that have informed the development of the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network are:

- Ashfield Greenspace Strategy (2008) (this includes a PPG17 Open pace Assessment)
- Broxtowe Greenspace Audit and Strategy 2009-2019 (2008) (this includes a PPG17 Open Space Assessment)
- Derbyshire Rights of Way Improvement Plan 2007-2012
- East Derbyshire Greenway Strategy (1998, currently under review)
- Erewash Borough Council PPG17 Open Space Study (2007)
- Erewash Draft Greenspace Strategy (2007)
- Gedling Borough Council PPG17 Open Space Study (2004)
- Greater Nottingham Landscape Character Assessment (2009)
- Greenwood Strategic Plan (2000)
- Lowland Derbyshire Biodiversity Action Plan, Delivery Plan 2008-2010 (2008)
- Nottingham City Council Breathing Space strategic Framework for the Management of Nottingham's Open and Green Spaces 2007-2017
- Nottingham City Council Corridors to the Countryside Project -Strategy for the River Leen (1998)
- Nottingham City Council Local Transport Plan for Greater Nottingham/Rights of Way Improvement Plan 2006/7 - 2010/11 (2007)
- Nottingham City Council Outdoor Sports Strategy (draft 2009)
- Nottingham City Council Play Strategy 2007-2012
- Nottingham City Council PPG17 Open Space Study (Draft final, 2009)
- Nottingham Gateway Green Infrastructure Strategy (work in progress)
- Nottinghamshire Local Biodiversity Action Plan (1998)
- Nottinghamshire Rights of Way Improvement Plan 2007-2012
- River Trent to Cotgrave Green Infrastructure Masterplan (Draft, 2009)
- Rushcliffe Borough Council PPG17 Open Space Study (date unknown)

- The Landscape Character of Derbyshire (2003)
- The Nottinghamshire Landscape Guidelines (1997)
- Trent River Park Vision and Action Plan (2008).

2.0 STRATEGIC GREEN INFRASTRUCTURE ASSETS, NEEDS AND OPPORTUNITIES

2.1 Existing Strategic Green Infrastructure Assets

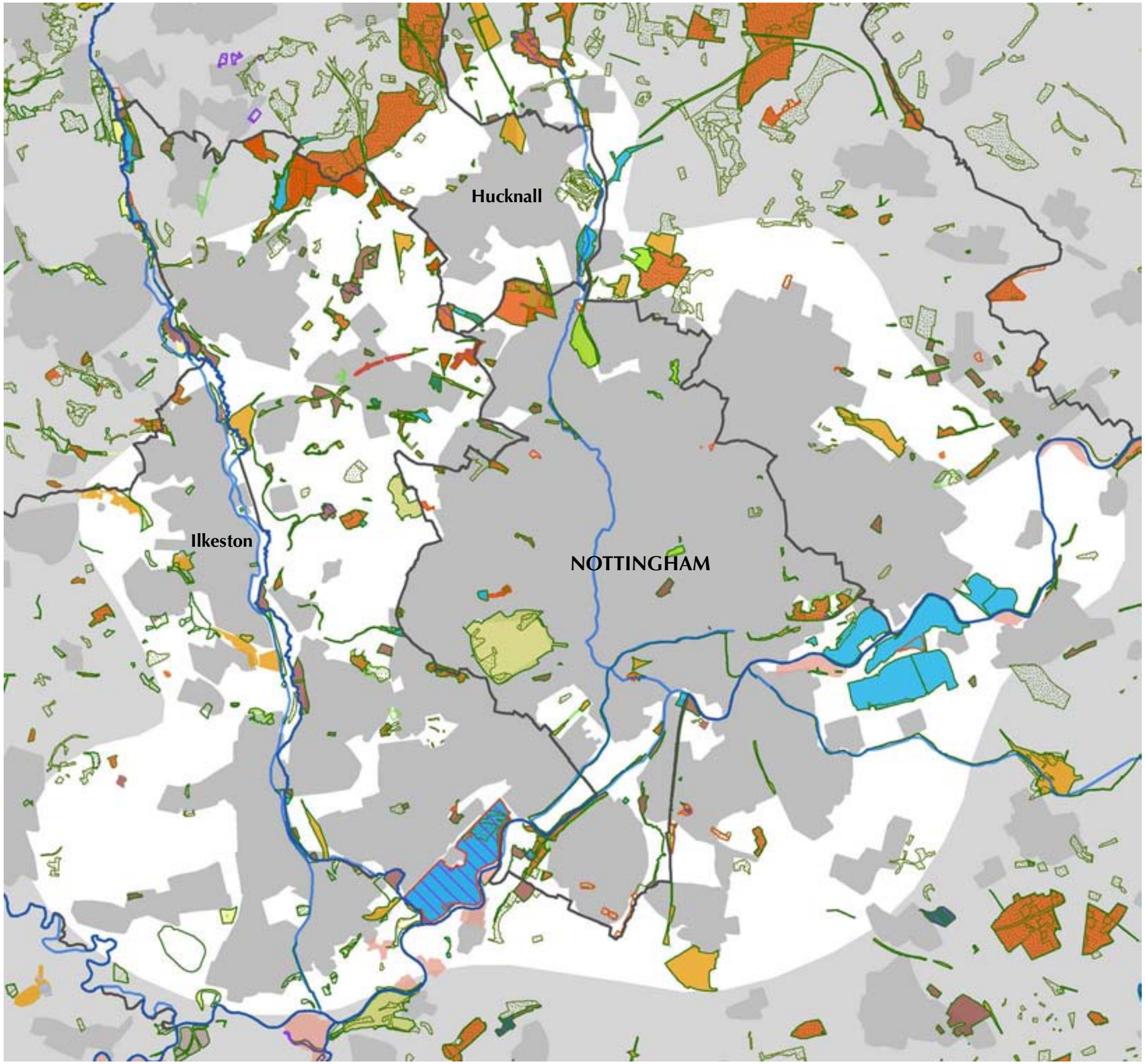
2.1.1 **Figures 2.1** to **2.5** show existing strategic GI assets that form the 'backbone' or underlying framework for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network. The mapping is based on the datasets used in the Stage 1 work, enhanced where appropriate by selected relevant additional datasets identified in consultation with local stakeholders[4].

2.1.2 A key source of additional data used is the PPG17 Open Space datasets provided by the local authorities, where available (see **Figure 2.3**). **Appendix A3** provides details of the PPG17 datasets provided, and the methodology for consolidating these into a consistent open space typology for the purposes of this study.

2.1.3 The distribution and extent of existing strategic GI assets in and around the Study Area is shown on **Figure 2.5**. These assets include:

- Existing natural greenspace[5];
- Existing strategic accessible natural greenspace[6];
- Existing strategic countryside access routes[7];
- Existing open space[8] and green wedges[9];
- Historic environment assets[10];
- Watercourses and waterbodies[11]; and

[4] A record of stakeholder consultation is provided **Appendix A1**. Sources of GI asset mapping data used in the Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston are provided in **Appendix A2**.
[5] For the purposes of the mapping methodology presented in this report, 'natural greenspace' is defined as: land, water or geological features that have been colonised by plants and animals and are dominated by natural processes (as defined by English Nature in Accessible Natural Greenspace in Towns and Cities).
[6] For the purposes of the mapping methodology presented in this report, 'strategic accessible natural greenspace' is defined as natural greenspace greater than 2ha in size that is normally available for public access on foot, providing opportunities for open access for informal recreational activities.
[7] For the purposes of the mapping methodology presented in this report, 'strategic countryside access routes' are defined as: linear, generally off-road and car free routes, that are normally available for public access on foot, horseback or by cycle providing opportunities to access the countryside for informal recreation activities It should be noted that Public Rights of Way have been considered to inform needs and opportunities. However, for presentational purposes they have not been mapped as part of the existing strategic GI assets.
[8] For the purposes of the mapping methodology presented in this report, 'open space' is defined as: parks and gardens, amenity greenspaces, natural and semi-natural greenspaces, green corridors, cemeteries and churchyards, allotments, children's play space and outdoor sports facilities.
[9] Green wedges are not necessarily covered by PPG17 Open Space datasets. However, following stakeholder consultation, they have been included (where available) on **Figure 2.3**. The Green Wedge areas deliver, or have the potential to deliver, a range of GI functions and benefits in close proximity to urban communities. Such benefits, either existing or potential, will vary from one area to another. It should be noted that the Regional Plan requires that Green Wedges be reviewed for their suitability. It should therefore not be assumed that all of the Green Wedges will be retained in their current form.
[10] For the purposes of the mapping methodology presented in this report, 'historic environment assets' are defined as designated historic environment assets including: scheduled monuments, historic battlefields, conservation areas, listed buildings, world heritage sites, and parks and gardens of historic interest.
[11] For the purposes of the mapping methodology presented in this report, 'watercourses and waterbodies' are as defined by the meridian datasets for 'Lakes' and 'Rivers'.



KEY

Natural/Semi-Natural Habitats (based on Wildlife Trust and Natural England BAP Priority Habitat data)

- Coastal and Floodplain Grazing Marsh
- Eutrophic Standing Waters
- Lowland Calcareous Grassland
- Lowland Dry Acid Grassland
- Lowland Fen
- Lowland Heathland
- Lowland Meadows
- Lowland Mixed Deciduous Woodland
- Open Mosaic Habitats on Previously Developed Land
- Purple Moor Grass and Rush-Pastures
- Reedbed
- Wood-Pasture and Parkland

Designated Areas

- Sites of Special Scientific Interest
- Local Nature Reserves
- Local Wildlife Sites
- Wildlife Trust Nature Reserves (with Public Access)

Woodland and Trees

- National Inventory of Woodland and Trees

- Urban Areas
- District/Borough Boundaries
- Principal Rivers and Canals

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

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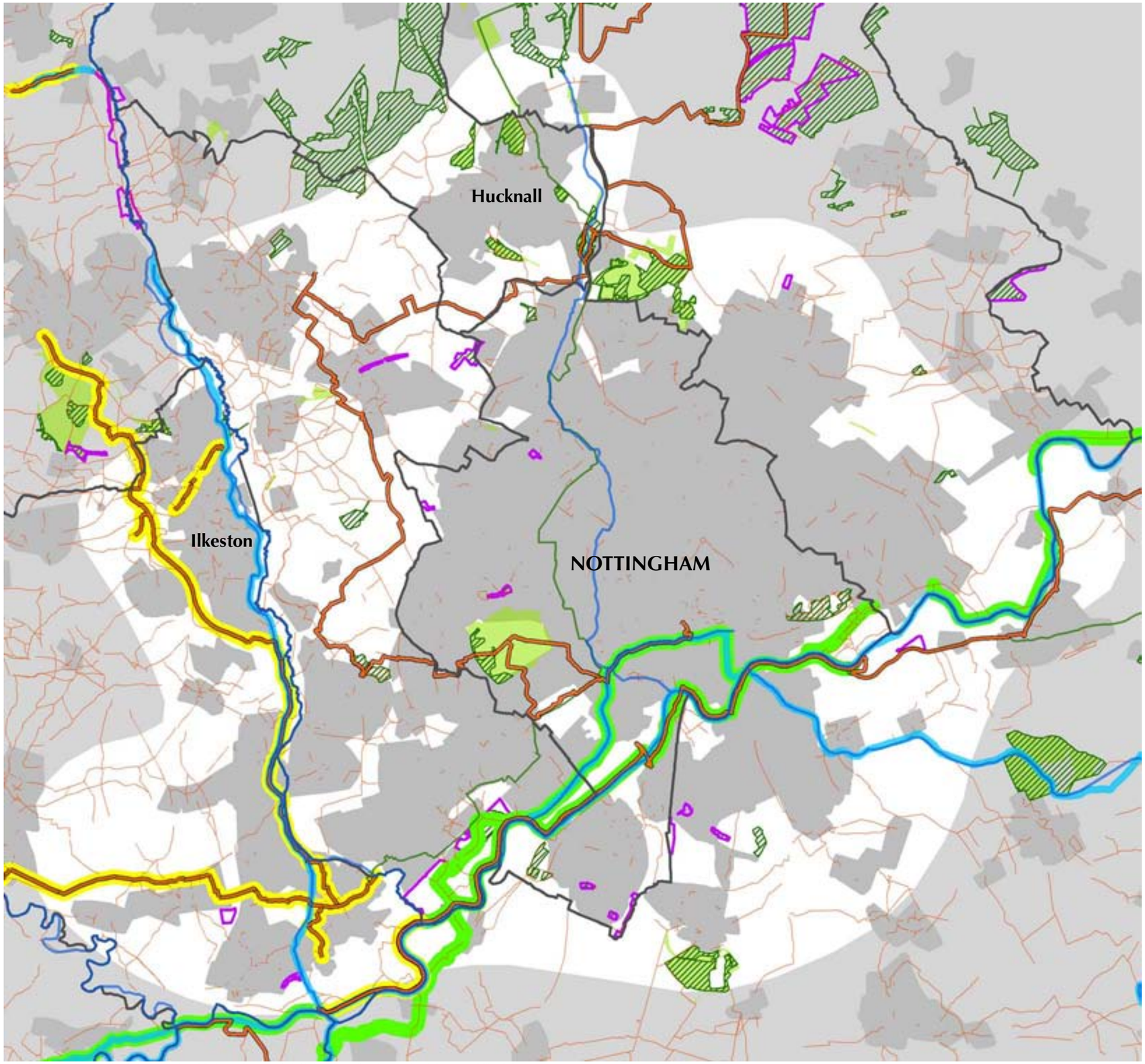
Figure 2.1
Biodiversity - Existing Strategic Assets (Natural Greenspace)



KEY

Existing Strategic Accessible Natural Greenspace

Land greater than 2ha in size that is normally available for public access on foot, providing opportunities for open access for informal recreational activities.

- Open Access Land and Wildlife Trust Nature Reserves with Public Access
- Accessible Woodland
- National Trust Land with Open Access
- Country Parks

Existing Strategic Countryside Access Routes

Linear, generally off-road and car free routes, that are normally available for public access on foot, horseback or by cycle providing opportunities to access the countryside for informal recreation activities.

- Promoted Recreational Routes
- Cycle Network
- Navigable Waterways (indicative)
- Greenways (within Derbyhire)
- Greenways (shown in the Trent River Park Vision & Action Plan, digitised by CBA)

Public Rights of Way Network

- Public Rights of Way Network

- Urban Areas
- District/Borough Boundaries
- Principal Rivers and Canals

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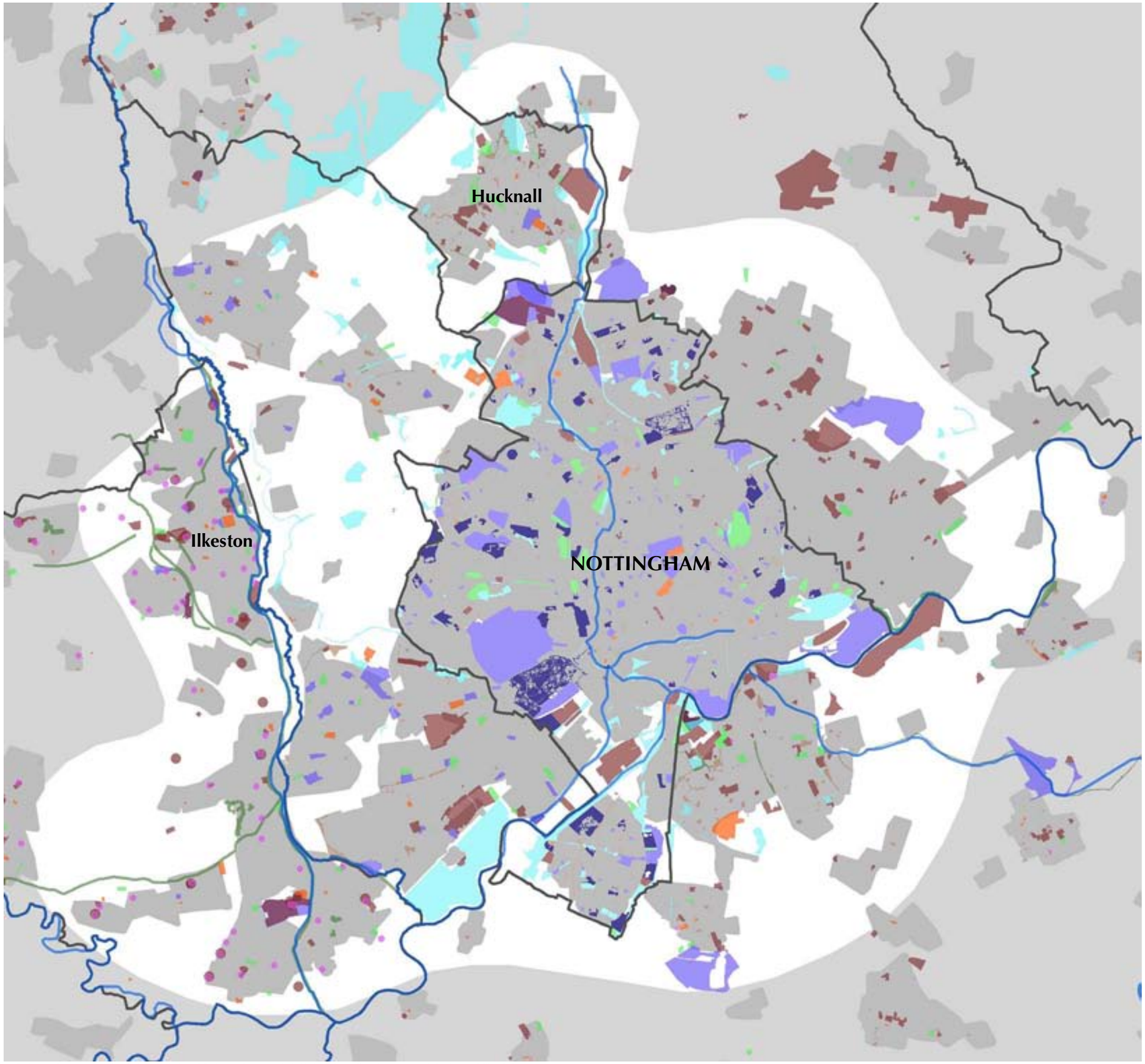
Figure 2.2
Access & Recreation - Existing Strategic Assets



KEY

Existing Open Space
(As provided in PPG17 Open Space datasets, see Appendix A3 for details)

- Allotments
- Amenity Greenspace
- Cemeteries & Churchyards
- Children's Play Space
- Green Corridor
- Natural & Semi-Natural Greenspace
- Outdoor Sports Facilities
- Parks & Gardens

- Urban Areas
- District/Borough Boundaries
- Principal Rivers and Canals

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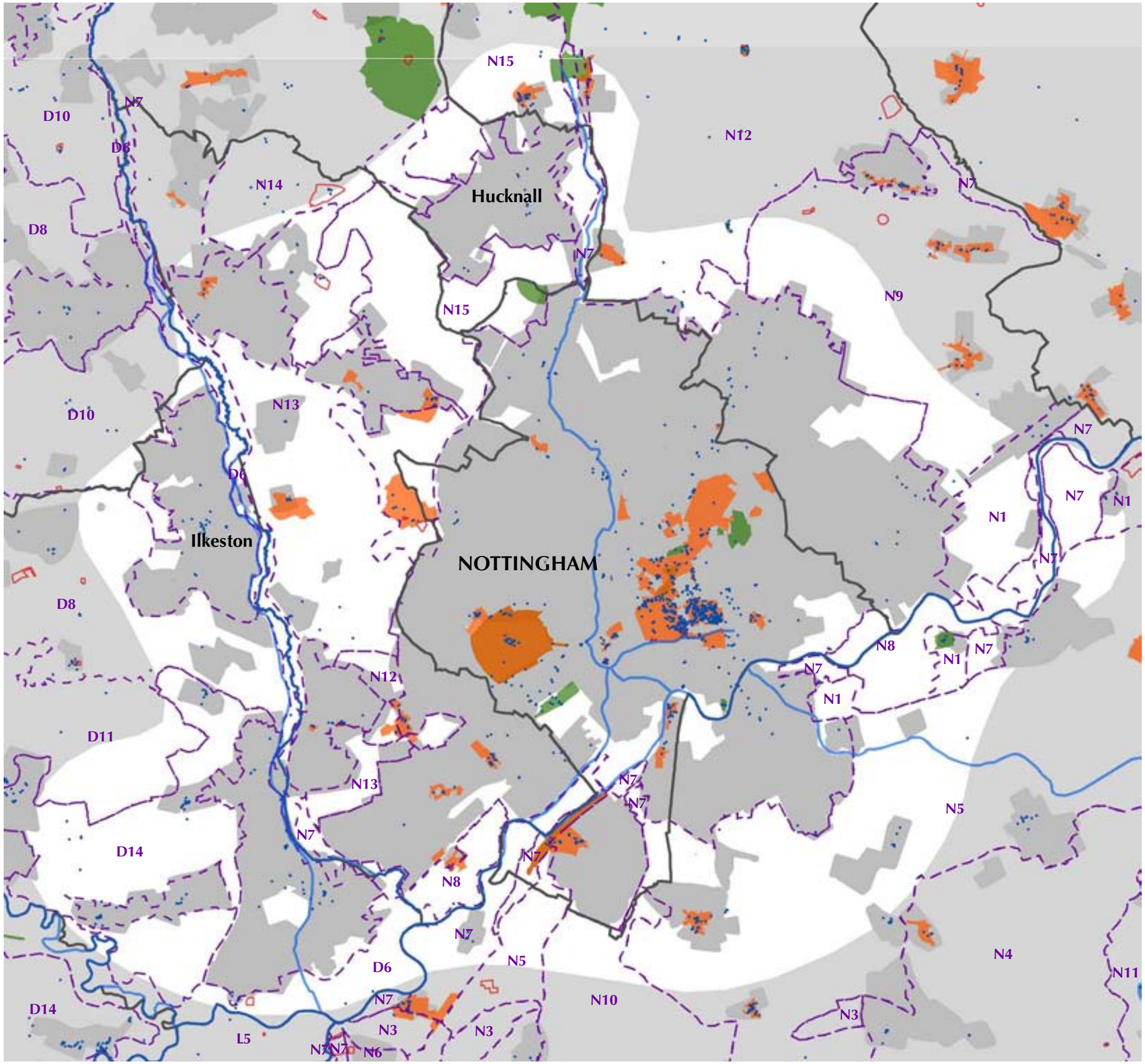
Figure 2.3
Open Space - Existing Strategic Assets



KEY

Published Landscape Character Units

Derbyshire Landscape Character Types

- D6 Riverside Meadows
- D8 Coalfield Village Farmlands
- D10 Coalfield Estatelands
- D11 Plateau Estate Farmlands
- D14 Lowland Village Farmlands

Nottinghamshire Landscape Character Types

- N1 Terrace Farmlands
- N3 Wooded Hills and Scarps
- N4 Wooded Clay Wolds
- N5 Village Farmlands
- N6 Alluvial Estatelands
- N7 River Meadowlands
- N8 River Valley Wetlands
- N9 Dumble Farmlands
- N10 Alluvial Farmlands
- N11 Vale Farmlands
- N12 Forest Sandlands
- N13 Coalfields Farmlands
- N14 Limestone Fringe
- N15 Limestone Farmlands

Leicestershire Landscape Character Areas

- L5 Trent Valley

Designated Historic Environment Assets

- Scheduled Monuments
- Historic Battlefields
- Conservation Areas
- Listed Buildings
- Derwent Valley Mills World Heritage Site
- Parks & Gardens of Historic Interest

- Urban Areas
- District/Borough Boundaries
- Principal Rivers and Canals

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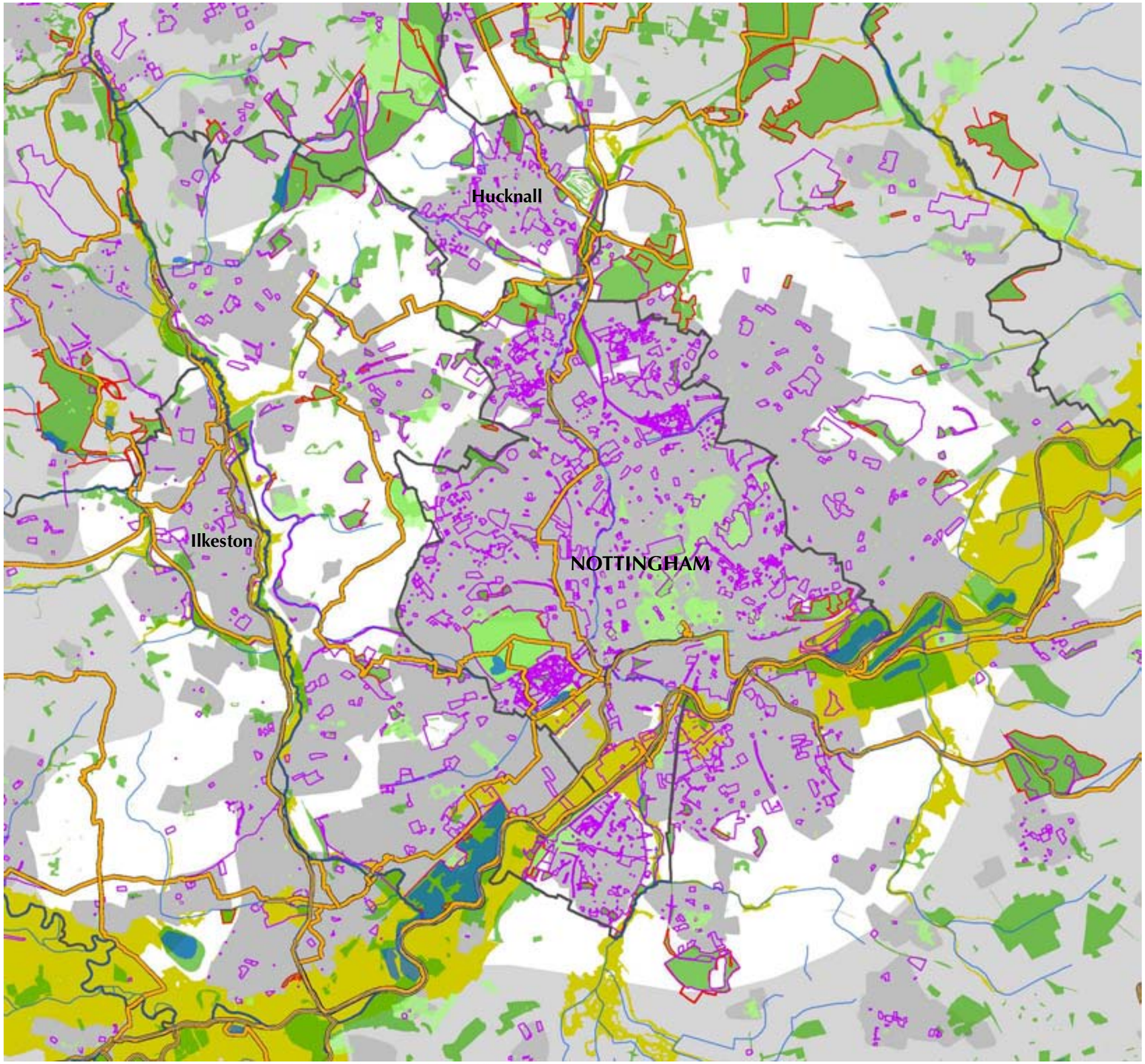
Figure 2.4
Landscape Character and Historic Environment - Existing Strategic Assets



KEY

- **Existing Natural Greenspace** (See Figure 2.1)
- **Existing Strategic Accessible Natural Greenspace** (See Figure 2.2)
- **Existing Strategic Countryside Access Routes** (See Figure 2.2)
- **Existing Open Space** (See Figure 2.3)
- **Designated Historic Environment Assets** (See Figure 2.4)
- **Predominantly Undeveloped Natural Floodplain**
- **Watercourses and Waterbodies**
- Urban Areas
- District/Borough Boundaries

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Figure 2.5
Strategic GI Assets

- Predominantly undeveloped natural floodplain[12].

2.2 Strategic Green Infrastructure Needs

Accessible Natural Greenspace Deficiencies

2.2.1 Based on the assessment of accessible natural greenspace provision undertaken in Stage 1, **Figure 2.6** identifies the location and distribution of different sizes of strategic accessible natural greenspace sites[13] and their respective catchments based on Natural England's Accessible Natural Greenspace Standard[14] (ANGSt) model. Although designed primarily for use in the urban context, the ANGSt model can also be used to assess how accessible natural greenspace in the wider countryside contributes to levels of provision for both urban and rural communities. Applying the Standard enables a consistent comparison to be made between the levels of accessible natural greenspace available to people across the sub-region.

2.2.2 It is important to recognise the strategic role of accessible agricultural landscapes in the wider countryside beyond the specific sites of accessible natural greenspace considered in this report. Key areas with deficiencies of accessible natural greenspace within the Study Area are:

Nottingham

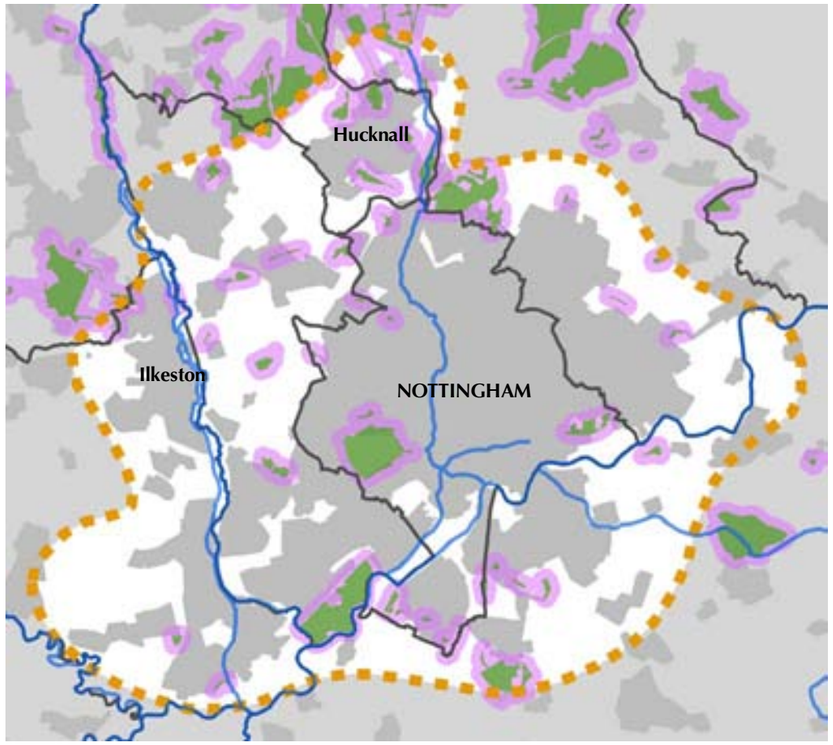
- Deficiency of sites over 2ha (within 300m of inhabitants) for almost all of Nottingham's population. Residents in small discrete areas have access to sites;
- Deficiency of sites over 20ha (within 2km of inhabitants) for populations living in central Nottingham, its southern tip and parts in the east and west;
- Deficiency of sites over 100ha (within 5km of inhabitants) for populations living in the eastern part of Nottingham;
- Deficiency of sites over 500ha (within 10km of inhabitants) for all of Nottingham's population.

Hucknall

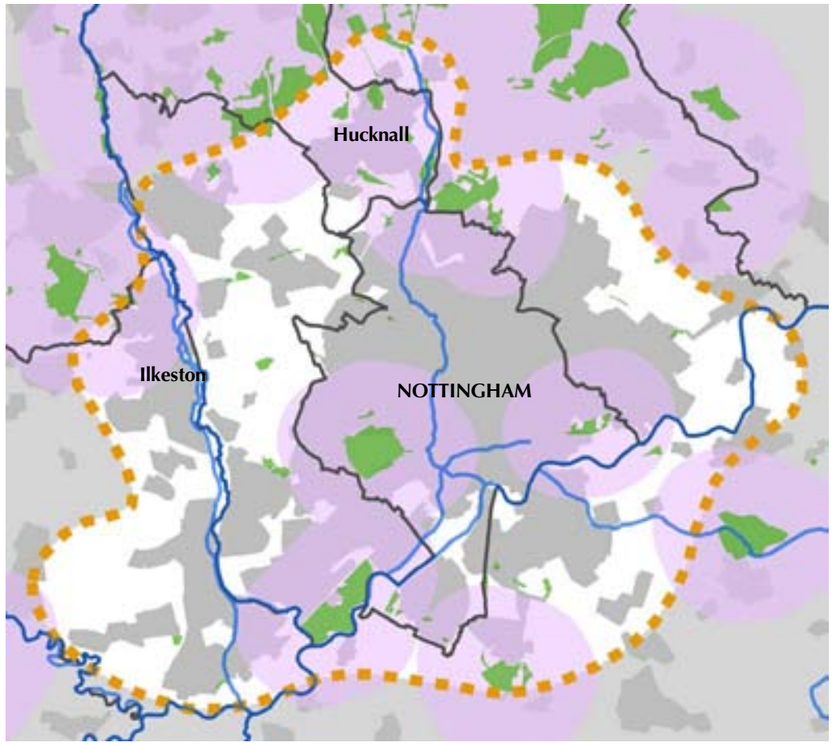
- Deficiency of sites over 2ha (within 300m of inhabitants) for a large proportion of Hucknall's population. Some residents living in the north-west, a small area in the east and south have access to a site;
- Deficiency of sites over 20ha (within 2km of inhabitants) for populations living in the south-western tip of Hucknall; and
- Deficiency of sites over 500ha (within 10km of inhabitants) for all of Hucknall's population.

---

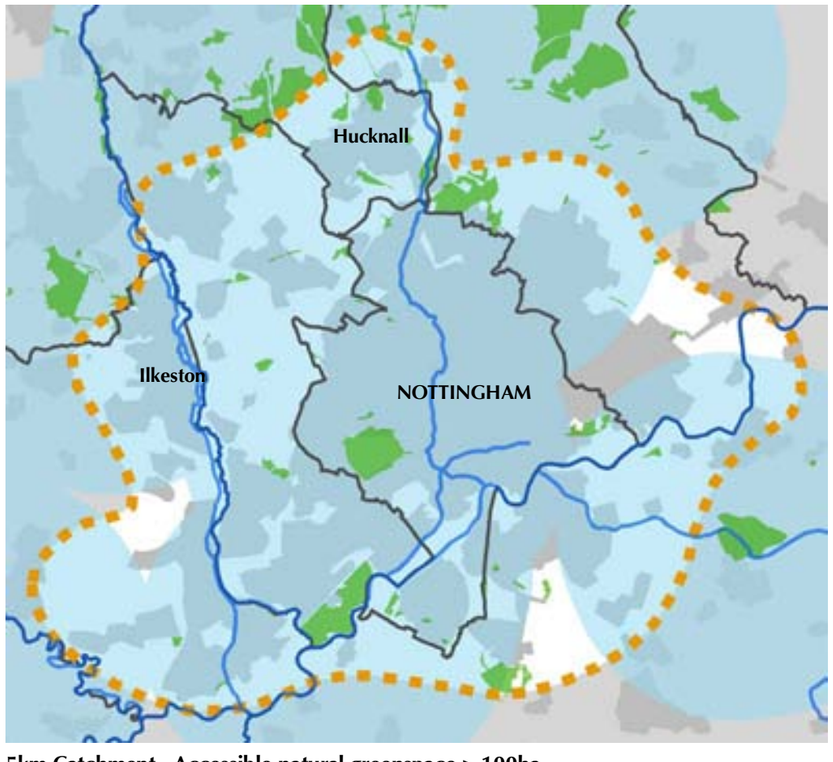
[12] For the purposes of this Study, the natural floodplain (the extent of the floodplain if there were no flood defences or certain other manmade structures and channel improvements), is shown only in predominantly undeveloped areas outside of the main settlements.
[13] Strategic accessible natural greenspace sites shown on **Figure 2.6** represent available information provided by stakeholders at the time of the Study and may not be exhaustive.
[14] Providing Accessible Natural Greenspaces in Towns and Cities: A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision (English Nature, 2003)



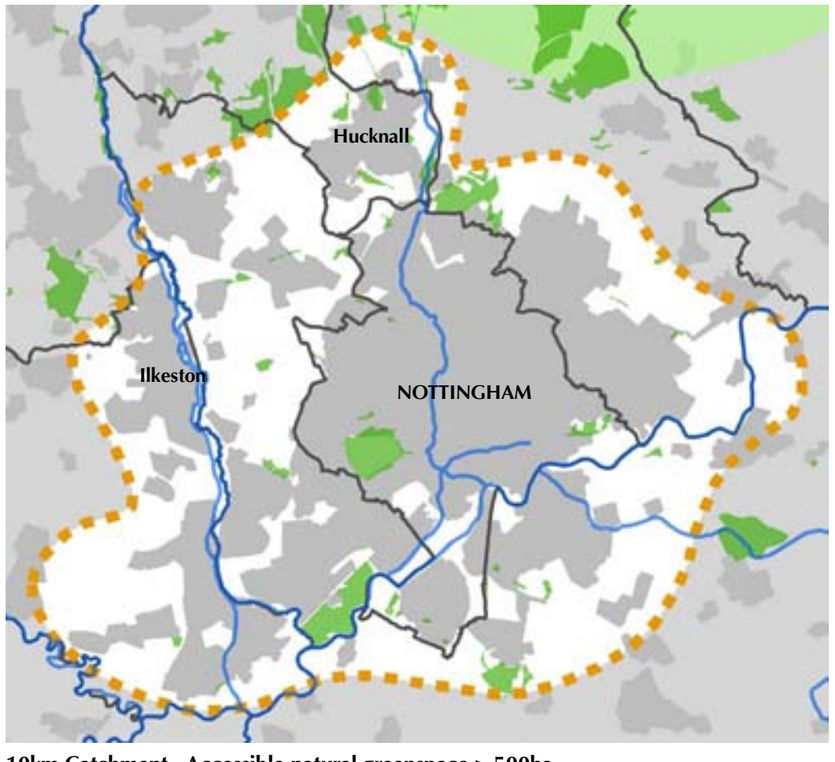
300m Catchment - All accessible natural greenspace



2km Catchment - Accessible natural greenspace > 20ha



5km Catchment - Accessible natural greenspace > 100ha



10km Catchment - Accessible natural greenspace > 500ha

KEY

Accessible Natural Greenspace Catchments

- 300m catchment - all accessible natural greenspace
- 2km catchment - accessible natural greenspace >20ha
- 5km catchment - accessible natural greenspace >100ha
- 10km catchment - accessible natural greenspace >500ha

Existing Strategic Accessible Natural Greenspace

Land greater than 2ha in size largely outside urban areas that is normally available for public access on foot, providing opportunities for open access for informal recreational activities.

- Nottingham GI Network
- Urban Areas
- District/Borough Boundaries
- Principal Rivers and Canals

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

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Figure 2.6
Strategic GI Needs - Accessible Natural Greenspace Deficiencies

Ilkeston

- Deficiency of sites over 2ha (within 300m of inhabitants) for almost all of Ilkeston's population. Residents in discrete areas north-east and north-west have access to sites;
- Deficiency of sites over 20ha (within 2km of inhabitants) for populations living in the southern half of Ilkeston;
- Deficiency of sites over 500ha (within 10km of inhabitants) for all of Ilkeston's population.

Other Settlements

- Deficiency of sites over 2ha (within 300m of inhabitants) for almost all other settlement's populations. Residents in small discrete areas around the Study Area have access to sites (e.g. in north-east Eastwood and south Clifton);
- Deficiency of sites over 20ha (within 2km of inhabitants) for almost all other settlement's populations. Residents in north-east Eastwood, south-west Radcliffe-on-Trent, east Bassingfield, east and west Clifton, and Barton-in-Fabis have access to sites;
- Deficiency of sites over 100ha (within 5km of inhabitants) for populations living in north-west Long Eaton and south Stanton-by-Dale;
- Deficiency of sites over 500ha (within 10km of inhabitants) for all other settlement's populations.

Open Space Deficiencies

2.2.3 Relevant PPG17 studies have highlighted varying deficiencies in open space across the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network area. Shortfalls in open space provision for areas within the Study Area and its environs, as described in individual PPG17 studies, are provided in the following table. The distribution of existing open spaces (using PPG17 open space datasets) is shown on **Figure 2.3**.

Rights of Way Needs

2.2.4 Needs identified in the Nottingham City, Nottinghamshire, Derby City and Derbyshire's Rights of Way Improvement Plans include the following:

Nottingham City Rights of Way Improvement Plan

- Provide a safe and user friendly environment to encourage more people to walk to their destination and continue to improve existing paths and create new paths wherever possible;
- Provide a safe and user friendly environment to encourage more people to cycle to their destination and continue to improve existing paths and create new paths wherever possible;
- Provide a safe and user friendly environment so people can enjoy horse riding and continue to improve existing paths and create new paths wherever possible;
- Where possible ensure all paths are accessible by people with limited mobility, the blind, and partially sighted.

Open Space Deficiencies

Open Space Type	Ashfield	Broxtowe	Erewash	Gedling	Nottingham City	Rushcliffe
Parks & Gardens	Greenspace deficiencies in Hucknall (all types): *North East Hucknall-Vaughan Estate *Watnall Road area *Ogle Street area *Hucknall town centre *Top end of Butlers Hill *South Hucknall-Nottingham Road *Watnall Road, south west edge of Hucknall *Common Lane-Beauvale Estate	There is a good distribution of Parks and Gardens in the North with notable exceptions around Newthorpe Common, Greasley and Nuthall East. The neighbouring Broxtowe Country Park (Nottingham City Council) does not fill a gap in provision for the Nuthall East Estates and as a result there is an identified need to work with Nottingham City Council to improve access to the country park by establishing safe and usable links to the Nuthall East catchment. In the M1 rural corridor there is a lack of provision around the Trowell area.	Shortfall in all areas of the borough. Issues of accessibility in all parts of the borough. (Erewash's Greenspace Strategy states: The standard generates a deficiency of over 42 hectares of park space across Erewash, and a deficit in all four areas. The deficit is most marked in Ilkeston, where over 17ha of additional space are needed, but is also prominent in the rural area where a deficit of over 10 hectares is indicated.)	Identification of a shortfall of one additional park to service the urban fringe. Funding for Gedling Colliery site has been secured; issue around land transfer agreements associated with the development of the colliery yard. The site is currently safe, for current purpose (i.e. no public access) but will require improvement work to allow greater access.	Not specified.	Not specified in the sections of the report we were provided with.
Amenity Greenspace	Included under greenspace deficiencies.	In the north of the borough there are identified gaps in provision around most of Eastwood South, the area to the South of Awsworth and the Nuthall East area. While the M1 rural corridor has a low population density there is also limited provision	There is an overall deficiency of 38ha in Erewash, but most of this is in Long Eaton. In Ilkeston, provision is almost at the required level. Erewash's Greenspace strategy states that the distribution is	No identified demand for additional amenity greenspace.	Not specified.	Not specified in the sections of the report we were provided with.

Open Space Deficiencies

Open Space Type	Ashfield	Broxtowe	Erewash	Gedling	Nottingham City	Rushcliffe
		to the North of Trowell. In the South of the borough the key gaps in provision are around Bramcote, Stapleford North, South East and South West and to the North of Beeston Rylands. While there is also limited provision in Central Beeston the area suffers from restricted land availability for new green space provision. Likewise parts of Chilwell West are restricted by the extent of MOD land and Toton and Chilwell Meadows is restricted by the industrial nature of part of the area.	reasonably even but the absence of spaces in substantial areas of Long Eaton, and in the northwest of the borough, is especially apparent.			
Children's Play Spaces	Uneven provision of play facilities and activity areas within the District, with particularly low provision of both play and activity areas in Hucknall. Proposed new or upgraded play areas in Hucknall include: *Washdyke Lane Recreation Ground- medium size play area required *Albert Street	Slight under provision in the borough.	These standards highlight a deficiency of nearly 5ha in current provision, spread across all areas of the borough. Erewash's Greenspace strategy states that Provision is best in Ockbrook and Borrowash, but elsewhere the deficiency is more marked, especially in the urbanised areas.	Shortfalls identified in a separate document.	Not specified.	Not specified in the sections of the report we were provided with.

Open Space Deficiencies

Open Space Type	Ashfield	Broxtowe	Erewash	Gedling	Nottingham City	Rushcliffe
	Recreation Ground- re-site and upgrade to medium size play area *Nabbs Lane-Upgrade from medium to large size play area *Milton Rise- replace small play area *Titchfield Park- upgrade from medium to large (Destination site) play area Priority sites for potential new or upgraded young people's facilities in Hucknall include: *The Ranges or Washdyke Lane Recreation Ground - new facility required: e.g. goalposts or a kickwall *Common Farm or Polperro Lagoon -e.g. five a side goal posts or a kickwall *Nabbs Lane- additional facilities required, e.g activity equipment. (Note: all locations and suggested provision will be subject to further investigation and consultation)					

Open Space Deficiencies

Open Space Type	Ashfield	Broxtowe	Erewash	Gedling	Nottingham City	Rushcliffe
Allotments	Although demand for allotment plots is currently strong in Hucknall, the provision of allotment plots per household in Ashfield District is well within the recommended national standard of 1 plot for every 50 households (e.g. Hucknall 1 plot for every 28 households).	Not specified.	Erewash's Greenspace Strategy states that an overall deficiency in allotment provision of 2.63 hectares is primarily due to a lack of sufficient sites in Long Eaton. In Ilkeston and in Ockbrook and Borrowash, there is actually a modest surplus of provision. Allotment sites are reasonably well-spread across the borough, but there are areas of notable deficiency in terms of accessibility, particularly in Long Eaton and in the north western area of the borough.	No identified demand for the creation of additional allotments	A City standard of suitable provision is to be determined by the City Council.	Not specified in the sections of the report we were provided with.
Cemeteries & Churchyards	Additional sites required will be identified through the planning process and specifically within the Local Development Framework.	Not specified.	The Council subscribes to the Charter for the Bereaved. Existing provision is adequate for the foreseeable future but attention will need to be given to quality standards at some sites.	Over the next few years there will be demand for additional burialspace in Gedling. GBC is looking to develop a strategy to consider sites over the next 50 – 100 years.	No quantitative Standard Set The City Standard is to be based on the minimal provision of 10 years space for burial and cremation needs for the City resident population.	Not specified in the sections of the report we were provided with.
Natural & Semi-Natural Greenspaces	Included under greenspace deficiencies.	Potential shortfall of approximately 38.7ha of Local Nature Reserves.	The standards actually show Erewash with a	Gedling is currently operating well below the English nature	Not specified.	Not specified in the sections of the report we were provided with.

Open Space Deficiencies

Open Space Type	Ashfield	Broxtowe	Erewash	Gedling	Nottingham City	Rushcliffe
		In the North of the borough there is even distribution of Natural & Semi-Natural Green Space, identified gaps in provision are around Greasley, Nuthall West, Nuthall East and Eastwood South. In the South of the Borough the key gaps are on the Western areas from Stapleford North down through Stapleford South East and South West and on the Eastern side from Beeston North through Beeston West, Central and Beeston Rylands. The natural and semi-natural green space provision could be enhanced by increasing the nature conservation value of parks and amenity green space.	surplus of provision overall, but provision is uneven and the more urbanised areas have shortfalls.	target for LNR sites per 1000 population. Demand for the designation of additional LNR status within the Borough.		
Outdoor Sports Facilities	Consideration should be given to providing new sites within the District for both adult and junior rugby. While there is currently adequate provision to meet demand for	Slight under provision in the borough. In the North there are identified gaps in provision around Newthorpe Common and Nuthall East.	There is an overall shortfall of 35.5ha of pitch space, and a large part of this arises in Long Eaton. Tennis and bowls are adequately provided for other than in	Shortfalls identified in a separate document.	The Council is developing a separate playing pitch strategy to sit alongside this audit. The playing pitch strategy will identify the supply and demand of outdoor sport in more detail and will establish	Not specified in the sections of the report we were provided with.

Open Space Deficiencies

Open Space Type	Ashfield	Broxtowe	Erewash	Gedling	Nottingham City	Rushcliffe
	hockey within the district, there is a growing demand for good quality, floodlit, all weather pitches for other pitch-based sport. Current deficiency in Hucknall of mini soccer and cricket pitches	In the South there are isolated gaps around Beeston West and North of Toton.	Ockbrook/ Borrowash.		provision standards based on local need identified through the Sport England 'Towards a level playing field methodology.	
Green Corridors	Not specified.	Treated as a sub-type of the Natural and Semi-Natural Greenspaces category	Not specified	Demand for networks to link up at least the major open spaces within the Borough. Rights of way shortfalls have been identified in Ravenshead, Linby, Newstead and Papplewick. Demand has been identified for the creation of additional cycleways and improved links to pedestrian crossings	Not specified.	Not specified in the sections of the report we were provided with.

Nottinghamshire Rights of Way Improvement Plan

- Protect, maintain and seek to enhance the network for all lawful users;
- Improve access to the network for all, including those with visual impairment and mobility problems, by adopting the principle of the least restrictive option;
- Develop accessible multi-user routes;
- Develop circular routes designed to BT 'Countryside for All standards';
- Improve the safety and connectivity of the metalled road network with the rights of way network including schemes to provide safe routes to schools and provision of safe crossing points with the road network.

Derbyshire Rights of Way Improvement Plan

- Improve the provision of routes for bridleway users;
- Improve the provision of circular or connected routes;
- Provide more easy access routes;
- Continue with the development of the greenway programme for the county;
- Improve the management of recreational motorised vehicles in the countryside;
- Promote routes identified as easy access paths; and
- Encourage the production of new promoted routes.

2.2.5 A greenway strategy has been produced by Derbyshire County Council for East Derbyshire (1998). The strategy provides a basis for the development of a network of greenways throughout the county, helping to meet the need for the development of the greenway programme identified in the Derbyshire Rights of Way Improvement Plan.

Landscape Character Needs

2.2.6 The Nottinghamshire Landscape Guidelines (1997), the Greater Nottingham Landscape Character Assessment (2009) and the Derbyshire Landscape Character Assessment (2003) provide guidelines for protecting and enhancing the character of the landscape within the Study Area, taking into account historic landscape character considerations. The guidelines are a response to the identified need to sustain and enhance the condition of landscapes throughout the Study Area.

2.2.7 The following Nottinghamshire landscape character types (see **Figure 2.4**) fall within the Study Area:

- Terrace Farmlands (N1)
- Wooded Clay Wolds (N4)
- Village Farmlands (N5)
- River Meadowlands (N7)

- River Valley Wetlands (N8)
- Dumble Farmlands (N9)
- Alluvial Farmlands (N10)
- Forestry Sandlands (N12)
- Coalfields Farmlands (N13)
- Limestone Fringe (N14)
- Limestone Farmlands (N15)

2.2.8 The following Derbyshire landscape character types (see **Figure 2.4**) fall within the Study Area:

- Riverside Meadow (D6)
- Coalfields Village Farmlands (D8)
- Coalfield Estatelands (D10)
- Plateau Estate Farmlands (D11)
- Lowland Village Farmlands (D14)

2.2.9 Planting and Management Guidelines Strategies for the Derbyshire landscape character types can be found in **Appendix A4**. Further guidance on strategies for individual landscape character types can be found in the Derbyshire Landscape Character Assessment (Derbyshire County Council, 2003)[15] and Appendix A4 of the Baseline Information Review and Strategic GI Audit Report (**Volume 3** of the 6Cs GI Strategy).

2.2.10 Derbyshire County Council has developed an approach for identifying strategic opportunities for GI based on analysis of historic landscape character and biodiversity assets. Subject to availability of appropriate historic landscape characterisation data, this approach could be applied within this Study Area to achieve a consistent analysis of historic environment GI resources across the 6Cs sub-region.

Biodiversity Needs

2.2.11 The relevant Biodiversity Action Plans (BAPs) provide targets and actions in response to identified needs for enhancing and extending habitat species of nature conservation value within the Study Area. See **Section 2.4** for further details.

2.3 Strategic Public Benefits of Green Infrastructure Provision

2.3.1 It is increasingly recognised that investment in GI such as accessible greenspace networks and other 'green assets' can provide a wide range of multiple public benefits for both rural and urban communities. The East Midlands Public Benefit Mapping Project[16] gathered evidence

[15] The Derbyshire Landscape Character Assessment (Derbyshire County Council, 2003) is available to download from: http://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/default.asp.
[16] Green Infrastructure for the East Midlands – A Public Benefit Mapping Project (East Midlands Regional Assembly, 2006).

from 27 different sectors, all relevant to the East Midlands Integrated Regional Strategy's objectives, in order to map where:

- There is the greatest need for the public benefits GI brings;
- There is the greatest opportunity for GI to support sustainable economic growth;
- Such needs and opportunities can be met in parallel; and
- Greatest multiple public benefit in terms of social, environmental, economic and multiples outcomes exist.

2.3.2 The East Midland's public benefit maps provide a strategic overview of where investment in GI is most likely to deliver greatest public benefit in the region. It should be noted that these maps should be considered in the context of the East Midlands Public Benefit Mapping Project as a whole, in particular in relation to the Project's constraints and limitations[17]. The public benefits mapping can help target actions in relation to:

- Provision of new or enhanced GI for areas of present and future deficit;
- Management of existing GI resources to increase their usefulness (multifunctionality);
- Conservation of key GI resources which contribute to the region's environmental infrastructure; and
- Improving connectivity of existing GI resources where they are presently fragmented.

2.3.3 The areas with greatest potential to provide combined multiple public benefits (emphasising top 30% environmental benefits) from investment in GI provision within the Study Area are shown on **Figure 2.7**[18]. Key areas include:

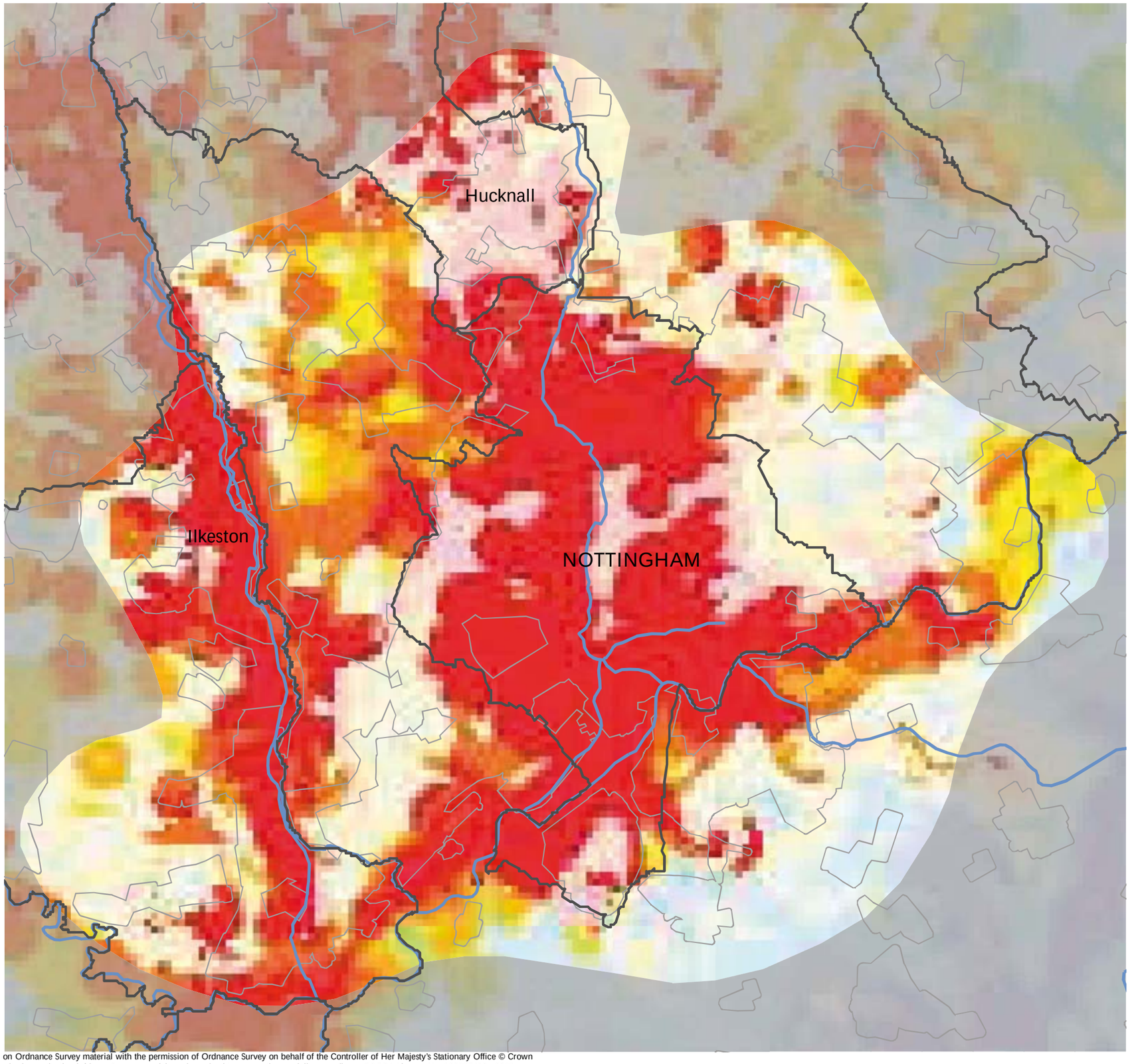
- An area north west of Hucknall;
- A substantial part of Nottingham;
- A substantial area west of Nottingham, including Ilkeston and Long Eaton;
- Discrete areas east of Nottingham;
- The Trent corridor.

2.4 Strategic Green Infrastructure Opportunities

Strategic Opportunities for Enhancing Connectivity of the Greenspace Network for Biodiversity

2.4.1 Opportunities for enhancing connectivity of the greenspace network for biodiversity have been identified based on the mapping exercises undertaken for the Stage 1 Strategic GI Audit and subsequent consultation exercises.

[17] Green infrastructure for the East Midlands – A Public Benefit Mapping Project can be downloaded from http://www.emra.gov.uk/publications/housing-planning-and-transport/environment/green-infrastructure-in-the-east-midlands-a-public-benefit-mapping-project.
[18] Map 31C 'Combined Multiple Public Benefit Emphasising Top 30% Environmental Benefits' was taken from the Green Infrastructure for the East Midlands – A Public Benefit Mapping Project (East Midlands Regional Assembly, 2006). Reproduced with the permission of the East Midland Regional Assembly.



KEY

Potential for Combined Multiple Public Benefits

(As per Map 31c of the Green Infrastructure for the East Midlands - A Public Benefit Mapping Project, East Midlands Regional Assembly, 2006)

High

Low

Urban Areas

District/Borough Boundaries

Principal Rivers and Canals

This Figure represents relevant available information provided by stakeholders at the time of the study, and may not be exhaustive. The accuracy of digital datasets received, which have been used in good faith without modification or enhancement, cannot be guaranteed. Commensurate with its intended 'city-scale' focus, the Strategic GI Network Plan illustrates indicative GI assets and opportunities at a strategic level, which do not necessarily indicate a constraint on development.

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Figure 2.7
Strategic Public Benefits of GI Provision

2.4.2 Opportunities for habitat creation, restoration, extension and enhancement have been identified with reference to targets and actions set out in the Nottinghamshire Local Biodiversity Action Plan[19] (LBAP[20]). The targets and actions set out in the LBAPs are a response to identified needs for maintaining, enhancing and extending the geographical range of habitats considered important for their biodiversity value. The opportunities described below are, therefore, intended to help meet the needs identified in the LBAPs by providing a focus for where habitat creation, restoration, extension or enhancement could be targeted and delivered through practical action.

2.4.3 It is recognised that the LBAPs cover areas that are geographically larger than the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network Study Area, and therefore the opportunities set out below are not intended to deliver all the targets and actions assigned to each habitat type within each LBAPs. Nevertheless, the majority of some habitat types, for example; woodlands, rivers and streams and open standing water, fall within the Study Area and therefore opportunities for these habitat types could deliver a correspondingly large proportion of the biodiversity action plan targets. Conversely, habitats such as heathland, calcareous and acid grasslands may not be so significantly represented in the Study Area, being predominantly restricted to areas within the north and north-west of the area, and therefore opportunities for extending and enhancing these habitats may be correspondingly smaller.

2.4.4 The time period for the current delivery plan for the Lowland Derbyshire and Nottingham LBAPs is due to complete in 2010 - 2012. It is anticipated that the opportunities identified could provide a focus for future Nottinghamshire LBAP targets and actions, to ensure an integrated approach to future biodiversity action planning for this area of south Nottinghamshire.

2.4.5 **Figure 2.8** provides an overview of the strategic opportunities for enhancing connectivity of greenspace for wildlife in relation to broad habitat types. The figure illustrates the distribution of existing habitats and identifies strategic opportunities based on site suitability for the creation of new, or restoration of existing, areas of habitat. Opportunities for biodiversity enhancement were selected on the basis of two criteria: i) where fragmented areas of existing semi-natural habitat could be linked by the extension or creation of new areas of habitat, thus forming larger, more stable habitat mosaics, or ii) where there were no areas of existing semi-natural habitat (e.g. around Tollerton or north east Nottingham) but the creation of new habitats would help to bridge gaps in the current resource and provide linkages between and around urban fringes and the wider countryside.

[19] Nottinghamshire Local Biodiversity Action Plan (1998).
[20] Additionally, the Lowland Derbyshire Biodiversity Action Plan has also been considered.

KEY

Existing Natural/Semi-Natural Greenspaces (Priority Habitats)

Strategic Opportunity Areas
(See Appendix A5 for details)

1 North Hucknall
2 River Leen east of Hucknall
3 Eastwood - Hucknall - Kimberley Gap
4 South Hucknall
5 North-East Nottingham to Lambley Gap
6 South Ilkeston
7 River Erewash
8a River Trent at West Bridgford
8b River Trent at Holme Pierrepoint
9 West Tollerton

Urban Areas

District/Borough Boundaries

Principal Rivers and Canals

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Figure 2.8
Strategic Opportunities for Enhancing Connectivity of the Greenspace Network for Biodiversity

2.4.6 Opportunities for enhancing connectivity of the greenspace network in the Study Area are set out by broad habitat type in **Appendix A5**. These include:

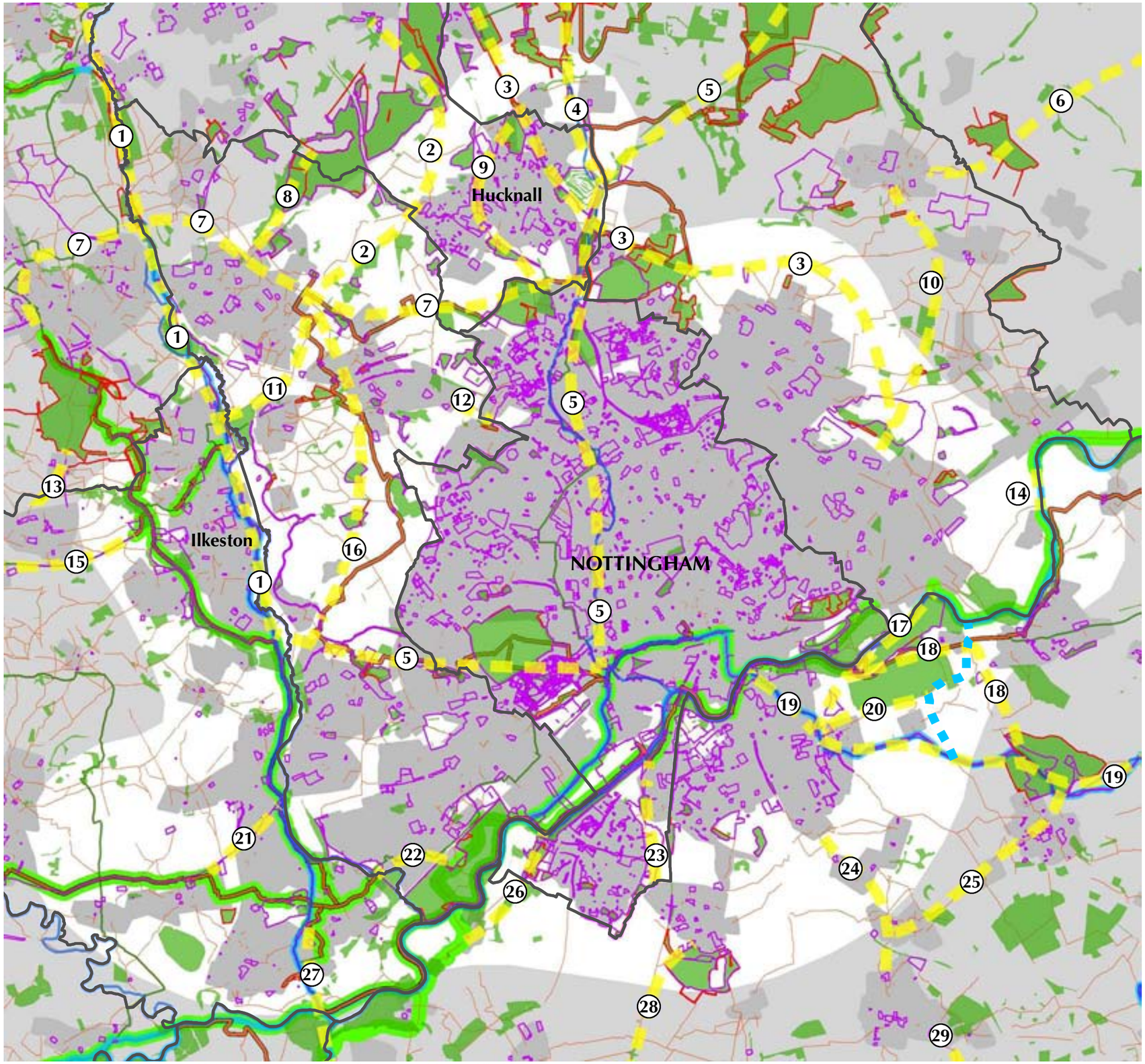
- Woodland;
- Wood pasture and parkland;
- Grasslands and heathland;
- Fen and reedbeds;
- Rivers and streams;
- Eutrophic and mesotrophic standing open waters;
- Open mosaic habitats on previously developed land; and
- Hedgerows, field margins, buffer strips and arable field margins.

Strategic Opportunities for Enhancing Accessibility of the Greenspace Network for People

2.4.7 Strategic opportunities for enhancing the connectivity of the greenspace network for people are illustrated in **Figure 2.9**. Opportunities for new/enhanced access linkages in the form of strategic multi-user greenways are identified. Greenways do not have any status in law. They can be defined as 'largely off-highway routes for shared use by people of all abilities on foot, bike or horseback, for commuting, play or leisure; connecting people to facilities and open spaces in and around towns, cities and the countryside'[21]. Greenways are especially valuable for wheelchair users, battery powered scooters, and buggies. In many cases they utilise existing bridleways or restricted byways with full legal rights for such usage. In other cases, greenways can be permissive routes, owned and managed by a local authority or voluntary organisation such as Sustrans, which the public have permission to use in appropriate ways.

2.4.8 Because of their nature as broad through routes, greenways can include street furniture, sculpture, interpretive panels, and act as havens for wildlife along the verges, with overhanging shrubs or trees. They also have significant potential to replace many local car journeys, both as green walking and cycling routes. The proposed greenway network provides key access routes from Nottingham, Hucknall and Ilkeston linking with surrounding villages and further beyond to recreational sites in the wider countryside. They can be designed as integral parts of sustainable urban extensions. Natural England has published a best practice Greenway Handbook[22] aimed at helping practitioners plan, design and create off-road routes to meet the needs of walkers, cyclists[23] and/or horse riders for informal recreation and commuting purposes. Proposals for new greenways should complement improvements to the existing rights of way network. A best practice example for greenways is included in the GI Guide for the East Midlands[24].

[21] As defined by Natural England: http://www.countryside.gov.uk/LAR/Recreation/Greenways/index.asp (accessed June 2009).
[22] Natural England's best practice Greenway Handbook is available to download from the following website: http://www.countryside.gov.uk/LAR/Recreation/Greenways/index.asp (accessed May 2009).
[23] For the purposes of this study, Greenways are not intended to be used for meeting demands for provision of formal competitive off-road cycling.
[24] GI Guide for the East Midlands (EMGIN, 2008): Case Study 12 – Trent Valley Greenway, Long Eaton, Derbyshire.



KEY

Existing Strategic Accessible Natural Greenspace

Strategic Open Space

Existing Strategic Countryside Access Routes

Linear, generally off-road and car free routes, that are normally available for public access on foot, horseback or by cycle providing opportunities to access the countryside for informal recreation activities.

- Promoted Recreational Routes
- Cycle Network
- Navigable Waterways (indicative)
- Greenways

Public Rights of Way Network

- Public Rights of Way Network

Opportunities for New/Enhanced Access Linkages

- Proposed Greenways
- Proposed Trent to Cotgrave Canal Link (preferred route)

- Urban Areas
- District/Borough Boundaries
- Principal Rivers and Canals

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Figure 2.9
Strategic Opportunities for Enhancing Accessibility of the Greenspace Network for People

2.4.9 Derbyshire County Council's East Derbyshire Greenway strategy outlines proposals for the development of a strategic network of greenways. This network links directly into settlements and to the public transport interchanges, continues through communities to join other routes, and provides a linear transport route from settlements into the wider countryside or to demand destinations. The underlying objectives of Derbyshire County Council's proposed greenway network corresponds with the aspirations for the 6Cs GI Strategy and the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network Plan. In agreement with Derbyshire County Council, existing greenways have been included in **Figure 2.2** and **2.9**.

2.4.10 The concept of providing multi-user routes or greenways also forms part of the visions for both the Trent to Cotgrave Link Masterplan (Draft, 2009) and the Trent River Park (2008), and is promoted by the Nottinghamshire Rights of Way Improvement Plan. For the purposes of this Study, an aspirational network of potential greenways is shown on **Figure 2.9**, taking into account greenway aspirations identified during stakeholder consultation and in relevant reports/masterplans.

2.4.11 Opportunities for new multi-user greenways include:

1. Long Eaton to Ilkeston, and Ironville
2. Eastwood to Hucknall and Mansfield
3. North-east Nottingham to Bestwood Village, Hucknall and Newstead
4. River Leen north of Bestwood Village, to Hucknall and towards Ravenshead
5. River Erewash (south of Long Eaton) to River Leen, Nottingham, south-east Hucknall and Sansom Wood
6. Calverton towards Southwell
7. South-east Hucknall to north Kimberley, Eastwood, Heanor, and Shipley Country Park
8. North-east Eastwood to High Park Woods
9. North-west Nottingham to Hucknall
10. North-east Nottingham to Woodborough and Calverton
11. North-east Ilkeston to east Eastwood
12. West Nottingham to east Kimberley
13. West Hallam to Mapperley and Shipley Country Park
14. Stoke Bardolph to Burton Joyce
15. West Ilkeston to West Hallam and towards Little Eaton
16. Stapleford to Kimberley and Eastwood
17. Colwick Country Park Gap
18. Cotgrave Country Park to Holme Pierrepont, and Adbolton
19. River Trent to the Grantham Canal, Cotgrave Country Park and towards Cropwell Bishop
20. Proposed Trent to Cotgrave Canal link to West Bridgford
21. Breaston to Long Eaton and Erewash Canal
22. Attenborough to Long Eaton
23. Ruddington to West Bridgford and River Trent
24. Keyworth to Tollerton and Edwalton
25. Normanton-on-the-Wolds to Cotgrave and Cotgrave Country Park
26. Barton-in-Fabis to Clifton and River Trent
27. Long Eaton to River Soar and towards Keyworth
28. Ruddington towards Loughborough
29. Keyworth towards Melton Mowbray

3.0 STRATEGIC GREEN INFRASTRUCTURE NETWORK

3.1 General

3.1.1 This section brings together and integrates the analysis of GI assets, opportunities and needs within the Study Area set out in **Section 2.0** to identify a proposed **'aspirational' multifunctional strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston**.

3.1.2 The purpose of the strategic GI Network is to provide the conceptual perspective or 'bigger picture' for the delivery of large-scale GI within the Study Area that connects communities and wildlife at the sub-regional and city-scales. It is intended to help focus attention or priority on land that needs to be safeguarded, managed or secured in positive ways to create a multifunctional network of greenspaces and assets for which investment can deliver the greatest range of benefits. It is not a rigid approach; the Strategic GI Network is intended to be flexible and responsive to opportunities - such as changing land ownership, community aspirations, access to funding, development opportunities, policy considerations etc - that may change priorities for investment over time.

3.1.3 The intention is to ensure that the integrity of the overall Strategic GI Network is not compromised by inappropriate development and land management. This means that there needs to be flexibility, and in cases where there is an unavoidable need to trade off existing GI assets to meet social and economic needs, this should be offset by mitigation and compensation measures to enhance the functionality of other GI assets elsewhere within the Strategic GI Network. However, some semi-natural habitats, such as ancient woodlands, are irreplaceable and need protection. Where development is planned within or in close proximity to a GI corridor, it should become an integral feature to the design and 'identity' of the development site to ensure that the connectivity of the network for both public benefit and biodiversity is retained and enhanced.

3.1.4 The proposed Strategic GI Network provides a spatial context for the delivery of the overall Vision for GI in the 6Cs sub-region related to the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston.

Setting Priorities for Green Infrastructure Investment

3.1.5 The GI concept applies across the whole of the Study Area, and it can occur at any scale. However, the proposed Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston Strategic GI Network identifies locations where targeting investment in

GI is most likely to deliver multiple benefits across a range of key environmental, social and economic policy areas.

3.1.6 The main priorities are considered to be:

- To focus investment on GI provision and management to address current deficits of provision/needs;
- To meet the GI needs of communities in and around the 6Cs sub-region who are likely to experience major growth-related pressures in the period to 2026;
- To protect, enhance and manage existing valuable GI assets that are under current or future pressure, in particular accessible natural greenspaces, biodiversity sites and river valleys/wetlands.

3.1.7 In response to the above, the proposed overall Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston shown on **Figure 3.1c** identifies broadly defined corridors and zones, within which it is recommended that investment in new and enhanced GI provision be prioritised and delivered over the next 15-20 years. These corridors and zones reflect the identified opportunities and needs for enhancing the connectivity and accessibility of the greenspace network for biodiversity and public benefit at the sub-regional and City-Scales. They provide the context for development of GI initiatives and projects that would provide, in many cases, multiple functions and benefits to meet a range of social, economic and environmental needs. GI related proposals within and adjacent to the corridors and zones would focus on the enhancement and restoration of existing GI assets, as well as the creation of new resources.

3.1.8 Existing strategic GI assets which form the backbone of the proposed overall Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston are shown combined on **Figure 3.1a**. Following stakeholder consultation, examples of existing GI Destinations[25] have been included on **Figure 3.1a**.

3.2 Sub-Regional Green Infrastructure

Sub-Regional Green Infrastructure Corridors

3.2.1 **The Sub-Regional Corridors** identified on **Figure 3.1b** generally reflect significant wildlife habitat corridors/areas that link with Strategic GI in surrounding areas at the sub-regional level, and have an important role to play in maintaining the overall integrity of the 6Cs GI Network in the long term. They comprise a mosaic of land uses, natural, built heritage and archaeological

[25] The GI Destinations included on **Figure 3.1a** were chosen based on them being well known GI sites/visitor destinations.

KEY

Combined Existing Strategic Green Infrastructure Assets
(See Figure 2.5)

Examples of Green Infrastructure Destinations

1 High Park Wood
2 Mill Lakes Country Park
3 Bestwood Country Park
4 Bulwell Hall Park
5 Bulwell Forest
6 Shipley Country Park
7 Wollaton Park
8 Colwick Country Park
9 Holme Pierrpoint National Water Sports Centre and Country Park
10 Attenborough Nature Reserve
11 Rushcliffe Country Park

Existing Urban Areas

Strategic GI Network Study Areas for the Three Cities within the 6Cs Sub-Region

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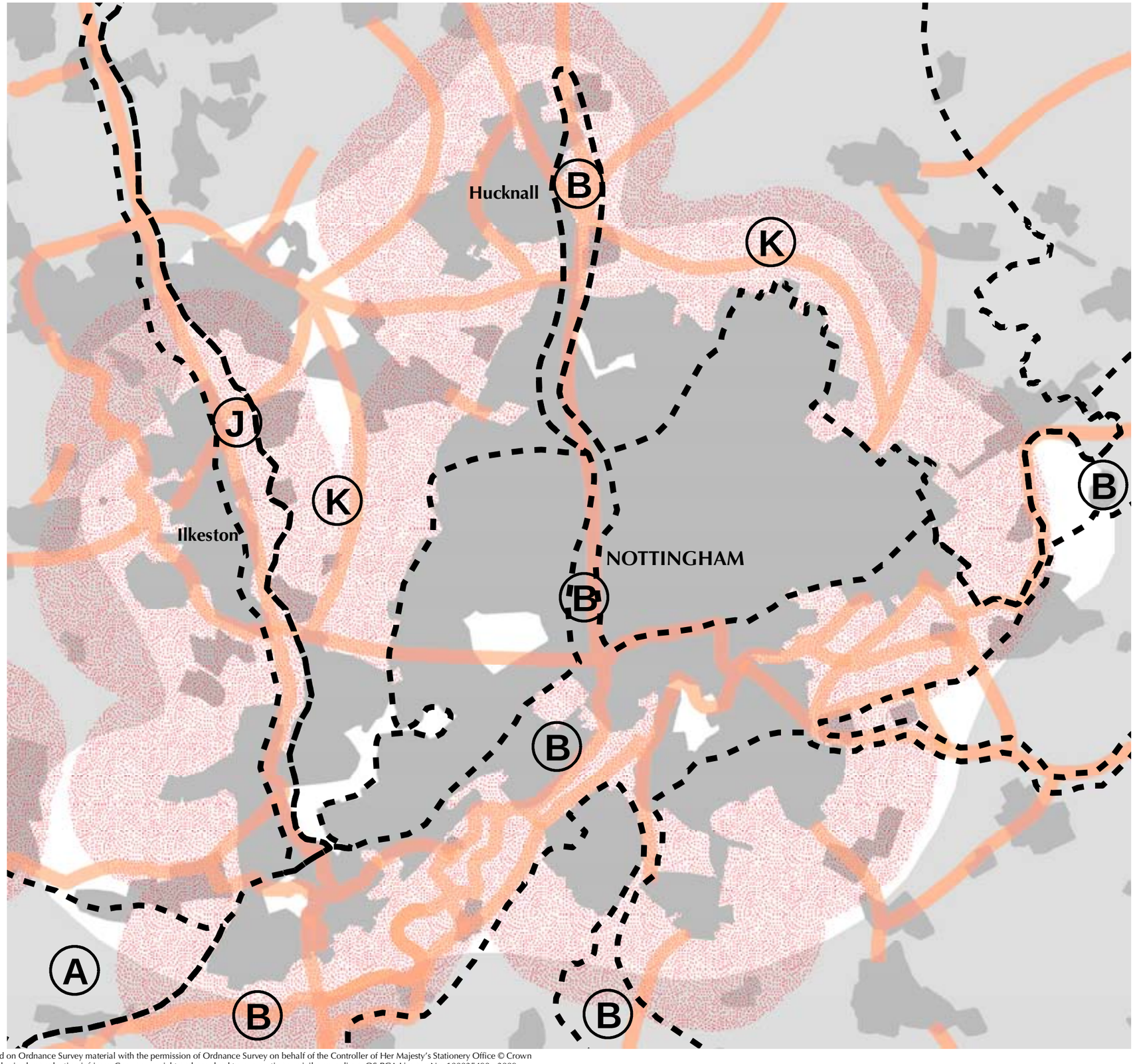
Figure 3.1a
Strategic GI Network - Existing GI Assets



KEY

Sub-Regional Green Infrastructure Corridors

A - Derwent Strategic River Corridor
B - Trent Strategic River Corridor and River Leen, Grantham Canal, Trent & Mersey Canal and Beeston Canal)
J - Erewash Strategic River Corridor and Erewash Canal
K - Greenwood Community Forest

Urban Fringe Green Infrastructure Enhancement Zones

City-Scale Green Infrastructure Corridors
(See Figure 2.9)

Existing Urban Areas

Strategic GI Network Study Areas for the Three Cities within the 6Cs Sub-Region

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Figure 3.1b
Strategic GI Network - Proposed GI Corridors & Zones

KEY

- **Sub-Regional Green Infrastructure Corridors** (See Figure 3.1b)
- **Urban Fringe Green Infrastructure Enhancement Zones**
- **City-Scale Green Infrastructure Corridors** (See Figure 2.9)
- **Combined Existing Strategic Green Infrastructure Assets** (See Figure 2.5)
- **Existing Urban Areas**

Strategic GI Network Study Areas for the Three Cities within the 6Cs Sub-Region

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Figure 3.1c
The Overall Strategic GI Network

resources and settlements, and are intended to become fully multifunctional zones with the ability or potential to deliver the following key GI 'functions':

- Access and Movement – linking settlements to their hinterland, destinations and the wider strategic access network. The corridors provide sustainable links through attractive green routes with clear way marking and other relevant facilities. They also provide opportunities to enhance the management, presentation, accessibility and interpretation of greenspace;
- Biodiversity – providing a focus for the enhancement and linkage of the biodiversity resource;
- Mitigation of flood risk, enhancement of water management and other natural process roles;
- Enhancement and promotion of landscape and urban character to celebrate the distinctiveness of these different corridors;
- Enhancement and promotion of heritage and cultural assets; and
- Enhancement and promotion of recreation and leisure, providing connections between communities, accessible greenspace and other destinations.

3.2.2 The Sub-Regional GI Corridors form the backbone of the 6Cs GI Network and provide the core of the proposed Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston. They are:

B – Trent Strategic River Corridor and River Leen, Grantham Canal, Trent & Mersey Canal, and Beeston Canal

Key Landscape Characteristics[26]

Terrace Farmlands (described as part of the Trent Washland group)
"A flat low-lying agricultural A flat low-lying agricultural landscape characterised by a traditional pattern of hedged fields and nucleated village settlements".

- Broad flat river terraces
- Regular pattern of medium-to large-sized fields, breaking down and becoming open in many areas
- Hedgerow trees main component of tree cover, ash the principle species
- Willow pollards
- Predominantly arable with permanent pasture around settlements and roads
- Nucleated villages with traditional red brick and pantile roofed buildings
- Large power stations
- Sand and gravel quarries

River Meadowlands A and B (described as part of the Trent Washland group)
"A flat low-lying riverine landscape characterised by alluvial meadows, grazing animals and remnant wetland vegetation".

- Meandering river channels, often defined by flood banks
- Sparsely populated with few buildings
- Permanent pasture and flood meadow
- Steep wooded bluffs
- Willow holts
- Long sinuous hedges
- Pollarded willows
- Regular pattern of medium to large size arable fields, breaking down and becoming open in many areas
- Hedgerow trees main component of tree cover

[26] Information provided by individual Landscape Character Type as described in the Nottinghamshire Landscape Guidelines (Nottinghamshire County Council, 1997). This information is now superseded by information contained in the Greater Nottingham Landscape Character Assessment (2009), which was not available at the time of the Study.

River Valley Wetlands (described as part of the Trent Washland group)
"A diverse range of highly modified landscapes created by sand and gravel extraction".

- Actively worked areas with disturbed ground and dry voids
- Flooded workings with large areas of open water
- Wetland habitats at different stages of maturity
- Recreational developments for water sports, country parks etc
- Areas of restored agricultural land, often poorly landscaped

Limestone Farmlands (described as part of the Magnesian Limestone group)
"A gently rolling, and in places urbanised agricultural landscape, characterised by large hedged fields, estate woodlands and small limestone villages".

- Gently rolling limestone escarpment
- Fertile soils supporting productive arable farmland
- Regular pattern of large hedged fields
- Large estate woodlands and belts of trees
- Views often framed by wooded skylines
- Nucleated pattern of small stone villages
- Limestone buildings with orange pantile roofs
- Large self-contained mining settlements
- Mine sites with associated pit heaps and railway lines

River Meadowlands (described as part of the Magnesian Limestone group)
"Narrow, in places incised, river corridors, defined by grazing meadows and riverside trees".

- Narrow alluvial flood plains
- Meandering river channels
- Marginal aquatic and bankside vegetation
- Grazing meadows with patches of wet grassland
- Riparian trees and scrub
- Sinuous boundary hedgerows
- Relic mills constructed from local limestone

Village Farmlands (described as part of the South Nottinghamshire Farmland group)
"A gently rolling agricultural landscape with a simple pattern of large arable fields and village settlements".

- Gently rolling topography
- Simple pattern of large arable fields
- Neatly trimmed hawthorn hedges
- Nucleated villages with traditional red brick and pantile roofed buildings
- Suburbanised commuter villages and small towns
- Small-scale pastoral landscapes along village edges

Alluvial Farmlands (described as part of the South Nottinghamshire Farmland group)
"Flat, low-lying, uninhabited and often inaccessible landscapes with a strong sense of space, characterised by open areas of farmland and a remnant pattern of large hedged fields."

- Flat low-lying topography
- Seasonally wet alluvial and peaty soils
- Open, spacious views, sometimes enclosed by rising ground
- Remnant pattern of large hedged fields defined by thorn hedges or ditches
- Small broad leaved plantations
- Absence of farmsteads or other buildings

Key Biodiversity Features, Designated Heritage Features and Settlements

- Biodiversity – floodplain grazing marsh, open mosaic habitats (on previously developed land), lowland mixed deciduous woodland, lowland meadows, rivers and streams, reedbed, eutrophic standing water and lowland fen.
- Cultural heritage features – a number of scheduled monuments, conservation areas in a number of settlements including Thrumpton, north-west Clifton, and southern Nottingham; Holme Pierrepoint Hall Historic Park and Garden, Nottingham's historic core adjacent;

- Settlements – Thrumpton, Barton-in-Fabis, north-west Clifton, southern parts of Nottingham, a corridor running through Nottingham south to north, Bestwood Village, south-east Hucknall, Holme Pierrepont, Shelford, and south-west Radcliffe-on-Trent.
- Geodiversity – Nottingham City and surrounds have a number of key RIGS/Local Geological Sites in the Lenton Sandstone, Nottingham Castle Sandstone, both as exposures and the numerous caves, and the Mercia Mudstone Group.

Key Opportunities for Delivering GI Benefits

- Access and movement – potential to establish traffic free multi-user greenways e.g. linking the communities of Clifton, Nottingham and Radcliffe-on-Trent to one another and to the River Trent and GI assets such Colwick Country Park, or linking communities in Nottingham to Hucknall along the River Leen;
- Biodiversity – opportunities for river corridor habitat management, creation, restoration and extension e.g. for floodplain grazing marsh, open mosaic habitats (on previously developed land), lowland mixed deciduous woodland, lowland meadows, rivers and streams, reedbed, eutrophic standing water and lowland fen;
- Natural processes – opportunities to manage flood risk through appropriate land management;
- Cultural heritage – opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets, e.g. Holme Pierrepont Hall Historic Park and Garden;
- Landscape – opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. conserve and restore the continuity and distinctive pastoral character of the river meadowlands landscape.

J – Erewash Strategic River Corridor and Erewash Canal

Key Landscape Characteristics[27]

Coalfield Farmlands (described as part of the South Nottinghamshire Coalfield group) [28]
"A densely settled, industrial landscape characterised by mining settlements and pit heaps, intermixed with pastoral farmland".

- Varied undulating topography
- Closely spaced mining settlements
- Pockets of pastoral farmland
- Small to medium-sized hedged fields
- Network of narrow winding lanes
- Mine sites, pit heaps and disused railway lines
- Rows of red brick terrace housing
- Scattered, small broad-leaved woodlands

River Meadowlands (described as part of the South Nottinghamshire Coalfiedls group) [29]
"A narrow, pastoral river corridor landscape, in places contained by settlement edges, pit heaps and railway embankments."

- Narrow alluvial floodplain
- Meandering river channel

[27] Information provided by individual Landscape Character Type
[28] Information from the Nottinghamshire Landscape Guidelines (Nottinghamshire County Council, 1997). This information is now superseded by information contained in the Greater Nottingham Landscape Character Assessment (2009), which was not available at the time of the Study.
[29] Information from the Nottinghamshire Landscape Guidelines (Nottinghamshire County Council, 1997). This information is now superseded by information contained in the Greater Nottingham Landscape Character Assessment (2009), which was not available at the time of the Study.

- Views often contained by built development and railway embankments
- Permanent pastures grazed by cattle and horses
- Patches of wet grassland and marsh
- Riverside alders and scrub
- Bushy hawthorn and willow hedgerows

Coalfield Village Farmlands[30]

"A broad industrial landscape characterised by many pit villages, dairy farming and small woodlands."

- Gently undulating landform
- Dairy farming with pasture and localised arable cropping
- Relict ancient semi-natural woodland, copses and linear tree-belts
- Dense streamline trees and scattered hedgerow trees
- Towns and villages on ridge lines surrounded by remnant medieval strip fields
- Network of small irregular lanes between larger urban roads
- Small villages with sandstone buildings expanded by red brick former mining terraces and ribbon development
- Primary habitats: ancient and species rich hedgerows, veteran trees, neutral grassland, standing open waters and canals, and rivers and streams
- Secondary habitats: ancient and semi natural broadleaved woodland, lowland parkland, cereal field margins, rush pasture, reedbeds, and lowland dry acid grassland.

Coalfield Estatelands[31]
"A heavily industrialised and urbanised landscape characterised by many mining settlements, parkland, woodland and dairy farming."

- Gently undulating landform
- Dairy farming dominated by pasture
- Plantation woodlands, tree belts and coverts
- Fields of medium size defined by hedgerows
- Extensive areas of existing and relict parkland
- Occasional country houses with associated parkland trees
- Villages and towns with red brick former mining terraces and ribbon development
- Primary habitats: ancient and semi natural broadleaved woodland, lowland parkland, wet woodland, veteran trees, ancient and species rich hedgerows, neutral grassland, standing open waters and canals, and rivers and streams
- Secondary habitats: cereal field margins, rush pasture, and reedbeds.

Riverside Meadows[32]
"A flat, riverside landscape characterised by dairy farming, wetland, watercourse trees and a legacy of industrial heritage."

- Narrow rivers meander along flood plains of variable width
- Remnant riverside vegetation, wetland and unimproved grassland
- Dairy farming dominated by pasture
- Dense tree cover along river channels
- Scattered tree cover along boundaries
- Strong association with transport routes due to the presence of canals, railway lines and roads
- Primary habitats: wet woodland, floodplain grazing marsh, rush pasture, reedbeds, lowland fen meadows, neutral grassland, standing open waters and canals, and rivers and streams

Key Biodiversity Features, Designated Heritage Features and Settlements

- Natural features – floodplain grazing marsh, open mosaic habitats (on previously developed land), lowland mixed deciduous woodland (including wet woodland), rivers and streams, and eutrophic standing water;
- Cultural heritage features – conservation area in Cossall adjacent;

[30] Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).
[31] Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).
[32] Information from the Landscape Character of Derbyshire (Derbyshire County Council, 2003).

- Settlements – a corridor through Long Eaton, east Ilkeston, east Heanor, east Ironville, and west Jacksdale.

Key Opportunities for Delivering GI Benefits

- Access and movement – potential to establish traffic free multi-user greenways e.g. linking the communities of Long Eaton, Ilkeston and Ironville to one another and to the River Erewash and Erewash Canal;
- Biodiversity – opportunities for river corridor habitat management, creation, restoration and extension e.g. floodplain grazing marsh, open mosaic habitats (on previously developed land), lowland mixed deciduous woodland (including wet woodland), rivers and streams, eutrophic standing water, lowland meadows, reedbed, and lowland fen;
- Natural processes – opportunities to manage flood risk through appropriate land management e.g. flood management works on the River Trent around southern Long Eaton;
- Cultural heritage – opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets, e.g. nearby Cossall historic village;
- Landscape – opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. restore and enhance the visual and ecological continuity of the river corridor.

K – Greenwood Community Forest

Key Landscape Characteristics[33]

Forest Sandlands (described as part of the Sherwood group)
"An undulating, well-wooded and in places industrialised landscape characterised by large arable fields, pine plantations and remnants of semi-natural woodland and heath".

- Dissected undulating topography
- Frequent views of wooded skylines
- Strong heathy character reflected in the widespread occurrence of bracken, gorse and broom species
- Geometric pattern of large-scale arable fields
- Planned layout of straight roads
- Neatly trimmed hawthorn hedgerows
- Large pine plantations
- Mining settlement and associated spoil heaps
- Scrubby semi-natural woodland and heaths with ancient-stag headed oaks

Dumble Farmlands (described as part of the Mid Nottinghamshire Farmland group)
"A distinctively rolling landscape characterised by mixed agriculture, wooded dumble valleys and a well-defined pattern of hedged fields."

- Steeply rolling topography
- Well-defined pattern of hedged fields
- Meandering tree-lined dumble valleys
- Mixed agriculture
- Scattered small woodlands, sometimes ancient in origin
- Expanded commuter settlements and small traditional villages
- Busy commuter roads and quiet country lanes
- Orchards

Limestone Farmlands (described as part of the Magnesian Limestone group)
"A gently rolling, and in places urbanised agricultural landscape, characterised by large hedged fields, estate woodlands and small limestone villages."

[33] Information provided by individual Landscape Character Type as per the Nottinghamshire Landscape Guidelines (Nottinghamshire County Council, 1997). This information is now superseded by information contained in the Greater Nottingham Landscape Character Assessment (2009), which was not available at the time of the Study.

- Gently rolling limestone escarpment
- Fertile soils supporting productive arable farmland
- Regular pattern of large hedged fields
- Large estate woodlands and belts of trees
- Views often framed by wooded skylines
- Nucleated pattern of small stone villages
- Limestone buildings with orange pantile roofs
- Large self-contained mining settlements
- Mine sites with associated pit heaps and railway lines

Coalfield Farmlands (described as part of the Nottinghamshire Coalfield group)
"A densely settled, industrial landscape characterised by mining settlements and pit heaps, intermixed with pastoral farmland."

- Varied undulating topography
- Closely spaced mining settlements
- Pockets of pastoral farmland
- Small to medium-sized hedged fields
- Network of narrow winding lanes
- Mine sites, pit heaps and disused railway lines
- Rows of red brick terrace housing
- Scattered, small broad-leaved woodlands

Terrace Farmlands (described as part of the Trent Washland group)
"A flat low-lying agricultural landscape characterised by a traditional pattern of hedged fields and nucleated village settlements "

- Broad flat river terraces
- Regular pattern of medium-to large-sized fields, breaking down and becoming open in many areas
- Hedgerow trees main component of tree cover, ash the principle species
- Willow pollards
- Predominantly arable with permanent pasture around settlements and roads
- Nucleated villages with traditional red brick and pantile roofed buildings
- Large power stations
- Sand and gravel quarries

River Meadowlands (described as part of the Trent Washland group)
"A flat low-lying riverine landscape characterised by alluvial meadows, grazing animals and remnant wetland vegetation."

- Meandering river channels, often defined by flood banks
- Sparsely populated with few buildings
- Permanent pasture and flood meadow
- Steep wooded bluffs
- Willow holts
- Long sinuous hedges
- Pollarded willows
- Regular pattern of medium to large size arable fields, breaking down and becoming open in many areas
- Hedgerow trees main component of tree cover

Key Biodiversity Features, Designated Heritage Features and Settlements

- Biodiversity – open mosaic habitats (on previously developed land), lowland mixed deciduous woodland, lowland meadows, eutrophic standing water, rivers and streams, floodplain grazing marsh, and lowland dry acid grassland;
- Cultural heritage features – a number of scheduled monuments, conservation areas in a number of settlements including Attenborough, Cossall, Kimberley, Eastwood, Brinsley, Bagthorpe, Stapleford, Hucknall, Papplewick, Bestwood Village, Calverton, Woodborough, Lambley; Papplewick Hall, Bestwood Pumping station, Annesley Hall and Newstead Abbey Historic Parks and Gardens;
- Settlements – Attenborough, Hucknall Village, Bulwell, Brinsley, Jacksdale, Bagthorpe, Selston, Sutton-in-Ashfield, Eastwood, Awsworth, Cossall, Kimberley, Trowell, Stapleford,

Newstead, Papplewick, Bestwood Village, north Nottingham, Calverton, Woodborough, Lambley, Burton Joyce, and Stoke Bardolph.

Key Opportunities for Delivering GI Benefits

- Access and movement – potential to establish traffic free multi-user greenways e.g. linking the communities of Nottingham and Calverton to one another and to strategic GI assets such as Epperstone Park, or linking communities to Sherwood Forest;
- Biodiversity – opportunities for landscape-scale habitat management,, creation, restoration and extension e.g. for open mosaic habitats (on previously developed land), lowland mixed deciduous woodland, lowland meadows, eutrophic standing water, lowland dry acid grassland, and lowland heath;
- Natural processes – opportunities for water management through appropriate land management e.g. nitrate management work on Greenwood Community Forest farms;
- Cultural heritage – opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets, e.g. Annesley Hall and Newstead Abbey Historic Parks and Gardens;
- Landscape – opportunities to enhance the character and distinctiveness of the landscape through positive landscape intervention measures and active land management action informed by Landscape Character Assessments e.g. conserve and strengthen the distinctive heathy and well-wooded character of the landscape.

Urban Fringe GI Enhancement Zones

3.2.3 Taking into account the 6Cs sub-region's existing demographic patterns, and the spatial pattern of changes in population arising from the future growth proposed under the Government's Sustainable Communities Plan and the East Midlands Regional Plan, the countryside in and around Nottingham, Hucknall and Ilkeston has greatest demand, and therefore need, for enhanced provision of existing and new GI. These broad zones include areas of land that represent a significant resource for urban communities in the sub-region, comprising dynamic and complex mosaics of land uses and habitats. They are the immediate landscape setting for Principal Urban areas and Sub-Regional Centres, have a critical role to play in linking town and country, and will experience major planned growth. By their definition, Sustainable Urban Extensions are likely to be located within these areas. Existing GI resources in such areas are already experiencing urban edge issues, and are therefore likely to come under increasing pressure in the future.

3.2.4 In recognition of their strategic importance for delivery of GI from a sub regional perspective, the countryside in and around Nottingham, Hucknall and Ilkeston has been defined as **Urban Fringe Green Infrastructure Enhancement Zones** (see **Figure 3.1b**): The indicative extent of the Zones defined on **Figure 3.1b** is generic, and is simply intended to schematically illustrate the transition between urban and rural land uses around the Principal Urban Areas and Sub-Regional Centres.

3.2.5 Through investment in GI provision, the Urban Fringe Green Infrastructure Enhancement Zones have the ability or potential to deliver a range of economic, environmental and social benefits related to the following GI themes or functions[34]:

- **A bridge to the country** - linking housing, schools, health centres and hospitals, bus and train stations in urban centres to the existing/enhanced access network to connect with accessible greenspaces in the wider countryside;
- **A gateway to cities and towns** - providing an improved image, experience and sense of place through investment in an improved environmental quality for public rights of way and spaces;
- **A health centre** - contributing to health improvements and well-being through schools, hospitals and health centres promoting opportunities to access greenspaces for exercise as part of health programmes;
- **An outdoor classroom** - opportunities to provide environmental education through parks, nature reserves and farm-based activities;
- **A recycling and renewable energy centre** - helping address climate change through sustainable management of waste, water and pollution, production of energy crops and creation of woodland to act as carbon sinks;
- **A productive landscape** – recognising the role of urban fringe farmland in food production, processing of local produce and retail (farm shops) for urban areas;
- **A cultural legacy** - increasing awareness of historic features in the urban fringe landscape and how they contribute to sense of place for local communities;
- **A place for sustainable living** - ensuring that future development links with the urban area and addresses issues such as fly-tipping, indistinct boundaries, poor accessibility, fragmented landscapes, etc;
- **An engine for regeneration** – providing quality of life benefits through opportunities for community involvement through volunteering or gaining new skills in environmental improvement work, particularly within areas of multiple deprivation; and
- **A nature reserve** - strengthening biodiversity, geological and geomorphological conservation management for sites in and around urban areas.

3.2.6 Within the Urban Fringe Green Infrastructure Enhancement Zones, land is widely used by urban communities as a resource for informal, and often unauthorised, recreation leading to conflicts with other land uses. Additionally, the poor permeability of some built up areas can be a barrier to accessing the surrounding countryside. These Zones would benefit from the adoption of a strategic and co-ordinated approach to managing access for urban communities into the surrounding countryside. It is envisaged that the Urban Fringe Green Infrastructure Enhancement Zones would encompass a network of interlinked and multifunctional greenspaces that connect with city/town centres, public transport nodes, and major employment and residential areas, including new sustainable urban extensions. A careful balance will need to be struck between creation of new GI and the need to safeguard existing natural and cultural features that contribute to the character and value of the wider agricultural landscape.

3.2.7 Urban Fringe GI Enhancement Zones have an important role to play in relation to improving linkages and connectivity between Principal Urban Areas/Sub-Regional Centres and the wider

[34] Key functions as described in Countryside Agency's vision for the Countryside in and around Towns (2005)

GI network of Sub-Regional and City-Scale GI Corridors. In particular, Sustainable Urban Extensions will need to protect the integrity of the wider GI network, and support existing urban areas, by maintaining and enhancing GI within the Urban Fringe GI Enhancement Zones. Further work is required at the local level to identify specific opportunities for integrating GI provision into local development and delivery plans within individual Zones.

3.3 City-Scale Green Infrastructure

3.3.1 A network of **City-Scale GI Corridors** is proposed (see **Figure 3.1b**) linking up settlements, strategic GI assets, and Sub-Regional Corridors. In many cases, the City-Scale GI Corridors extend into the urban areas, providing key elements of the Urban Fringe GI Enhancement Zones. While these corridors are indicative, they demonstrate the priority that should be given to achieving a connected network of green access links within and between urban areas. Typically, the City-Scale GI Corridors follow existing and proposed greenways and are key to enabling doorstep to countryside connections within the overall Strategic GI Network. They comprise a mosaic of land uses, natural and built heritage resources and settlements and have the primary aim of providing access and movement linkages for people. With investment, these GI Corridors are intended to deliver one or more of the 'functions' of a Sub-Regional Corridor as described above in paragraph 3.2.1.

3.3.2 Within the context of the Sub-Regional and City-Scale GI Corridors and Urban Fringe Green Infrastructure Enhancement Zones, are opportunity areas for new and enhanced localised GI. Examples of opportunity areas are provided in **Appendix A6** (it should be noted that the list of examples provided is not exhaustive). The opportunity areas are intended to be multifunctional and help towards delivering a range of public benefits. They focus on opportunities for the enhancement and restoration of existing GI assets, as well as the creation of new resources (the latter could include one or a combination of appropriate greenspaces, e.g. parks, allotments, semi-natural greenspaces, and/or children's play areas).

3.4 Delivering the Green Infrastructure Network

3.4.1 This report promotes a strategic network for guiding the delivery of GI provision for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston within the context of the proposed vision and delivery framework set out in the Strategic Framework.

APPENDIX A1
RECORD OF STAKEHOLDER CONSULTATION

RECORD OF STAKEHOLDER CONSULTATION

Targeted stakeholder meeting held on the 19th August 2009, 10am - 1.00pm at Glenfield Parish Council to review Volume 6: Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston.

Attendees

Name	Job Title	Organisation
David Lepper	Government Relations Specialist	Natural England
Matt Gregory	HMA Planning Manager	Notts HMA
Lisa Bell	Principal Planning Officer	Ashfield District Council
Andy Hinchley	Projects Officer	Ashfield District Council
Malcolm Marshall	Countryside Funding Officer	Greenways – Derbyshire County Council
James Dymond	Parks and Open Spaces Development Manager	Nottingham City Council
Heather Stokes	Services Manager Conservation	Nottinghamshire County Council
Andy Wickham	Conservation	Nottinghamshire County Council
Nic Wort	Project Development Officer	Greenwood Community Forest
Ian McDonald	Planning Policy Officer	Gedling Borough Council
Liz Newman	Planning & Conservation Advisor	Natural England
Pete Jarman	Rights of Way Manager	Nottinghamshire County Council
Niles Holroyde	Planning Policy Officer	Nottingham City Council

Apologies

Name	Job Title	Organisation
Tim Crawford	Parks and Environment Manager	Broxtowe Borough Council
Steve Jones	Team Manager Countryside Access	Nottinghamshire County Council

Key Messages

- More 'local colour' needed to be added to the corridor descriptions so that the document sounded less generic and more 6Cs specific – the suggestion was that this could be based on landscape character information.
- There needed to be a clear separation between 'evidence' and 'strategy' in the way the document was structured so that the link between the evidence base and the recommendations being made could be logically followed.
- A number of people felt that the inclusion of the Biodiversity Opportunity Maps in the Stage 2 reports was confusing and they could not see how the links between Stage 1 (that did not include these Bio Opportunity Maps) and Stage 2 had been made. The suggestion was to remove these Biodiversity Opportunity Maps from Stage 2.
- There should be flexibility between the level of information and detail contained within each Strategic GI Network report so that local information and work could inform the Stage 2 Reports and be incorporated where appropriate. This will result in subtle differences between the 3 sections opposed to the guiding principle of Stage 1 being that data and information needed to be of a consistent nature across the 6Cs sub-region as a whole. But we still need to be clear that this is a strategic document.
- Opportunity Areas to be removed from Figure 3.1 but descriptions to remain within the Report text.
- Within each Strategic GI Network report, the spatial relationship between the study area and the whole of the 6Cs sub-region and between each Study Area needs to be shown.

- Urban fringe areas were identified as key but people found it hard to find the corresponding section within the report that made reference to them.
- The term 'local' corridors and opportunity areas needed to be amended.
- There needs to be a clear message that the proposed network and opportunity areas are not intended to be restrictive in any way and allows flexibility in terms of delivery. This 'message' will be made clearer if the 'local' corridors identified on the figure 2.9 are broadened and 'smoothed out'.
- The extent of the floodplain (defined by the EA indicative floodplain dataset) shown on Figure 2.5 needs to be amended. It was suggested that this dataset is switched on first and the urban area dataset switched on top.
- Figure 3.1 is to be complemented by 2 additional maps; one to show the existing GI assets, one to show just the conceptual GI network and Fig 3.1 will remain to show the two combined.

APPENDIX A2
SOURCES OF GI ASSET MAPPING DATA FOR VOLUME 6

SOURCES OF GI ASSET MAPPING DATA USED FOR VOLUME 6
Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston

Datasets used in the preparation of the Stage 2 Baseline Information Review and GI Audit are subject to licence arrangements with the individual suppliers and are subject to copyright. Requests for data should be addressed to the appropriate suppliers.

Dataset	Owner	Data Source/Supplier
BASE MAPPING		
6Cs sub-region Boundary	6Cs Strategic GI Board	Sharon Jefferies, 6Cs Growth Point GI Development Co-ordinator Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
GI Network Boundaries	Indicative boundaries created by Chris Blandford Associates	Chris Blandford Associates
Meridian data - A Roads - County Council Region - District Council Region - Dula region (settlements) - Motorways - Rail Lines - Rivers	Ordnance Survey	Richard Venables Forestry Commission Operational Support Mapping and Geographic Information Unit Silvan House 231 Corstorphine Road Edinburgh EH12 7AT
BIODIVERSITY NETWORK MAPPING		
Sites of Special Scientific Interest (SSSIs)	Natural England	Brian Crumley Natural England Data Services Science Services Team Northminster House Peterborough PE1 1UA
National Biodiversity Action Plan Priority Habitats	Natural England/Derbyshire Wildlife Trust	See above
Local Nature Reserves	Natural England	See above
Derbyshire Local Wildlife Sites (LWS)	Derbyshire Wildlife Trust	Derbyshire Wildlife Trust East Mill Bridgefoot Belper Derbyshire DE4 5EH
Leicestershire Local Wildlife Sites (LWS)	Leicestershire Wildlife Trust	Leicestershire Environmental Resources Centre (LERC) Holly Hayes 216 Birstall Road Birstall Leicestershire LE4 4DG
Nottinghamshire Local Wildlife Sites (LWS)	Nottinghamshire Biological Record Centre	Rob Johnson Natural History Museum Wollaton Park Nottingham Nottinghamshire

Dataset	Owner	Data Source/Supplier
		NG8 2AE
Derbyshire Wildlife Trust Nature Reserves	Derbyshire Wildlife Trust	Ann Hall Conservation Technical Assistant Derbyshire Wildlife Trust East Mill Bridgefoot Belper Derbyshire DE56 1XH
Leicestershire Wildlife Trust Nature Reserves	Leicestershire and Rutland Wildlife Trust	Andy Lear Conservation Officer Leicestershire and Rutland Wildlife Trust Brocks Hill Environment Centre Washbrook Lane Oadby, LE2 5JJ
Nottinghamshire Wildlife Trust Nature Reserves	Nottinghamshire Wildlife Trust	Gary Craggs Conservation Administrator Conservation Policy and Planning Nottinghamshire Wildlife Trust The Old Ragged School Brook Street Nottingham, NG1 1EA
ACCESS PROVISION NETWORK MAPPING		
National Trails	Natural England	Brian Crumley Natural England Data Services Science Services Team Northminster House Peterborough PE1 1UA
Access Land (includes Registered Common Land)	Natural England	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Derbyshire Rights of Way	Derbyshire County Council	Kerry Turner Derbyshire County Council
Derbyshire Promoted Routes	Derbyshire County Council	Wayne Bexton Greenways & Countryside Officer Derbyshire Countryside Service Derbyshire County Council County Hall Matlock DE4 3AG
Derbyshire Greenways (built and proposed)	Derbyshire County Council	Anna Chapman Derbyshire Countryside Service Derbyshire County Council County Hall Matlock DE4 3AG
Leicestershire Rights of Way	Leicestershire County Council	Edwin McWilliam Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
Leicestershire Long Distance Promoted Paths	Leicestershire County Council	Edwin McWilliam Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
Nottingham City Rights of Way	Nottingham City Council	Kieran Fitzsimmons GIS Analyst

Dataset	Owner	Data Source/Supplier
		Geographical Information Services Environment and Regeneration Nottingham City Council Exchange Buildings Smithy Row Nottingham NG1 2BS
Nottinghamshire Rights of Way	Nottinghamshire County Council	See above
Nottinghamshire Promoted Routes	Nottinghamshire County Council	See above
Existing greenways within the Trent River Park	Indicative boundaries created by Chris Blandford Associates	Chris Blandford Associates
Derbyshire Country Parks	Derbyshire County Council	Kerry Turner Derbyshire Countryside Service Derbyshire County Council County Hall Matlock DE4 3AG
Nottinghamshire Country Parks/Green Estates	Indicative Boundary created by CBA	Chris Blandford Associates
Nottingham Green Estates	Nottinghamshire County Council	Gareth Austin Nottinghamshire County Council Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ
National Trust Land - 24 hr Open Access and Limited Access Land Datasets	National Trust	Mike Renow-Clarke The National Trust Heelis Kemble Drive Swindon SN2 2NA
Forestry Commission Woodland	Forestry Commission	Graham Bull Woodland Surveys Unit Biometrics, Surveys and Statistics Division Forest Research Northern Research Station Roslin Midlothian EH25 9SY Scotland
National Inventory of Woodland and Trees (NIWT)	Forestry Commission	Forest Research Northern Research Station Roslin Midlothian EH25 9SY
Woodland Trust Access Land	Woodland Trust	The Woodland Trust Autumn Park Dysart Road Grantham Lincolnshire NG31 6LL
Nottingham City National Cycle Routes	Nottingham City Council	Kieran Fitzsimmons GIS Analyst Geographical Information Services Environment and Regeneration Nottingham City Council Exchange Buildings Smithy Row Nottingham

Dataset	Owner	Data Source/Supplier
		NG1 2BS
Nottinghamshire Sustrans	Nottinghamshire County Council	Nottinghamshire County Council Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ
Derbyshire Cycle Routes	Derbyshire County Council	Derbyshire County Council County Hall Matlock DE4 3AG
Extent of Navigable River	British Waterways	British Waterways
ENVIRONMENTAL CHARACTER AND LOCAL DISTINCTIVENESS MAPPING		
Parks and Gardens of Historic Interest	English Heritage	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Scheduled Monuments	English Heritage	See above
World Heritage Sites	English Heritage	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Listed Buildings	English Heritage	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Battlefields	English Heritage	Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk)
Conservation Areas - Nottinghamshire	Nottinghamshire County Council	Nottinghamshire County Council Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ
Conservation Areas - Derbyshire	Derbyshire County Council	Derbyshire County Council County Hall Matlock DE4 3AG
Derbyshire CC Landscape Character Types	Derbyshire County Council	Derbyshire County Council County Hall Matlock DE4 3AG
Nottinghamshire CC Landscape Character Types	Nottinghamshire County Council	Nottinghamshire County Council Trent Bridge House Fox Road West Bridgford Nottingham NG2 6BJ
Leicestershire CC Landscape Character Areas	Leicestershire County Council	Leicestershire County Council County Hall (room 500) Glenfield LE3 8TE
ENVIRONMENTAL SYSTEMS AND NATURAL RESOURCES MAPING		
Indicative Floodplain	Environment Agency	Environment Agency Sapphire East 550 Steetsbrook Road Solihull B91 1QT

Dataset	Owner	Data Source/Supplier
PPG17 OPEN SPACE, SPORT & RECREATION MAPPING		
Ashfield District Council PPG17 Study	Ashfield District Council	Ashfield District Council Urban Road Kirkby-in-Ashfield Nottingham NG17 8DA
Broxtowe Borough Council PPG17 Study	Broxtowe Borough Council	Broxtowe Borough Council Foster Av Beeston Nottingham NG9 1AB
Gedling Borough Council PPG17 Study	Gedling Borough Council	Gedling Borough Council Civic Centre Arnot Hill Pk Arnold Nottingham NG5 6LU
Erewash Borough Council PPG17 Study	Erewash Borough Council	Adam Reddish Erewash Borough Council Policy and Development Section Directorate of Regeneration & Community Town Hall Ilkeston DE7 5RP
Nottingham City Council PPG 17 Study	Nottingham City Council	James Dymond Parks & Open spaces Development Manager Community & Culture Nottingham City Council
Rushcliffe Borough Council PPG17 Study	Rushcliffe Borough Council	Rushcliffe Borough Council Civic Centre Pavilion Rd West Bridgford Nottingham NG2 5FE

APPENDIX A3
PPG17 OPEN SPACE DATASETS & OVERARCHING TYPOLOGY METHODOLOGY

PPG17 OPEN SPACE DATASETS AND OVERARCHING TYPOLOGY METHODOLOGY

It was agreed that the Stage 1 GI audit would be enhanced at Stage 2, using selected relevant additional data as appropriate. PPG17 Open Space studies, which categorise open space sites by type (such as allotments, parks and gardens and children's play spaces) were identified as key to providing datasets to enhance the Stage 1 work. **Figure 2.3** has been enhanced using relevant datasets/GIS shapefiles, where available, from such studies.

With regards to the Strategic GI Network for the Nottingham Principal Urban Area and the Sub-Regional Centres of Hucknall and Ilkeston, PPG17 Open Space studies and their datasets/GIS shapefiles were requested from the following local authorities:

- Ashfield District Council;
- Gedling Borough Council;
- Broxtowe Borough Council;
- Erewash Borough Council;
- Nottingham City Council; and
- Rushcliffe Borough Council.

Types chosen by individual local authorities to categorise their sites vary and are not all relevant to enhancing the GI networks. It was thus necessary to define an overarching set of types, appropriate to enhancing the Stage 1 GI audit, in which to organise types provided. The Green Infrastructure Guide for the East Midlands[35] describes green infrastructure assets as 'consisting of public and private assets, with and without public access in urban and rural locations, including:

- Allotments
- Amenity space, including communal green spaces within housing areas
- Green corridors and hedgerows, ditches, disused railways, verges
- Brownfield and Greenfield sites
- Urban parks and gardens
- Registered commons and village town greens
- Children's play space
- Natural and semi-natural habitat for wildlife
- Playing fields
- Cemeteries
- Pocket parks
- Country parks
- Woodland
- Historic parks and gardens and historic landscapes
- Nature reserves
- Sites of Special Scientific Interest and Scheduled Monuments
- Locally designated heritage sites, including county wildlife sites
- Waterways and water bodies, including flooded quarries
- Development sites with potential for open space links
- Land in agri-environment management
- Public rights of way, cycleways and other recreational routes'.

Based on the above and the green infrastructure typology proposed in Natural England's Green Infrastructure Guidance (2009), the following typology was used to categorise open space datasets provided by individual local authorities. Definitions for individual open space types vary between PPG17 Open Space studies. The definition for each type provided below thus takes into account all definitions provided for the type in relevant PPG17 Open Space studies, as shown in the following tables.

[35] The Green Infrastructure Guide for the East Midlands (East Midlands Green Infrastructure Network, 2008)

- **Parks and Gardens** – including urban parks, country parks, and formal gardens
- **Amenity greenspaces** (most commonly but not exclusively in housing areas) – including informal recreation spaces, housing green spaces, village greens, urban commons, green roofs, and other incidental space
- **Natural and semi-natural greenspaces** – including woodland and scrub, grassland (e.g. downland and meadow), heath and moor, wetlands, open and running water, wasteland and disturbed ground, bare rock habitats (e.g. cliffs and quarries)
- **Green Corridors** – including rivers and canal banks, road and rail corridors, cycling routes, pedestrian paths, and rights of way
- **Cemeteries and Churchyards**
- **Allotments**
- **Children's Play Space** – including play and youth facility areas such as equipped playgrounds, youth shelters, BMX and skateboard parks, ball courts, Multi-Use Games Areas, and other more informal areas
- **Outdoor Sports Facilities** – including natural and artificial surfaces used for sports and recreation. Examples include recreational grounds, sports pitches, school and other institutional playing fields athletic tracks, bowling greens, tennis courts, golf courses, and other outdoor sports area.

PARKS AND GARDENS	Definition
Amber Valley	"Accessible, high quality opportunities for informal recreation and community events" - including urban parks, country parks and formal gardens.
Ashfield	Town parks - Large areas of urban green space designed and managed for public enjoyment, providing a range of landscape elements, recreational opportunities and facilities. Main focal green spaces for towns or large neighbourhoods. --- Formal gardens - Areas of historic designed green space combining a variety of landscape and horticultural elements. Usually associated with historic buildings or estates rather than urban residential environments. May have restricted access.
Blaby	For the purpose of this study all sites including recreation grounds, parks, and formal gardens have been placed under a single classification called Parks, Gardens and Recreation Grounds. They take on many forms, and may embrace a wide range of functions, including: • Informal recreation and outdoor sport. • Play space of many kinds (including for sport and children's play). • Providing attractive walks to work. • Offering landscape and amenity features. • Areas of formal planting. • Providing areas for 'events'. • Providing habitats for wildlife.
Broxtowe	"Accessible, high quality opportunities for informal recreation and community events" - including urban parks, country parks and formal gardens.
Charnwood	No data/ PPG17 in progress
Derby City	No data/ PPG17 in progress
Erewash	Parks are essentially local provision to be accessed fairly spontaneously, and on foot, so there is an expectation that they should be sufficiently local to allow this.
Gedling	"Accessible, high quality opportunities for informal recreation and community events" - including urban parks, country parks and formal gardens.
Harborough	This type of open space includes urban parks, formal gardens and country parks that provide opportunities for various informal recreation and community events.
Hinckley and Bosworth	"Accessible, high quality opportunities for informal recreation and community events" - including urban parks, country parks and formal gardens.
Leicester City	Public parks and gardens take on many forms, and may embrace a wide range of functions, including: • Informal recreation and outdoor sport • Play space of many kinds (including for sport and children's play) • Providing attractive walks to work

	• Offering landscape and amenity features • Providing areas for 'events' • Providing habitats for wildlife. Parks are more than simply recreational space- they are a composition of features the combined value of which might be seen as greater than that of the constituent parts.
Melton	"Accessible, high quality opportunities for informal recreation and community events" - including urban parks, country parks and formal gardens.
North West Leicestershire	The decision where to place parks and open spaces is based on factors such as the scale of the site, its function, its location and the facilities that are available.
Nottingham City	Accessible, high quality opportunities for informal recreation and community events.
Oadby and Wigston	For the purpose of this study all sites including recreation grounds, parks, and formal gardens have been placed under a single classification called Parks and Recreation Grounds. They take on many forms, and may embrace a wide range of functions, including: • Informal recreation and outdoor sport. • Play space of many kinds (including for sport and children's play). • Providing attractive walks to work. • Offering landscape and amenity features. • Areas of formal planting. • Providing areas for 'events'. • Providing habitats for wildlife.
Rushcliffe	We only have part of the report. No definition in the part of the report which we hold.
South Derbyshire	"Accessible, high quality opportunities for informal recreation and community events." including urban parks, country parks and formal gardens.

AMENITY GREEN SPACE	**Definition**
Amber Valley	"Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas".
Ashfield (neighbourhood greenspaces)	Recreation Grounds - spaces providing some formal recreational opportunities (a football pitch and sometimes a playground) and limited landscape elements. Local small green spaces- small green spaces providing opportunities for informal or passive recreation close to home or work. Semi-private space - spaces which are publicly accessible, but physically associated with adjacent buildings. Includes green space around flats. --- Incidental green space - green space providing limited recreational opportunities due to size or lack of facilities, but offering a

	visual break in a built up area. Includes, for example, large verges.
Blaby (informal open space)	The category is considered to include those spaces open to free and spontaneous use by the public, but neither laid out nor managed for a specific function such as a park, public playing field or recreation ground; nor managed as a natural or semi-natural habitat. These areas of open space will be of varied size, but are likely to share the following characteristics: • Unlikely to be physically demarcated by walls or fences. • Predominantly lain down to (mown) grass. • Unlikely to have identifiable entrance points (unlike parks). • Unlikely to have planted flower beds or other formal planted layouts, although they may have shrub and tree planting. • Generally no other recreational facilities and fixtures (such as play equipment or ball courts), although there may be items such as litter bins and benches. Examples might include both small and larger informal grassed areas in housing estates and general recreation spaces. They can serve a variety of functions dependent on their size, shape, location and topography. Some may be used for informal recreation activities, while others by themselves, or else collectively, contribute to the overall visual amenity of an area.
Broxtowe	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas. Including amenity spaces, verges and roundabouts.
Charnwood	No data/ PPG17 in progress.
Derby City	No data/ PPG17 in progress.
Erewash	This is informal space in urban areas, normally in or around housing developments, that can help to create a more attractive townscape and that is often used for play and other recreation.
Gedling	"Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas".
Harborough	This type of open space is most commonly found in housing areas. It includes informal recreation spaces and greenspaces in and around housing with its primary purpose to provide opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
Hinckley and Bosworth	"Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas".
Leicester City	It is quite difficult to offer a practical definition of Informal Green Space/Amenity green space compared with other types of open space covered by this study. The category is considered to include those spaces open to free and spontaneous use by the public, but neither laid out and or managed for a specific function such as a park, public playing field or recreation ground; nor managed as a natural or semi-natural habitat. These areas of open space will be of varied size, but are likely to share the following characteristics: • Unlikely to be physically demarcated by walls or fences. • Predominantly laid out to mown grass. • Unlikely to have identifiable entrance points (unlike parks). • Unlikely to have planted flower beds or other formal planted layouts, although they may have shrub and tree planting.

	• Generally no other recreational facilities and fixtures (such as play equipment or ball courts), although there may be items such as litter bins and benches. Examples might include both small and larger informal grassed areas in housing estates and general recreation spaces. They can serve a variety of functions dependent on their size, shape, location and topography. Some may be used for informal recreation activities, while others by themselves, or else collectively, contribute to the overall visual amenity of an area. However, as a general rule such spaces will not include highway verges and other incidental open space that does not fall within the definition of recreational open space contained within Section 1. The exception to this the above 'working' definition of Informal Green Space is through the inclusion of churchyards within this heading which, apart from their primary purpose, do serve an important visual and amenity function.
Melton	"Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas".
North West Leicestershire	Not included.
Nottingham City	Supplementary open greenspace that enhances the appearance of the City
Oadby and Wigston	The category is considered to include those spaces open to free and spontaneous use by the public, but neither laid out nor managed for a specific function such as a park, public playing field or recreation ground; nor managed as a natural or semi-natural habitat. These areas of open space will be of varied size, but are likely to share the following characteristics: • Unlikely to be physically demarcated by walls or fences. • Predominantly lain down to (mown) grass. • Unlikely to have identifiable entrance points (unlike parks). • Unlikely to have planted flower beds or other formal planted layouts, although they may have shrub and tree planting. • Generally no other recreational facilities and fixtures (such as play equipment or ball courts), although there may be items such as litter bins and benches. Examples might include both small and larger informal grassed areas in housing estates and general recreation spaces. They can serve a variety of functions dependent on their size, shape, location and topography. Some may be used for informal recreation activities, while others by themselves, or else collectively, contribute to the overall visual amenity of an area..
Rushcliffe	We only have part of the report. No definition in the part of the report which we hold.
South Derbyshire	"Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas".

NATURAL/SEMI-NATURAL	**Definition**
Amber Valley	Natural and semi natural greenspaces, including urban woodland.
Ashfield (sub groups shown separately)	Country parks - Areas of managed semi-natural green space which combine ecological habitats with opportunities for passive recreation and a range of public facilities (such as visitor) centres, cafes and toilets)

	Informal woodland - Areas of accessible woodland with opportunities for passive recreation but limited or no facilities. --- Other natural and semi natural spaces - Areas of green space with a predominantly natural characteristic and incorporating a variety of potential ecological habitats. Includes areas of grassland and wetland. Provide opportunities for passive recreation but limited facilities. --- Restored landscapes - Areas of formerly industrial land being restored to a semi-natural state. Commonly take the form of planted spoil heaps creating a distinctive landscape feature defined by the relief of the land. As sites mature, they will tend to become informal woodland or country parks. --- Reservoirs - Spaces dominated by large water bodies, but providing accessible semi-natural green space at its margins.
Blaby	For the purpose of this study (Accessible) Natural Green Space covers a variety of spaces including meadows, river floodplain, woodland and copse all of which share a trait of having natural characteristics and wildlife value, but which are also open to public use and enjoyment. Research elsewhere and (more importantly) the local consultation for this study have identified the value attached to such space for recreation and emotional well-being. A sense of 'closeness to nature' with its attendant benefits for people is something that is all too easily lost in urban areas. (Accessible) Natural Green Spaces should be viewed as important a component of community infrastructure in planning for new development as other forms of open space or 'built' recreation facilities. (Accessible) Natural Green Spaces can make important contributions towards local Biodiversity Action Plan targets and can also raise awareness of biodiversity values and issues. Some sites will have statutory rights or permissive codes allowing the public to wander in these sites. Others may have defined Rights of Way or permissive routes running through them. For the remainder of sites there may be some access on a managed basis. Although many natural spaces may not be 'accessible' in the sense that they cannot be entered and used by the general community, they can be appreciated from a distance, and contribute to visual amenity. Natural Greenspace with limited public access (e.g. RSPB reserves) have been mapped where known.
Broxtowe	Wildlife conservation, bio-diversity and environmental education and awareness. Includes: • Grassland • Tree Planted Areas • Woodlands • Wetlands • Scrubland • Rivers, Canals and Waterways • Green Corridors
Charnwood	No data/ PPG17 in progress.
Derby City	No data/ PPG17 in progress.

Erewash	The study is confined to those spaces that are accessible to the public. They serve not only as habitats for plants and animals but can also provide leisure and play opportunities. Several of these spaces are protected by formal designation.
Gedling	"Wildlife conservation, biodiversity and environmental education and awareness" - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
Harborough	This type of open space includes woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons, meadows), wetlands, open and running water, nature reserves and wastelands with a primary purpose of wildlife conservation and bio-diversity.
Hinckley and Bosworth	"Wildlife conservation, biodiversity and environmental education and awareness" - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
Leicester City (ANG)	For the purpose of this study Accessible Natural Green Space covers a variety of spaces including meadows, river floodplain, woodland, copse all of which share a trait of being managed primarily for wildlife value but which are also open to public use and enjoyment. Research elsewhere and (more importantly) the local consultation for this study have identified the value attached to such space for recreation and emotional well-being. A sense of 'closeness to nature' with its attendant benefits for people is something that is all too easily lost in urban areas. Accessible natural green spaces should be viewed as important a component of community infrastructure in planning for new development as other forms of open space or 'built' recreation facilities. Accessible natural green spaces can make important contributions towards local Biodiversity targets and have particular value in helping to raise awareness of natural habitats. Many of the Natural Green Spaces are within parks, cemeteries, or other types of open space, and in these cases Natural Green Space is listed as a secondary type in the tables within the ward profiles.
Melton	"Wildlife conservation, biodiversity and environmental education and awareness" - including woodlands, urban forestry, scrub, grasslands (e.g. downlands, commons and meadows) wetlands, open and running water, wastelands and derelict open land and rock areas (e.g. cliffs, quarries and pits).
North West Leicestershire	Not included.
Nottingham City	Sites for wildlife conservation, biodiversity, environmental education and awareness
Oadby and Wigston	For the purpose of this study (Accessible) Natural Green Space covers a variety of spaces including meadows, river floodplain, woodland and copse all of which share a trait of having natural characteristics and wildlife value, but which are also open to public use and enjoyment. Research elsewhere and (more importantly) the local consultation for this study have identified the value attached to such space for recreation and emotional well-being. A sense of 'closeness to nature' with its attendant benefits for people is something that is all too easily lost in urban areas. (Accessible) Natural Green Spaces should be viewed as important a component of community infrastructure in planning for new development as other forms of open space or 'built' recreation facilities. (Accessible) Natural Green Spaces can make important contributions towards local Biodiversity Action Plan targets and can also raise awareness of biodiversity values and issues. Some sites will have statutory rights or permissive codes allowing the public to wander in these sites. Others may have defined

	Rights of Way or permissive routes running through them. For the remainder of sites there may be some access on a managed basis. Although many natural spaces may not be 'accessible' in the sense that they cannot be entered and used by the general community, they can be appreciated from a distance, and contribute to visual amenity. Natural Greenspace with limited public access (e.g. RSPB reserves) have been mapped where known.
Rushcliffe	We only have part of the report. No definition in the part of the report which we hold.
South Derbyshire	Previous studies have assessed green corridors and semi natural greenspaces. These typologies have, therefore, not been covered in this report.

GREEN CORRIDORS	**Definition**
Amber Valley	"Walking, cycling or horse riding, whether for leisure purposes or travel" - including river and canal banks, cycleways, and rights of way
Ashfield (green routes)	Walking or cycling routes - linear green spaces providing surfaced paths for walking and/or cycling, but limited open space for other activities. River corridors - Linear green spaces forming the margins of a river or canal.
Blaby	Not included.
Broxtowe	Not included.
Charnwood	No data/ PPG17 in progress.
Derby City	No data/ PPG17 in progress.
Erewash	Not included.
Gedling	"Walking, cycling or horse riding, whether for leisure purposes or travel" - including river and canal banks, cycleways, and rights of way.
Harborough	This open space type includes towpaths along canals and riverbanks, cycleways, rights of way and disused railway lines with the primary purpose to provide opportunities for walking, cycling and horse riding whether for leisure purposes or travel and opportunities for wildlife migration.
Hinckley and Bosworth	"Walking, cycling or horse riding, whether for leisure purposes or travel" - including river and canal banks, cycleways, and rights of way.
Leicester City	The main links are essentially a combination of open space identified as Natural and Semi Natural Green Space, and Parks. Walking and cycling are continually identified by national surveys as major recreation activities in their own right, but are also endemic to everyday 'healthy living' (such as walking or cycling to work, the shops, or school). As activities they should be encouraged as a means of making both recreation and utility trips. Green recreational corridors will also include: • The local public Rights of Way network • Promoted long distance footpaths and cycleways • Permissive routes.

	It is also recognised that some of these routes (especially in urban areas) will also serve as utility routes and can also be of significant ecological value. Links between City and countryside are important for accessing the wider rights of way network and quiet lanes, and can help to reduce car usage.
Melton	"Walking, cycling or horse riding, whether for leisure purposes or travel" - including river and canal banks, cycleways, and rights of way.
North West Leicestershire	Not included
Nottingham City	Not included.
Oadby and Wigston	Not included.
Rushcliffe	We only have part of the report. No definition in the part of the report which we hold.
South Derbyshire	Previous studies have assessed green corridors and semi natural greenspaces. These typologies have, therefore, not been covered in this report.

Allotments - This includes all forms of allotments with a primary purpose to provide opportunities for people to grow their own produce as part of the long-term promotion of sustainability, health and social inclusion. This type of open space may also include urban farms and community gardens.

Cemeteries and Churchyards - Cemeteries, disused churchyards and other burial grounds.

Children's Play Space – including play and youth facility areas such as equipped playgrounds, youth shelters, BMX and skateboard parks, ball courts, Multi-Use Games Areas, and other more informal areas.

Outdoor Sports Facilities – including natural and artificial surfaces used for sports and recreation. Examples include recreational grounds, sports pitches, school and other institutional playing fields athletic tracks, bowling greens, tennis courts, golf courses, and other outdoor sports area.

Datasets/GIS shapefiles received from individual local authorities are provided in the following tables. Information is also provided regarding whether the data was used, if not the reason for not using it, and the type it was categorised into within the overarching typology.

Ashfield District Coucil			
Data received	**Used/Not used**	**Justification for not using it**	**Type**
Allotments	Used	N/A	Allotment
Cemeteries/churchyard	Used	N/A	Cemeteries & Churchyard
Civic Greenspace	Not Used	No attributes to classify these sites	N/A
Country Park	Used	N/A	Parks & Gardens
Cricket Ground	Used	N/A	Outdoor Sports Facilities
Football Grounds	Used	N/A	Outdoor Sports Facilities
Formal Gardens	Used	N/A	Parks & Gardens
Gold Course	Used	N/A	Outdoor Sports Facilities
Informal woodland	Used	N/A	Natural & Semi-Natural Greenspace
Local Small Green Space	Used	N/A	Amenity Greenspace
Other	Not Used	No attributes to classify these sites	N/A
Other Amenity Greenspace	Used	N/A	Amenity Greenspace
Other Natural & Semi-Natural Green Space	Used	N/A	Natural &Semi-Natural Greenspace
Other Sports Area	Used	N/A	Outdoor Sports Facilities
Recreation Ground	Used	N/A	Outdoor Sports Facilities
Reservoir	Used	N/A	Natural & Semi-Natural Greenspace
Restored Landscape	Used	N/A	Natural & Semi-Natural Greenspace
River	Used	N/A	Natural and Semi-Natural Greenspace
School Playing Field	Used	N/A	Outdoor Sports Facilities
Semi-Private Space	Used	N/A	Amenity Greenspace
Parks	Used	N/A	Parks & Gardens
Walking/Cycling Route	Used	N/A	Green Corridor

Broxtowe Borough Council			
Data received	**Used/Not used**	**Justification for not using it**	**Type**
Allotments	Used	N/A	Allotment
Amenity Green Space	Used	N/A	Amenity Greenspace
Cemeteries, closed Churchyards	Used	N/A	Cemeteries & Churchyards
Civic Space	Not used	Not part of the typology of GI assets	N/A
Future Potential Sites	Not used	Not part of the typology of GI assets	N/A
Institutional	Not used	Not part of the typology of GI assets	N/A
Natural & Semi-Natural Green Space	Used	N/A	Natural & Semi-Natural Greenspace
Outdoor Sports Facilities	Used	N/A	Outdoor Sports Facilities

Parks &Gardens	Used	N/A	Parks & Gardens

Erewash Borough Council			
Data received	**Used/Not used**	**Justification**	**Type**
Bowling	Used	N/A	Outdoor Sports Facilities
Gold Clubs	Used	N/A	Outdoor Sports Facilities
MUGAs	Used	N/A	Children's' Play Space
Play Area	Used	N/A	Children's' Play Space
Synthetic Pitches	Not Used	Not included because of its artificial surface	N/A
Tennis	Used	N/A	Outdoor Sports Facilities
Green Corridor	Used	N/A	Green corridors
Allotment Asoc Managed	Used	N/A	Allotment
Allotment Council Owned	Used	N/A	Allotment
Cemeteries	Used	N/A	Cemeteries and Churchyards
Parks	Used	N/A	Parks and Gardens
Pitches	Used	N/A	Outdoor Sports Facilities
Wild406	Not Used	Could not be used as drawn as lines and not polygons	N/A

Gedling Borough Council			
Data received	**Used/Not used**	**Justification for not using it**	**Type**
Gedling Colliery Park	Used	N/A	Parks & Gardens
Trentside Path	Used	N/A	Green Corridor
School Grounds and Playing Fields	Used	N/A	Outdoor Sports Facilities
Public Open Space	Not used	No attributes to classify these sites	N/A
Private Open Space	Not used	No attributes to classify these sites	N/A
Important Open space in CA	Not used	Not part of the typology of GI assets	N/A
Golf Courses	Used	N/A	Outdoor Sports Facilities
Ancient Woodland	Used	N/A	Natural & Semi-Natural Greenspace
Allotments	Used	N/A	Allotment
Other	Not used	Not part of the typology of GI assets	N/A

Nottingham City Council			
Data received	**Used/Not used**	**Justification for not using it**	**Type**
Agricultural	Not used	Not part of the typology of GI assets	N/A
Allotments & Community Gardens	Used	N/A	Allotments
Amenity Greenspace	Used	N/A	Amenity Greenspace
Cemeteries & Disused	Used	N/A	Cemeteries and Churchyards

Churchyards			
Institutional	Not used	Insufficient attributes to classify some of the sites	N/A
Natural & Semi-Natural	Used	N/A	Natural & Semi-Natural Greenspace
Outdoor Sports Facility	Used	N/A	Outdoor Sports Facilities
Parks & Gardens	Used	N/A	Parks & Gardens
Provision for Children & Young People	Used	N/A	Children's' Play Space

Rushcliffe Borough Council			
Data received	**Used/Not used**	**Justification for not using it**	**Type**
Provision for Children & Young People	Used	N/A	Children's Play Space
Allotments	Used	N/A	Allotment
Amenity Green Spaces	Used	N/A	Amenity Greenspace
Churchyard & Cemeteries	Used	N/A	Cemeteries & Churchyard
Country Parks	Used	N/A	Parks & Gardens
Green Corridors	Used	N/A	Green Corridor
Natural & Semi-Natural Greenspaces	Used	N/A	Natural & Semi-Natural Greenspaces
Outdoor Sports Facilities	Used	N/A	Outdoor Sports Facilities
Parks & Gardens	Used	N/A	Parks & Gardens

APPENDIX A4
DERBYSHIRE LANDSCAPE CHARACTER GUIDANCE WITHIN THE STUDY AREA

DERBYSHIRE LANDSCAPE CHARACTER GUIDANCE WITHIN THE STUDY AREA

A number of Derbyshire Landscape Character Types fall within the Study Area, for which planting and management guidelines, summarised below, have been written. Landscape is a fundamental GI asset and the landscape character types defined by the Derbyshire Landscape Character Type descriptions form strategic baseline information for part of the Study Area. The planting and management guidelines below can be used to inform the delivery of GI by the conservation, enhancement, and management of existing landscape and habitat assets or the creation of new ones. It should be noted that woodland and tree cover is just one aspect of landscape character.

Further guidance on strategies for individual landscape character types can be found in the Derbyshire Landscape Character Assessment (Derbyshire County Council, 2003) and Appendix A4 of the Baseline Information Review and Strategic GI Audit Report (Volume 3 of the 6Cs GI Strategy).

Below is a summary table of the National Character Areas which fall within the Study Area (see Figure 1) and their relative subdivisions into County Landscape Character Types by Derbyshire County Council. Reference numbers can be cross-referenced to **Figure 2.4** within the main report. Full strategies for each landscape character types are presented in "The Landscape Character of Derbyshire" published by Derbyshire County Council (2003). This report can be downloaded on: http://www.derbyshire.gov.uk/environment/conservation/landscapecharacter/default.asp.

National Character Area	CBE Refs	County Landscape Types
Notts, Derbys and Yorks Coalfield	D8	Coalfield Village Farmlands
	D11	Plateau Estate Farmlands
	D6	Riverside Meadows
	D10	Coalfield Estatelands
Trent Valley Washlands	D14	Lowland Village Farmlands
	D6	Riverside Meadows

Planting and Management Guidelines for each landscape character type.

Below are planting and management guidelines extracts for each landscape character type which falls within the Study Area, taken from "The Landscape Character of Derbyshire" published by Derbyshire County Council (2003).

These provide baseline information on tree and woodland character at a strategic level but also provide guidance for more detailed GI work, such as management or new planting, and can be read in tandem with the BAP woodland targets (see **Appendix A6**). It should be noted that specific site conditions and requirements will apply to any detailed GI work.

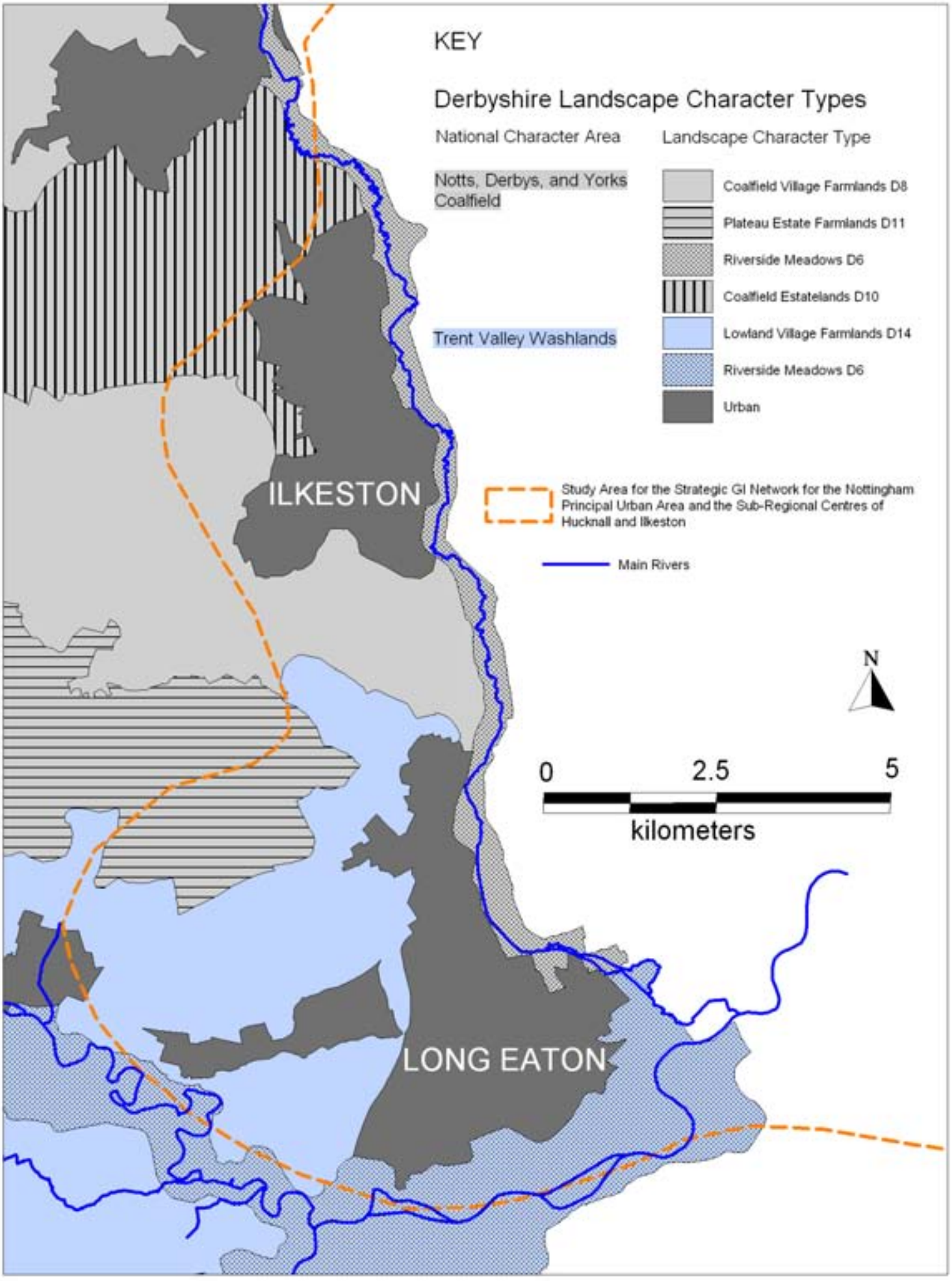
Nottingham, South Derbyshire & Yorkshire Coalfield
Coalfield Village Farmlands D8

A small-scale landscape of small organic woodlands, some of ancient origin, copses and linear tree belts with scattered hedgerow and dense watercourse trees.

Primary woodland character: Thinly scattered small woodlands
Primary tree character: Thinly scattered hedgerow trees and dense watercourse trees.
Woodland vision: Densely scattered small woodlands
Tree vision: Densely scattered hedgerow trees and dense watercourse trees **Typical woodland size range:** 0.5 - 10 ha small
Woodland pattern: Organic

- Small scale woodland planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees - through selection and natural regeneration, or by planting.
- Encourage the management of scrub and secondary woodland to link with existing habitats and woodland.

Figure 1



Data derived from "The Landscape Character of Derbyshire Publication" (Derbyshire County Council, 2003)

- Enhance the visual and ecological continuity of river corridors by management, natural regeneration, or by planting.
- Ensure the conservation and management of mature/veteran trees within hedgerows.

Nottingham, South Derbyshire & Yorkshire Coalfield
Plateau Estate Farmlands D11

An upstanding plateau of thinly scattered small plantations and coverts with scattered hedgerow and watercourse trees, and localised amenity trees.

Primary woodland character: Thinly scattered small plantations
Primary tree character: Thinly scattered hedgerow trees, scattered watercourse trees and localised amenity tree groups.
Woodland vision: Thinly scattered small plantations
Tree vision: Thinly scattered hedgerow trees, scattered watercourse trees and localised amenity tree groups.
Typical woodland size range: 0.5 - 5 ha small
Woodland pattern: Regular plantations

- Small scale woodland planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees - through selection and natural regeneration, or by planting.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Conserve and renew ornamental plantations and individual parkland trees.
- Ensure the conservation and management of mature/veteran trees within hedgerows.

Nottingham, South Derbyshire & Yorkshire Coalfield
Riverside Meadows D6

An open floodplain with scattered watercourse trees.

Primary woodland character: Unwooded
Primary tree character: Dense watercourse trees.
Woodland vision: Occasional small wet woodlands
Tree vision: Dense watercourse trees.
Typical woodland size range: 0.5 - 5 ha small
Woodland pattern: Organic / linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.

Nottingham, South Derbyshire & Yorkshire Coalfield
Coalfield Estatelands D10

A well wooded, urbanised, estate landscape of small to medium plantations, coverts and tree belts with scattered hedgerow, dense watercourse and localised amenity tree groups, including parkland trees.

Primary woodland character: Thinly scattered small plantations
Primary tree character: Thinly scattered hedgerow trees, dense watercourse trees and localised amenity tree groups.
Woodland vision: Densely scattered small woodlands
Tree vision: Densely scattered hedgerow trees, dense watercourse trees and localised amenity tree groups.
Typical woodland size range: 0.5 - 15 ha small-medium

Woodland pattern: Regular plantations

- Small-medium scale woodland planting.
- Conserve and restore all ancient woodland sites and restock with locally occurring native species.
- Promote linked extensions to ancient woodland by natural regeneration and planting.
- Re-establish and enhance physical links between existing isolated woodland and hedgerows.
- Ensure the management and enhancement of hedgerow trees - through selection and natural regeneration, or by planting.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Conserve and renew ornamental plantations and individual parkland trees.

Trent Valley Washlands
Lowland Village Farmlands D14

Open, mixed farming landscape with thinly scattered plantations and hedgerow trees.

Primary woodland character: Thinly scattered small plantations
Primary tree character: Thinly scattered hedgerow trees
Woodland vision: Thinly scattered small plantations
Tree vision: Thinly scattered hedgerow trees
Typical woodland size range: 0.5 - 10ha small
Woodland pattern: Regular plantations

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Conserve and enhance the tree groups that occur within and around rural settlements and isolated farmsteads.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.
- Ensure new woodland does not conflict with features (e.g. ridge and furrow) that help to define landscape character.

Trent Valley Washlands
Riverside Meadows D15

A broad, open floodplain with scattered hedgerow and watercourse trees.

Primary woodland character: Unwooded
Primary tree character: Thinly scattered hedgerow trees and dense watercourse trees.
Woodland vision: Occasional wet woodlands.
Tree vision: Thinly scattered hedgerow trees and dense watercourse trees.
Typical woodland size range: 0.5 - 5 ha small
Woodland pattern: Organic / linear

- Ensure the use of indigenous tree and shrub species, including a proportion of large, long lived species.
- Ensure a balance is maintained between new woodland planting and areas of nature conservation value.
- Enhance the visual and ecological continuity of river corridors by management, natural regeneration and planting of riparian trees.
- Encourage the continuing practice of pollarding to maintain the traditional riparian character of the landscape.

APPENDIX A5
BIODIVERSITY NEEDS AND OPPORTUNITIES BY BROAD HABITAT TYPE

BIODIVERSITY NEEDS AND OPPORTUNITIES BY BROAD HABITAT TYPE

Opportunities for enhancing connectivity of the natural greenspace network in the Study Area are set out below by broad habitat type. Opportunity areas have been identified as either i) general search areas e.g. River Trent, quarries etc., or ii) specific locations within general search areas where opportunities for extending or enhancing known existing areas of semi-natural habitat have been identified. The codes in brackets relate to **Figure 2.8**:

Woodland

Resource

Although not all woodlands included within the NIWT are classified as BAP habitats, the data has been included as part of the resource audit because they will provide some value for woodland biodiversity.

Analysis of the data shows that the SArea supports the following woodland resource:

Table W1: Woodland Resource for the Study Area

Woodland Type: Biodiversity Action Plan	Woodland Type: National Inventory of woodland and trees (NIWT)	Area (ha) (BAP woodland)	Area (ha) (NIWT woodland)	Total Area (ha)
Lowland mixed deciduous woodland		529		
Wet woodland		44		
	Broadleaved		578	
	Coniferous		32	
	Mixed		139	
	Young trees		71	
	Shrub		4	
	Felled		31	
Totals		573	855	1,428

Biodiversity Action Plan Targets

Table W2: Woodland BAP Targets for Nottinghamshire

Action	Target
Woodland Creation	Increase area of mixed ash dominated woodland
	Increase extent of open areas (planted coniferous woodland)
Positive Management	Enhance (70% by 2010; 100% by 2015) (mixed ash dominated woodland)
	Improve condition of relict habitat (16ha by 2010) (mixed ash dominated woodland)
	Maintain extent of oak-birch woodland
	Maintain and improve (100% by 2010) (wet broadleaved woodland)
	Develop conservation value through restructuring and diversification (planted coniferous woodland)
	Increase diversity of native species (planted coniferous woodland)

Opportunities

The woodland resource for the Study Area is predominantly concentrated to the north and north-west of Nottingham. Opportunities for creating new, and extending and linking existing, woodlands should be considered in the following areas:

- North Hucknall (1): Lowland mixed deciduous woodland; wet woodland;

- Eastwood-Hucknall-Kimberley Gap (3): Lowland mixed deciduous woodland;
- South Hucknall (4): Lowland mixed deciduous woodland;
- NE Nottingham-Lambley Gap (5); Lowland mixed deciduous woodland
- South Ilkeston (6): Lowland mixed deciduous woodland and wet woodland;
- River Erewash (7): Lowland mixed deciduous woodland and wet woodland;
- River Trent at Holme Pierrepont (8b): Lowland mixed deciduous woodland and wet woodland;
- West Tollerton (9): Lowland mixed deciduous woodland.

Wood pasture and parkland

Resource

Wood Pasture and Parkland within the Study Area, is predominantly associated with Wollaton Park, Strelley Hall Park and Stanton Hall Parkland.

Table WP1: Wood Pasture and Parkland Resource for the Study Area

Habitat Type	Area (ha)
Wood Pasture and Parkland	245

Biodiversity Action Plan Targets

Table WP2: Wood Pasture and Parkland BAP Targets for Nottinghamshire

Action	Target
Habitat Creation	150ha
Positive Management	Maintain extent and favourable condition of habitat
	Restoration management on 30% of undesignated wood pasture and parkland
	Pollard appropriate oaks

Opportunities

Opportunities for creating, restoring and extending wood pasture and parkland should be centred on:

- Wollaton Park;
- Strelley Hall Park;
- Stanton Hall Parkland.

Grasslands and Heathland

Resource

Table G1: Grassland and Heathland Resource for the Study Area

Habitat Type	Area (ha)
Floodplain grazing marsh	41
Lowland meadow (neutral grassland)	383
Calcareous grassland	22
Acid grassland	80
Lowland heath	-

Biodiversity Action Plan Targets

Table G2: Grassland and Heathland BAP Targets for Nottinghamshire

Habitat Type	Action	Target
Lowland wet grassland (Floodplain	Habitat creation / restoration	Increase area of lowland wet grassland
	Restoration	Improve condition of relict habitat

Habitat Type	Action	Target
grazing marsh / wet meadow)		(211ha by 2010; 1910ha by 2015)
	Sympathetic management	660ha by 2015
Lowland meadow (neutral grassland)	Recreation	Increase area
	Restoration	Improve condition of relict habitat (800ha by 2010; 1264ha by 2015)
	Sympathetic management	70% by 2010; 100% by 2015
Calcareous grassland	Recreation	Increase area
	Restoration	Improve condition of relict habitat (125ha by 2010; 175ha by 2015)
	Sympathetic management	70% by 2010; 100% by 2015
Acid grassland	Recreation	Increase area
	Restoration	Improve condition of relict habitat (500ha by 2010/15)
	Sympathetic management	80% by 2010; 100% by 2015
Heathland	Creation	Increase area
	Restoration	Improve condition of relict habitat (500ha by 2010/15)
	Sympathetic Management	80% by 2010; 100% by 2015

Opportunities

Opportunities for creating, restoring and extending grasslands and heathland should be centred on:

- North Hucknall (1): dry meadows, acid grassland, calcareous grassland;
- Eastwood-Hucknall-Kimberley Gap (3): dry meadow;
- South Hucknall (4): acid grassland, heath and calcareous grassland;
- NE Nottingham-Lambley Gap (5): dry meadow;
- South Ilkeston (6): dry meadow;
- River Erewash (7): floodplain grazing marsh and wet meadows;
- River Trent at West Bridgford (8a): floodplain grazing marsh and wet meadows;
- River Trent at Holme Pierrepont (8b): floodplain grazing marsh and wet meadows;
- West Tollerton (9): dry meadow;
- River Leen east of Hucknall (2):wet meadows.

Fen, Marsh, Swamp and Reedbeds

Resource

Table F1: Fen, Marsh, Swamp and Reedbed Resource for the Study Area

Habitat Type	Area (ha)
Fen, marsh and swamp	60
Reedbed	4.3

Biodiversity Action Plan Targets

Table F2: Fen, Marsh, Swamp and Reedbed BAP Targets for Nottinghamshire

Habitat Type	Action	Target
Fen, marsh, swamp	Creation	Improve condition and increase area (100ha by 2010/2015)
	Appropriate management	Maintain and improve
Reedbed	Habitat creation	Improve existing and expand habitat (200ha by 2010/2015)
	Appropriate management	Maintain and improve (70% of total resource by 2010; 90% by 2015)

Opportunities

Opportunities for creating, restoring and extending fen, marsh, swamp and reedbeds should be centred on:

- South Ilkeston (6): fen, reedbeds;
- River Erewash (7): fen, reedbed;
- River Trent at West Bridgford (8a): reedbeds;
- River Trent at Holme Pierrepont (8b): fen, reedbeds.

Rivers and Streams

Resource

Table R1: Rivers and Streams Resource for the Study Area

Habitat Type	Area (km)
Rivers and Streams	69.78

Biodiversity Action Plan Targets

Table R2: Rivers and Streams BAP Targets for Nottinghamshire

Action	**Target**
Restoration	Opportunities for restoring natural structure to stretches of main river
	Restore natural flow where possible
Management / Enhancement	100km

Opportunities

Opportunities for creating (buffer strips), restoring and managing rivers and streams should be centred on:

- River Trent;
- River Erewash;
- Erewash Canal;
- River Leen.

Eutrophic and Mesotrophic Standing Waters

Resource

Table S1: Standing Open Water Resource for the Study Area

Habitat Type	**Area (ha)**
Standing Open Water	1,067

Biodiversity Action Plan

Table S2: Standing Open Water BAP Targets Nottinghamshire

Action	**Target**
Creation	150 new ponds by 2010
Sympathetic management	Improve management of habitats (50% of resource by 2010; 75% by 2015)

Opportunities

The whole of the Study Area should be considered as an opportunity area for the creation and restoration of ponds. Specific areas should be identified at the local area for pond creation. Although individual ponds provide value for wildlife, associations of ponds that are geographically linked provide enhanced biodiversity by facilitating species dispersal and migration. Furthermore, ponds associated with different habitats (e.g. urban, woodland, open grassland) will tend to develop different characteristics which add to the overall diversity of the pond resource within the Study Area.

While there may be opportunities to enhance the biodiversity value of the large reservoirs, the primary opportunities for enhancing the biodiversity value of open standing water are likely to be in relation to the old gravel pits, particularly those within the Trent and Erewash valleys. The relationship between old gravel pits restored for biodiversity with the river, floodplain grazing marsh, fens, swamps and reedbeds also helps to enhance the overall biodiversity value through connectivity.

Open Mosaic Habitats on Previously Developed Land

Resource

Table OM1: Open mosaic habitat Resource for the Study Area

Habitat Type	Area (ha)
Open Mosaic Habitats	247

Biodiversity Action Plan

Table OM2: Open Mosaic Habitat BAP Targets for Nottinghamshire

Action	Target
Creation	Establish and maintain newtworks of wildlife sites and corridors in all urban areas by 2010.
Sympathetic management	As near to 100% of urban Local Wildlife Sites by 2010.

Opportunities

- Lock Lane;
- Attenborough Gravel Pits;
- Holme Pierrepont.

Hedgerows and Field Margins

Biodiversity Action Plan Targets

Table H1: Hedgerows and field margins BAP Targets for Nottinghamshire

Habitat Type	Action	Target
Hedgerows	Creation	50km
	Positive Management	Enhance 200km by 2010
Field Margins	Management	Treble number of agri-environment schemes (from 2003 baseline) by 2010.
		Improve hare populations

Opportunities for the creation, restoration, extension and enhancement of hedgerows, field margins, buffer strips and arable field margins should be considered throughout the Study Area.

APPENDIX A6
EXAMPLES OF OPPORTUNITY AREAS

EXAMPLES OF OPPORTUNITY AREAS

Examples of opportunity areas for new and enhanced localised GI are provided below. It should be noted that the list of examples provided is not exhaustive. The opportunity areas are intended to be multifunctional and help towards delivering a range of public benefits. They focus on opportunities for the enhancement, restoration, and conservation of existing GI assets, as well as the creation of new resources (the latter could include one or a combination of appropriate greenspaces, e.g. parks, allotments, semi-natural greenspaces, and/or children play areas).

The opportunity areas described below were identified through interpretation of the relationship between:

- opportunities arising from the analysis of the GI resources (particularly in relation to the proposals for developing ecological networks for wildlife and movement networks for people);
- accessible natural greenspace deficiencies;
- areas capable of delivering combined multiple public benefits;
- stakeholder consultation; and
- existing relevant strategies (e.g. the National Forest Delivery Strategy)

North Hucknall Urban Fringe
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the limestone farmlands landscape character type. It provides opportunities for creating new and extending and linking existing lowland mixed deciduous woodland, and opportunities for creating, restoring and extending habitat types including dry meadow, acid grassland, and calcareous grassland. This area could connect with proposed City-Scale GI Corridors (e.g. proposed greenway linking north-east Nottingham to Bestwood Village, Hucknall & Newstead). It provides opportunities to enhance the management, presentation, accessibility and interpretation of historic environment assets such as Papplewick Hall Historic Park and Garden. As well as being in an area with high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of large-scale accessible natural greenspace close to the growing urban areas of Nottingham and Hucknall and may also help to meet shortfalls in open space provision.

Hucknall to Eastwood Countryside Gap
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for limestone farmlands and coalfields farmlands landscape character types. It provides opportunities for creating new, and extending and linking existing lowland mixed deciduous woodland, and for creating, restoring and extending dry meadow. This area could connect with a proposed City-Scale GI Corridor (e.g. proposed greenway linking Hucknall to north Kimberley, and Eastwood). As well as being in an area with high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including Eastwood, Hucknall, and Kimberley, and also within 2-10km of a broader range of communities. It may also help to meet shortfalls in open space provision.

Nottingham Urban Fringe: North East Nottingham, Lambley and Calverton Countryside Gap
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the village farmlands landscape character type. It provides opportunities for creating new, and extending and linking existing lowland mixed deciduous woodland and for creating, restoring and extending dry meadow. This area could connect with a proposed City-Scale GI Corridor (e.g. proposed greenway linking Nottingham and Calverton). As well as being in an area with high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including Calverton, Lambley, and Nottingham, and also within 2-10km of a broader range of communities. It may also help to meet shortfalls in open space provision.

South Ilkeston Urban Fringe
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the coalfield village farmland landscape character type. It provides opportunities for creating new, and extending and linking existing lowland mixed deciduous woodland, and for creating, restoring and extending dry meadows. This area could connect with a proposed City-Scale GI Corridor (e.g. proposed greenway linking Ilkeston, Eastwood and Ironville) and provides opportunities to manage flood risk. It would offer opportunities for creating buffer strips, restoring and managing rivers and streams as well as extending and creating areas of wet woodland and creating fens and reedbeds in the river valley. As well as being in an area with high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities including Ilkeston, New Stanton, and Stanton-on-Dale, and also within 2-10km of a broader range of communities. It may also help to meet shortfalls in open space provision.

River Trent Floodplain: North West Bridgford
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for this area. It provides opportunities for creating, restoring and extending habitat types including floodplain grazing marsh, wet meadows, and reedbed, and for creating (buffer strips), restoring and managing rivers and streams. This area could connect with an existing City-Scale GI Corridor (e.g. existing greenway following the course of the River Trent) and offers opportunities to manage flood risk. As well as being in an area with high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities in southern Nottingham (including West Bridgford), and also within 2-10km of a broader range of communities. It is included as an opportunity area in the Trent River Park Vision and Action Plan (2008) and may help to meet shortfalls in open space provision.

River Trent Floodplain: Radcliffe-on-Trent to West Bridgford Countryside Gap
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the village farmlands, river meadowlands, terrace farmlands and river valley wetlands landscape character types. An Area which provides opportunities for creating, restoring and extending habitat types including lowland mixed deciduous woodland, wet woodland, floodplain grazing marsh, wet meadow, fen and reedbed; and for creating (buffer strips), restoring and managing rivers and streams. This area could connect with proposed City-Scale GI Corridors (e.g. proposed greenway linking Holme Pierrepont to West Bridgford) and provides opportunities to manage flood risk. As well as part of this area having high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities in southern Nottingham (including West Bridgford), and also within 2-10km of a broader range of communities. GI enhancements/provision in this area would be complementary to the River Trent to Cotgrave GI Masterplan Vision (Draft, 2009) and may help to meet shortfalls in open space provision.

South West Bridgford Urban Fringe
An area which offers opportunities to maintain and enhance the overall quality and diversity of landscape character, underpinned by the strategies developed for the village farmland landscape character type. An Area which provides opportunities for creating new, and extending and linking existing lowland mixed deciduous woodland; and for creating, restoring and extending dry meadows. This area could connect with a proposed City-Scale GI Corridor (e.g. proposed greenway linking West Brigford and Keyworth). As well as part of this area having high potential for delivering combined multiple public benefits through GI provision/enhancement, it could bridge a gap in the provision of accessible natural greenspace sites of varying sizes on the doorstep of communities in southern Nottingham (including West Bridgford), Ruddington and Tollerton, and also within 2-10km of a broader range of communities. It may also help to meet shortfalls in open space provision.

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