Cambridgeshire Green Infrastructure Strategy Review

WORKING DRAFT

Foreword

This is a second consultation draft of the Cambridgeshire Green Infrastructure Strategy. When adopted by partners including the Local Authorities this will replace the 2006 Green Infrastructure Strategy published by Cambridgeshire Horizons.

Public Consultation will take place during spring 2011 as a follow up to an earlier consultation undertaken January – March 2010. The revised Strategy responds to a number of key issues raised in that consultation.

The target date for finalising the Cambridgeshire Green Infrastructure Strategy is the end of May 2011. Local Authority Partners and key stakeholders will look to endorse the strategy during Summer of 2011.

Formally adopting the Cambridgeshire Green Infrastructure Strategy will mean that a robust evidence base is in place across Cambridgeshire that can inform policy making. In addition, the Green Infrastructure Strategy will provide an evidence base for seeking developer contributions and other sources of funding. It will also serve as a coordinating plan for the delivery of Strategic Green Infrastructure in Cambridgeshire up to 2031.

Contributors

The development of this Second Edition of the Green Infrastructure Strategy for Cambridgeshire has been shaped and informed by a wide range of Partners including:

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Cambridge Past, Present and Future (formerly Cambridge Preservation Society)

Cambridge Sports Lake Trust

Cambridgeshire and Peterborough Biodiversity Partnership

Cambridgeshire County Council

Cambridgeshire Horizons

NHS Cambridgeshire

East Cambridgeshire District Council

East of England Development Agency (EEDA)

English Heritage

Environment Agency

Fenland District Council

Forestry Commission

Farming and Wildlife Advisory Group

GO-East

Huntingdonshire District Council

Natural England

Peterborough Environment City Trust

Royal Society for the Protection of Birds (RSPB)

South Cambridgeshire District Council

The National Trust

The Wildlife Trust for Bedfordshire, Cambridgeshire, Northamptonshire &

Peterborough

The Woodland Trust

Project Group

A Project Group of key stakeholder organisations was established to manage the review and report progress to the Green Infrastructure Forum.

Cambridge City Council

Cambridgeshire County Council

Cambridgeshire Horizons

East Cambridgeshire District Council

Environment Agency

Fenland District Council

Huntingdonshire District Council

Natural England

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LDA Design



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1 Executive Summary

Note – to be revised

Green Infrastructure is part of our natural life-support system. It is the network of natural and man made features such as open spaces, woodlands, meadows, footpaths, waterways and historic parks, which help to define and to link the communities, villages, towns and cities of Cambridgeshire with each other and to the surrounding landscape.

This Strategy is designed to assist in shaping and co-ordinating the delivery of Green Infrastructure to provide social, environmental and economic benefits now and for the future.

This Strategy will demonstrate how the different elements of Green Infrastructure can be used to help to achieve four objectives:

- 1) To reverse the decline in biodiversity
- 2) To mitigate and adapt to climate change
- 3) To promote sustainable growth and economic development
- 4) To support healthy living and wellbeing.

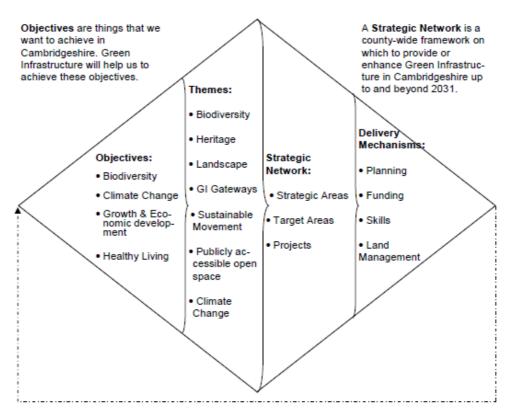
These four objectives were agreed by The Green Infrastructure Review Group in preparing the Strategy, and are based on a number of key documents, including the 'Cambridgeshire Together Vision 2007 – 2021' and the 'Cambridgeshire Quality Charter for Growth'.

Public consultation took place early in 2010. This consultation confirmed that the objectives were the right ones to be aiming towards.

To help determine how Green Infrastructure can be used to meet the four objectives, it is useful to think about Green Infrastructure as a number of 'Themes'. Green Infrastructure is based on physical assets (things), both natural and man-made and these can usefully be dealt with under a number of themes or subject headings. These themes focus attention on particular aspects of Green Infrastructure. By spatial analysis; that is, mapping, of where each of themes (and other important factors relating to Green Infrastructure) is most relevant and important, and then by considering all of the themes together, it is possible to build up a 'Strategic Network' for Green Infrastructure across the county. The Strategic Network is central to the whole Strategy, and includes projects that are directly relevant to the overall objectives. The Strategy includes ideas about how these projects can be funded and delivered on the ground.

The Green Infrastructure Strategy, and the associated technical appendices, will form part of the evidence base for local planning authorities to help with preparing local planning policy.

The diagram on the next page shows that these key elements of the Strategy (objectives, themes, Strategic Network and delivery mechanisms) need to be considered together to understand the whole Strategy.



Deliver Projects and Refine Objectives

Themes. Green Infrastructure is based on physical things (natural and man-made) and these can usefully be dealt with under a number of 'themes' or subject headings.

Delivery Mechanisms are the ways in which we can make the projects within the Strategic Network happen on the ground.



2 Background and Purpose

2.1 What is Green Infrastructure?

Green Infrastructure is our natural life-support system. It is the network of natural and man made features such as open spaces, woodlands, landscapes, rights of way, waterways and historic parks, which links our settlements and countryside and serves our communities.

Green Infrastructure is *multi-functional*, combining a range of aspects such as landscape, wildlife and public access, and providing multiple benefits, contributing to economic development, sustainable growth and quality of life and place. For example, enhancing connectivity through the provision of new walking and cycling routes not only supports healthy lifestyles but can also help support economic development and reduce carbon emissions.

Although there is no commonly agreed definition in the UK, Green Infrastructure refers to a strategic, multi-functional network of public green spaces and routes, landscapes, biodiversity and heritage. It includes a wide range of elements such as country parks, wildlife habitats, rights of way, commons and greens, nature reserves, waterways and bodies of water, and historic landscapes and monuments. The network comprises rural and urban Green Infrastructure of different sizes and character, and the links between them. It is part of (and contributes to) the wider environment.

2.2 Background to the Green Infrastructure Strategy

Green Infrastructure is vital to quality of life for both existing and future residents of Cambridgeshire and is regarded nationally as an important component of well designed and inclusive places. This Strategy plays its part in helping to deliver Cambridgeshire's Countywide Sustainable Communities Strategy 2007 – 2021¹ and its cross-cutting themes of:

- **Growth** accommodating growth, creating flagship communities and ensuring the benefits of growth and infrastructure are enjoyed by all.
- **Economic Prosperity** supporting the special role of Cambridgeshire as a centre of knowledge and innovation, especially in low carbon technologies.
- Environmental Sustainability meeting the challenges of climate change while maintaining a high quality environment.
- Equality and Inclusion supporting vulnerable groups and enabling them to participate fully in community life, and encouraging healthier and more sustainable lifestyles.

¹ Cambridgeshire Vision 2007-2021

• **Strong Communities** – engaging citizens in service planning and improvement and ensuring our communities enjoy good quality of life and health, with low crime, unemployment, discrimination and inequalities.

The planned growth for Cambridgeshire provides an exciting opportunity to create sustainable and vibrant new communities. Cambridgeshire's population is estimated at 600,800 (mid 2009) and is amongst the fastest growing in the country. In the region of 73,300 new homes are planned for the county between 2001 and 2021, concentrated in and around Cambridge and in the county's market towns.

Delivering this growth poses a number of challenges for the county, particularly the adaptation to and mitigation of the effects of climate change; the health and wellbeing of our communities; the development of sustainable transport networks and protecting and enhancing our environment, and creating attractive places and giving a good quality of life.

A number of documents have influenced the development of this Strategy including the Cambridgeshire Quality Charter for Growth² which sets out principles related to the expected quality of new developments in Cambridgeshire including climate change, character, community and connectivity. The importance of Green Infrastructure runs through the principles in the Quality Charter.

2.3 Why is Green Infrastructure important for Cambridgeshire?

Cambridgeshire is a diverse, mainly rural county with numerous villages, a number of market towns and a main city, Cambridge. It is the most westerly county in East Anglia and borders Norfolk, Suffolk, Essex, Hertfordshire, Bedfordshire, Northamptonshire and Lincolnshire. Cambridgeshire is made up of four districts and Cambridge City itself.

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² For further details http://www.cambridgeshirehorizons.co.uk/about horizons/how we do it/quality charter.aspx

Figure 2-1

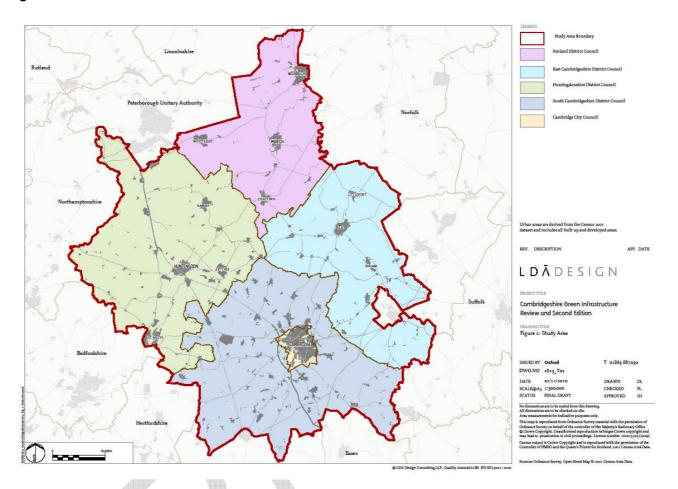


Figure 2-1: Cambridgeshire, showing administrative boundaries and settlement pattern.

Cambridgeshire's diversity is a result of the range of physical and cultural influences. The underlying geological conditions have had a significant effect in influencing the county's economy and patterns of settlement, industrial, agricultural and cultural activity. There is a wide range of landscapes and habitats, including some of national and international importance, for example, the Ouse and Nene Washes. There are flat fens in the north and east, undulating clay lands in the west and chalk hills in the south. Man-made waterways and 3 distinct river valleys – the Nene, Cam and Great Ouse - flow across a largely open agricultural landscape. Holme Fen in Huntingdonshire is the UK's lowest lying point. The low-lying nature of the county makes it susceptible to both fluvial and (potentially) coastal flooding, which are expected to increase as a result of climate change.

Green Infrastructure provides a range of social, economic and environmental benefits for local people and communities in Cambridgeshire. For example, it helps to regulate our climate, support our wildlife, store water to reduce flooding, clean and filter our water, as well as providing raw materials to support the economy. It also supports soil formation and crop pollination and brings benefits such as cultural heritage, health and wellbeing, aesthetic value

and recreational opportunities. It improves our quality of life and helps create high quality new places where people want to live and visit.

More specifically for Cambridgeshire, its low lying nature means that it acts strategically as a floodplain more widely for a number of river catchments in the East of England. Green Infrastructure plays a significant role here, through absorbing and storing water and slowing down the run off of water into our rivers and streams, and so helping to manage flood risk. Examples of Green Infrastructure that work hard to help manage water include Wicken Fen, The Great Fen, the Nene Washes and the corridor of Green Infrastructure that supports the River Ouse Valley.

As the population of Cambridgeshire grows it is crucially important that quality places are provided. Green Infrastructure helps the health and wellbeing of communities by providing opportunities to exercise; spaces to play in, learn from and enjoy. Examples of this include Wandlebury and Hinchingbrooke Country Parks.

Cambridge and Cambridgeshire attracts visitors from across the globe as a place to develop careers and to enjoy the historic and other stimulating places they offer. Green Infrastructure assets such as Wimpole Hall, Devil's Dyke, and the Green Fen and Icknield Ways are an important part of the attraction of the area. Enhanced and new Green Infrastructure can help draw visitors more widely across the county.

2.4 Why review the 2006 Green Infrastructure Strategy?

The May 2006 Green Infrastructure Strategy for the Cambridge Sub-region,³ which covered a twenty year period, was a milestone for planning the delivery of Green Infrastructure in the county. It was developed by The Landscape Partnership, on behalf of Cambridgeshire Horizons⁴ and its partners and was one of the first such strategies in the East of England.

The Vision for the 2006 Strategy was to "create a comprehensive and sustainable network of green corridors and sites that: enhance the diversity of landscape character, connect and enrich biodiversity habitats, extend access and recreation opportunities and enhance the historic environment, for the benefit of the environment as well as current and future communities in the Cambridge Sub-region".

The success of this strategy has demonstrated the importance of planning and delivering Green Infrastructure. A total of £21.9 million has been secured or invested directly into it in Cambridgeshire since 2004, of which £8 million came from Government Growth Funding. This investment has so far helped to create and/or safeguard approximately 3.5 square miles of Green

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³ http://www.cambridgeshirehorizons.co.uk/our_challenge/green_spaces

⁴ The not for profit organisation responsible for driving forward the delivery of sustainable new communities in Cambridgeshire.

Infrastructure as well as creating and improving a wide range of visitor/education facilities and public access for the benefit of local communities. The 2006 Green Infrastructure Strategy has played a key role supporting decision makers in their investment priorities. Progress on the implementation of the individual projects identified in the Strategy can be found in Appendix 2.

It is important to take this work forward into a reviewed Cambridgeshire Green Infrastructure Strategy and ensure those projects that need continued and long term investment are progressed, as well as identifying new opportunities to create and enhance Green Infrastructure in the County.

Since the publication of the 2006 Green Infrastructure Strategy, there has been greater recognition of Green Infrastructure's contribution to sustainable communities and the role that planning policy and local action can play in securing long term implementation and investment.

The impetus to review the 2006 Strategy is:

- Extending the coverage of the Strategy to the whole of Cambridgeshire rather than just the Cambridge Sub-Region. This means that all areas in the county that experience a deficit of Green Infrastructure and areas of socio-economic challenge are addressed.
- Strengthening the role of Green Infrastructure in the planning process by providing a robust evidence base to support local planning authority policies and plans and support the delivery of Green Infrastructure through and as part of new development.
- Extending the period covered to 2031 and beyond in line with emerging local planning policy.
- Supporting the development of Cambridgeshire's Integrated Development Programme (IDP)⁵. The IDP identifies the strategic infrastructure requirements for Cambridgeshire's growth and provides an evidence base for funding strategies. The IDP requires a robust evidence base for providing strategic Green Infrastructure for funding through a variety of sources.
- Integrating the wider benefits of Green Infrastructure delivery, with benefits for climate change, health and well-being and the delivery of sustainable communities.

⁵ An Integrated Development Programme is a single document bringing together housing and economic aims for a Functional Urban Area. It identifies, costs, and prioritises interventions required to achieve these aims, thus supporting regional funding decisions. Cambridgeshire Horizons and the Greater Cambridge Partnership have drafted an Integrated Development Programme for Cambridgeshire, which also recognizes the economic sub-region of Greater Cambridge. The IDP examines the housing and economic plans to 2021, and, drawing primarily on existing analysis, sets out packages of infrastructure investment and other interventions required to support growth. Cambridgeshire Horizons, 2009.

- Building on national guidance such as those produced by Natural England (Green Infrastructure Guidance 2009⁶), the Landscape Institute⁷, Town and Country Planning Association⁸, Forest Research⁹, and River Basin Catchment Management Plans. These provide a comprehensive overview of the concept of Green Infrastructure including policy statements and wider policy priorities.
- Providing a framework and methodology for the delivery of Green Infrastructure at district and community level.

Taken together, these factors prompted partners with the support of Cambridgeshire Horizons, to review the 2006 Green Infrastructure Strategy and replace it with a new Cambridgeshire Green Infrastructure Strategy. As part of the review, public and stakeholder consultation was undertaken January-March 2010.

2.5 Purpose of the Green Infrastructure Strategy

The purpose of the Strategy is to identify a Strategic Network of Green Infrastructure for Cambridgeshire which:

- Supports the protection, management and enhancement of existing green infrastructure and the creation of new at a county scale
- Provides context for the planning and delivery of local Green Infrastructure plans and projects to 2031, in line with emerging local planning policy;
- Is 'connected', linking urban and rural areas, joining up wildlife habitats and giving people access to nature;
- Is sensitive to and reinforces the distinctive landscape, historic and other character of Cambridgeshire's settlements and countryside;

⁶ Natural England, Green Infrastructure Guidance, 2009. http://naturalengland.etraderstores.com/NaturalEnglandShop/NE176

⁷ Green Infrastructure: connected and multifunctional landscapes. Landscape Institute Position Statement. Landscape Institute, 2009. http://www.landscapeinstitute.org/news/index.php/new_articles/view/gl_position_statement_p_ublished

⁸ Biodiversity by Design. TCPA, September 2004. http://www.tcpa.org.uk/pages/biodiversity-by-design.html

⁹ Benefits of Green Infrastructure. Report by Forest Research. October 2010. http://www.forestresearch.gov.uk/fr/INFD-8A9A2W

- Identifies the landscape scale¹⁰, benefits that can be achieved by coordinating planning and investment at community, local and 'subregional' scale;
- Identifies Green Infrastructure investment opportunities that can provide benefits to a broader set of issues including health, climate change mitigation and adaptation; economic development and enhancing biodiversity;
- Provides a robust evidence base and other means for Local Authorities to produce and support planning policies, manage development and provide an evidence base for Strategic Green Infrastructure investments as part of a future Community Infrastructure Levy (CIL);
- Provides support for bids for funding and other resources for Green Infrastructure projects.

The Strategy must be responsive to the needs of local communities. The Strategy should show where to target investment to develop a Green Infrastructure network, whilst allowing for local flexibility and determination in its delivery.

2.6 The objectives of the Green Infrastructure Strategy

The objectives of the Strategy have been informed by local and national priorities including The Cambridgeshire Vision 2007 – 2021 and Cambridgeshire's Quality Charter for Growth.

Objective 1:

Reverse the decline in biodiversity – conserving and enhancing biodiversity and geo-diversity, through the protection and enhancement of habitats and wildlife sites and linkage of key habitats at the landscape scale

Mitigate and adapt to climate change – manage the impacts of climate change through developing initiatives that reduce greenhouse gas emissions and that actively take carbon dioxide out of the atmosphere, promote access to green routes that reduce the need for travel by car; and Green Infrastructure that supports our adaptation to a changing weather pattern

Objective 2:

Objective 3:

through, for example, flood control.

large area, influenced by human action and underlying landform and geology.

Landscape means "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors." (European Landscape Convention, 2007). Landscapes are where there is a mix of land uses and ecosystems repeated over a

Promote sustainable growth and economic development — Green Infrastructure plays a key role in place-making, ensuring Cambridgeshire remains a place that people want to live and invest in. It can help attract and keep high quality workers; increase property values and attract visitors. Green infrastructure contributes to the character of our settlements and countryside and helps create attractive and distinctive new places.

Objective 4:

Support healthy living and well-being – Green Infrastructure can support healthy and active lifestyles, support good mental health, inspire learning, and create a sense of community.



3 Developing the Cambridgeshire Green Infrastructure Strategy

Note – this chapter is to be rewritten to clarify the methodology undertaken, using simplified graphics where possible.

This chapter explains the methodology for developing the Green Infrastructure Strategy. Figure 3-1 shows the general process and timescale for developing the Strategy through to adoption.



Figure 3-1: Timescale and key stages of preparation of the Green Infrastructure Strategy Review.

3.1 How the Strategy fits together

The Green Infrastructure Strategy is based on analysis of public policy (including planning and environmental policy) and key baseline data grouped into seven 'themes' which were identified as being important aspects of Green Infrastructure. Each theme has a role in helping to deliver the Strategy's objectives. Figure 3-2 shows the methodology used to develop the Strategy, highlighting where in this document the key parts of the Strategy can be found.

Green Infrastructure is based on physical assets (natural and man-made) that can be grouped under themes such as 'landscape', 'heritage' and 'publicly accessible open space' and which have a range of immediate and wider benefits. The Strategy identifies existing assets and also opportunities to enhance them and to create new assets. It also seeks to deliver related benefits that Green Infrastructure can provide (such as community engagement, economic development and tourism) and the four Objectives. It does this through identification of a Strategic Network.

Green Infrastructure is a spatial concept and the Strategic Network reflects this, identifying priorities for Green Infrastructure action within a county-level and multi-functional framework. Delivering the priorities highlighted by the Strategic Network by achieving Green Infrastructure improvements on the ground will benefit the different Themes, will result in a wide variety of benefits and contribute to the Strategy Objectives.

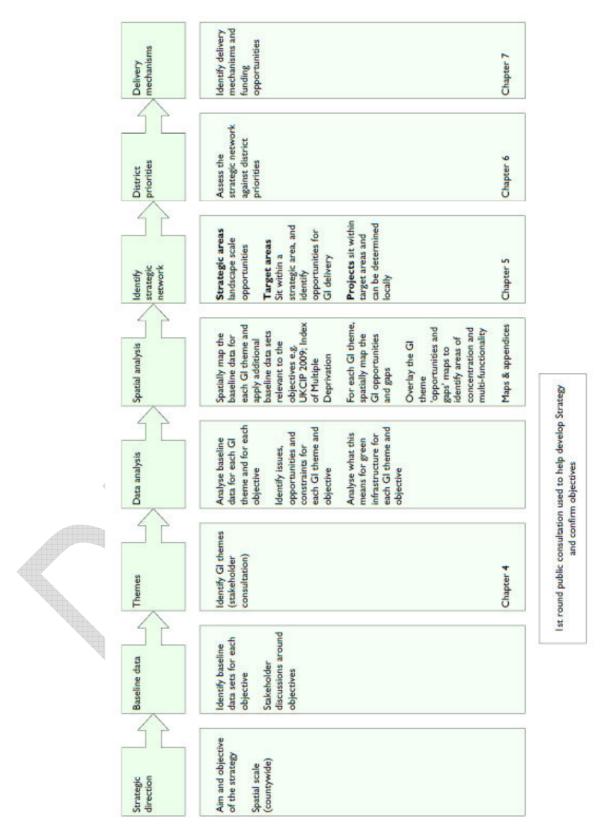


Figure 3-2: Methodology for developing the Cambridgeshire Green Infrastructure Strategy.

3.2 Objectives of the Strategy

The Green Infrastructure Strategy has four objectives, first developed as part of the 2006 Green Infrastructure Strategy. The purpose of the objectives is to ensure that the Green Infrastructure Strategy helps address the key issues facing Cambridgeshire. A range of documents, including the Cambridgeshire Vision 2007 – 2021 and the Cambridgeshire Quality Charter for Growth have informed the review of the Green Infrastructure Strategy and have confirmed the objectives, as discussed in the Executive Summary and Section 2.1 and in Technical Appendix 1. The Strategic Network highlighted in Figure 3-2 gives the opportunity to help achieve the objectives. The four objectives are:

- 1) Reverse the decline in biodiversity
- 2) Mitigate and adapt to climate change
- 3) Promote sustainable growth and economic development
- 4) Support healthy living and well-being

During January – March 2010, a public consultation on the first draft of the revised Green Infrastructure Strategy was undertaken. Responses to the consultation supported the objectives. The development of the Strategy was checked back against the objectives at different stages to ensure that the Strategy remained focussed on helping to achieve the objectives.

3.3 Green Infrastructure Themes

As noted above, Green Infrastructure is based on physical assets (natural and man-made) and these can usefully be dealt with under a number of themes or sub-headings. Such an approach is common and in developing the Strategy the themes were selected in discussions between stakeholders and informed by public consultation in 2010. The themes chosen are:

- Biodiversity
- Climate Change
- Green Infrastructure Gateways
- Heritage
- Landscape Character
- Publicly Accessible Open Space
- Sustainable Movement

All of the themes are important on their own for Cambridgeshire, and were considered first in isolation, to see what opportunities there were for each theme to help contribute to achieving the Strategy's objectives. By bringing

the themes together, stakeholders were able to look at the bigger picture of how Green Infrastructure could help to achieve the Strategy's objectives through the multi-functional Strategic Network.

To understand how each Green Infrastructure theme was important for Cambridgeshire, stakeholders interpreted the 'baseline data' and expressed this as opportunities, constraints, and issues. For example, in terms of Climate Change, data collected at a national level (UKCIP data provided by the UK Climate Impacts Programme based in Oxford) told us that we may be facing hotter, drier summers in eastern parts of the UK. For Cambridgeshire, this impact will be felt in urban areas, which can become hotter due 'urban heat island' effects. We therefore have the opportunity to use Green Infrastructure in urban areas in Cambridgeshire to help mitigate hotter summers, for example through provided more shaded areas through tree planting or parks close to urban areas.

In this context, 'opportunities' are ways that Green Infrastructure can help to deliver the four Strategy objectives. 'Constraints' are existing barriers to, or something that is preventing, the delivery of Green Infrastructure to help achieve the Strategy's objectives. 'Issues' are points of interest emerging from the dataset analysis that have particular relevance to Green Infrastructure, for example analysis of climate change data shows that summers will be drier and hotter, which will influence how the opportunities or constraints could be addressed.

Examples of the issues, opportunities (and constraints) for each theme, and case studies of projects in Cambridgeshire contributing to each theme can be found in Chapter 4.

3.4 Data analysis and spatial data analysis for the themes and other issues

For each objective and each theme, relevant 'baseline datasets' were identified and analysed geographically. Data was plotted onto maps of Cambridgeshire to give a comprehensive picture for each theme. As an example, for Biodiversity, datasets of the principal terrestrial and wetland habitat types and 'buffers' were mapped together with the Biodiversity Partnership's 50 Year Vision Target Habitats and nature conservation designations. This process identified the geographic distribution and concentration of features of each of the themes.

A technical appendix has been created for each theme, to explain in more detail the baseline information and maps that were used in data analysis.

Background technical appendices contain information to give the context for the Green Infrastructure Strategy, progress with the 2006 Strategy, the results of public consultation in 2010, and in terms of planning policy and growth proposals for Cambridgeshire. The appendix also includes other issues that are of particular importance to Green Infrastructure, but were not identified as a theme.

Maps were prepared by specialist consultants LDA Design as a way of presenting the large number of datasets. Maps were prepared for each theme. The first round of public consultation raised some suggestions about making the maps easier to 'read' and understand. Maps included in the final Strategy include an explanation of key points of interest.

Note – all the maps included in the consultation document will be presented in a clear legible way.

3.5 Developing the Strategic Network

The Strategic Network provides a county-wide framework upon which to provide or enhance Green Infrastructure in Cambridgeshire up to and beyond 2031 and therefore supports the delivery of the four objectives of the Strategy.

The Strategic Network is central to the revised Strategy; it is designed to give county-wide connectivity for Green Infrastructure, identify 'multi-functional' opportunities to support the delivery of the four objectives, and connect into Green Infrastructure provision outside Cambridgeshire. It brings together existing Green Infrastructure, Green Infrastructure that can be enhanced and improved and proposed new Green Infrastructure.

Figure 3-3 shows the process for developing the Strategic Network, giving a 'worked example' for the Green Infrastructure Gateways theme.

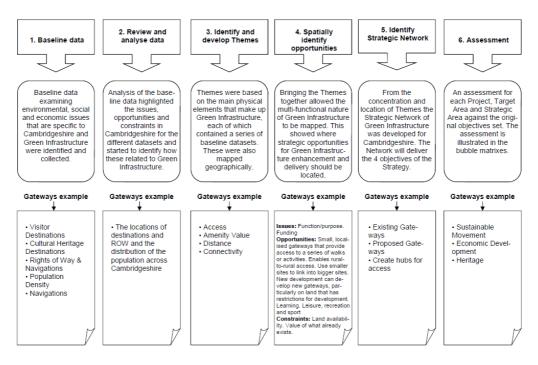


Figure 3-3: Process used to create the Strategic Network, with an example of the process used for Green Infrastructure Gateways.

The 'theme maps' and maps for other datasets (for example Indices of Multiple Deprivation) were overlain onto each other to show which places had

a concentration of opportunities. In some places within Cambridgeshire, maps showed a concentration of opportunities relating to themes and important aspects for the objectives. These places, where there are opportunities for Green Infrastructure to achieve multiple Strategy objectives, were of particular interest. Through this process it was possible to identify the Strategic Network that focussed on the most important issues for Cambridgeshire.

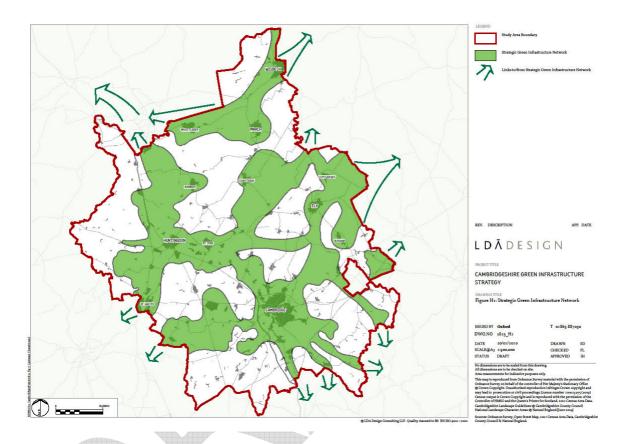


Figure 3-4: Cambridgeshire Strategic Green Infrastructure Network.

Figure 3-4 shows the Strategic Network that emerged from this analysis. The Strategic Network comprises three elements: Strategic Areas, Target Areas and Projects.

Strategic Areas

These separate the Network into six distinct geographical areas to help with the planning and delivery of the overall Network. They are based around landscapes and the connections within them, combinations of Green Infrastructure Themes and areas particularly important for single themes and how these relate to other important issues (such as housing growth, areas of deprivation, waterways). Their boundaries have been informed by the geographical analysis process.

The six Strategic Areas are shown in Figure 3-5. They are:

1) River Nene

- 2) Huntingdonshire Fens and Woods
- 3) Great Ouse
- 4) Eastern Fens and Towns
- 5) Chippenham Fen
- 6) Cambridge and Surrounding Areas

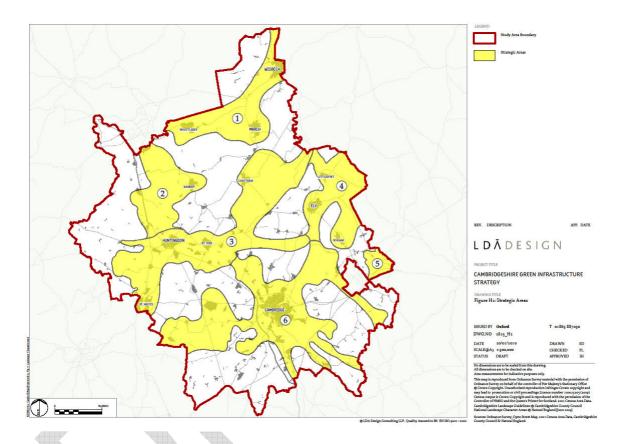


Figure 3-5: Strategic Network 'Strategic Areas'

Target Areas

Within each of the Strategic Areas, geographic concentrations of Green Infrastructure Themes and other important issues or assets including areas of opportunity such as major housing growth can come together to form Target Areas. A Target Area identifies an area in which to focus investment in Green Infrastructure. Table 3-A shows the Green Infrastructure Themes that contributed to the identification of the Target Areas.

	· · · · · · · · · · · · · · · · · · ·			า Inf	Infrastructure Theme				
Strategic Area	Target Area	Biodiversity	Climate Change	GI Gateways	Heritage	Landscape	Publicly Accessible Open Space ¹¹	Sustainable Movement	
River Nene	Wisbech	✓	✓	✓	✓	✓		✓	
	Whittlesey	✓	✓	✓	✓	✓		✓	
	March		✓	√	✓	✓	✓	✓	
	Nene Washes and River Nene (Old Course)	√					√	✓	
Huntingdonshire Fens and Woods	Great Fen	✓	\	✓	✓	✓		√	
	Ramsey			✓		✓	✓	√	
	Hunts Ancient Woodlands	√	√					✓	
Great Ouse	Grafham Water	√	✓	✓		✓	,		
	St Neots	✓	V	√	✓	✓	✓		
	Ouse Valley / Paxton Pits	Y	√	V					
	Huntingdon	/	√	<	\	√		√	
	St Ives	✓	√	√	✓	✓		√	
	Fen Drayton	V	✓	✓	- 1			√	
	Needingworth	√	√		,	√		✓	
	Earith		✓		√			,	
	Chatteris				✓	√	✓	√	
	Block Fen	√	√			√		✓	
	Ouse Washes	✓	✓			√		√	
Eastern Fens and Towns	Littleport	√		√		√		√	
	Ely	V	\checkmark	✓	✓	✓		✓	
	Soham	V		✓	✓	✓		✓	
	Ely Ouse	✓						✓	
Chippenham Fen	Chippenham Fen	✓	✓		√	✓			
Cambridge and surrounding areas	Northstowe		√	√	✓	√		√	
	Wicken Fen and Anglesey Abbey	√	√	√	√	√		√	
	Cambridge	✓	✓	√	✓	√		✓	
	Cambourne	-		√		✓	✓		
	Wimpole	√	√	✓	✓				
	West Cambs Woodland	✓	√			✓	✓		
Strategic Area	Target Area	Biodiversity	Climate Change	GI Gateways	Heritage	Landscape	Publically Accessible Open Space	Sustainable Movement	
		Green Infrastructure Theme							

Table 3-A Target Areas explained as concentrations of Green Infrastructure Themes.

¹¹ The Theme for Publicly Accessible Open Space is based on the 'all deficiency' Accessible Natural Greenspace Standards (ANGSt) analysis undertaken by Natural England autumn/winter 2010. The Theme therefore shows areas where none of the ANGSt are met in Cambridgeshire. At a strategic scale the Green Infrastructure Strategy should seek to address these areas where they coincide with the Strategic Network. Strategic Areas and Target Areas may have deficiencies against individual Standards and the Natural England document should be examined to provide more detail.

Projects

Projects are how Green Infrastructure is delivered at the local, district and county scale, all of which can contribute to the delivery of the Strategic Network. Projects can sit within Target Areas or other parts of Strategic Areas. The projects detailed in Appendix 15 'Strategic Network Projects' are ones that are already underway or are being planned, and that are further justified and supported by the Strategic Network and the individual Green Infrastructure themes. New projects can be developed that reflect the opportunities or needs identified through the Strategic Network and which reflect the different themes in a particular area. The delivery of projects should contribute to the four Strategy objectives.

The Strategic Network described here identifies projects within the framework of Strategic Areas and Target Areas that are necessary to address the issues identified, as well as providing a rationale and justification for the project.

3.6 Assessing the Strategic Network and Target Areas against the Strategy's objectives

As described above, spatial and other data on the objectives was used to help define the Strategic Network. A series of questions were consistently applied to determine whether Strategic Areas and Target Areas had a 'significant', 'moderate' or 'limited' influence on delivering the overall objectives for the Strategy. This assessment also provided a further check, to demonstrate that the Strategic Areas and Target Areas were clearly related to the Strategy objectives. This assessment process is set out in Figure 3-6. The assessment was carried out by stakeholders directly involved in the preparation of the Strategy. The results from this assessment are displayed illustratively (in Chapter 5) for each Strategic Area and Target Area in a series of 'bubble matrices'.

Reverse the decline in Biodiversity

- Does it protect and enhance habitats?
- Does it protect and enhance wildlife sites?
- Does it link key habitats at the landscape scale?
- Is it a key wildlife corridor?

Mitigate and adapt to Climate Change

- Does it mitigate urban heat island effects?
- Does it provide opportunities for carbon sequestration and storage?
- Does it provide opportunities for flood alleviation?
- Does it provide opportunities for wood fuel production?
- Does it provide green routes to reduce travel by car?

Promote Sustainable Growth & Economic Development

- Is it an existing Green Infrastructure gateway or provide opportunities for being a gateway?
- Are there deprivation issues as measured by the IMD?
- Is there predicted population/housing growth?

- Are there concentrations of population with limited access to the countryside and nature conservation sites?
- Are there key access corridors (promoted routes, cycle routes, and navigable waterways) adjacent?
- Does it provide opportunities for economic growth and employment?
- Does it protect and enhance cultural heritage and landscape character?

Support Healthy Living and Wellbeing

- Are there health and deprivation issues as measured by IMD and health data?
- Are there limited opportunities to access the countryside?

Figure 3-6: Process for assessing Strategic Areas and Target Areas against Strategy objectives.

3.7 Assessing the Strategic Network against existing District priorities

Boundaries and other aspects of the emerging Strategic Network were checked with stakeholders with local knowledge and limited revisions made. The Strategic Network and its Strategic and Target Areas and Projects were checked against existing District priorities. Existing projects were considered against the Strategic Network and the analysis behind it to see if they responded to the gaps and opportunities.

3.8 Identifying Delivery Mechanisms

To realise the potential of the projects within the Strategic Network to meet the Strategy's objectives, a number of 'delivery mechanisms' are needed and it is important to recognise and identify the role of the partners and others in bringing forward projects either as decision makers, for example the local authorities on planning policy documents and planning applications, or those who will actually delivery Green Infrastructure on the ground. A way of making the project happen on the ground is essential. Delivery mechanisms are those things that are able to facilitate or directly deliver Green Infrastructure projects.

A number of delivery mechanisms were considered to see how Green Infrastructure projects could be planned for, funded, and what skills are needed to support delivery. Delivery is dealt with in Chapter 7.

4 Green Infrastructure themes: issues, opportunities and constraints

4.1 Introduction

This chapter reports the issues, opportunities and constraints that exist for the Green Infrastructure themes and three other important influencing factors on Green Infrastructure. These are economic development and health – which reflect two of the objectives of the Strategy, and land and water management – one of the key delivery mechanisms for Green Infrastructure. To understand how each theme and the three other influencing factors were important for Cambridgeshire, stakeholders interpreted the 'baseline data' and expressed this as opportunities, constraints, and issues.

The chapter takes the following structure, and gives a case study of a Green Infrastructure project relevant to each theme and influencing factor:

- Biodiversity
- Climate change
- Green Infrastructure gateways
- Heritage
- Landscape character
- Publicly accessible open space
- Sustainable movement
- Economic development
- Health
- Land and water management

4.2 Biodiversity

<u>Issues</u>

- Habitat loss and increasing fragmentation
- Threats from climate change and development

Opportunities

- Creating 'bigger, better and joined-up' networks of biodiversity, that connect and enlarge habitats and provide landscape-scale conservation initiatives that create and support healthy ecosystems.
- Larger and better connected habitats have greater resilience against chance events and the impacts of climate change.
- Protection and enhancement of existing habitats

- Enhanced landscapes which provide benefits for public access, health, well-being and education.
- Environmental Stewardship offers a way to enhance habitat networks e.g. through providing linear features to connect habitats

Constraints

 Biodiversity easily drops off agendas as its value is not always recognised.

Case Study - River Cam Habitat and Access Enhancement Project has been undertaken by South Cambridgeshire District Council, working in partnership with organisations including Cambridgeshire Horizons, Grosvenor and the Environment Agency as part of the major development at Trumpington Meadows. This is located on the south-western edge of Cambridge, forming part of the urban expansion of the city, and a 60 hectare Community Riverside Park is proposed as part of the development. This park will provide formal and informal Green Infrastructure and will be an important resource for new and existing residents. The River Cam runs to the west of the Park and public access routes are planned along most of the river corridor. The biodiversity and habitat enhancement project has greatly improved the river and adjacent bank side habitats for a range of wildlife species (e.g. chub and minnow), improved the landscape and created flood alleviation measures. This project demonstrates how Green Infrastructure can deliver multi-functional benefits, but particularly biodiversity through innovative river restoration and how a committed funding source can be used to secure substantial match-funding from partners. The project won a Green Apple Award in 2010.



Photo provided by South Cambridgeshire District Council

4.3 Climate Change

<u>Issues</u>

- Changing average temperatures with hotter summers and milder winters
- Increased storminess and changing rainfall patterns with drier summers and wetter winters
- Flooding
- Urban Heat Island effects (add definition here and in glossary)
- Sea level rises

Opportunities

- Green Infrastructure can help ensure that the release of carbon is minimised and that carbon 'sinks' are created in areas where natural geography and land use allows enhanced carbon storage.
- Changes in land use and/or management can increase or decrease the amount of carbon stored and also supply wood as fuel in appropriate locations supporting renewable energy generation locally.

- Management and planning of green space and tree planting and the creation of wetlands can mitigate urban heat island effects, especially in densely built up areas such as Cambridge and the larger market towns.
- Maintaining Green Infrastructure assets such as river corridors encourages air flow into and through urban areas and woodland and helps to filter out air pollutants.
- Green Infrastructure can reduce the impacts of flood risk through the
 restoration of natural flood plains along river valleys or the creation of
 Sustainable Drainage Systems (SUDS) as part of development proposals.
 This is especially important in Cambridgeshire and supports the national
 strategy 'Making Space for Water¹², which proposes a whole catchment
 approach in order to take better account of the environmental and social
 consequences of flood risk

Constraints

• Competing land uses e.g. food production vs. wood fuel

Case Study – the Great Fen is a partnership project that demonstrates how Green Infrastructure can help to mitigate and adapt to climate change and also result in social, economic and environmental benefits. Peat restoration can store and capture large amounts of carbon¹³ and can provide areas for flood alleviation and control. These are important in mitigating and adapting to the impacts of climate change. It is a partnership project involving the Environment Agency, Huntingdonshire District Council, Middle Level Commissioners, Natural England and the Wildlife Trust. It aims to create 3,700 ha of wetland and other habitats between Huntingdon and Peterborough and link together two National Nature Reserves - Holme Fen and Woodwalton Fen. Once completed it will deliver wider socio – economic benefits, including flood protection, tourism and enhanced local access.

¹³ Natural England (2010) England's peat lands: Carbon storage and greenhouse gases http://naturalengland.etraderstores.com/NaturalEnglandShop/NE257

¹² Defra, Making Space for Water: Taking forward a new Government strategy for food and coastal erosion risk management in England, 2005.



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4.4 Green Infrastructure Gateways

<u>Issues</u>

- The variety of functions & purposes that Gateways can provide
- Sustainable funding of Gateway sites

Opportunities

- Gateways introduce people to the countryside through accessible and safe parks and visitor attractions.
- Provide amenities to encourage use and act as stepping stones to other Green Infrastructure such as circular routes, trails and public rights of way.
- Opportunities to provide land for gateways through new development sites.

Constraints

Limited land availability

Case Study - Coton Countryside Reserve is a wildlife and farm reserve

created on farmland on the western edge of Cambridge owned by local charity Cambridge Past, Present and Future (CPPF). Habitats, including woodlands, hedges wildflower and hay meadows have been created and improved. The Reserve will help to mitigate climate change through increased woodland planting and through changes to farm management, and future flood attenuation schemes. New recreational routes for walkers, joggers, disabled persons and horse riders link with adjacent public footpaths and bridleways making the Reserve an accessible major publicly accessible green space. There is an active programme of community and educational events on the Reserve and CPPF have worked closely with the local community and tenant farmer(s) to develop and deliver the Reserve. The Reserve demonstrates how habitat creation, public access, community involvement and education can be provided whilst still keeping the majority of the land in active environmentally-friendly agricultural production.



Photo provided by Cambridgeshire Horizons.

4.5 Heritage

Issues

- Impact of climate change and development
- Impact of farming
- Conflicts between conservation and public access
- Lack of visibility of some heritage assets

Opportunities

- Local history and archaeology contribute to the quality of life through informing and engaging local communities, and promoting healthy access to the countryside by making available places to visit.
- Information on the heritage of new and old settlements helps create a sense of connection and community, of place and pride.
- Heritage assets provide landscape features and landmarks to add interest to Green Infrastructure and publicly accessible open space.
- The historic environment also acts as gateways to the countryside, e.g. Wimpole Hall and Denny Abbey and Farmland Museum.
- High biodiversity value e.g. ancient woodlands, historic parks and gardens
- Community heritage schemes
- Environmental Stewardship schemes and other grants

Constraints

 Designations can constrain management practices and options for the development and use of sites

- Private ownership & costs of works
- Scope of grants available

Case Study - Devil's Dyke is a major landscape feature in the county. It is an Anglo-Saxon earthwork that runs from Reach to Wood Ditton in the east of the county, and is a Public Right of Way along its entire length, with a series of local circular walks used by visitors and local communities. It is home to several rare species of flora, is an excellent example of chalk grassland and has been designated a Site of Special Scientific Interest as well as a Scheduled Ancient Monument. As such it is a key Green Infrastructure asset in Cambridgeshire. Opportunities for providing information and educational resources to enhance people's experience of a Green Infrastructure site do not have to be limited to organised events or interpretation boards. SHAPE East¹⁴, with help from Cambridgeshire County Council and English Heritage, has produced a downloadable podcast guided walk¹⁵ that covers the history,

¹⁴ SHAPE EAST is an educational charity and architecture centre working with communities, schools, professionals, local authorities and the general public to increase their understanding of the importance of good planning, urban design, architecture and the built environment. http://www.shape-east.org.uk

¹⁵ http://www.shape-east.org.uk/tours/Devil's Ditch Podcast.html

use and importance of the Dyke, plus information on its wildlife and biodiversity.



Photo provided by Cambridgeshire Horizons.

4.6 Landscape Character

<u>Issues</u>

- Long term investment to realise benefits
- Erosion of landscape character and quality from changing land use and development

Opportunities

- Creation of new and restoration of landscapes through development
- Alignment with other initiatives to provide opportunities for funding.
- Engage residents and visitors to the county to better appreciate the character of the county's landscape, and understand the factors that have shaped the patterns of land use, settlement and industry

Constraints

- Funding
- Fitting in with surrounding landscape character

No designated landscape areas (Areas of Outstanding Natural Beauty)

Case Study - West Cambridgeshire Hundreds aims to enhance biodiversity through the better management, expansion and linkage of habitats, concentrating on the ancient woodlands and hedgerow network across the project area, which is the wooded clay upland from the west of Cambridge to the Bedfordshire border. It aims to do this by working in partnership with local landowners to identify opportunities for environmental enhancements and co-ordinating action across property boundaries to increase landscape connectivity over a large area. This will be more successful at creating and linking habitats than would be the case if landowners working independently. It is a joint project between local landowners, the Wildlife Trust, the Woodland Trust, National Trust, Forestry Commission, Natural England and the Farming and Wildlife Advisory Group. The case study demonstrates how large-scale habitat and access enhancements that improve the landscape character of an area can be developed and delivered by landowners working in partnership with relevant organisations, using a variety of funding sources (including Growth Area Funding, Countryside Stewardship and the English Woodland Grant scheme).



Photo provided by Cambridgeshire Horizons.

4.7 Publicly Accessible Open Space

Publicly Accessible Open Space is important for providing areas for recreation and enjoyment by communities at different scales and distances from people's homes. One way of measuring Open Space provision is through the application of standards. Given the variety of local standards across Cambridgeshire and a need for consistency Natural England's Accessible Natural Greenspace Standards (ANGSt) have been used to examine the level of publicly accessible natural greenspace provision in Cambridgeshire.

With data supplied by districts and other partners, Natural England has undertaken a full ANGSt (Accessible Natural Greenspace Standards) analysis of the county, and indicative results to test against the Strategic Green Infrastructure Network have been provided. Detailed ANGSt analysis for each district, describing in more detail where there are areas of deficiency in provision, will be included in the full Natural England report, due for completion by March 2011.

Issues

- The ANGSt analysis provides a baseline for the county. Planned future development, with resultant population growth, may be located in areas that already have a deficit against some or all of the standards, or they may adversely alter how an area performs against the standards.
- Conversely well-planned and delivered development can create new Accessible Natural Greenspace that addresses deficits in Cambridgeshire.

Opportunities

- Planned development offers opportunities to create new Accessible Natural Greenspace to address deficits or to mitigate against new areas of deficit.
- Where appropriate, making areas of Natural Greenspace that are currently inaccessible to the public or that do not meet the criteria for accessibility can help address deficits at different ANGSt scales.
- Green Infrastructure investment across the county through the creation or improvement of new sites that meet the definition of Accessible Natural Greenspace can help address deficits in ANGSt.

Constraints

 The definition of Accessible Natural Greenspace does not encompass all Green Infrastructure assets that may exist in Cambridgeshire, for example, other forms of open space that are more 'manicured', including many recreation grounds and areas of sports pitches, and also Public Rights of Way.

Case Study – Cambourne, a new settlement of three linked villages – Upper Cambourne, Greater Cambourne and Lower Cambourne – is being developed near Bourn to the west of Cambridge. The development is to include around

4,200 homes (approximately 3,000 of which have already been constructed), local facilities and a high proportion of publicly accessible open space. Existing woodland and scrub, connecting greenways, public open space, landscape character, ecology, cycle paths and good access links throughout the development were major drivers of the proposed layout of Cambourne. This has resulted in a settlement that has a well-designed and well-used network of public open space, with associated benefits for resident's health and wellbeing. Cambourne demonstrates how publicly accessible open space and other Green Infrastructure features can be provided through the planning process. The design of Cambourne's Green Infrastructure won a Landscape Institute Award in 2010.



Photo provided by Cambridgeshire Horizons.

4.8 Sustainable Movement

<u>Issues</u>

Economic benefit of investing in promoted routes

Opportunities

 To establish a sustainable movement network linking rural and urban communities and tourists to destinations. This could include a combination of public rights of way and sustainable transport routes (including public transport), with interchanges being provided at transport nodes, such as railway stations, bus stops and park and ride sites.

- Through improving long distance routes, benefits for tourism and economic development are created, and with more visitors to the area more are likely to stay overnight and spend their money locally.
- At a more local scale, opportunities exist to improve access through green corridors to work places, schools and colleges, shopping centres and other facilities without reliance on the car, encouraging healthier lifestyles and minimising carbon dioxide emissions.
- Carbon savings through change to sustainable modes of transport.

Constraints

- Funding for investment and maintenance
- Land ownership
- Historic pattern of Rights of Way with fewer routes in some parts of the county, gaps in the network due to a lack of viable river crossings and changed land use over which Rights of Way run (pasture to arable)
- Physical constraints e.g. existing infrastructure

Case Study – the Fen Rivers Way is a recreational linear footpath that runs from Cambridge and follows the Rivers Cam and Ely Ouse across the fens into Norfolk and then to Kings Lynn. Cambridgeshire County Council led and facilitated the development of the route, which was delivered through The Fen Rivers Way Association volunteer group. The Association was formed by representatives from the Parish Council along the rivers and The Ramblers Association. The project developed from the Parish Paths Partnership initiative which the County Council started in order to involve local people in managing local path networks. At one stage all the Parishes between Cambridge and Ely were in the Scheme and at a partnership meeting/training event, volunteers suggested linking up all these Parishes through the existing network of footpaths that ran between Cambridge & Ely along the river. The Fen Rivers Way demonstrates how an existing network can be developed upon as a result of local interest and support of the County Council and how linear Green Infrastructure can have community development, health, recreational and tourism benefits.



Photo provided by Cambridgeshire Horizons.

Case Study – Reach Lode Bridge, part of the Wicken Fen Vision, was constructed in 2010 as part of the Lodes Way, creating a walking, cycling and horse riding route linking National Cycle Network routes 11 and 51. Created by the National Trust with funding from the Big Lottery Fund, Sustrans, Housing Growth Fund, Higher Level Stewardship and the Environment Agency it helps connect local villages as well as the wider communities of Cambridge, Ely and Newmarket with a sustainable access route for health, recreation, tourism and countryside access.



Photo provided by The National Trust

4.9 Other influencing factors

In addition to the themes identified in the preceding section, other factors have influenced the development of the strategy and the achievement of its objectives. The third of these, water and land management, also strongly influence the development and delivery of the Green Infrastructure Strategy. Water cycle studies should be prepared and considered alongside the Strategy to help maximise opportunities for Green Infrastructure in aiding flood risk management, improving water quality, protecting our water resources and enhancing biodiversity.

4.9.1 Economic Development

<u>Issues</u>

Impacts of climate change

Opportunities

- Transport route improvements in those areas with significant gaps to assist with greater connectivity between villages and to access services.
- Green Infrastructure can also create tourism activities and attract inward investment e.g. wetland projects.

- Growth in cycling and outdoor pursuits
- High quality places attract inward investment of jobs and people
- Using our waterways for more functions, such as freight and commuting are also opportunities. Schemes such as the water taxi system in Spalding, Lincolnshire, the proposed water taxi scheme in Peterborough, and The Fens Waterways Link, will all provide benefits for economic development through tourism, employment, regeneration and business opportunities.
- Improving our waterways can help water supply, flood defences, provision of water for abstraction as well as pollution removal and dilution.

Constraints

- Limited public funding for route improvement
- Business reticence to invest in current climate

Case Study - The Fens Waterways Link is a waterway project that will connect the cathedral cities of Lincoln, Peterborough and Ely. In Cambridgeshire it will link the market towns of March, Littleport, Whittlesey Ramsey and Chatteris and smaller communities including Sutton and Upwell. The new circular waterway will improve or open up 240 km (149 miles) of navigable rivers and drains. This will provide access to the heritage, culture and history of the Fens; benefit the natural environment by linking major wetland sites and creating new habitats; improve and increase Green Infrastructure and give local people a sense of ownership of their local waterways with opportunities for recreation, enjoyment and healthy activities; promote waterways as a venue for learning, training and skills development; and enable visitors, businesses and others to become champions for the waterways at the heart of local communities. It will demonstrate how Green Infrastructure can be a major economic and tourism resource in an area of deprivation and/or limited economic diversity.



Photo provided by Cambridgeshire Horizons

4.9.2 Health

<u>lssues</u>

- Climate change impacts, such as more extreme summer temperatures
- Air quality
- Negative associations with Green Infrastructure e.g. with fear of crime, falls, accidental drowning
- Public health challenges such as rising levels of obesity, diabetes and heart disease

Opportunities

- Green Infrastructure offers access to green spaces and routes providing benefits for mental and physical health through exercise, sport and leisure, social inclusion and enjoyment of open spaces and linear access networks (Rights of Way, cycle routes)
- Quality green spaces close to people's homes designed into and in association with new developments so all people live within accessible distances of greenspaces of a range of sizes, delivering opportunities for easy, no/low cost physical exercise, and mental health benefits through reconnection with nature

 Health benefits through reduced air pollution and cooling of higher summer temperatures. For example, trees filter out pollutants and provide shading to help ameliorate urban heat island effects

Constraints

• Green Infrastructure has to be considered alongside other factors which impact on health

Case Study – Huntingdonshire Health Walks started as a pilot in 2003 in St Ives and was delivered by Huntingdonshire District Council in partnership with the Huntingdonshire Primary Care Trust (subsequently part of NHS Cambridgeshire). Since then it has expanded to take in St Neots, Huntingdon, Ramsey and Yaxley. In 2009-10 there were 8,081 attendances from 542 participants. In the first 6 month of 2010-11 there were 4,142 attendances and 452 participants using the scheme as a way to benefit their health.

Nationally accredited this scheme involves a team of 32 volunteers leading a programme of walks across the district; the walks range from 30 to 90 minutes and are based on the national 'Walking for Health Initiative'. Although walks are based around the 5 main centres walks do take place in other locations to make them more accessible including Kimbolton, Buckden and Hemingford Grey.



Photo provided by Huntingdonshire District Council

4.9.3 Water and Land Management

Issues

- Pressures on water environment from development and population growth as well as availability and sustainability of water resources
- Complex pollution issues from land management
- Changing climate impacts on one of the driest parts of the country e.g. drought
- Low lying county susceptible to flooding
- Water quality
- Land use e.g. food production balanced against renewable fuels and/or biodiversity
- Declining agricultural industry

Opportunities

- Diversification of land uses can improve biodiversity and provide alternative/additional income streams for farmers and land managers
- Environmental Stewardship Schemes / English Woodland Grant Schemes
- Reducing flood risk
- Green Infrastructure will have a very important role to play in improving water quality of our water bodies and ensuring compliance with the Water Framework Directive (WFD). The WFD encourages the protection and enhancement of every aspect of the water environment. The framework introduces more stringent standards and requires 'no deterioration' from current water status. High quality GI will help filter/hold back and in some cases reduce pollutants entering river systems, thus aiding in maintaining and improving good status for water bodies in Cambridgeshire.
- Benefits to Green Infrastructure from delivering and implementing Water Cycle Strategies
- The Cambridgeshire and Peterborough Minerals and Waste Development Plan offers significant opportunities to provide additional Green Infrastructure through appropriate restoration schemes, for example at Block Fen.
- Cambridgeshire has the largest County Farms Estate in the country and the Estate has a key role in sustainable land management and the protection and enhancement of biodiversity and the provision of public access routes or areas – often to serve local communities.

Constraints

 Availability of sustainable water resources – Cambridgeshire is an Area of Serious Water Stress

Case Study - The Great Ouse Wetland is a landscape-scale conservation project comprising a network of existing and developing wetland sites, extending from RSPB's Fen Drayton Lakes to the Ouse Washes and including the Hanson-RSPB Wetland project at Ouse Fen. The Great Ouse Wetland provides local solutions to flood storage and sustainable land management and food production, while delivering Green Infrastructure, public access and internationally important wildlife habitats. Flood management at the Ouse Washes is undertaken by the Environment Agency, whilst much of the land is owned and managed by the RSPB, Wildlife Trust and WWT, and the management of this ecologically important grazing land protects approximately 880 properties and 29,000ha of high grade farmland from serious flooding. Fen Drayton Lakes also provides flood storage in the Ouse valley in times of high river flood flows, and additional capacity will be created when the Hanson-RSPB wetland starts to abstract river water to feed the newly created reed beds near Needingworth and Over. This case study demonstrates the significant land and water management benefits that creating an integrated, large-scale network of Green Infrastructure sites can provide.



Photo provided by Cambridgeshire Horizons

5 The Strategic Network

Note: Introductory sections to be revised in conjunction with Chapter 3 revisions dealing with the presentation of the methodology.

5.1 Introduction

This chapter introduces the Strategic Network for the Cambridgeshire Green Infrastructure Strategy, presented as Strategic Areas, Target Areas and Projects. The methodology used to develop the Strategic Network is given in Chapter 3. To summarise, the Strategic Network was developed by analysing datasets for each Green Infrastructure Theme and other influencing factors, mapping them to show where 'concentrations' of Green Infrastructure Themes exist (the 'Target Areas') and identifying projects either within these Target Areas or within Strategic Areas.

The Strategic Network is made up of six Strategic Areas. This chapter begins with a high level assessment of the Strategic Areas against the Strategy's four objectives. The rest of the chapter presents the Target Areas and Projects within each Strategic Area, with frequent reference back to the Strategy's four objectives.

5.2 How do the Strategic Areas deliver strategy objectives?

The assessment of the Strategic Areas against the Strategy's objectives, shown in Figure 5-A, confirmed that all Strategic Areas have significant potential to contribute towards delivering the Strategy's objectives. There is a slight exception for Chippenham Fen, which has limited potential to help promote sustainable growth and economic development and to help support healthy living and wellbeing. This is due to the location of Chippenham Fen (away from urban areas and areas allocated for employment) and because public access within Chippenham Fen is limited. However, as one of the only remaining remnants of fen habitat in the country it is of national importance and therefore forms a key pat of the Strategic network of Green Infrastructure in Cambridgeshire.

Confirmation that all Strategic Areas can contribute to delivering the Strategy's objectives is important as this meant that the Strategic Network could be developed using the Strategic Areas as a starting point. Knowing that the Strategic Areas 'fit' well with the overall objectives means that Target Areas and Projects within each Strategic Area should also 'fit' well with the overall objectives.

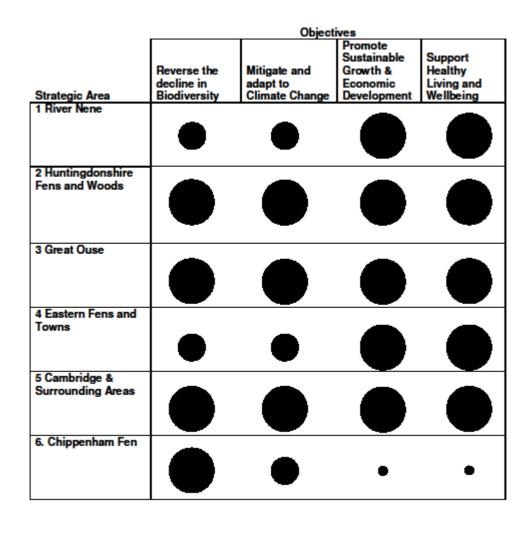




Figure 5-1: How the Strategic Areas deliver the strategy objectives.

5.3 Strategic Areas Overview

The next sections of this chapter work through each Strategic Area, providing background and context and highlighting key aspects of the Areas themselves. Target Areas for each Strategic Area are then presented, with

Projects that could help towards meeting the Strategy's objectives. Projects are discussed both at the Strategic level (for example the large-scale Fens Adventurers Partnership: Green Fen Way) and the Target Area level (for example Soham common restoration or Chatteris country park). Table 5-A gives an overview of the whole Strategic Network, presenting Strategic Areas, Target Areas within these, and projects.

Table 5-A Cambridgeshire Green Infrastructure Strategy - Strategic Network projects.

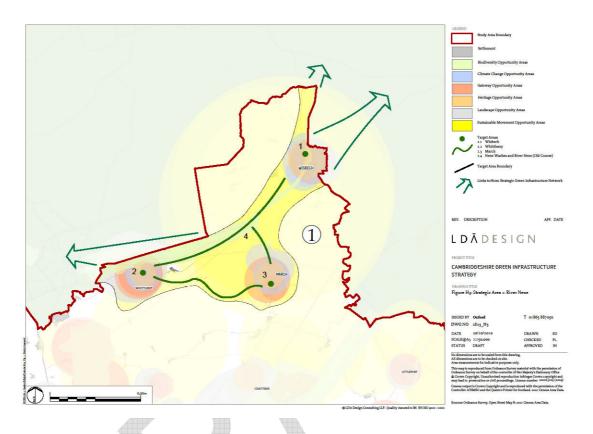


Strategic Area 1: River Nene Strategic Area project: Fens Adventurers Partnership: Green Fen Way Target Area Wisbech Target Area projects → Wisbech country park Target Area Whittlesey Target Area March Target Area projects → March country park Target Area Nene washes and River Nene Target Area projects → Links to Peterborough Green Wheel Strategic Area 2: Huntingdonshire Fens and Woods Strategic Area project: Fens Adventurers Partnership: Green Fen Way Target Area Great Fen Target Area projects → Great Fen masterplan delivery, Great Fen/South Peterborough Access Link Target Area Ramsey Target Area projects → Healthy Walks Programme Target Area Huntingdonshire Ancient Woodlands Target Area projects → Woodland Linkage Programme Strategic Area 3: Great Ouse Strategic Area project: Fens Adventurers Partnership: Green Fen Way Target Area Grafham Water Target Area projects → Woodland Linkage Project, Grafham Water – Brampton Wood Link Target Area St Neots Target Area projects → St Neots A428 Pedestrian Underpass. St Neots Green Corridor Project Target Area Ouse Valley & Paxton Pits Target Area projects → Ouse Valley Wet Meadows, Wet Woodlands, Ouse Valley Way, Paxton Pits NR, Cow Lane Gravel Pits Target Area Huntingdon Target Area projects → Huntingdon Green Spaces Target Area St Ives Target Area projects → Houghton Meadows Restoration Project & St Ives Country Park Target Area Fen Drayton Target Area projects → Fen Drayton Lakes & RSPB habitat and visitor infrastructure management Target Area Needingworth Target Area projects → Hanson RSPB wetland project Target Area Earith Target Area Chatteris Target Area projects → Chatteris Country Park, Chatteris – Somersham Railway Corridor Enhancement Target Area Block Fen Target Area projects → Block Fen Minerals After use Wetland & Restoration Project & creation of wet grassland following mineral extraction Target Area Ouse Washes Target Area projects → The Environment Agency Ouse Washes Habitat Creation Project Strategic Area 4: Eastern Fens and Towns Target Area Littleport Target Area projects → Littleport Urban Greenway & New River Town Park & Cycleway Improvements & Woodland Creation Target Area Ely Target Area projects → Ely Country Park & Woodland Creation & North Ely Development & Ouse SuDS & Sustainable Access across A10 Target Area Soham Target Area projects → Soham Common Restoration & Improved public open space and town parks Target Area Ely Ouse Target Area projects → Environmental Stewardship Schemes – Commons & Access to WT & Eastern Gateway Green Infrastructure Expansion Strategic Area 5 : Chippenham Fen Target Area Chippenham Fen Strategic Area 6: Cambridge & surrounding area Strategic Area project: Chalk Rivers Project Strategic Area 6: Cambridge & surrounding area Strategic Area project: Fowlmere Nature Reserve Extension and Development of Facilities Strategic Area 6: Cambridge & surrounding area Strategic Area project: Linear Monuments Strategic Area 6 : Cambridge & surrounding area Strategic Area project: Woodland Linkage Project Target Area Northstowe Target Area projects → Enhance Rights of Way Links Target Area Wicken Fen and Anglesey Abbey Target Area projects → Wicken Fen Vision, Wicken Fen Heritage Trails Target Area Cambridge Target Area projects → Cambridge Nature Conservation Strategy, Cambridge Fringe Sites, Outside Cambridge, Cambridge City Centre Target Area Cambourne Target Area projects → Large scale public open space Target Area Wimpole Target Area projects → Wimpole Cycling Link

Target Area West Cambridgeshire Woodlands Target Area projects → West Cambridgeshire Hundreds Habitat Enhancement Project, Bourn Brook Enhancement

Strategic Area 1: River Nene

5.3.1 Description



This area is focused along the Nene Washes, River Nene and the old course of the Nene and includes the market towns of Wisbech, Whittlesey and March and their adjacent rural areas. There are key links along the River Nene to Peterborough and Norfolk/South Lincolnshire.

The area is predominantly flat and low-lying comprising some of the most fertile soils in the country, and is a highly productive agricultural area. Rivers and drains criss-cross the landscape, and form part of the wider fen drainage scheme. The Area is bounded to the north by the Nene Washes; which is a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar site of international renown, particularly for over-wintering birds. There is little in the way of tree cover in the Area in comparison to other Areas or parts of Cambridgeshire. Wind turbines are a significant feature in the fenland landscape.

Food production and food processing; precision engineering; and brick making at Whittlesey are the main industries, along with retailing in the Market Towns and a significant public sector employment presence in respect of administration, education and healthcare. However, opportunities exist to develop and promote tourism, in particular utilising the Green Infrastructure sites referred to above and the network of waterways and long-distant Rights

of Way. The A605, A141, and A47 are the main distributor roads in the Area. The Ely – Peterborough railway also runs through the Area with stations at March and Whittlesey.

Looking at the Strategy's Objectives there is a particular emphasis in the Strategic Area on Green Infrastructure promoting 'sustainable growth and economic development' and 'supporting healthy living and wellbeing'. The importance of the Nene for 'biodiversity' is also a key consideration in this area, and acts as a movement corridor for people and wildlife. 'Climate change adaptation and mitigation' opportunities are focused on the three market towns. There are significant issues regarding health and well being, and local economic development within this area. These provide a particular opportunity for Green Infrastructure investment to benefit of the local community.

Looking at the Green Infrastructure themes, investment in this Strategic Area offers significant opportunities for:

- Biodiversity through enhancing and protecting the nationally and internationally important nature conservation areas and the local network of drains and ditches that form an important network of water-based habitats.
- Climate Change Adaptation by provision of urban cooling measures such as tree planting, local flood alleviation and green space creation.
- Gateways developing gateways that act as nodes linking the market towns and strategic movement routes, navigable waterways and housing growth.
- Heritage by using historic assets which are associated with the market towns and the network of medieval drains and other linear archaeological features.
- Landscape Character contributing to landscape character through growth and regeneration of the market towns and through improving and maintaining the Nene Washes.
- Publicly Accessible Open Space at present the Area has a total deficiency in ANGSt at the 100ha plus and 500ha plus standards and a significant deficiency in ANGSt at the 2ha plus and 20ha plus standards.
- Sustainable Movement by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside and linking to adjacent major population growth in Peterborough.

5.3.2 Strategic Area Projects

Fens Adventurers Partnership: Green Fen Way

5.3.3 How do the Target Areas deliver strategy objectives?

In the River Nene Strategic Area, the Target Areas are:

- Wisbech
- Whittlesey, March
- Nene Washes and River Nene (old course)

The bubble matrix Figure 5-2 shows that each of the Target Areas do have the potential to contribute towards delivering the Strategy's objectives. It is notable that Wisbech, Whittlesey and March have significant potential to contribute towards promoting sustainable growth and economic development, and supporting healthy living and wellbeing. The River Nene has significant potential to contribute towards reversing the decline in biodiversity. This assessment provided confidence that the Target Areas should be explored in more detail and opportunities identified for how the themes could be used to realise the potential within each Target Area.

Strategic Area 1: River Nene

	Objectives				
Target Areas	Reverse the decline in Biodiversity	Mitigate and adapt to Climate Change	Promote Sustainable Growth & Economic Development	Support Healthy Living and Wellbeing	
1.1 Wisbech	•	•			
1.2 Whittlesey	•	•			
1.3 March	•	•			
1.4 Nene Washes and River Nene (old Course)		•	•	•	

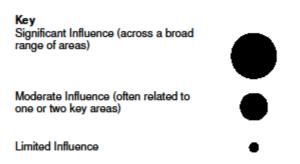


Figure 5-2: How the River Nene Target Areas deliver the strategy objectives.

5.3.4 Target Area 1.1: Wisbech

Background

Wisbech is a historic market town, renowned for its Georgian architecture, which is a legacy from the town's history as an important trading centre focusing on the port.

The Green Infrastructure Network for Wisbech should seek to address the existing shortage of open space within and around parts of the town, and to develop and enhance the existing provision.

The Network should also seek to develop links to the smaller outlying settlements to the west and north by utilising the River Nene wherever possible.

The lands owned by the National Trust to the west of the town, around the Council's leisure centre, and in the vicinity of the Sea Bank Scheduled Ancient Monument are considered areas where enhancements might be made. Proposals for a new country park to the west of the town have previously been put forward as part of possible large scale housing development. A country park in this location might be able to incorporate measures to mitigate against the risk of flooding. However, depending on proposals put forward in the Local Development Plan other areas may be considered more appropriate for any large scale open space provision.

Opportunities within the Target Area to inform future project development

- Biodiversity: through enhancing and protecting the important nature conservation areas and the local network of drains and ditches that form an important network of water-based habitats
- Climate Change: by the provision of urban cooling measures such as tree planting, local flood alleviation and the creation of green spaces.
- Green Infrastructure Gateways: Developing Wisbech as a gateway that
 act as a node linking the market town with strategic movement routes,
 navigable waterways, housing growth and into west Norfolk.
- Heritage: by using historic assets, including the Georgian architecture along the brink, which are associated with Wisbech and the network of medieval drains and other linear archaeological features.
- Landscape character: contributing to landscape character through growth and regeneration of the market town.
- Publicly Accessible Open Space: TBC
- Sustainable movement: by improving the Rights of Way network and utilising the Fens drain system and the port to allow access to Green Infrastructure sites and the wider countryside.

<u>Current Projects</u> (see Appendix 15 for further details)

Wisbech Country Park

5.3.5 Target Area 1.2: Whittlesey

Background

Whittlesey is located on the north west of Cambridgeshire only 6 miles from the city of Peterborough. It is bordered by the River Nene to the North. The

Green Infrastructure Network around Whittlesey should include the Kings Dyke and Briggate River to the south of the town. There is potential for enhanced linkages with the rest of the town, particularly towards the Yacht Club to the south-east; the Diving Centre area around Guildenburgh Water and Lattersey Field Local Nature Reserve to the east.

Green Infrastructure linkages to the north of Whittlesey between the Nene Washes and the town, and greater use of the Green Infrastructure benefits of the Town Cemetery in Cemetery Road and the adjacent College playing fields at Sir Harry Smith Community College to the east could be made.

Overall, Whittlesey is similar to Chatteris in that most places are easily walk able and cyclable, and this ease of movement around the town should be emphasized within any Green Infrastructure Network.

More emphasis on the sustainable nature of the town's railway links between March/Ely and Peterborough should be made - something which Fenland District Council is seeking to achieve through the Whittlesey Market Town Transport Strategy.

Used/Disused Brick Pits - these are an existing, and are likely to become a more important future Green Infrastructure resource in respect of their potential for providing wildlife habitats and recreational opportunities. It is important that the potential for Green Infrastructure linkages with the rest of Whittlesey and beyond into Peterborough, should be investigated and evaluated.

Opportunities within the Target Area to inform future project development

- Biodiversity: opportunities in Whittlesey relate to the enhancement/ expansion of Lattersey LNR to include neighbouring Wildlife Sites and habitat creation and public access enhancements associated with the restoration of brick pits to the west of the town. There are also opportunities through enhancing and protecting the important international and national nature conservation areas and the local network of drains and ditches that form an important network of water-based habitats
- Climate Change: by the provision of urban cooling measures such as tree planting, local flood alleviation and green space creation.
- Green Infrastructure Gateways: developing Whittlesey as a gateway that act as a node linking the market town with strategic movement routes, navigable waterways and housing growth.
- Heritage: by using historic assets which are associated with the market town and the network of medieval drains and other linear archaeological features around Whittlesey

- Landscape character: contributing to landscape character through growth and regeneration of the market town and through improving and maintaining the Nene Washes
- Publicly Accessible Open Space: TBC
- Sustainable movement: by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside and linking to adjacent major population growth in Peterborough.

<u>Current Projects</u> (see Appendix 15 for further details)

TBC

5.3.6 Target Area 1.3: March

Background

The market town of March is located in the centre of Fenland district. It was an important railway centre, with a major junction station on the Great Eastern and Great Northern railways. The town is situated on the banks of the River Nene (old Course) which flows west to east through the town centre alongside the park at 'Little London' and then through to the east out to Creek Fen. It offers opportunities for linking existing Green Infrastructure such as the Park with the river frontage, moorings, and town centre facilities.

To the north of March, the existing Nature Reserve to the west of Whitemoor Railway Yard would benefit from the enhancement of existing linkages with the main part of the town to the south. The area in the north-east quadrant to the north of Estover Road in the area of the existing Recreation Ground also provides opportunities for improving the existing Green Infrastructure.

To the south-west of the town, again the existing Green Infrastructure represents opportunities for improvement and enhancement as a leisure resource, area of open space with views of St Wendreda's Church across it to the east.

To the south-east, the old track-bed of the Chatteris - March railway line provides an opportunity for a green link to the village of Wimblington to the south; and, opportunities for the enhancement of the green fringe to the east side of March up to the B1099 - Upwell Road.

Opportunities within the Target Area to inform future project development

 Biodiversity: through enhancing and protecting the important nature conservation areas and the local network of drains and ditches that form an important network of water-based habitats There are particular opportunities around enhancement of Wildlife Sites, LNRs and other green spaces to form a Green Infrastructure corridor in the north of March¹⁶.

- Climate Change: by the provision of urban cooling measures such as tree planting, local flood alleviation and green space creation.
- Green Infrastructure Gateways: Developing March as a gateway that act as a node linking the market town with strategic movement routes, navigable waterways and housing growth.
- Heritage: by using historic assets, such as St Wendreda's Church, which are associated with the market town and the network of medieval drains and other linear archaeological features around March
- Landscape character: contributing to landscape character through growth and regeneration of the March and through improving and maintaining the River Nene (old course).
- Publicly Accessible Open Space: TBC
- Sustainable movement: by improving the Rights of Way network and utilising the Fens drain system to allow access to Green Infrastructure sites and the wider countryside.

<u>Current Projects</u> (see Appendix 15 for further details)

March Country Park

5.3.7 Target Area 1.4: Nene Washes and River Nene (Old Course)

Background

The fens river system, including the River Nene and the Nene Washes provides an important, and at present under-used, transport and recreational resource. Sustainable movement links, including for walking and cycling, between all the Fenland Market Towns, and many of the smaller settlements, are possible using the fens drainage system. Early engagement with the Environment Agency and Middle Level Commissioners regarding possible improvements for navigation and accessibility for river craft is an area of future development. It must, however, be borne in mind that the primary function of the Fens drainage system is to ensure the safe drainage of the area, and to guard against flooding.

There are existing Moorings/Marinas at Whittlesey; Wisbech - which has links to the sea, and is an established operational port - March; Staffurth's Bridge; Benwick; and at Upwell and Outwell in the east of the District on the Cambridgeshire/Norfolk border.

¹⁶ In particular linking Rings End LNR, Graysmoro Pit, Whitemoor nature reserve, Whitemoor Marshalling Yards and Norwood Road nature reserve.

Emphasis on the sustainable nature of these links and the nature conservation benefits of active, sympathetic management of the river banks and water quality will provide ongoing benefits for wildlife, tourists and anglers, as well as helping to raise the profile of Fenland as a river cruising destination/resource.

The Nene Washes are designated SSSI, SPA, SAC and Ramsar. Constructed and used for flood storage the site hosts internationally important numbers of breeding and wintering birds. Much of the area is managed as grassland although certain areas are farmed for spring crops. Access to the area is difficult and is restricted to the external banks.

Opportunities within the Target Area to inform future project development

- Biodiversity: The Nene Washes are already important for biodiversity; this
 could be significantly enhanced by converting arable land within the
 washes to grassland and bringing grassland into favourable condition
 where needed. Enhancing and protecting the adjacent network of drains
 and ditches that together form an important network of water-based
 habitats is also an opportunity for this area.
- Climate Change: Changes to flooding patterns may at some stage affect the biodiversity of the area but this is believed to be unlikely in the foreseeable future. Maintaining and improving the Nene Washes for flood alleviation and storage is therefore important.
- Green Infrastructure Gateways: The Nene Washes and old course of the River Nene can provide better and more accessible links and interpretation between the Washes, Peterborough, Whittlesey and March.
- Heritage: Interpreting the history of the Washes and their role in flood alleviation.
- Landscape character: Restoration to grassland management to demonstrate the historic open nature, and traditional grazing management, of wash lands in the Fens.
- Publicly Accessible Open Space: Provision of additional access for car parking and a visitor reception at the Nene Washes
- Sustainable movement: Promotion of existing footpaths and cycleways linking to March, Whittlesey and Peterborough and by improving the Rights of Way network alongside the Washes and river channels and utilising the Fens drain system to allow access to Green Infrastructure sites and the wider countryside.

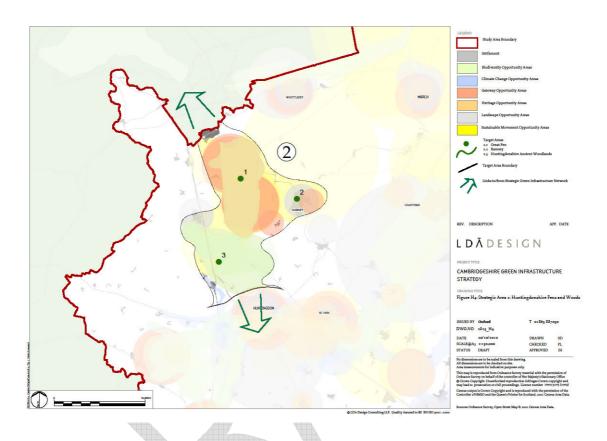
<u>Current Projects</u> (see Appendix 15 for further details)

 The RSPB is actively involved in management of the Nene Washes for biodiversity and low level visitor access. Linkages exist with Peterborough Natural Networks Green Wheel cycle routes.



5.4 Strategic Area 2: Huntingdonshire Fens and Woods

5.4.1 Description



This Area is focused on Ramsey, the Great Fen (including Woodwalton and Holme Fens) and the belt of ancient woodland that lies to the north of Alconbury (Aversley, Archers and Monks Woods). Monks Wood National Nature Reserve is home to over 1000 species of beetles and many other insects, birds and a large number of deer. The Area lies in a zone of transition from the peat fen that makes up the north and eastern areas of Huntingdonshire and the clay plateau that most of the District lies on. The Area forms a key network of Green Infrastructure linking Huntingdon, Ramsey and Peterborough, all of which are or will be experiencing growth, which will place additional demands on the physical and social infrastructure in this Area.

Particular opportunities have been identified for habitat creation and enhancement. The Great Fen is a major habitat restoration project which will create a 3,700 hectare wetland between Huntingdon and Peterborough by connecting Holme Fen NNR and Woodwalton Fen NNR. It is hoped that it will also provide new opportunities for recreation, employment, tourism and education. Focusing countryside enhancement efforts, in part, on the Great Fen, will give maximum scope for consolidating and linking important habitats, and enable complementary access improvements to be pursued.

Looking at the Strategy's Objectives there is a particular emphasis in the Strategic Area on Green Infrastructure reversing the decline in biodiversity, mitigating and adapting to climate change, promoting sustainable growth and economic development and supporting healthy living and wellbeing are all important in this area. There are localised health and wellbeing and economic development issues and significant opportunities regarding habitat creation with associated flood alleviation and carbon sequestration and storage.

Looking at the Green Infrastructure themes, investment in this Strategic Area offers significant opportunities for:

- Biodiversity through enhancing, linking and protecting the nationally and internationally important nature conservation areas of historic fen and ancient woodlands.
- Climate Change mitigation measures such as carbon sequestration and adaptation measures such as flood storage and alleviation as well as urban cooling through tree planting and green space creation in Ramsey.
- Gateways developing gateways that will result from large-scale habitat restoration and the link between Ramsey and neighbouring strategic destinations such as the Great Fen.
- Heritage by using assets which are associated with the existing historic fenland landscape and the planned restoration of this landscape.
- Landscape Contributing to landscape character through the funding opportunities associated with growth and through improving and maintaining the key habitats of historic fen and ancient woodlands.
- Publicly Accessible Open Space at present the Area has an almost total deficiency in ANGSt at the 500ha plus standard and a significant deficiency in ANGSt at the 2ha plus standard. The 20ha plus standard is deficient to the east and south of the Area. The 100ha standard is well met in the Area.
- Sustainable movement by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

5.4.2 Strategic Area Projects

Fens Adventurers Partnership: Green Fen Way

5.4.3 How do Target Areas deliver strategy objectives?

In the Huntingdonshire Fens and Woods Strategic Area, the Target Areas are:

- Great Fen
- Ramsey

Huntingdonshire Ancient Woodlands.

The bubble matrix Figure 5-3 shows that each of the Target Areas do have the potential to contribute towards delivering the Strategy's objectives. It is notable that the Great Fen Target Area has significant potential to contribute towards reversing the decline in Biodiversity, mitigating and adapting to climate change, and supporting healthy living and wellbeing. Ramsey has significant potential to contribute towards promoting sustainable growth and economic development, and supporting healthy living and wellbeing. Huntingdonshire ancient woodlands have significant potential to contribute towards reversing the decline in biodiversity. This assessment provided confidence that the Target Areas should be explored in more detail and opportunities identified for how the themes could be used to realise the potential within each Target Area.

Strategic Area 2: Huntingdonshire Fens and Woods

	Objectives				
Target Area	Reverse the decline in Biodiversity	Mitigate and adapt to Climate Change	Promote Sustainable Growth & Economic Development	Support Healthy Living and Wellbeing	
2.1 Great Fen			•		
2.2 Ramsey	•	•			
2.3 Huntingdonshire Ancient Woodlands		•	•	•	

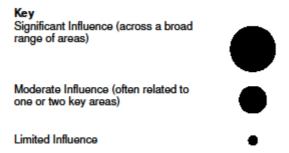


Figure 5-3: How the Huntingdonshire Fens and Woods Target Areas deliver the strategy objectives.

5.4.4 Target Area 2.1: Great Fen

Background

The Great Fen is a partnership project established to join together two National Nature Reserves, Holme Fen and Woodwalton Fen, and in doing so better safeguard the relict habitats the reserves protect. Once complete it will cover an area of fen and fen-edge of 3,700 hectares and will deliver wider socio-economic benefits including flood protection, enhanced local access, tourism and climate change mitigation and adaptation.

This will be achieved by obtaining land adjacent to two existing National Nature Reserves, Holme Fen and Woodwalton Fen. Connecting these two vitally important nature reserves will provide a haven for wildlife and create a massive green space for people, opening new opportunities for recreation, education and business.

By rewetting peat soils and the establishment of wetlands and other natural habitats the project has significant carbon storage benefits and prevents the further release of carbon through soil erosion.

Opportunities within the Target Area to inform future project development

- Biodiversity: Opportunities are particularly around large-scale wetland habitat creation
- Climate Change: Carbon storage within peat soils & potential carbon sequestration and flood storage and alleviation
- Green Infrastructure Gateways: The proposed visitor centre for the Great Fen represents an opportunity to develop a Gateway site that allows access to the Great Fen and the wider countryside
- Heritage: Protection of archaeological assets through re-wetting of soils
- Landscape character: Restoration of "wild" fenland
- Publicly Accessible Open Space: TBC
- Sustainable movement: New access links north to Peterborough and enhancement of access links south towards Huntingdon. Enhancement of existing access routes and creation of new access routes through the Great Fen area

Current Projects (see Appendix 15 for further details)

- Great Fen masterplan delivery
- Great Fen/South Peterborough Access Link

5.4.5 Target Area 2.2: Ramsey

Background

This section will describe the main features and issues in the Target Area and how they relate to Green Infrastructure and the Strategy.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area.

<u>Current Projects</u> (see Appendix 15 for further details)

Healthy Walks Programme

5.4.6 Target Area 2.3: Huntingdonshire Ancient Woodlands

Background

This area represents one of half a dozen clusters of ancient woodland within Cambridgeshire centred around Monk's Wood National Nature Reserve. There is significant potential to create an enhanced ecological network based around these woodlands and linking them to the Great Fen to the north. Within this area there are also remnants of species-rich grasslands along woodland rides, road verges and small meadows such as at Upwood and Woodwalton Marsh. The aim would be to create greater habitat connectivity between the ancient woodlands through new and enhanced hedgerows, species-rich field margins, road verges and meadows.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area, in addition to 'biodiversity'.

 Biodiversity: Linking, restoring and creating species-rich grassland and woodland are a key opportunity in this Area.

<u>Current Projects</u> (see Appendix 15 for further details)

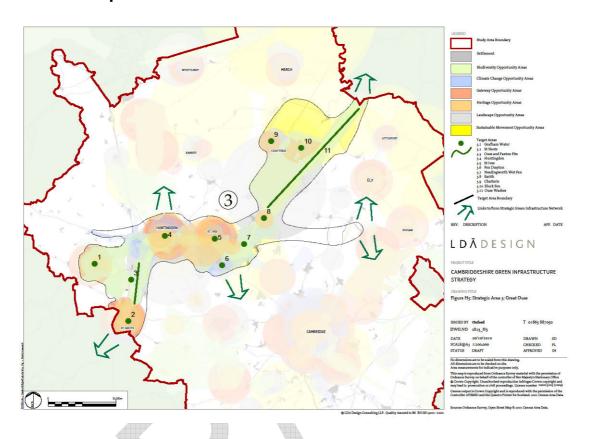
Woodland Linkage Project

Future Projects (see Appendix 15 for further details)

 Opportunities exist to enhance and create access links south from the Great Fen capturing the ancient woodland sites and any potential strategic development sites that may come forward in the future, such as Alconbury airfield.

5.5 Strategic Area 3: Great Ouse

5.5.1 Description



This Area includes the Ouse Valley, Ouse Washes and the Old West River and encompasses the market towns of St Neots, Huntingdon, St Ives and Chatteris – crossing through or bordering four Local Authority areas and linking upriver into Bedfordshire and downstream into Norfolk. The Great Ouse forms a key landscape corridor across Cambridgeshire and contains a wide variety of woodland, meadowland and wetlands and a number of sites of particular importance for biodiversity. Grafham Water and its neighbouring woodland – including Brampton Wood, the second largest wood in Cambridgeshire, lie in the west of the Area. The southern and central part of the Area includes St Neots, Paxton Pits, Hinchingbrooke Country Park and Port Holme at Huntingdon, St Ives, Fen Drayton and the Hanson RSPB wetland project at Needingworth. The Ouse Washes – a SSSI, SPA, SAC and Ramsar site lies in the north of the Area and the Old West River – the old course of the Ouse, runs due east to the River Cam.

Growth will create demands on the Area's physical and social infrastructure, the majority of which will take place in the market towns that are located in or close to the Ouse Valley. Focusing countryside enhancement efforts on this will give maximum scope for consolidating and linking important habitats, and enable complementary access improvements to be pursued. There are numerous opportunities for Green Infrastructure to support tourism in the

Area, both through individual sites and the corridors of the River Great Ouse, Old West River and Ouse Washes.

Looking at the Strategy's Objectives there is a particular emphasis in the Strategic Area on Green Infrastructure reversing the decline in biodiversity, mitigating and adapting to climate change, promoting sustainable growth and economic development and supporting healthy living and wellbeing. In this Area there are localised issues regarding health and wellbeing, and economic development as well as opportunities for habitat creation with associated flood alleviation and carbon sequestration. There are 11 Target Areas, all of which will play their part in delivering the strategic network.

Looking at the Green Infrastructure themes, investment in this Strategic Area offers significant opportunities for:

- Biodiversity through enhancing, linking and protecting the nationally and internationally important nature conservation areas along the Ouse Valley, Ouse Washes, the Old West River and Grafham Water.
- Climate Change mitigation measures such as carbon sequestration¹⁷, and adaptation measures such as appropriately designed and sited flood storage and alleviation, as well as urban cooling through tree planting and green space creation.
- Developing gateways associated with large-scale habitat restoration and the association between the market towns and strategic movement routes, navigable waterways, housing growth and neighbouring strategic destinations.
- Heritage by using assets which are associated with the market towns, mineral extraction sites and the network of historic drains.
- Contributing to landscape character through the growth of the market towns, restoration of mineral extraction sites and through improving and maintaining the key habitats of the Area.
- Publicly Accessible Open Space at present the Area has a deficiency in ANGSt at the 100ha plus and 500ha plus standard at the southern (St Neots) and northern (Chatteris and Ouse Washes) parts of the Area. The 20ha plus standard is deficient in the north of the Area and there is a significant deficit in the 2ha plus standard away from the corridor of market towns along the Ouse Valley. Opportunities to address deficiencies include through co-ordinating public access links, signage and promotion throughout the Great Ouse Wetland (see 4.3.3 case study)
- Sustainable movement by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

¹⁷ Carbon sequestration is the process of removing carbon from the atmosphere and depositing it in a reservoir.

5.5.2 Strategic Area Projects

Fens Adventurers Partnership: Green Fen Way

5.5.3 How do Target Areas deliver strategy objectives?

In the Great Ouse Strategic Area, the Target Areas are:

- Grafham Water
- St. Neots
- Ouse Valley/ Paxton Pits
- Huntingdon
- St. Ives
- Fen Drayton
- Needingworth
- Earith
- Chatteris
- Block Fen
- Ouse Washes

The bubble matrix Figure 5-4 shows that all but three of the 11 Target Areas do have the potential to contribute towards delivering the Strategy's objectives. Three of the Target Areas (St Ives, Earith and Block Fen) have limited or moderate potential to contribute towards delivering the objectives. It is notable that Needingworth has significant potential to contribute towards reversing the decline in biodiversity, mitigating and adapting to climate change and supporting healthy living and wellbeing. This assessment provided confidence that the Target Areas should be explored in more detail and opportunities identified for how the themes could be used to realise the potential within each Target Area.

Strategic Area 3: Great Ouse

		Object	ives	
	Douges the		Promote Sustainable	Cumari
	Reverse the decline in	Mitigate and adapt to Climate	Growth & Economic	Support Healthy Living
Target Area	Biodiversity	Change	Development	and Wellbeing
3.1 Grafham Water				
	•	•	•	
3.2 St Neots				
	•	•		•
3.3 Ouse Valley/Paxton				
Pits		•		
3.4 Huntingdon				
3.5 St Ives	_			
		•	•	
3.6 Fen Drayton		•	•	
3.7 Needingworth			•	
3.8 Earith				
	•	•		•
3.9 Chatteris				
	•	•		
3.10 Block Fen				
3.11 Ouse Washes		•	•	•

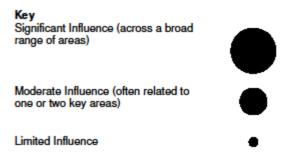


Figure 5-4: How the Great Ouse Target Areas deliver the strategy objectives.

5.5.4 Target Area 3.1: Grafham Water

Background

This section will detail the importance of Grafham Water as a recreational resource in addition to the text below.

Grafham Water and the circle of ancient woodlands around it provide a local biodiversity hotspot. The clusters of ancient woodland are one of the most important in the county and would benefit from the creation of linkages between the woods and some of the woods need restoration from conifers to native broadleaves.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area, in addition 2 and expanding upon 'biodiversity' below.

 Biodiversity: Linking the woodlands in this Area (particularly Grafham to Brampton)

Current Projects (see Appendix 15 for further details)

- Woodland Linkage Project
- Grafham Water Brampton Wood Link

5.5.5 Target Area 3.2: St Neots

Background

This section will describe the main features and issues in the Target Area and how they relate to Green Infrastructure and the Strategy in addition to the text below.

With the major growth occurring in St Neots there is a need for high quality Green Infrastructure within these developments as well as enhancement of the river corridor that forms a significant feature of St Neots.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area in addition to 'biodiversity'.

Biodiversity: In this Area wet woodland and wet meadow creation and enhancement along the river valley through St Neots and the creation of Green Infrastructure linkages through new developments, e.g. along the brooks leading to the River Great Ouse represent particular opportunities.

Current Projects (see Appendix 15 for further details)

- St Neots A428 Pedestrian Underpass
- St Neots Green Corridor Project

5.5.6 Target Area 3.3: Ouse Valley/Paxton Pits

Background

This section will describe the main features and issues relating to Paxton Pits, in addition to the below text.

A partnership of various organisations including Huntingdonshire District Council, the Wildlife Trust, FWAG, Environment Agency, Natural England and Forestry Commission has been working over the past few years to identify opportunities for the restoration and creation of wet meadow and wet woodland habitats along the Ouse Valley. In addition to the expansion of Little Paxton Pits nature reserve, the work has aimed to work with other landowners to persuade them to improve their floodplain land for wildlife. Several landowners have entered Higher Level Stewardship or modified their management to benefit wildlife as a result of the project. A key priority is the restoration of the remaining floodplain meadows and where possible the creation of new floodplain meadows to link with Port Holme. Other opportunities include the enhancement of back waters and back channels for their wildlife and fisheries.

South of the river and adjacent to the Ouse Valley Way are the former gravel pits at Cow Lane. These are currently underused and have the potential to be developed into a high quality Green Infrastructure site, with enhanced access, interpretation as well as conservation and enhancement of the sites biodiversity.

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area, in addition to that identified for 'biodiversity'.

 Biodiversity: There are opportunities for enhancing biodiversity through the expansion of Little Paxton Pits through gravel extraction; floodplain meadows restoration and creation between Little Paxton and Fen Drayton; development of Cow Lane Gravel Pits as a new GI site and enhancement of back waters and back channels for fisheries.

<u>Current Projects</u> (see Appendix 15 for further details)

- Ouse Valley Wet Meadows & Wet Woodlands Project
- Ouse Valley Way
- Paxton Pits Nature Reserve

Future Projects (see Appendix 15 for further details)

Cow Lane Gravel Pits

5.5.7 Target Area 3.4: Huntingdon

Background

This section will describe the main features and issues in the Target Area and how they relate to Green Infrastructure and the Strategy.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area.

Current Projects (see Appendix 15 for further details)

Huntingdon Green Spaces

5.5.8 Target Area 3.5: St Ives

Background

This section will describe the main features and issues in the Target Area and how they relate to Green Infrastructure and the Strategy in addition to the text below.

Creation of major new Green Infrastructure is required associated with St Ives western expansion. This would link to the Ouse Valley and ensure the protection of existing high value biodiversity sites such as Houghton Meadows SSSI. There are opportunities to create new Green Infrastructure associated with the development and to expand Houghton Meadows to dissipate future

recreational pressures and link with other Wildlife Sites within the local area such as Houghton Grange and Holt Island.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area, in addition to 'biodiversity'.

• Biodiversity: meadow creation and expansion is an opportunity in this area, particularly around Houghton Meadows.

<u>Current Projects</u> (see Appendix 15 for further details)

- Houghton Meadows Restoration Project
- St Ives Country Park

5.5.9 Target Area 3.6: Fen Drayton

Background

Fen Drayton Lakes is located on old gravel workings between the River Great Ouse and the villages of Fenstanton and Fen Drayton. The 391ha RSPB site is a nature reserve with trails and other public routes, which is continuing to be developed as a high quality Green Infrastructure resource for the residents of the surrounding area, Cambridgeshire and for the future residents of the new settlement of Northstowe. There is a request stop on the Cambridgeshire Guided Busway and a good network of Rights or Way and permissive paths through the reserve that link to the wider network of paths – particularly the Ouse Valley Way.

Core objectives for the reserve are:

- Habitat restoration and improvement
- Public access
- Visitor Facilities
- Community engagement and education

- Biodiversity: improving the habitats to increase biodiversity benefits across disused mineral site and flood meadows
- Climate Change: enhancing the awareness of climate change and the importance of the site for flood risk management

- Green Infrastructure Gateways: providing easy access to nature from Cambridge and St Ives as well as the proposed new development at Northstowe via The Busway
- Heritage: linking local people and visitors to the wildlife and history of the Fens through this easily accessible site.
- Landscape character: enhancement of landscape around extensive series of man-made lakes from former mineral workings and safeguarding of typical flood meadows along River Great Ouse
- Publicly Accessible Open Space: enhancement of a network of paths and bridleways around the man-made lakes and along the River Ouse with easy access and facilities.
- Sustainable movement: development of strong links with The Busway.

<u>Current Projects</u> (see Appendix 15 for further details)

- Fen Drayton Lakes
- RSPB habitat and visitor infrastructure management

5.5.10 Target Area 3.7: Needingworth

Background

There are significant opportunities around Needingworth due to the creation of a wetland nature reserve following extraction of 28 million tonnes of sand and gravel at Needingworth and Over. There is a joint project between Hanson and the RSPB that will create the site stage-by-stage over a 30 year period and lead to the creation of 700ha of wetland including 460ha of reedbed. Access provision will be improved through the creation of 32km of new Public Rights of Way.

- Biodiversity: the provision of a significant contribution to the national Biodiversity Action Plan target for new reedbed creation with associated benefits to important species – including bittern
- Climate Change: enhancing the awareness of climate change and its effect on wildlife through interpretation and education.
- Green Infrastructure Gateways: promote links with the Ouse Valley Way and proximity to Fen Drayton and The Busway.
- Heritage: Opportunities for interpretation and education relating to historic landscapes and settlement.

- Landscape character: will retain the open landscape and 'skyscape' of traditional fenland.
- Publicly Accessible Open Space: creation of 32km of new public rights of way linking to Ouse Valley Way and The Busway.
- Sustainable movement: TBC

<u>Current Projects</u> (see Appendix 15 for further details)

 Hanson RSPB wetland project: Needingworth 700ha of wetland being created following mineral extraction

5.5.11 Target Area 3.8: Earith

Background

This section will describe the main features and issues in the Target Area and how they relate to Green Infrastructure and the Strategy.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area.

<u>Current Projects</u> (see Appendix 15 for further details)

TBC

5.5.12 Target Area 3.9: Chatteris

Background

Chatteris lies in the south of Fenland District, and was included in the previous Green Infrastructure Strategy as it lies within the Cambridge sub-Region. The original GI Strategy identified the South Chatteris Country Park/Strategic Area of Open Space. The former Chatteris – Somersham railway line would provide a link to such an area from London Road, Chatteris, as well as providing a sustainable GI transport link to Somersham/Bluntisham/St. Ives/Earith.

The network around Chatteris should also include land to the south of the Forty Foot Drain centred on Dock Road, and running south into the town. Chatteris Docks closed in 1967, but water-borne freight was transported to the town along the local river system until this time. A connection with this past could be made based on improved Green Infrastructure.

Improvements to the existing parks and green spaces in Chatteris should be included. Presently there is a shortage of open space compared to the size/population of Chatteris. Improvements/enhancements to the Parkside Recreation Ground, off Wenny Road; Cromwell Community College Playing Fields and the Cricket Ground/ football pitches to the south east off Wenny

Road could be better integrated to provide more choice, and potentially provide improved health benefits to local people.

Overall, Chatteris is a very walk able town. Most of the facilities it has are within easy walking or cycling distance - the sustainable nature of this element of its make-up should be highlighted in the Green Infrastructure Network.

Opportunities within the Target Area to inform future project development

- Biodiversity: through enhancing and protecting the nationally and internationally important nature conservation areas in the locality and also the local network of drains and ditches that form an important network of water-based habitats.
- Climate Change: by provision of mitigation such as urban cooling measures such as tree planting, local flood alleviation and green space creation.
- Green Infrastructure Gateways: Developing Chatteris as a gateway associated with nearby large-scale habitat restoration and the association between the market town and strategic movement routes, navigable waterways, housing growth and neighbouring strategic destinations.
- Heritage: by using heritage assets; including the history of water-borne freight; which are associated with Chatteris and the network of historic drains around the market town.
- Landscape character: Contributing to landscape character through the growth of Chatteris and through improving and maintaining the key habitats of the Area.
- Publicly Accessible Open Space: TBC
- Sustainable movement: by improving the Rights of Way network, such as utilising the former Chatteris – Somersham railway line, to allow access to Green Infrastructure sites and the wider countryside.

Current Projects (see Appendix 15 for further details)

Chatteris Country Park

Future Projects (see Appendix 15 for further details)

Chatteris – Somersham Railway Corridor Enhancement

5.5.13 Target Area 3.10: Block Fen

Background

The Block Fen area to the south-east of Chatteris, close to Fenland District's boundary with East Cambridgeshire has significant potential as a recreational/

nature conservation resource. It lies adjacent to the Ouse Washes; the ADAS Arthur Rickwood Agricultural Research Station; and, Mepal Pits Outdoor Centre - which is just inside East Cambs. It is, therefore, considered that this area deserves its own particular framework. Public transport linkages and the potential for possible cycle routes linking the area to nearby settlements should also be investigated and evaluated. There will also be major opportunities for expansion in the future through an extension of gravel extraction and restoration. A key aim of the restoration will be to create complimentary wet grassland and lake habitats adjacent to the Ouse Washes.

Opportunities within the Target Area to inform future project development

- Biodiversity: Creation of complimentary wet grassland and lake habitats adjacent to the Ouse Washes and provision of significant area of wet grassland, open water and other wetland habitats following mineral extraction over the next 50 years.
- Climate Change: provision of alternative habitat for birds affected in the medium to long term by changing flooding patterns on the adjacent Ouse Washes.
- Green Infrastructure Gateways: possibility of linking with and developing access along the Ouse Washes and linking with Earith, Sutton and Mepal.
- Heritage: restoration of traditional grazing practices.
- Landscape character: retention of open landscape and skyscape of traditional fenland.
- Publicly Accessible Open Space: opportunity to plan and develop outdoor recreation and nature conservation in close proximity
- Sustainable movement: opportunity to improve cycling and walking links to nearby towns and villages.

Current Projects (see Appendix 15 for further details)

- Block Fen Minerals After use Wetland Restoration Project
- Experimental creation of wet grassland following mineral extraction and inert landfill currently being undertaken by Aggregate Industries, RSPB and Mick George

5.5.14 Target Area 3.11: Ouse Washes

Background

The Ouse Washes in the Cambridgeshire Fens perform a vital flood defence function as a strategic flood storage area; protecting a large area of Cambridgeshire and Norfolk. The regular flooding and high water levels,

combined with the rich deep peat soil and traditional grassland management, have protected an important remnant of the traditional wildlife and ancient landscape of the fens. Created in 1652 and covering an area of 2403ha this is the largest example of internationally important wash land in Britain. The nature conservation value of the site is reflected by its international (Ramsar), European (SPA and SAC), and national (SSSI) designations. Water levels and infrastructure are managed by the Environment Agency and the washes are managed largely by the RSPB, Wildlife Trust and Wildfowl and Wetlands Trust. The site holds internationally important numbers of wintering wildfowl and is important in the UK for its breeding birds during the summer. Excellent facilities exist for viewing wildlife just over the County boundary at Welney and at Welches Dam, Manea.

Opportunities within the Target Area to inform future project development

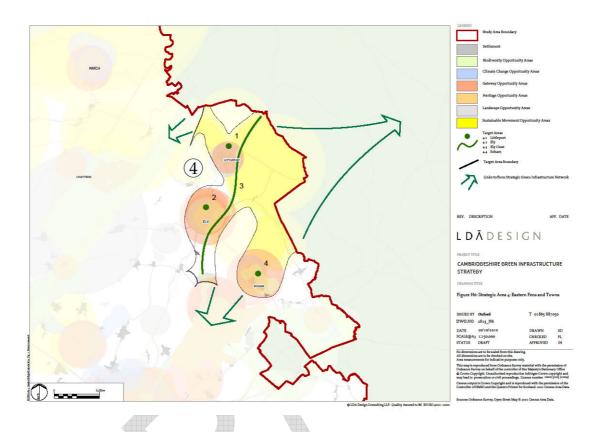
- Biodiversity: There are opportunities around management of the Ouse Washes and habitat creation either side of the Washes to mitigate against increased flooding, which is taking its toll on existing wildlife. Opportunities are being sought to create alternative habitat on adjacent land and to safeguard the existing habitat.
- Climate Change: opportunities to interpret changing rainfall and increased flooding patterns and to seek solutions to maintain the multiple functions of the area in the face of climate change
- Green Infrastructure Gateways: good links via existing footpaths to the Ouse Valley Way and Great Ouse Wetland sites, including Hanson RSPB wetland project at Needingworth and Fen Drayton. Although it is a rural location it is accessible from the villages of Earith, Sutton and Mepal.
- Heritage: opportunities exist to promote the history of the drainage of the fens as the Washes are an important part of this history
- Landscape character: can be maintained by management to retain the long wide unimpeded open views typical of traditional fenland landscape.
- Publicly Accessible Open Space: Access is restricted to banks with opportunities to develop interpretation and facilities at key points in Earith, Sutton and Mepal.
- Sustainable movement: Linkages with the Ouse Valley Way exist at Earith and there are opportunities to develop linkages to Chatteris and March.

<u>Current Projects</u> (see Appendix 15 for further details)

- The Environment Agency Ouse Washes Habitat Creation Project
- Ouse Washes Management of the Ouse Washes

5.6 Strategic Area 4: Eastern Fens and Towns

5.6.1 Description



This area is focused on the three market towns of Ely, Littleport and Soham and their surrounding fenland landscape, along with the Ely Ouse. The Area is characterised by low-lying intensively farmed fenland - with many of the settlements located on higher ground on the old 'islands' in the fen. Flood risk in the area is a key issue, as much of the land lies at or below sea-level. The Area contains the three market towns and a range of scattered villages and hamlets. Compared to other areas of Cambridgeshire incomes are lower, deprivation is more marked, and although it is pre-dominantly an area of fertile agricultural land, it contains the majority of the industry and manufacturing in this part of the county. The Area has also been the focus for most of the housing growth in East Cambridgeshire District over the last 20 years. The main tourist, service and commercial centre is the cathedral city of Ely, whilst Soham and Littleport serve more local catchments and have lower scales of commercial and retail provision. Together the three Market Towns comprise about 45% of the total District population estimated for 2006. There are links along the Ely Ouse (including the Wetland and Wildfowl Trust's reserve at Welney) and eastwards into Norfolk.

Looking at the Strategy's Objectives there is a particular emphasis in the Strategic Area on Green Infrastructure promoting sustainable growth and economic development and supporting healthy living and wellbeing and a

more geographically-targeted focus on reversing the decline in biodiversity and mitigating and adapting to climate change. The Ely Ouse forms a key biodiversity, tourism and movement corridor for the area.

Looking at the Green Infrastructure themes, investment in this Strategic Area offers significant opportunities for:

- Biodiversity through enhancing and protecting the nationally important nature conservation areas along the Ely Ouse.
- Climate Change Adaptation measures such as urban cooling through tree planting, local flood alleviation and green space creation.
- Developing gateways associated with the link between the market towns and strategic movement routes, navigable waterways, housing growth and neighbouring strategic cultural and nature conservation destinations.
- Heritage by using assets which are associated with the market towns and the historic features in the area.
- Contributing to landscape character through the growth of the market towns.
- Publicly Accessible Open Space at present the Area has a significant total deficiency in ANGSt at the 2ha plus standard away from the market towns and Ely Ouse corridor. The 100ha plus and 500ha plus standards are well met and at the 20ha plus standard there are only pockets of deviancy within the Area.
- Sustainable movement by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

5.6.2 Strategic Area Projects

Fens Adventurers Partnership: Green Fen Way

5.6.3 How do Target Areas deliver strategy objectives?

In the Eastern Fens and Towns Strategic Area, the Target Areas are:

- Littleport
- Ely
- Soham
- Ely Ouse

The bubble matrix Figure 5-5 shows that two of the four Target Areas have the potential to contribute towards delivering the Strategy's objectives. It is notable that Ely has significant potential to contribute towards promoting sustainable growth and economic development, and supporting healthy living and wellbeing. The Ely Ouse River has significant potential to contribute towards reversing the decline in biodiversity. Whilst Littleport and Soham were assessed as having no significant potential to contribute towards delivering the Strategy's objectives, their potential as location for housing and employment development in East Cambridgeshire means that they do have some potential. This assessment provided confidence that the Target Areas should be explored in more detail and opportunities identified for how the themes could be used to realise the potential within each Target Area.

Strategic Area 4: Eastern Fens and Towns

		Objectives				
Target Area	Reverse the decline in Biodiversity	Mitigate and adapt to Climate Change	Promote Sustainable Growth & Economic Development	Support Healthy Living and Wellbeing		
4.1 Littleport	•	•	•	•		
4.2 Ely	•	•				
4.3 Soham	•	•	•	•		
4.4 Ely Ouse		•	•	•		



Figure 5-5: How the Eastern Fens and Towns Target Areas deliver the strategy objectives.

5.6.4 Target Area 4.1: Littleport

Background

Littleport Parish is one of the largest in the county. The majority of the surrounding land is rich fenland and agriculture is still the largest industry in the town. Littleport acts as a local service centre for the surrounding hamlets and communities, providing a range of services and facilities. To the northwest of the town are the Ouse Washes Site of Special Scientific Interest (SSSI) and the Welney Wetland Centre¹⁸, which is of national importance for its wildlife and rare breeding birds.

Opportunities within the Target Area to inform future project development

- Biodiversity: improving the habitats of the town with additional tree planting and habitat creation, especially where new development is planned
- Climate Change: enhancing local resident's awareness of climate change through the development of new community spaces and projects tackling flooding and food security
- Green Infrastructure Gateways: providing better and more accessible links between the town, the River Great Ouse and the wider countryside
- Heritage: linking the historic market town centre with local Public Rights of Way and open spaces to support a more inclusive community
- Landscape character: TBC
- Publicly Accessible Open Space: additional development of formal and informal spaces associated with development that offer recreational, education, leisure and sustainable movement for all residents of the town
- Sustainable movement: improvement in cycling and walking links around the town, its environment and the railway station to allow people to use alternatives to the car

<u>Current Projects</u> (see Appendix 15 for further details)

- Littleport Urban Greenway
- New River Town Park
- Cycleway Improvements
- Woodland Creation

¹⁸ http://www.wwt.org.uk/welney

5.6.5 Target Area 4.2: Ely

Background

Ely is one of England's classic cathedral cities. With an architectural heritage of truly international significance, a riverside setting along the River Ouse, and a high quality of life, it is the administrative and cultural centre of East Cambridgeshire District. The city's isle location, surrounded by low-lying fenland, provides it with a unique place in the geography and culture of Cambridgeshire. It is also home to a number of nature conservation sites with national and international designations. The existing and proposed growth of the city has highlighted a number of ecological and social challenges but its landscape setting and social capital will be able to support future sustainable growth.

Opportunities within the Target Area to inform future project development

- Biodiversity: development of new habitats across the city including wildflower meadows, new hedgerows and tree planting. There are also opportunities to restore Chettisham Meadows and create a strategic habitat link joining Ely Country Park, Chettisham Meadows, Little Downham LNR and the Ouse Washes;
- Climate Change: addressing the issues of flooding with enhanced work along the Great River Ouse, the identification of food security as a driver for allotment expansion in North Ely and the development of medium to large-scale Green Infrastructure projects to mitigate the effects of expansion in the city
- Green Infrastructure Gateways: further development of Ely Country Park and Ely North to provide additional locations for outdoor activity in the urban-fringe
- Heritage: further enhancing the historic character of the city through open space development
- Landscape character: maintaining the distinctive character of the Isle of Ely through careful open space provision that supports the wider environmental visions outlined in the Masterplan
- Publicly Accessible Open Space: develop new, and enhance existing open spaces to form a connected and multi-functional network of spaces that links homes, work places and leisure facilities
- Sustainable movement: promote a more extensive network of footpaths and cycle routes that provide alternatives modes of transport for residents to and from the places they need to go

<u>Current Projects</u> (see Appendix 15 for further details)

Ely Country Park

Future Projects (see Appendix 15 for further details)

- Woodland Creation
- North Ely Development
- Ouse SuDS
- Sustainable Access across A10

5.6.6 Target Area 4.3: Soham

Background

Soham has a rich history as a market town, evident today in the quality of its historic centre and the commons in the heart of the town. Proximity to Cambridge, good road connections to Ely and Newmarket, and easy access to neighbouring villages and the adjacent countryside make it an attractive place to live. Soham's Commons form one of the largest Green Infrastructure resources in East Cambridgeshire and they have potential to act as an important hub to improve biodiversity and mitigate against habitat loss as a result of climate change. Soham is also a key gateway to Wicken Fen, Chippenham Fen and the wider Rights of Way network in this part of East Cambridgeshire.

- Biodiversity: continuing Higher Level Stewardship on Soham Commons to provide habitat opportunities and restoration for a wide range of species
- Climate Change: matching the economic drivers of change within Soham with the protection of existing open spaces and developing new public realm locations that provide attractive and functional places
- Green Infrastructure Gateways: utilising the Public Rights of Way network to facilitate movement from Soham into the wider countryside and in particular links with Wicken Fen
- Heritage: enhancing the ecological heritage of the town and working with residents to develop better open spaces within its historic centre
- Landscape character: *TBC*.
- Publicly Accessible Open Space: improving the access and provision of public spaces in central Soham and matching this with new locations in the proposed eastern expansions of the town

 Sustainable movement: providing the infrastructure across the town and to neighbouring villages for people to walk and cycle to the places they want to go to

<u>Current Projects</u> (see Appendix 15 for further details)

- Soham Common Restoration
- Improved public open space and town parks

5.6.7 Target Area 4.4: Ely Ouse

Background

This section will describe the main features and issues in the Target Area and how they relate to Green Infrastructure and the Strategy.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area in addition to 'biodiversity'...

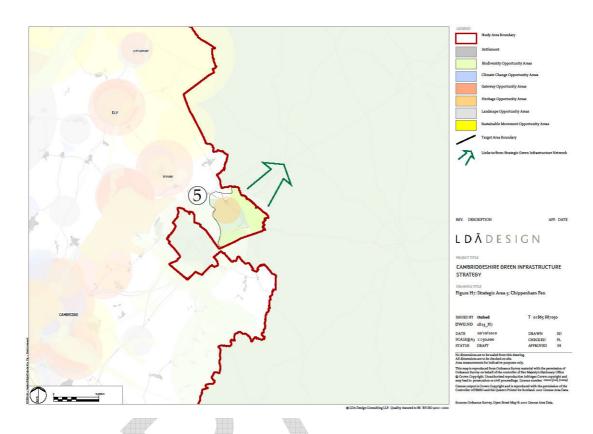
 Biodiversity: can be improved through the restoration of floodplain grassland along the Ely Ouse

<u>Current Projects</u> (see Appendix 15 for further details)

- Environmental Stewardship Schemes Commons
- Eastern Gateway Green Infrastructure Expansion

5.7 Strategic Area 5: Chippenham Fen

5.7.1 Description



This area is focussed on Chippenham Fen and the surrounding landscape. Chippenham Fen is a nationally important remnant of fen habitat and is seen as having strong links with Suffolk and Breckland. It has recently been discovered that Chippenham Fen is home to an internationally rare spider – the Rosser's Sac Spider¹⁹ and this may influence the projects that will be developed within the Area.

Looking at the Strategy's Objectives there is a particular emphasis in the Strategic Area on reversing the decline in biodiversity. Mitigating and adapting to climate change is moderately important, with fewer opportunities to promote sustainable growth and economic development and supporting healthy living and wellbeing, due to the nature of the area and its location within Cambridgeshire.

Looking at the Green Infrastructure themes, investment in this Strategic Area offers significant opportunities for:

¹⁹ http://www.bbc.co.uk/news/uk-england-11806723

- Biodiversity through enhancing and protecting the nationally and internationally important nature conservation area of Chippenham Fen.
- Climate Change mitigation measures such as carbon sequestration and flood storage and alleviation.
- Working with partners to support the development of Gateways that may exist in neighbouring Authority areas that link to this area.
- Contributing to landscape character through improving and maintaining the fen landscape.

In addition, there are opportunities to promoting the historic fen landscape and to improve public access to and around Chippenham Fen, so long as this is balanced against the important nature conservation issues that exist in the Area. At present the Area has a significant deficiency in ANGSt at the very local 2ha plus standard and a small deficiency to the south of the Area at the 20ha plus standard.

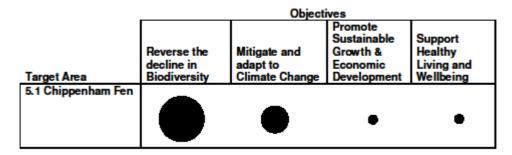
5.7.2 How do Target Areas deliver strategy objectives?

In the Chippenham Fen Strategic Area, the Target Area is:

Chippenham Fen

The bubble matrix Figure 5-6 shows that the Target Area does have the potential to contribute towards delivering the Strategy's objectives. It is notable that Chippenham Fen has significant potential to contribute towards reversing the decline in biodiversity. This assessment provided confidence that the Target Areas should be explored in more detail and opportunities identified for how the themes could be used to realise the potential within each Target Area.

Strategic Area 5: Chippenham Fen



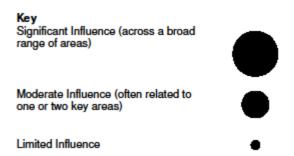


Figure 5-6: How the Chippenham Fen Target Area delivers the strategy objectives.

5.7.3 Target Area 5.1: Chippenham Fen

Background

Chippenham Fen is a National Nature Reserve that lies to the north of Newmarket on the south-east border of the county within East Cambridgeshire district. It is located in a rural fen-edge area composed of small and medium-sized villages.

"The reserve's habitats include beds of saw-sedge and common reed, grazed wet meadows rich in wild flowers, meadows cut for hay, chalk grassland, carr woodland and scrub, and mature woodland. The reserve lies in a shallow peat-filled depression underlain by a thick layer of chalky marl which rises to the surface in places. The fen is fed by rainfall and springs arising from the chalk aquifer.

More than 400 species of wild flowers and more than 500 species of moths occur have been recorded in the reserve and it is the main British site for the very rare Cambridge milk parsley. Many nationally scarce and rare invertebrates have been found here, and 10 species are known in the UK only from this site.

The reserve can be accessed via by public footpaths, but access away from these paths is by permit only." Natural England. 2010²⁰.

- Biodiversity through enhancing and protecting the nationally and internationally important nature conservation area of Chippenham Fen.
- Climate Change mitigation measures such as carbon sequestration and flood storage and alleviation.
- Working with partners to support the development of Gateways that may exist in neighbouring Authority areas that link to this area.

²⁰ http://www.naturalengland.org.uk/outwork/conservation/designatedareas/nnr/1006036.aspx

• Contributing to landscape character through improving and maintaining the fen landscape.

<u>Current Projects</u> (see Appendix 15 for further details)

• TBC

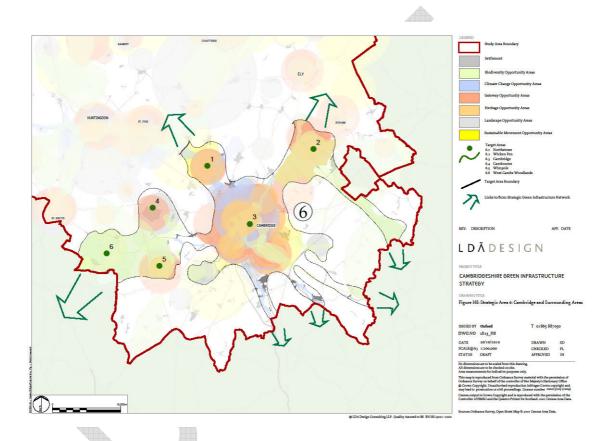


5.8 Strategic Area 6: Cambridge & Surrounding Areas

Note: Further revisions to be made to this section.

5.8.1 Description

Note: The Strategic Area boundary is to be refined to incorporate key river corridors and current project boundaries



This Strategic Area includes Cambridge with its high quality green infrastructure within the City and linking to the surrounding countryside, and those parts of its surrounding areas that comprise key green infrastructure assets – including sites such as Milton Country Park, Coton Countryside Reserve and the Gog Magog Hills. The Cambridge area is experiencing major housing growth in support of its successful local economy and the Strategic Area also includes areas where major developments have taken place or are proposed and which generate a need or opportunity for enhancement of green infrastructure.

Note: paragraph to be added about Cambridge and its immediate setting.

The Area to the north of Cambridge falls gently towards the valley of the river Great Ouse and the villages of the fen edge and includes the proposed new settlement of Northstowe. The Area extends westwards along the Bourn Brook to encompass the new village of Cambourne, the Wimpole Estate and the ancient woodlands around Gamlingay and neighbouring villages that lie on an elevated, relatively well-wooded clay plateau. Anglesey Abbey, Denny Abbey and the Farmland Museum and Wicken Fen lie to the north-east of the Area. Tourism is an important component of the economy in this Area and Green Infrastructure sites can contribute and support the tourism sector.

The south-eastern part of the Area features a range of chalk hills with thin, free draining soils and the pronounced river valleys of the Cam, Rhee and Granta to the south and west of Cambridge form 'fingers' that extend into the wider countryside, as do the linear landscape features of the Worsted Street Roman Road and the Fleam and Devil's Dykes. The River Cam forms a key corridor through Cambridge and northwards to its junction with the Ely Ouse and the Old West River. There are links along these river and linear landscape features into Bedfordshire, Essex and Suffolk.

Medium to large scale arable farmland landscapes now dominate across the Strategic Area with many small woodlands and copses combining to create a wooded skyline to the west and south. By contrast, the Area also contains a number of areas of formal parkland and the landscape to the north and northwest is one of extensive fenland fields with fewer hedges and other features.

Looking at the how the Strategic Area will help deliver Strategy's Objectives reversing the decline in biodiversity; mitigating and adapting to climate change; promoting sustainable growth and economic development and supporting healthy living and wellbeing are all important in this Area. Large-scale housing growth, economic development and associated infrastructure provision are key issues for the Area and Green Infrastructure has both a key role in supporting this sustainable growth and benefiting from it. Habitat enhancement and creation, often with associated flood alleviation and carbon capture benefits are also important issues, as well as maintaining the historic character of Cambridge and the villages and rural character of the countryside.

Looking at the Green Infrastructure themes investment in this Strategic Area offers significant opportunities for:

- Biodiversity by enhancing, linking and protecting the nationally, internationally and locally important nature conservation designations within the Area. This includes the River Cam and its tributaries, Wicken Fen, Anglesey Abbey, Wimpole and the historic commons and green spaces in Cambridge. Other sites include ancient woodlands and linear archaeological features including Roman roads and lodes.
- Climate Change Adaptation measures such as carbon sequestration, and flood storage and alleviation as well as urban cooling through tree planting and green space creation.
- Developing existing gateways and those that will result from large-scale habitat restoration, heritage sites and parkland, significant housing growth

and the association between Cambridge and strategic movement routes, navigable waterways, neighbouring strategic destinations and wider countryside connectivity.

- Heritage by using assets which are associated with Cambridge, housing growth sites and the network of historic linear features.
- Contributing to landscape character through the growth of Cambridge and new developments, and through improving and maintaining the key habitats of the Area.
- At present the Area is deficient in ANGSt at the 500ha plus standard around Cambridge and to the south, west and east of the Area and at the 100ha plus standard to the south, east and then in an arc around the Longstanton/Oakington area. There are areas of deficiency in ANGSt at the 20ha plus standard on the northern and southern fringes of Cambridge and significant deficiencies away from Cambridge and the far west of the Area, and at the 2ha plus standard there are significant deficiencies across the whole Area.
- Sustainable movement by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside, including through the major new developments on the edge of Cambridge and the new settlements of Cambourne and Northstowe.

5.8.2 Strategic Area Projects

Many projects are focused on the Target Areas and addressed in the following sections. However, there are a number of significant Green Infrastructure projects that are located within the Strategic Area but outside the Target Areas (see Appendix 15 for further details).

- Chalk Rivers Project
- Fowlmere Nature Reserve Extension and Development of Facilities
- Linear Monuments
- Woodland Linkage Project

5.8.3 How do Target Areas deliver strategy objectives?

In the Cambridge and Surrounding Areas Strategic Area, the Target Areas are:

- Northstowe
- Wicken Fen
- Cambridge

- Cambourne
- Wimpole
- West Cambridgeshire Woodlands

The six Target Areas within the Cambridge and Surrounding Areas Strategic Area, focused on the main settlement of Cambridge, the new settlements of Cambourne and Northstowe, and three major green infrastructure assets. The bubble matrix Figure 5-7 shows that four of the six Target Areas do have the potential to make a significant contribution towards delivering the Strategy's objectives, whilst the other two are important but have a moderate contribution. It is notable that Cambridge has significant potential to contribute towards all of the Strategy's objectives. Emerging plans for the proposed new town of Northstowe allowed this Target Area to display significant potential to contribute towards mitigating and adapting to climate change, promoting sustainable growth and economic development, and supporting healthy living and wellbeing. This assessment provided confidence that the Target Areas should be explored in more detail and opportunities identified for how the themes could be used to realise the potential within each Target Area.

Strategic Area 6: Cambridge & Surrounding Areas

	Objectives				
Target Area	Reverse the decline in Biodiversity	Mitigate and adapt to Climate Change	Promote Sustainable Growth & Economic Development	Support Healthy Living and Wellbeing	
6.1 Northstowe	•				
6.2 Wicken Fen			•		
6.3 Cambridge				•	
6.4 Cambourne	•	•	•	•	
6.5 Wimpole	•	•	•	•	
6.6 West Cambridgeshire Woodlands		•	•	•	

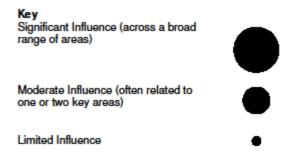


Figure 5-7: How the Cambridge & Surrounding Area Target Area delivers the strategy objectives.

5.8.4 Target Area 6.1: Northstowe

Background

A key part of the development strategy for South Cambridgeshire District Council is the development of a new Community, to be called Northstowe, situated between the villages of Oakington and Longstanton to the North West of Cambridge.

Land for this proposal is allocated in the Northstowe Area Action Plan (2007), with much of the development lying on the former airfield at Oakington. Areas of 'green separation' will separate Northstowe from the villages so that they will retain their individual character.

This major new community is planned to provide around 10,000 dwellings and be linked to Cambridge by The Busway. The town is planned to have an ultimate population approaching 25,000 people.

Northstowe will contain a number of residential areas, a town centre, local centres, a secondary school, primary schools and employment opportunities. It will also provide a range of open spaces, including green corridors through the town that connect with the surrounding countryside and also to ensure there are links from all parts of the town to the wider countryside.

Planning applications for the new town and its supporting infrastructure were submitted in 2007. Negotiations have continued and, although a number of factors have resulted in delays to the determination of the planning applications and delivery of the new town, all parties are committed to the development of Northstowe, which will bring forward much needed housing and services in a sustainable location.

At the time of writing, a number of factors affecting the delivery of Northstowe are being explored, including the implications of the Coalition Government's announcement in the Comprehensive Spending Review that the A14 Improvement Scheme will not progress in its original form.

Northstowe was also included in the second round of the Eco-Town process and the Government has awarded a grant to fund a co-ordinated set of studies, along with a further capital grant for two Eco-Town Demonstrator Projects.

These projects include the retro-fitting of retained properties in the Rampton Drift area of the new town with sustainable energy technologies, and an exhibition space at The Busway Park and Ride site at Longstanton, which will serve Northstowe and the surrounding villages.

- Biodiversity: Although currently limited in opportunities for biodiversity, the
 existing, partially brownfield site does contain a range of priority species
 and habitats. Future development of the site must retain species and
 provide the opportunity to create new habitats appropriate to the new
 landforms.
- Climate Change: The town's development will provide many opportunities
 for climate adaptation from green roofs and walls, sustainable drainage
 methods, natural cooling of buildings and integration of green energy
 production and the provision of green spaces and corridors will help
 mitigate the urban heat island effects from the new town.
- Green Infrastructure Gateways: Access to green infrastructure within and adjoining the town e.g. the Area Action Plan requires a new Southern Parkland Country Park as well as providing an enhanced Rights of Way network will enable residents to explore the wider countryside and access site further afield. There will also be a link to the RSPB's Fen Drayton Lakes via The Busway.
- Heritage: The former use of a substantial part of the site as a World War Two military air base is a heritage asset, although much of the landscaping is more recent. There are records of several buried archaeological sites, including large cropmark complexes of Iron Age / Roman / Anglo-Saxon date. There are also historic landscape elements in the green separation area with Longstanton, such as fields showing remnants of ridge and furrow farming practices. A survey of the site and its surroundings will be required as part of development proposals and any other heritage assets that can utilised in the future.
- Landscape character: Within the site, the development will offer opportunities to define the character of Northstowe through a wide range of both urban and semi natural landscapes, and to connect these to the wider countryside. Restoration of the eroded local landscape character is also a priority, utilising existing landscape features such as stream valleys, historic field patterns and maturing airfield woodlands.
- Publicly Accessible Open Space: The town will have many areas of open space each designed to reflect different characters of the emerging town.
 There will be multi functional green corridors through the town and other open spaces, such as the Southern Parkland Country Park proposed in

the Area Action Plan as well as a multi-functional water park. Publicly accessible open space can provide opportunities for art, biodiversity and community activities.

 Sustainable movement: Northstowe will feature a range of sustainable movement routes, both within the built areas and in the green spaces. These will connect with the wider landscape and enhanced public right of way and public transport networks. Elements of the sustainable movement network will include footpaths, bridleways, cycle routes, and connections to The Busway.

<u>Current Projects</u> (see Appendix 15 for further details)

Enhance Rights of Way Links

Future Projects

 Projects are anticipated to come forward as the proposals for the new town are worked up, to meet the needs of the new town.

5.8.5 Target Area 6.2: Wicken Fen and Anglesey Abbey

Background

Wicken Fen is an ambitious project to create a new nature reserve on land between Cambridge and Wicken Fen. In the long-term Wicken Fen aims to create a diverse range of habitats providing suitable environments for a huge number of species, including many which are rare and threatened, as well as providing different landscapes for visitors to explore, with benefits for health, quality of life and community engagement.

The area will be used to support wider issues created by climate change including potential carbon storage benefits and floodwater storage to allow water to percolate into soils and replenish ground water resources.

Key objectives are to:

- Open up land for wildlife and people;
- Create a mosaic of habitats, providing new sustainable opportunities for rare fenland species, securing the essential resource of water and protecting peat soils;
- Provide opportunities for visitors, tourists and local residents to benefit from access to the Wicken Fen area;
- Provide new economic opportunities for the local economy.

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area.

<u>Current Projects</u> (see Appendix 15 for further details)

Wicken Fen Vision

Future Projects (see Appendix 15 for further details)

Wicken Fen Heritage Trails

5.8.6 Target Area 6.3: Cambridge

Background

Cambridge is a compact City with an historic core that attracts over 4.1 million visitors a year, surrounded by attractive and accessible green spaces. The City sits within arable lowland, with the topography allowing a number of key views into and out of Cambridge. It is the main settlement within a rapidly growing sub-region, which encompasses over 471,000 people living in surrounding villages, new settlements and market towns. The City is enclosed by a Green Belt, the boundaries of which have been the subject of recent planned changes to allow for more sustainable growth focused on Cambridge to support the success of the local economy both locally and nationally. A number of factors contribute positively to the special character of Cambridge. The distribution, physical separation, setting, scale and character of the necklace of villages surrounding the City are essential to the Green Belt designation.

In addition to providing the setting for the City, South Cambridgeshire District includes some land in the built-up area of Cambridge. Orchard Park and a small part of Cherry Hinton are physically part of Cambridge, but currently lie within South Cambridgeshire's administrative boundary. The landscape of Cambridge and its surrounding area is an important but fragile resource. These qualities are finite and irreplaceable, and should be safeguarded.

The City has just over 1500 listed buildings, of which approximately 10% are Grade I and just under 4% are Grade II*. Cambridge has 5 Scheduled Monuments and 11 Historic Parks and Gardens. There are 11 Conservation Areas designated in the City, with Conservation Areas covering a significant proportion of the central part of the City. Over 1000 buildings are designated as being of Local Interest.

There is a high demand for housing (particularly affordable housing) in Cambridge, and there is a need to ensure the prosperity of the local economy. Average house prices in Cambridge are around eight times the average income of Cambridge residents, placing home ownership out of the reach of many of the City's residents and workers²¹. In order to provide new homes

²¹ Hometrack monitoring data, March 2010.

close to jobs, a significant level of growth is proposed on the edge of Cambridge. This growth will provide more homes for key workers and other groups and increase the population of the City and the demand for access to high quality Green Infrastructure. The City's urban expansion will provide opportunities to improve quality of life and to upgrade essential infrastructure, including Green Infrastructure.

There are a number of major growth sites planned for new homes and communities on the southern, north west and eastern fringes of Cambridge, partly within the City's boundaries and partly within South Cambridgeshire. Three of these are particularly relevant to the Strategy and create additional demands for access to Green Infrastructure and provide opportunities to provide new areas (see Section 6.3 for further details):

Cambridge Southern Fringe:

- Trumpington Meadows 1,200 homes and supporting uses
- Bell School 350 homes and 100 units of student accommodation
- Clay Farm 2,300 new homes and a mixture of other supporting uses
- Glebe Farm approximately 300 homes.
- Addenbrooke's 20:20 creation of a Cambridge Biomedical Campus

North West Cambridge:

- <u>Land between Huntingdon Road and Histon Road (NIAB 1) 1,780</u> homes and supporting uses
- <u>Land between Huntingdon Road and Histon Road (NIAB 2) a</u> second phase of 1,100 dwellings and supporting uses
- Land between Madingley Road and Histon Road to address the needs of the University of Cambridge, comprising academic and research and development facilities, accommodation for 2,000 students and 3,000 dwellings, half of which will be for University key workers

Cambridge East: new urban quarter with 10,000 to 12,000 new urban homes, employment and supporting uses. Potential for early phases north of Newmarket Road and north of Cherry Hinton with the Airport remaining on site.

The major developments are at various stages and whilst are all are expected to provide new green infrastructure, some at still at the planning stage whilst others have permission and specific projects have been identified.

- Biodiversity: There are opportunities for enhanced management of and linkages between Cambridge's commons and riverside meadows, including via green corridors to the wider countryside. Floodplain habitat restoration is also an excellent opportunity to improve biodiversity in the Area. On the city fringes there are specific opportunities available, and several projects are being progressed including the Gog Magogs Countryside Project, Trumpington Meadows County Park and Byron's Pool Local Nature Reserve.
- Climate Change: There are opportunities around remediation of the urban heat island effect and flood alleviation.
- Green Infrastructure Gateways: The growth areas provide opportunities for enhanced linkages between the City and the surrounding countryside.
- Heritage: By the protection and enhancement of the historic built and natural environment.
- Landscape character: By ensuring that the growth of Cambridge protects and enhances the setting of the historic City and also enhances the character of the City through maintaining and contributing to green corridors linking the wider countryside with the heart of Cambridge.
- Publicly Accessible Open Space: The provision of open space and linkages to the strategic Green Infrastructure network and Public Rights of Way forms one of the key elements of the growth agenda for Cambridge. Significant levels of high quality open space are required by planning policies. These open spaces must link well with the surrounding built-up area. The ANGSt analysis indicates that there are particular areas of deficiency for 2ha plus in the north and south/southeast of the City, for 20ha plus in the northern and southern fringes, for 100ha plus the Eastern side of Cambridge and at the 500ha plus standard the majority of the City except the very northern edge near Milton.
- Sustainable movement: By ensuring that all communities have access to sustainable modes of movement and the enhancement of links to the wider countryside as required by the plans for the major developments to provide for countryside recreation. A number of the growth sites are required to enhance or provide green corridors, reflecting the existing green corridors that run from the surrounding countryside to the heart of Cambridge. There are also opportunities to provide linkages between growth areas, the existing City, and nearby villages and the surrounding countryside, such as from Trumpington Meadows into the City along the River Cam, to Grantchester Meadows, and out via the new Country Park to nearby villages such as Haslingfield.

<u>Current Projects</u> (see Appendix 15 for further details)

Cambridge Nature Conservation Strategy

The Cambridge Nature Conservation Strategy, adopted in 2006, provides a technical document to guide the nature conservation activities of all departments and partners across the City of Cambridge. The vision is that over 20 years (2006 – 2016) Cambridge will see a "net gain" in biodiversity, both within the city and its immediate hinterland. Wildlife will be protected, enhanced and where possible expanded and linked. Everyone who lives or works in Cambridge will have access to high quality natural green spaces within walking distance of their home or place of work, and there will be a greater awareness and understanding of biodiversity.

Within the strategy a number of actions and projects have been proposed covering:

- The designation of new Local Nature Reserves (LNRs)
- The favourable management of County and City Wildlife Sites
- Restoration of Cambridge Commons and floodplain
- Enhanced biodiversity management of public parks and open spaces
- Improved public access to, interpretation and promotion of Cambridge's natural Green Spaces.

Cambridge Southern Fringe

- Trumpington Meadows:
 - Country Park
 - Haslingfield to Trumpington Meadows Footpath Link
- Bell School informal as part of the wider provision of Green Infrastructure in the Southern Fringe.
- Clay Farm Green Corridor
- Glebe Farm informal as part of the wider provision of Green Infrastructure in the Southern Fringe
- Addenbrooke's 20:20 informal as part of the wider provision of Green Infrastructure in the Southern Fringe

North West Cambridge

 Land between the two parts of Huntingdon Road and Histon Road (NIAB 1) and (NIAB 2) – Green Corridor

Outside Cambridge

- Coton Countryside Reserve
- Gog Magog Countryside Project
- North Cambridge Heritage Trail (including Worts Meadow, Landbeach Roman sites, Carr Dyke and Waterbeach Abbey)
- Cambridge Sport Lakes

City Centre

Restoration of Cambridge Commons and floodplain

Future Projects (see Appendix 15 for further details)

A number of future projects are identified by the planning authorities to come forward as part of the new developments, although others may also be identified.

North West Cambridge

- Land adjoining Huntingdon Road and Histon Road (NIAB 2) Countryside Enhancement
- Land between Madingley Road and Huntingdon Road Green Corridor and adjoining development.

Cambridge East

 Country Park and Green Corridor to City centre via Coldham's Common

5.8.7 Target Area 6.4: Cambourne

Background

The new settlement of Cambourne is located in South Cambridgeshire District, and lies on former farmland near Bourn to the west of Cambridge., The new community takes the form of three linked villages — Upper Cambourne, Greater Cambourne and Lower Cambourne, and is to include approximately 4,200 homes, a village centre with shopping, a library, community and health facilities, two primary schools, leisure facilities, a business park and a high proportion of accessible green space. Building commenced in 1994.

The development lies on relatively well-wooded clay plateau with medium to large-scale arable farmland landscapes dominating, although many small woodlands and copses combine to create a wooded skyline.

The retention and enhancement of the existing landscape character and habitats such as woodland, scrub and meadow, the provision of new areas of green space - greenways, public space, high biodiversity habitats - and a sustainable network of public rights of way such as cycle paths, bridleways and good pedestrian links throughout the development - were major drivers of the proposed layout.

- Biodiversity: Opportunities exist to continue with Cambourne green spaces management & enhancement
- Climate Change: Demonstration sites such as Lamb's Drove show how modern developments can be "flood adapted" to lessen the impact of flood events. Sustainable urban drainage methods have been used to reduce run-off rates.
- Green Infrastructure Gateways: The creation of extensive natural open spaces has brought Green Infrastructure to the very heart of Cambourne. Rights of Way links to the wider countryside have been improved. Fen Drayton Lake, Coton Countryside Reserve and Wimpole are all within 10km of Cambourne.

- Heritage: TBC
- Landscape character: Cambourne lies on a relatively high Clay plateau and the immediate area feature small mature woodlands, mature hedgerows and wooded stream valleys. Long views of the surrounding landscape are a useful and significant feature. There are opportunities to preserve and enhance existing landscape elements while also restoring the historic field patters close to the settlement, and extending green connections into the wider countryside.
- Publicly Accessible Open Space: Extensive greenways and grass verges weave through Cambourne providing visual interest and safety for walkers. Formal areas have much potential for community uses such as markets.
- Sustainable movement: The layout of Cambourne has been planned with an extensive network of footpaths, bridleways and cycle paths as a key principal. Further opportunities to establish connections within the built areas and to the wider countryside will emerge as Upper Cambourne is developed.

<u>Current Projects</u> (see Appendix 15 for further details)

- In association with Cambourne 950 there is an aspiration for the extensive use of solar hot water panels on dwellings and appropriately sited smallscale wind turbines.
- Large-scale public open space provision (including greenways, village greens, woodland, lakes, SuDS areas and access routes).

5.8.8 Target Area 6.5: Wimpole

Background

To the west of Cambridge lies the house, garden and parkland of the Wimpole Hall Estate. Owned by the National Trust the site attracts over 300,000 visitors per annum. There is 650 acres of Organic Farm at Wimpole Home Farm, a Community Supported Agriculture Scheme, an SSSI and SAC site for Barbastrelle bats and 200 acres of Scheduled Ancient Monument. Opportunities for much wider access around the 2,500 acre estate for walkers, cyclists and horse riders together with links to neighbouring quiet lanes and to Cambridge are important. Wimpole not only forms a visitor hub through the historic house and gardens but can also act as an important Gateway site to the West Cambridgeshire Woodlands Target Area.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area.

<u>Current Projects</u> (see Appendix 15 for further details)

Wimpole Cycling Link

5.8.9 Target Area 6.6: West Cambridgeshire Woodlands

Background

The West Cambridgeshire Woodlands Target Area encompasses the clay plateau between the Bourn Brook and Rover Rhee. This clay plateau contains one of the largest and most important clusters of ancient woodland within the county as well as the parklands of Wimpole, Longstowe and Hatley Estates. Within the Target Area the West Cambridgeshire Hundreds Project has been established. The Project has formed a partnership to take forward coordinated efforts across multiple landowners to create a high quality ecological network based around linking the ancient woodlands; better management of the woodlands and restoring / creating other lost habitats such as species-rich meadows. The partnership involves private landowners, Wildlife Trust, National Trust, Woodland Trust and FWAG.

Opportunities within the Target Area to inform future project development

This section will detail the opportunities for each of the Green Infrastructure Themes relevant to the Target Area, in addition to 'biodiversity'.

 Biodiversity: There are particular opportunities to improve the management of ancient woodlands, undertake woodland linkage projects, create species-rich grassland and support the conservation of Water Voles through mink control – particularly along Bourn Brook

<u>Current Projects</u> (see Appendix 15 for further details)

- West Cambridgeshire Hundreds Habitat Enhancement Project
 - Promotion of Higher Level Stewardship and English Woodland Grant Scheme
 - Landscape-scale Biological Monitoring
 - Habitat connectivity/mapping
 - Management of existing assets (woods, parkland and meadows)
 - Deer Management Group
 - Community engagement/involvement

Future Projects (see Appendix 15 for further details)

• Bourn Brook Enhancement (Countryside Restoration Trust vision)

6 Local Authority Issues and Green Infrastructure Priorities

6.1 Introduction

The Strategic Network for Cambridgeshire has been developed across Local Planning Authority (City and District Council) boundaries, having been based on the geographic distribution of key Green Infrastructure Themes and other county-wide issues and assets. However, Local Planning Authorities have a key role to play in the delivery of Green Infrastructure and have identified key issues and Green Infrastructure priorities relevant to their area, which are supported by the Strategic Network.

Chapter 6 sets out these key issues and Green Infrastructure priorities and in some cases sets out how the Strategic Network can be taken forward by the Local Planning Authorities.

6.2 Cambridge

Cambridge has a prosperous and dynamic economic base in high technology, research and development and related service sector industries. It is the main settlement within a rapidly growing sub-region and Cambridge's population in 2009 was estimated to be 119,100. By 2011, the population is projected to rise to 131,600 and by 2021 to 151,200. Cambridge has a distinct character and landscape setting and is renowned for its history and architecture. The mosaic of listed buildings and conservation areas, the colleges and the commons, residential areas, open spaces and gardens, archaeological and historic sites, natural features and habitats all contribute to the distinctiveness and uniqueness of the City's landscape.

6.2.1 Key issues for Cambridge

There is a high demand for housing in Cambridge, and there is a need to ensure the prosperity of the local economy. Average house prices in Cambridge are around eight times the average income of Cambridge residents, placing home ownership out of the reach of many of the City's residents and workers²². There is a particular need for affordable housing in the City. In order to maintain and strengthen the world-wide reputation of Cambridge and the wider sub-region for its high technology cluster and as a centre of innovation, Cambridge needs to continue to be an attractive place in which to live and work. The City's urban expansion will provide opportunities to improve quality of life and to upgrade essential infrastructure, including Green Infrastructure.

²² Hometrack monitoring data, March 2010.

There are three major growth sites planned for new homes and communities on the southern, north west and eastern fringes of Cambridge (partly within the city's boundaries and partly within South Cambridgeshire). Another site on Cambridge's northern eastern fringe was previously earmarked for housing development but, after further research, this is now being considered for employment-led development. In addition to smaller sites within the City's existing built-up area, the area surrounding Cambridge Station is also the subject of plans for redevelopment, including provision of residential development.

6.2.2 Green Infrastructure priorities for Cambridge

Cambridge has the following priorities in terms of Green Infrastructure:

- Maintaining and enhancing the historic and natural character and setting of Cambridge;
- Ensuring the sustainability and quality of place of new development within the City's existing communities and its urban extensions;
- Addressing climate change and biodiversity through habitat protection and enhancement;
- Protection and enhancement of open space and recreational facilities and the creation of new Green Infrastructure to meet deficits; and
- Protection and improvement of people's health and levels of physical activity.

6.3 Cambridge Fringe Sites

As mentioned in the background to Strategic Area 6 (section 5.8.6) a key aspect of the development strategy for the Cambridge area is a number of major new urban extensions to the City. This has involved the release of land from the Green Belt and planning policy documents are now in place for all of the urban extensions. Many of the urban extensions include land in both Cambridge City Council and South Cambridgeshire District Council's administrative area and have extensive inputs from both authorities, but are all dealt with here for convenience. They are dealt with in various different planning policy documents and are at various stages of implementation.

Cambridge Southern Fringe:

Trumpington Meadows

Trumpington Meadows comprises 1,200 new homes and a mixture of supporting uses. It lies within both Cambridge City and South Cambridgeshire District Councils' areas. It is allocated in the Cambridge Local Plan and South Cambridgeshire's Cambridge Southern Fringe Area Action Plan. Planning permission was granted in 2009. Throughout the residential development there will be 'green fingers' - areas of open space that extend into the development from the arable fields to the south and country park to the west.

All 'green fingers' except one, which runs above the main gas pipeline, will be planted with two rows of trees to create avenues. Pocket parks and greens will also be provided throughout the development.

A new riverside community park (Country Park) is to be provided along the River Cam extending north and south of the M11 motorway. It will include a variety of habitats, including wet and dry meadowland, wet and dry woodland and tussocky grassland at the river edge. There will be two balancing ponds within the Country Park, sited on land to the north of the M11 and east of the River Cam. There will be new planting around the balancing ponds.

Shared cycle and pedestrian routes will be provided, linking the country park to the built up area. The two parts of the country park on either side of the M11 will be linked by a cycle and footpath using the existing bridge over the motorway. There will be a good network of informal footpaths across the park.

Land directly to the south and south west of the built up area will remain in arable use and be rented out to local farmers. The illustrative landscape strategy plan within the Design and Access Statement accompanying the planning application seeks to break up these large fields between the M11 and the development edge into smaller fields that replicate the old pattern of field boundaries. New trees will be planted within the new hedgerow boundaries to break up the expanse of arable fields and improve biodiversity.

The site contains archaeological remains from the Palaeolithic period through to the Second World War. Several areas of remains are sufficiently important to warrant designation as scheduled ancient monuments, including an area of Iron Age and Roman British Settlement remains within the site close to the River Cam.

Bell School

This site lies entirely within Cambridge's administrative area and comprises just over 347 residential units and 100 units of student accommodation. It is allocated in the Cambridge Local Plan and received planning approval, subject to a Section 106 agreement, in 2008. Bell School has a soft buffer of informal open space centred around two balancing ponds along the southern edge, the provision of allotments, play areas and pocket parks together with a central linear informal space terminating in a crescent on its southern end and a landscaped buffer adjacent to Greenlands on its northern end. The layout provides an opportunity for an attractive pedestrian link with views out to the countryside beyond the site, including the Gog Magogs to the south.

Clay Farm

This site lies entirely within Cambridge's administrative area and provides 2,300 new homes and a mixture of other supporting uses. It is allocated in the Cambridge Local Plan and planning permission was granted in 2010. This site is an important gateway to Cambridge and will form a new edge to the City. Landscape and open space are key elements contributing to the overall

character of the proposed development. The existing trees, plantations, hedges, Hobson's Brook and associated ditches are significant components that characterise the development, and provide the background around which the new landscape will be designed. A very high proportion of these features have been developed into the masterplan.

The green corridor provides the transition between the urban fabric and the open countryside to the south, and remains in the Green Belt. A transition is proposed within this corridor from more formal recreation/open space adjacent to Long Road to more informal open space further south to merge with the countryside character beyond. This is achieved with the majority of active uses located north of the Cambridgeshire Guided Busway Addenbrooke's spur. South of the Cambridgeshire Guided Busway spur will comprise wet/dry balancing ponds, a permanent wetland feature, informal species rich grassland and tree planting primarily along the western and southern edges. An allotment site of 1 hectare is included on the western edge of the southern section. This is acceptable in landscape terms provided appropriate boundary treatment is included.

Glebe Farm

This site lies entirely within Cambridge's administrative area and provides for residential development of just under 300 homes. It is allocated in the Cambridge Local Plan and planning permission was granted in 2010. The public open space is spread across three main areas: a central open space, a western open space and an eastern open space, each of which contains a play area. These three spaces are subject to a similar palette of street furniture. The layouts and play specification for the spaces provide for a range of different ages, from toddlers to teenagers. The open space on the northern side of the side, which has previously been referred to as the 'Zone of Integration', is much less animated and smaller in scale and seeks to implement a native tree planting mix with a wildflower seeded area along its northern margins. Along the sides of the site that face Hauxton Road and the Addenbrooke's Access Road is a buffer strip of native structural landscaping arranged in a series of thickets. The allotments are provided at the very eastern side of the site and are sub-divided by a roadway and potential strategic pedestrian/cycle link to Exeter Close. A number of pedestrian and cycle links are provided at regular intervals. A strategic link is provided centrally that meets with Bishop's Road and crosses to meet Hauxton Road further north. Along the western side of the site adjacent to Hauxton Road, the proposal extends the off-road pedestrian/cycleway provided as part of the Addenbrooke's Access Road further northwards, connecting to the existing Park & Ride Toucan crossing.

Addenbrooke's 20:20

The site lies within Cambridge's administrative area but is highly visible from public vantage points from beyond the City to the south and from the west and is flat, exposed and relatively featureless. The Cambridge Local Plan allocates this area for enhancements to Addenbrooke's Hospital as part of the creation of a wider Cambridge Biomedical Campus, which received planning

permission in 2009. It is set against the backdrop of the existing hospital, which appears as a mass of institutional buildings with minimal landscaping. Long distance views of the site are most evident from the Gog Magog Down to the south. The Addenbrooke's site has a number of areas of public realm within it and provides scope for informal areas for relaxation. The site links with the wider City and the surrounding countryside via strategic footpath and cycleway routes.

North West Cambridge:

Land between Huntingdon Road and Histon Road (NIAB 1)

A park is proposed in the centre of this development of 1,780 dwellings within Cambridge's boundaries and a green corridor is proposed along the outer boundary of the development that runs between Cambridge and South Cambridgeshire. The site is allocated in the Cambridge Local Plan and planning permission was granted in 2010 subject to a legal agreement, although the frontage area has a separate permission and construction began in Spring 2010. The green corridor along the boundary will include the retained hedgerows and additional planting; the existing definitive footpath linking Huntingdon Road and Histon Road, an additional cycle route and new drainage facilities which take the form of swales, ditches or ponds. The park will be provided in the centre of the development, near the mixed-use community centre and linked to two of the green corridors that cross the site. This park will contain sports pitches, landscaped areas for informal play and recreation, drainage facilities including drains or swales along the edges of the park and wetland areas. Children's equipped play areas will be provided throughout the site.

Land between Huntingdon Road and Histon Road (NIAB 2)

A second phase of development at NIAB is proposed for 1,100 dwellings within South Cambridgeshire in its Site Specific Policies Development Plan Document. The development must enhance the landscape, biodiversity and public access in the open countryside area adjoining the development, including hedgerow management and enhancement, measures to protect and enhance wildlife habitats and new links to the countryside via the existing farm bridge over the A14.

Land between Madingley Road and Histon Road

Land in Cambridge and South Cambridgeshire has been released from the Green Belt specifically to address the long term development needs of the University of Cambridge. The joint North West Cambridge Area Action Plan provides for academic and research and development facilities, accommodation for 2,000 students and 3,000 dwellings, half of which will be for University key workers. A large central area of open space will be provided in the strategic gap between the two parts of the site, which will be retained as Green Belt. There will also be a substantial open landscaped area between the development and the M11, retained in the Green Belt. The Plan requires improved linkages into the wider countryside and other areas of

publically accessible open space such as the Coton Countryside Reserve and the NIAB 1 and 2 developments.

Cambridge East:

The joint Cambridge East Area Action Plan sets out the planning requirements for this site which lies within both Cambridge and South Cambridgeshire, and which plans for 10,000 – 12,000 new homes in the area based on the Cambridge airport site. Whilst the urban quarter as a whole requires the airport to relocate, the Plan identifies potential for early development north of Newmarket Road and north of Cherry Hinton with the Airport remaining on site. In addition to the creation of strategic routes connecting Green Infrastructure in the City with the surrounding districts and key projects such as Wicken Fen, a Country Park is proposed to the east of Airport Way, as part of the development of this site as a new urban quarter for Cambridge. An urban park is also proposed on the existing Park and Ride Site, along with a range of smaller open spaces and allotments. A Green Corridor will be retained through the new urban quarter, linking Coldham's Common with the wider countryside. This corridor is retained as Green Belt.

Cambridge Northern Fringe:

Orchard Park

Development of Orchard Park bounded by the A14, Histon Road and Kings Hedges Road was allocated in the South Cambridgeshire Local Plan 2004 on land that was originally in the Green Belt. Situated in South Cambridgeshire, this high density urban extension to Cambridge was originally granted planking permission for 900 dwellings and employment uses with supporting services and facilities in 2005 and about two thirds of the development has been completed. The South Cambridgeshire Site Specific Policies Development Plan Document provides for a further 220 dwellings in place of some of the employment uses and requires the creation of cycle and footpath links to the rural area to the north of the A14.

Cambridge Northern Fringe East

A joint Area Action Plan will be prepared to address the redevelopment potential of this area lying largely in Cambridge, with a small part adjoining the railway line located in South Cambridgeshire.

6.4 South Cambridgeshire

South Cambridgeshire is the second largest and most populated district in Cambridgeshire with an area of 90,200 hectares and a population of 142,500. Most of the District is relatively rural with the majority of the population currently living in villages or rural areas. Many villages are prominent in the landscape and most have at least a historic core, with the District containing a high number of conservation areas, listed buildings and archaeological sites. The population of South Cambridgeshire has grown rapidly and is expected to increase by around 20% over the next 13 years and so the district is making a

comparatively large contribution to growth in the Cambridge sub region, with a number of key business parks located in the countryside around Cambridge. The District has played a key part in the economic growth of the region. Future development is focused on a few major sites on the fringes of Cambridge and on a planned new town at Northstowe.

6.4.1 Key issues for South Cambridgeshire

South Cambridgeshire is a very desirable place to live and work, with people valuing its quiet, rural character and links to Cambridge and London. National surveys consistently identify it as one of the best places to live in the country. Important issues and priorities highlighted in the Sustainable Communities Strategy include:

- Relatively high level of population growth compared to other districts in the county
- The largest percentage population increases will be in people aged 65 or over
- One of the most expensive districts to live in the county with house prices over four times the average household income (2005) and a strong demand for affordable housing
- Local residents say that natural areas contribute most to a good quality environment.
- The loss of green space and excessive new development was given as one of the things people like least about the area.
- Resources for social cohesion as well as the physical environment are essential to ensure mental health and wellbeing in new communities.
- Approximately 17% of adults in South Cambridgeshire are classified as obese
- People believe that provision for walking and cycling is the most important way they can improve their health and is given a high priority in most Parish Plans.
- Highest levels of CO2 emissions per capita in the county, closely linked to high emissions from transport and the growing industrial and commercial sector.
- Annual average temperatures look set to rise by between 2°C and 3.5°C by the 2080's.

6.4.2 Green Infrastructure issues and opportunities for South Cambridgeshire

Intensive modern agriculture has resulted in the removal of many hedgerows and the drainage of wetland, creating largely open landscapes of large fields, often bounded by gappy hedgerows and drainage ditches. This has reduced biodiversity habitats and fragmented the remaining links between them.

However, many villages feature small fields and paddocks, remnants of early enclosure, which provide a local landscape setting and opportunity for people to experience biodiversity and enjoy open spaces and other benefits. They should be considered to be an important part of local Green Infrastructure.

More traditional approaches to land management – sustained over long periods or created more recently through initiatives such as environmental stewardship schemes – create landscapes and habitats of high quality that make a strong contribution to Green Infrastructure. These approaches should be supported and the areas created expanded and linked to others of similar value.

Landscape and biodiversity in the west of the district, where a historically well-wooded landscape has been reduced to separate blocks, should be strengthened. This includes managing, planting and linking woodland and reinforcing the surrounding landscape of hedged fields and parkland. Woodland can also provide a sustainable source of fuel.

Areas of calcareous grassland have become fragmented and need to be expanded and linked together in order to produce sustainable blocks of habitat. The Wicken Fen Vision provides another opportunity to reinforce a traditional landscape and important habitat, as well as providing a wide range of recreation, sustainable movement and other benefits.

Rivers and streams are particularly important features of the district. To the west and south are the chalk streams and tributaries of the River Cam, while to the north and east the River Great Ouse and the lower Cam form a natural boundary to the district at the fen edge. Together with other wetlands, the rivers provide opportunities for conservation, enhancement and increased public access and enjoyment.

The land around watercourses and water bodies provide opportunities to help manage flood risk. This can be an integral and crucially important part of Green Infrastructure though it can also impose some constraints on what can be achieved.

Heritage opportunities exist at the gateways, including the Farmland Museum and Denny Abbey, and on sites that are 'multi-functional' in Green Infrastructure terms. Sites often combine historic and wildlife interest and form part of a wider historic pattern of routes, fields and other land uses such as the Wimpole Estate with its Grade 1 Listed Park, Hall, gardens, SAM and SSSI. Heritage can also increase public understanding and enjoyment of an area through interpretation.

There is an opportunity to enhance the role of gateway sites, such as the country parks at Milton and Wandlebury and Coton Countryside Reserve, which attract visitors and provide a way in to the countryside. Integrating them with the Green Infrastructure network and exploiting their collective value is important.

Rights of way, and similar public routes, provide opportunities for recreation as well as sustainable movement, and may act as wildlife corridors. Connecting new growth sites and settlements to the wider network of routes is important. Gaps in parts of the network around Cambridge, to the south west of the City, and in the west of the district are identified in this Strategy.

Green Infrastructure should be an integral part of new settlements and growth sites in the district, mitigating the impacts of climate change, delivering a range of other objectives, and linking to the wider Green Infrastructure network. Links between Cambridge, the fringe sites, and the surrounding area, and across and around the City, will be key. Multi-functional sites such as the Gog Magog Hills and Coton Countryside Reserve, which are within easy reach of the City, will be increasingly important.

A large part of the district's population will continue to live in the rural areas, and there may be local opportunities to enhance Green Infrastructure around and between villages which will serve the village community and enhance the wider strategic GI network.

The major increase in population planned for South Cambridgeshire and Cambridge will put a particular pressure on existing Green Infrastructure and require proportionate investment in developing the Green Infrastructure network.

6.4.3 Green Infrastructure priorities for South Cambridgeshire

- Securing new and enhanced Green Infrastructure and improved links to the wider network as part of the major developments on the Cambridge fringes and at Northstowe
- Seeking opportunities with all new developments to incorporate and link to Green Infrastructure
- Providing Green Infrastructure to meet the needs of the expanding population of the district, Cambridge and sub-region
- Connecting and reinforcing habitats and landscape features;
- Conserving, enhancing and increasing the enjoyment of the district's rural and historic character;
- Improving access to Green Infrastructure across the District;
- Engaging and supporting people, groups and initiatives to help deliver Green Infrastructure:

- Making real improvements to places and quality of life; and
- Reducing the causes and impacts of climate change.

6.5 East Cambridgeshire

East Cambridgeshire is a predominantly rural district located to the north-east of Cambridge. The District covers an area of 655 km2, and has a population of 76,231 (Cambridgeshire County Council mid-year population estimate 2006). The district contains 3 market towns, and 50 other villages and hamlets varying in size, including the fringe areas of Newmarket.

6.5.1 Key issues for East Cambridgeshire

The role of the larger scale places in East Cambridgeshire (including Wicken Fen, Ouse Washes and the riparian corridors) can be seen as enabling the District to work at mitigating or adapting to climate change. Smaller scale Green Infrastructure interventions can aid this process by increasing the capacity of local environments to meet the challenges of change.

Supporting Healthy Living and Wellbeing is also very important as East Cambridgeshire meets the challenges of an ageing and less healthy population. This should focus directly on the provision of sustainable transport routes within and between the main settlements of East Cambridgeshire to ensure that people can access Green Infrastructure and open space when they want to. The role of Public Rights of Way and riparian corridors will be integral to this process as they already form the basis of a sustainable transport network.

The master planning process in the District has shown that the ability of East Cambridgeshire to secure longer term sustainability is dependent on the promotion of the area as a place for investment. The provision of a functional and attractive landscape/Green Infrastructure that draws businesses and people to East Cambridgeshire would help to meet these challenges.

The following strategic objectives will help to deliver the spatial vision, and guide development in the district. The objectives will also help to provide a framework for developing appropriate indicators and targets for monitoring purposes. These have been developed having regard to other relevant plans and strategies, national and regional planning guidance, and community views expressed through the Community Strategy and LDF consultation process. They have also taken account of the overriding aim of land-use planning, which is to achieve 'sustainable development', which is defined as:

- 1. To accommodate future population and employment growth to meet the needs of the district
- 2. To locate new development in sustainable locations where it reduces the need to travel, and enables people to access jobs and key services

- 3. To ensure that new housing meets the needs of the community, including the provision of an appropriate amount and range of affordable housing and specialist needs housing
- 4. To support and encourage economic growth and job creation which meets local employment needs and limits out-commuting
- 5. To protect and enhance the vitality and viability of the district's town centres as places for shopping and leisure
- 6. To retain and improve the provision of community facilities and services in the district, particularly in rural areas
- 7. To provide a framework for the delivery of infrastructure and services (including health, education, community, transport and recreation facilities) in tandem with new development
- 8. To protect the countryside from inappropriate development, and to protect and enhance the district's natural environment including distinctive landscapes, habitats and biodiversity
- 9. To protect and enhance the historic heritage and unique character of settlements by ensuring that new development reflects and/or is sympathetic to the distinctive character and appearance of the local area
- 10. To secure new development which is accessible to all users, and minimises the risk of crime, flooding and climate change
- 11. To promote development which conserves natural resources, minimises greenhouse gas emissions, and helps to reduce waste
- 12. To increase opportunities to pursue a healthy lifestyle, by enhancing walking, cycling and other Rights of Way links, and maintaining and improving the availability of recreation facilities and open spaces.

6.5.2 Green Infrastructure priorities for East Cambridgeshire

- Meeting deficits in Green Infrastructure and open space (formal and informal) provision;
- Development of a series of District wide strategically important GI and open spaces that link district planning and development priorities;
- Linking development with the objectives and aims outlined in the Government's Growth Areas initiatives and programmes;
- Improve the level of high quality biodiversity and conservation provision across the District:
- Maintaining the historic character of Ely;

- Maintaining the visual qualities of East Cambridgeshire and in particular Ely and its cathedral – particularly the north side of Ely Cathedral;
- Improve social engagement, ownership and promote a long-term appreciation of Green Infrastructure, open space and the wider countryside of East Cambridgeshire;
- Develop a network of functional Green Infrastructure links that promote a better quality of life, place and environment for East Cambridgeshire;
- Creation of safer and healthier population that support prosperous and involved communities in East Cambridgeshire;
- Promotion of a District wide initiative to increase woodland creation and promote outdoor recreation

6.6 Fenland

Fenland District comprises the Local Government administrative area for north Cambridgeshire and is centred on the four Market Towns of Chatteris, March, Whittlesey and Wisbech with smaller rural settlements scattered throughout. The area is predominantly flat and low-lying comprising some of the most fertile soils in the country, and is a highly productive agricultural area.

6.6.1 Key issues for Fenland

- Generally high levels of deprivation in the east March and Wisbech areas.
- Below average GVA per head compared to the national average.
- Fenland has a significant percentage of its work force comprising an outflow of commuters to locations outside the District.
- Relatively high unemployment rate, (especially in the Wisbech area), compared to the rest of Cambridgeshire.
- Difficulty in attracting Key Workers. (esp. teachers)
- Poor public transportation links within the District.
- Continuing decline in services within villages e.g. closures of shops, post offices, pubs, and petrol stations.
- Shortage of quality employment premises for small and medium enterprises including incubation facilities, offices and managed workspace.
- Several employment sites in the District include areas of under-utilised or vacant land.
- Much of the District lies in Flood Risk Zones 2 & 3.

 Lack of hotel accommodation in the District to serve tourists and business travellers.

Green Infrastructure priorities for Fenland

- Catering for a growing and ageing population;
- Meeting existing deficiencies in open space in the district;
- Creating clean and attractive places to live;
- Encouraging greater social cohesion;
- Improving people's health and encouraging physical activity (particularly in the young and old);
- Promoting modes of sustainable transport (walking and cycling);
- Providing good access to and within the countryside (including Rights of Way) which is currently poor despite the rural nature of district;
- Exploiting existing GI assets (i.e. extensive waterways) as an economic resource to be used for recreation and tourism (cycling, walking, boating, fishing, bird watching etc) and thereby creating employment opportunities; and
- Improving biodiversity and enhancing the landscape character within the district.

Fenland District includes two of the six Strategic Areas. These are Strategic Areas 1 and 3.

The Strategic Network for Fenland District should support delivery of the above Green Infrastructure Priorities and promote and seek to improve the existing Green Infrastructure links between the Market Towns, Villages and countryside that make up the character and fabric of the District. The potential provision of Country Park(s) to serve the Market Towns of Chatteris, March and Wisbech is at the core of the Districts Strategic Network, along with the provision of Green Infrastructure frameworks around these Market Towns, and around Whittlesey. These Frameworks are viewed as key to integrating any new development that comes forward in line with the District Council's forthcoming Local Development Plan which seeks to guide development, and facilitate the provision of the relevant infrastructure, and cohesive social fabric that such development engenders within the District through to 2031.

There is scope for improving connectivity along the waterways that criss-cross the District and to provide recreation, leisure and educational opportunities. This should help enhance bio-diversity and maintain the landscape character of the District, whilst serving to promote tourism.

6.7 Huntingdonshire

Huntingdonshire is still predominantly rural in character with an area of approximately 913km2. The population is currently around 160,000 people (2006), with approximately half living in the four market towns of Huntingdon, St Neots, St Ives and Ramsey and most of the remainder in almost 100 villages. Huntingdonshire has a variety of Green Infrastructure including rivers, gardens, parks, farmland and woods which make up a large proportion of the District. This Green Infrastructure supports a great variety of plants and animals.

Key Issues for Huntingdonshire

Growth will generate additional demands on the District's physical and social infrastructure. A key challenge will be the timely provision of adequate and appropriate new infrastructure to meet these demands. Green Infrastructure is a vital part of Infrastructure provision to enable communities to thrive. The majority of the growth that will take place in the District will be located in the market towns which, with the exception of Ramsey, are located in or close to the Ouse Valley.

Access to quality green space is a priority for the Council. Green space forms an important part of the District's Green Infrastructure which can come under considerable pressure as a result of new development. Focusing countryside enhancement efforts on the areas of the Great Fen, Grafham Water/Brampton Woods and the Great Ouse Valley will give maximum scope for consolidating and linking important habitats, and enable complementary access improvements to be pursued.

Green Infrastructure priorities for Huntingdonshire

- Support positive growth and development;
- Opportunity to establish link between people and open space assets;
- Important role in climate change mitigation and adaptation;
- Role in economic uplift, largely through tourism, attracting people and inward investment;
- The Great Fen and links to the South Peterborough Green Parks, Ramsey and Huntingdon;
- The Grafham Water/ Brampton Woodlands Area and links to Huntingdon and St Neots;
- The Great Ouse Valley area and links to settlements between St Neots and Earith; and
- Links between the three main areas of strategic Green Infrastructure.

Huntingdonshire District includes two of the six Strategic Areas. These are Strategic Areas 2 and 3.

The Strategic Network in Huntingdonshire encompasses the Great Fen which links Peterborough to Huntingdon through the Fen edge landscape that includes Woodwalton and Holme Fen, Ramsey, and the ancient woodlands around Alconbury.

This in turn links to the Ouse Valley, running from St Neots in the south of the district, incorporating Paxton Pits and the river Great Ouse through to the Huntingdon area with Hinchingbrooke Country Park and Port Holme. Running eastwards the Ouse Valley takes in the opportunity for a new country park at St Ives, Fen Drayton and Needingworth Wet Fen. From Earith the network continues out of the district to the north east with the Ouse Washes and eastwards along the old course of the Great Ouse. The Ouse Valley forms a key corridor across Cambridgeshire and contains a wide variety of Green Infrastructure sites and opportunities. Grafham Water and its neighbouring woodland lie to the west with links to the Ouse valley, Brampton Woods and the Ellington Brook.

Linked directly to the Ouse Valley are the northern parts of the Cambridge and Surrounding Area section of the network and also with the West Cambridgeshire Woodlands around Gamlingay and neighbouring villages.

The Strategic Network in Huntingdonshire enables significant opportunities for the following:

- Biodiversity: Enhancing, linking and protecting the nationally and internationally important nature conservation areas along the Ouse Valley, Ouse Washes, Grafham Water, historic fen and ancient woodlands.
- Climate Change: Adaptation measure such as carbon sequestration and flood storage and alleviation as well as urban cooling through tree planting and green space creation.
- Gateways: Developing gateways that result from large-scale habitat restoration and the association between the market towns and strategic movement routes, navigable waterways, housing growth and strategic destinations.
- Heritage: Using assets that are associated with the market towns, mineral extraction sites, and the network of historic drains, the existing historic fenland landscape and its planned restoration.
- Landscape: Contributing to landscape character through the growth of the market towns, mineral extraction and through improving and maintaining the key habitats of the area, particularly the historic fen and ancient woodlands.
- Sustainable Movement: Improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

7 Delivery of the Strategic Network

7.1 Background

The spatial planning system plays an important role in planning and delivering Green Infrastructure through national and local planning policy and guidance, development management, and securing developer contributions towards creating and enhancing new and existing provision.

An important role of the Strategy is to provide a robust evidence base and in other respects support existing policies and assist the development of new ones. This will ensure that planning policy documents for each District are able to support the Strategic Green Infrastructure Network for Cambridgeshire as well as reflecting their own specific local Green Infrastructure needs. This will provide continuity across local authority boundaries but allows for local flexibility in terms of implementation and delivery.

7.2 The context for delivery

Three key areas for delivery include planning policy, funding and skills. This section describes briefly the context within which the Strategy will need to deliver.

Planning – During 2010 draft legislation was established which seeks to abolish Regional Spatial Strategies and which places a stronger emphasis on the local development plan as part of the Government's 'Localism' agenda. For Cambridgeshire, a two-tier authority area, this means a renewed emphasis on the role of the five local authority development plans and policies as a mechanism for the delivery of the Cambridgeshire Green Infrastructure Strategy. The Strategy is providing an important evidence base for the formulation of policies and proposals to be included in these plans. Delivery of Green Infrastructure may also in future be through means of neighbourhood plans as proposed in the draft legislation.

Funding – An era of reduced spending and restraint means that the ability to fund the Strategic Network will require more innovative finance mechanisms and a broader view on how to access funding from a range of sources. The development process will remain a key source of funding for Green Infrastructure but different mechanisms for supporting Green Infrastructure may also evolve over time.

Skills – Cambridgeshire is fortunate to have a wide variety of organisations and individuals with the skills and capacity to deliver the Strategic Network. However, keeping hold of the skills and experience will be challenging for organisations as funding becomes tighter. It is critical for the success of the Strategy that experienced and skilled Green Infrastructure specialists are retained.

The case study of Little Downham Local Nature Reserve is an excellent example of a community working with partner organisations and bringing together planning, funding and skills to deliver a project.

Case Study – Little Downham Local Nature Reserve (LNR) is a wildlife resource offering a range of opportunities for local people actively to engage with their local environment. The creation of a new adjacent community orchard has diversified its ecological value for great crested newts, specimen trees or diverse wildflower species. The maintenance of the LNR is carried out by Little Downham Conservation Group. This case study demonstrates how a local community can work with partner organisations and the local Councils to develop designate and then manage an important local green space.



Photo provided by East Cambridgeshire District Council

7.3 How will the Strategy be delivered?

This section develops the three key means by which the Strategy will be delivered.

7.3.1 Planning policy

The endorsement of the Strategy including its evidence base by local authorities and the development of policies as part of the Development Plan

process are key to the successful delivery of the Strategic Network. The Strategy will also support existing Green Infrastructure and related policies.

There is the opportunity to create a coherent policy framework for Green Infrastructure across Cambridgeshire through the inclusion of policies in local planning policy documents that draw on the evidence base provided by this Strategy whilst complementing locally derived Green Infrastructure priorities. Local Planning Authorities will need to take a view on how this is given effect in their individual Development Plans but embedding Green Infrastructure into policy and providing the context for both on and off-site Green Infrastructure delivery and its relationship to means of funding delivery will be crucially important.

7.3.2 Funding Delivery of the Strategic Network

The funding of the Strategic Network could come from a variety of sources. Figure 7-1 below identifies some of the funding opportunities that may be available to support delivery. Some of these are still in the early development phases in Cambridgeshire such as a local carbon offset²³ but it is anticipated that over the lifetime of delivering the strategic network that most of these will contribute at some point.

Developer Contributions to Green Infrastructure

S106 and Community Infrastructure Levy

Developer contributions have traditionally funded Green Infrastructure provided in relation to new developments through legal agreements related to the grant of planning permission (known as section 106 agreements). This is likely to continue to be an important means of funding Green Infrastructure provision in relation to new development. For example, new local open space to meet local authority standards.

The Community Infrastructure Levy (or CIL) has been introduced as a means to capture value from a wide range of development in a more systematic way than negotiated s106 agreements have typically done. Development value realised from a wide range of developments through a Levy can be used to fund strategic infrastructure, including Green Infrastructure, that will be of wider benefit to the new and existing communities. For example, the Great Fen and Wicken Fen are strategic flood alleviation opportunities that provide more than immediate local benefit.

Assuming there is consensus amongst the Local Authorities to adopt the Community Infrastructure Levy, a common approach to charges for the strategic elements of the Levy could be adopted. This Strategy is expected to

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²³ A local carbon offset mechanism has been scoped for Cambridgeshire. This is the potential development of a Fund which attracts contributions from developers of new homes and businesses delivering their zero carbon obligations from 2016. The Fund will look to invest in a range of infrastructures and Green Infrastructure is one of the infrastructures that may be considered.

provide the key elements of the evidence base to inform the preparation of costed Green Infrastructure and local authority charging schedules for collection of developer contributions towards strategic Green Infrastructure projects. However, it should be noted that Green Infrastructure delivery in the new developments will not always aim to exclusively meet the four Strategy Objectives.

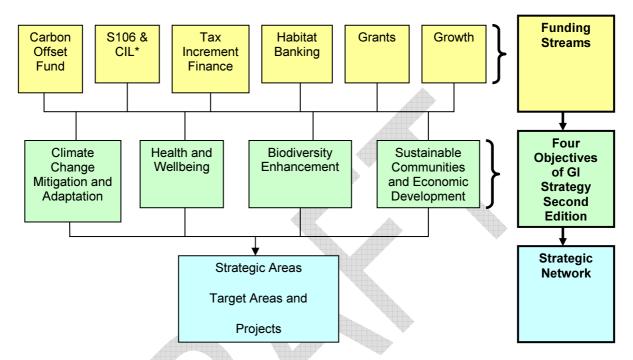


Figure 7-1: Funding opportunities for Green Infrastructure

Other Funding Mechanisms

In addition to traditional investment types, there is also growing interest in the UK in innovative infrastructure investment models. Although many of these innovative finance mechanisms are in their infancy in the UK, some or all of these mechanisms may come forward during the lifetime of the Strategy. The development of a funding strategy will be important.

These models include:

- Tax Increment Financing by which the costs of forward-funded infrastructure are recouped from net additional local business tax revenues retained in the local area. Green Infrastructure will have to be part of a wider infrastructure initiative, the relative merits of which are likely to be assessed in relation to other, more costly, infrastructure requirements.
- Habitat Banking by which revenues from development schemes requiring off-site mitigation of habitat loss are collected and invested in specific habitat creation projects. In an English context, habitat banking

will be researched and tested and is being developed as a means of 'offsetting' by Defra and Natural England similar to models around Carbon Offsetting.

 Carbon Offsetting – by which businesses, organisations and individuals seek (or in due course are likely to be obliged to) compensate for all or part of their unavoidable carbon emissions. A carbon offset fund could choose to invest in Green Infrastructure projects that absorb an equivalent amount of carbon dioxide and which are cost effective to deliver.

Further information on CIL, Habitat Banking and Carbon Offsetting mechanisms may be found in the technical appendix.

As well as funding sources already described, there are also opportunities to explore:

- Agri-environment, land management and improvement funds. For example higher level stewardship and entry level stewardship grants and English Woodland Grant Schemes
- Local business/organisation sponsorship. For example, as part of a business corporate and social responsibility, it may wish to support local Green Infrastructure improvements.
- Endowments: A financial endowment is a transfer of money or property donated to an institution or Trust. An endowment may come with stipulations regarding its usage. In some circumstances an endowment may be required to be spent in a certain way or alternatively invested, with the principal to remain intact in perpetuity or for a defined time period. This allows for the donation to have an impact over a longer period of time than if it were spent all at once.
- Landfill Communities Fund: The Landfill Communities Fund (formerly
 the Landfill Tax Credit Scheme) enables landfill site operators to claim tax
 credit for contributions they make to approved environmental bodies for
 spending on projects that benefit the environment. The environmental
 bodies are those enrolled by Entrust, the regulatory body for the scheme.

Although public sector and third sector funding is tight, all opportunities will need to be explored including:

- EU funding, such as LIFE, the EU's financial instrument for supporting environmental and nature conservation projects;
- Local Authority capital and revenue programmes, especially in relation to public open space, publicly-owned land, leisure services and highways/rights of way etc. For example, linking with 'Making Assets Count in Cambridgeshire where the totality of public sector assets are being looked at to identify their best use, some of the land assets may have potential to support the delivery of the Strategic Network.

- Public agency infrastructure funding;
- Public agency revenue funding, e.g. Environmental Stewardship (ELS/HLS) and the English Woodland Grant Scheme;
- Lottery funds

Third Sector inputs could include:

- Voluntary contributions as part of community action;
- Third sector members funds, e.g. RSPB, Wildlife Trust, Woodland Trust, National Trust;
- Charitable trusts.

7.3.3 Capacity and Skills to Deliver the Strategic Network

The Green Infrastructure Forum was established to oversee the delivery of the 2nd Edition of the Green Infrastructure Strategy. The role of the Forum is central to the success of the Strategy and the delivery of the Strategic Network. It holds within it the skills and experience to advise, develop and deliver projects. But it also has a role coordinating stakeholders' views, identifying opportunities for securing delivery and keeping Councillors informed on key issues or barriers to delivery. A full list of Green Infrastructure Forum members is at the front of this document.

The skills of the members of the Green Infrastructure Forum are continually developed within their own work setting to ensure that they remain innovative for Green Infrastructure in Cambridgeshire.

7.3.4 Overview of Project Delivery Mechanisms

Figure 7-2 shows how the various delivery mechanisms must be used together to deliver projects and achieve the Strategy's objectives.

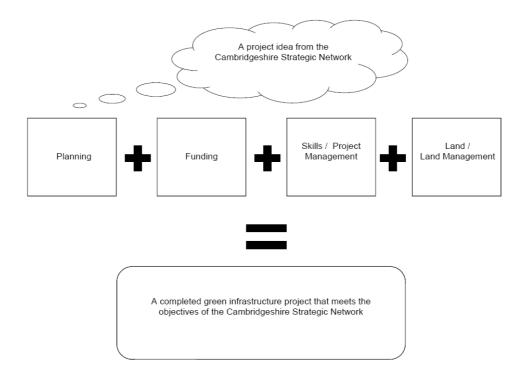


Figure 7-2 Summary of process for project delivery

7.4 Further work and Next Steps

Action 1: Manage Strategy implementation

- The Green Infrastructure Forum plays an important role in overseeing a wide range of Green Infrastructure delivery in Cambridgeshire. It is therefore important that the Green Infrastructure Forum is maintained or another body established to oversee the implementation and monitoring of the Strategy. The Green Infrastructure Forum (or successor body) will need appropriate links into relevant high-level partnership groups, possibly including the Greater Cambridge and Greater Peterborough Local Enterprise Partnership (LEP), subject to the LEP's role and responsibilities.
- The role of the Green Infrastructure Forum (or successor body) will need to be developed to provide support and advice on implementation and promotion of Green Infrastructure to an appropriate high-level partnership group and work with that group on tasks that will benefit the delivery of the Green Infrastructure Strategic Network and the Strategy's Objectives.

Action 2: Establish a funding strategy

 Develop a common approach to strategy funding from the Community Infrastructure Levy to support delivery of the Strategic Network.

- Identify innovative funding mechanisms that can be developed to support Green Infrastructure and that can be used to create a funding strategy based on short, medium and long-term investments.
- Identify other funding sources including land management grants; funding from trusts and endowments or other sources.

Action 3: Develop Green Infrastructure projects

- Deliver Green Infrastructure through growth and new developments.
- Offer project development assistance and advice to Green Infrastructure project stakeholders, including parish councils, local community groups, and third sector organisations.

Action 4: Increase knowledge of Green Infrastructure

 Develop the skills of local communities and businesses to support and understand the value of Green Infrastructure for health and wellbeing, climate change adaptation and mitigation, economic development and biodiversity enhancement.

Action 5: Harness Community Support

 Work with communities of interest and place, including Green Infrastructure project stakeholders, parishes, and neighbourhood groups, to plan and implement local Green Infrastructure projects, and to deliver the Strategic Network at all levels.

Action 6: Strategy promotion and communication

- Develop a Green Infrastructure Communications Plan.
- Work with a wide range of stakeholders to develop effective joint working models, promote new and existing projects, share project ideas, and support education and learning.

Action 7: Strategy monitoring

 Work with the Green Infrastructure Forum (or successor body) to monitor and report delivery of the Strategic Network, including to communities and relevant high level partnership groups.

8 List of Technical Appendices

- 1. Background and Context
- 2. Progress with the 2006 Strategy
- 3. 1st Round Consultation Summary
- 4. Planning and Sustainable Growth
- 5. Biodiversity
- 6. Climate Change
- 7. Green Infrastructure Gateways
- 8. Heritage
- 9. Landscape
- 10. Publicly Accessible Open Space
- 11. Sustainable Movement
- 12. Economic Development
- 13. Health and Wellbeing
- 14. Water and Land Management
- 15. Strategic Network Projects