

Cambridgeshire Green Infrastructure Strategy



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- The National Trust
- The Wildlife Trust for Bedfordshire, Cambridgeshire, Northamptonshire & Peterborough
- The Woodland Trust

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- Environment Agency
- Fenland District Council
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- Natural England
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Contents

1	Executive Summary	11
2	Background and Purpose.....	15
2.1	What is Green Infrastructure?	15
2.2	Background to the Green Infrastructure Strategy.....	16
2.3	Why is Green Infrastructure important for Cambridgeshire?	17
2.4	Why review the 2006 Green Infrastructure Strategy?	20
2.5	Purpose of the Green Infrastructure Strategy.....	22
2.6	Guide to the document	23
3	Developing the Cambridgeshire Green Infrastructure Strategy	26
3.1	How the Strategy fits together.....	26
3.2	Objectives of the Strategy	29
3.3	Green Infrastructure Themes	30
3.4	Overarching factors that influence Green Infrastructure	30
3.5	Data analysis and spatial data analysis for the themes and other issues	31
3.6	Biodiversity.....	32
3.7	Climate Change	33
3.8	Green Infrastructure gateways.....	34
3.9	Heritage.....	35
3.10	Landscape.....	36
3.11	Publicly accessible open space.....	37
3.12	Rights of Way.....	38
3.13	Other influencing factors	40
3.13.1	Economic Development	40
3.13.2	Health.....	41

3.13.3	Water and Land Management.....	42
3.14	Developing the Strategic Network.....	44
3.14.1	Strategic areas	47
3.14.2	Target areas	49
3.14.3	Projects	49
3.15	Assessing the Strategic Network against the Strategy's objectives	51
3.16	Identifying Delivery Mechanisms	54
4	The Strategic Network.....	57
4.1	Strategic areas Overview.....	57
4.2	Strategic Area 1: River Nene	60
4.2.1	Description	60
4.2.2	Strategic area projects (see Appendix 15 for further details)	63
4.2.3	How do the target areas deliver strategy objectives?	63
4.2.4	Target Area 1.1: Wisbech.....	65
4.2.5	Target Area 1.2: Whittlesey	66
4.2.6	Target Area 1.3: March	68
4.2.7	Target Area 1.4: Nene Washes and River Nene (Old Course)...	70
4.3	Strategic Area 2: Huntingdonshire Fens and Woods.....	72
4.3.1	Description	72
4.3.2	Strategic area projects (see Appendix 15 for further details)	74
4.3.3	How do target areas deliver strategy objectives?.....	74
4.3.4	Target Area 2.1: Great Fen	75
4.3.5	Target Area 2.2: Ramsey.....	77
4.3.6	Target Area 2.3: Huntingdonshire Ancient Woodlands	78
4.4	Strategic Area 3: Great Ouse.....	80
4.4.1	Description	80
4.4.2	Strategic area projects (see Appendix 15 for further details)	82

4.4.3	How do target areas deliver strategy objectives?.....	83
4.4.4	Target Area 3.1: Grafham Water	85
4.4.5	Target Area 3.2: St Neots.....	86
4.4.6	Target Area 3.3: Ouse Valley/Paxton Pits.....	87
4.4.7	Target Area 3.4: Huntingdon.....	89
4.4.8	Target Area 3.5: St Ives.....	90
4.4.9	Target Area 3.6: Fen Drayton.....	91
4.4.10	Target Area 3.7: Needingworth.....	92
4.4.11	Target Area 3.8: Earith	93
4.4.12	Target Area 3.9: Chatteris	94
4.4.13	Target Area 3.10: Block Fen.....	96
4.4.14	Target Area 3.11: Ouse Washes.....	97
4.5	Strategic Area 4: Eastern Fens and Towns	99
4.5.1	Description	99
4.5.2	Strategic area projects (see Appendix 15 for further details) 101	
4.5.3	How do target areas deliver strategy objectives?.....	101
4.5.4	Target Area 4.1: Littleport.....	103
4.5.5	Target Area 4.2: Ely	104
4.5.6	Target Area 4.3: Soham	105
4.5.7	Target Area 4.4: Ely Ouse	106
4.6	Strategic Area 5: Chippenham Fen.....	108
4.6.1	Description	108
4.6.2	How do target areas deliver strategy objectives?.....	110
4.6.3	Target Area 5.1: Chippenham Fen	110
4.7	Strategic Area 6: Cambridge and surrounding areas	112
4.7.1	Description	112

4.7.2	Strategic area projects (see Appendix 15 for further details)	116
4.7.3	How do target areas deliver strategy objectives?.....	116
4.7.4	Target Area 6.1: Northstowe.....	118
4.7.5	Target Area 6.2: Wicken Fen and Anglesey Abbey.....	120
4.7.6	Target Area 6.3: Cambridge.....	122
4.7.7	Target Area 6.4: Cambourne.....	130
4.7.8	Target Area 6.5: Wimpole	132
4.7.9	Target Area 6.6: West Cambridgeshire Woodlands.....	133
5	Local Authority Issues and Green Infrastructure Priorities	137
5.1	Introduction.....	137
5.2	Cambridge	137
5.2.1	Key issues for Cambridge	137
5.2.2	Green Infrastructure priorities for Cambridge.....	138
5.3	Cambridge Fringe Sites.....	138
5.4	South Cambridgeshire.....	138
5.4.1	Key issues for South Cambridgeshire.....	139
5.4.2	Green Infrastructure issues and opportunities for South Cambridgeshire.....	139
5.4.3	Green Infrastructure priorities for South Cambridgeshire	141
5.5	East Cambridgeshire	142
5.5.1	Key issues for East Cambridgeshire.....	142
5.5.2	Green Infrastructure priorities for East Cambridgeshire	143
5.6	Fenland.....	144
5.6.1	Key issues for Fenland.....	144
5.6.2	Green Infrastructure priorities for Fenland	145
5.7	Huntingdonshire	146
5.7.1	Key issues for Huntingdonshire	146

5.7.2	Green Infrastructure priorities for Huntingdonshire	146
6	Delivery of the Strategic Network	151
6.1	Introduction.....	151
6.2	Meeting the objectives of the Strategy.....	151
6.3	The context for delivery.....	153
6.4	How will the Strategy be delivered?	154
6.4.1	Planning policy	154
6.4.2	Funding delivery of the strategic network.....	154
6.4.3	Capacity and skills/partnership working to deliver the strategic network	157
6.4.4	Overview of project delivery mechanisms	159
6.5	Further work and next steps	159
6.6	Conclusion.....	161
7	List of Appendices	164
8	Glossary	165

Table of Figures

Figure 2-1: Cambridgeshire, showing administrative boundaries and settlement pattern (Next page)	17
Figure 3-1: Timescale and key stages of preparation of the Green Infrastructure Strategy Review.	26
Figure 3-2: Methodology for developing the Cambridgeshire Green Infrastructure Strategy.	28
Figure 3-3: Cambridgeshire Strategic Green Infrastructure Network (Next page)	45
Figure 3-4: Strategic Network 'strategic areas' (Next page)	47
Figure 3-5: Process for assessing strategic areas and target areas against Strategy objectives.....	52
Figure 3-6: How the strategic areas deliver the strategy objectives.....	54
Figure 4-1 Strategic Area 1: River Nene (Next page)	61
Figure 4-2: How the River Nene target areas deliver the strategy objectives.	64
Figure 4-3 Strategic Area 2: Huntingdon Fens and Woods (Next page)	72
Figure 4-4: How the Huntingdonshire Fens and Woods target areas deliver the strategy objectives.	75
Figure 4-5 Strategic Area 3: Great Ouse (Next page)	80
Figure 4-6: How the Great Ouse target areas deliver the strategy objectives.	85
Figure 4-7 Strategic Area 4: Eastern Fens and Towns (Next page)	99
Figure 4-8: How the Eastern Fens and Towns target areas deliver the strategy objectives.	102
Figure 4-9 Strategic Area 5: Chippenham Fen (Next page)	108
Figure 4-10: How the Chippenham Fen target area delivers the strategy objectives.	110
Figure 4-11 Strategic Area 6: Cambridge and surrounding areas (Next page)	113

Figure 4-12: How the Cambridge and surrounding area target area delivers the strategy objectives. 118

Figure 6-1 How the strategic network helps to meet the objectives of the Green Infrastructure Strategy 152

Figure 6-2 How future projects can help to meet the objectives of the Green Infrastructure Strategy 153

Figure 6-3 Summary of process for project delivery 159

Table of Tables

Table 3-A Target areas explained as concentrations of Green Infrastructure Themes.	50
Table 4-A Cambridgeshire Green Infrastructure Strategy - Strategic Network projects.	57

1 Executive Summary

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.

Green Infrastructure is vital to quality of life for both existing and future residents of Cambridgeshire and is nationally acknowledged as an important element of well designed and inclusive places.

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

This Strategy will demonstrate how 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 well-being.

These four objectives were agreed by the Cambridgeshire Green Infrastructure Forum and supported through public consultation. They also reflect country-wide priorities as set out in 'Cambridgeshire's Vision 2007 - 2021'¹ and the 'Cambridgeshire Quality Charter for Growth'².

This Strategy is based on the analysis of public policy and key baseline data grouped into seven themes identified as important elements of Green Infrastructure, biodiversity, climate change, Green Infrastructure gateways, heritage, landscape, publicly accessible open space and rights of way. In addition, three cross-cutting/overarching issues were considered: economic development, health and well-being, and land and water management.

A 'Strategic Network' of Green Infrastructure priorities for Cambridgeshire was identified by mapping these themes and other important factors

¹ The vision is for Cambridgeshire to be a county of strong, growing, prosperous and inclusive communities supported by excellent services where people can fulfil their potential; live longer, healthier lifestyles; and influence decision-making.

² The Cambridgeshire Quality Charter for Growth sets out basic principles for achieving excellence in the new housing developments planned for Cambridgeshire.

relating to Green Infrastructure to show where each theme is most important for Green Infrastructure in Cambridgeshire.

The Strategic Network provides a county-wide framework upon which to provide or enhance Green Infrastructure in Cambridgeshire up to and beyond 2031. The Strategic Network is central to this Strategy and is designed to offer county-wide connectivity, identify opportunities to support the delivery of the four objectives, and link into Green Infrastructure provision outside Cambridgeshire.

This Strategy suggests opportunities for the funding and delivery of Green Infrastructure projects and initiatives. Together with the associated technical appendices, the Strategy will form part of the evidence base for local planning authorities to help with preparing local planning policy to support Green Infrastructure delivery.

The box below describes the key elements of the strategy - objectives, themes, Strategic Network and delivery mechanisms. These need to be considered together to understand the whole Strategy.

Objectives are things that we want to achieve in Cambridgeshire. Green Infrastructure will help us to achieve these objectives.

A **Strategic Network** is a county-wide framework on which to provide new or enhance existing Green Infrastructure in Cambridgeshire up to and beyond 2031.

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.

Case studies have been included throughout the Strategy to provide examples of different Green Infrastructure projects in Cambridgeshire. These demonstrate best practice, celebrate notable successes or discuss progress or future proposals.

The Green Infrastructure review has been a complex and major piece of work that has involved significant partnership working and input from a wide range of stakeholders. It has pushed the boundaries of Green Infrastructure Strategy development, particularly through the adoption of a robust evidence base suitable for use by local authorities and the testing of the Strategy through public consultation. It represents an example of how Cambridgeshire has taken the lead on developing and delivering Green Infrastructure.

Case Study - Cambourne

A relatively 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 planned to include around 5,000 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 community 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.

Case Study - The Great Ouse Wetland

The Great Ouse Wetland is a conservation project comprising a network of existing and developing wetland sites, extending from RSPB's (Royal Society for the Protection of Birds) 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 Wildfowl and Wetlands Trust (WWT). 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 project 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

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 manmade features such as open spaces, woodlands, landscapes, rights of way, waterways and historic parks, which links and serves our communities and countryside.

Green infrastructure fulfils a number of functions³ including enhancing the landscape, creating habitats for wildlife and providing public access. It gives rise to many benefits, including contributing to economic development, sustainable growth, improved places and an enhanced quality of life. Individual elements may produce a number of different benefits, for example a route that enhances accessibility for walkers, cyclists and horse riders may also help to improve people's health, support economic development and reduce carbon emissions.

It is important to have a clear definition of 'Green Infrastructure'. The definition used as the basis for this Strategy is set out in the box below.

Green Infrastructure is 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 connections and links between them. It is part of (and contributes to) the wider environment.

Green Infrastructure is essential to the quality of life of existing and new communities and provides:

- attractive and distinctive places that respect and enhance local character and heritage
- recreational and cultural opportunities and experiences for residents and visitors
- a healthy and high quality environment
- support for and enhancement of biodiversity, landscapes, heritage and geodiversity⁴
- ecological or ecosystem services⁵

³ 'Multi-functional' is another term used to describe how Green Infrastructure provides a number of functions at the same time.

⁴ Geodiversity refers to geological diversity – the varied range of rocks, minerals and topographic characteristics/ landform, together with the processes instrumental in forming these features over geological time.

- a sustainable future

We believe that existing Green Infrastructure should be protected and well managed, and networks of existing and new Green Infrastructure should be planned and delivered at all spatial scales from the countywide and local level to regional, national and trans-national level.

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 nationally acknowledged as an important element of well designed and inclusive places. This Strategy plays its part in helping to deliver Cambridgeshire's Countywide Sustainable Communities Strategy 2007 - 2021⁶ 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.
- **Strong Communities** - engaging residents 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

⁵ The terms 'ecological services' and 'ecosystem services' are used to broadly refer to the benefits of resources and processes that are supplied by natural ecosystems to humankind. They may include products like clean water and air and processes such as the decomposition of wastes and prevention of flooding.

⁶ Cambridgeshire's Vision 2007-2021: Countywide Sustainable Community Strategy. Sustainable Community Strategies are prepared by local strategic partnerships (LSPs) as a set of goals and actions which they, in representing the residential, business, statutory and voluntary interests of an area, wish to promote. It should inform the local development framework (LDF) and act as an umbrella for all other strategies devised for the area. It is a statutory requirement to produce a Sustainable Community Strategy.

population was estimated at 600,800 (mid 2009) and is amongst the fastest growing in the country. In the region of 73,000 new homes are planned for the county between 2001 and 2021, concentrated in and around Cambridge and in the county's market towns.

Accommodating this growth poses a number of challenges for the county, particularly the adaptation to and mitigation of the effects of climate change⁷; the health and well-being of our communities; the development of sustainable transport networks; 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 Growth⁸ which sets out the key principles for delivering high quality new developments in Cambridgeshire based on climate change, character, community and connectivity. The importance of Green Infrastructure runs through all of these principles within the Quality Charter. Appendix 1 provides more detail on the background and context to the Green Infrastructure Strategy.

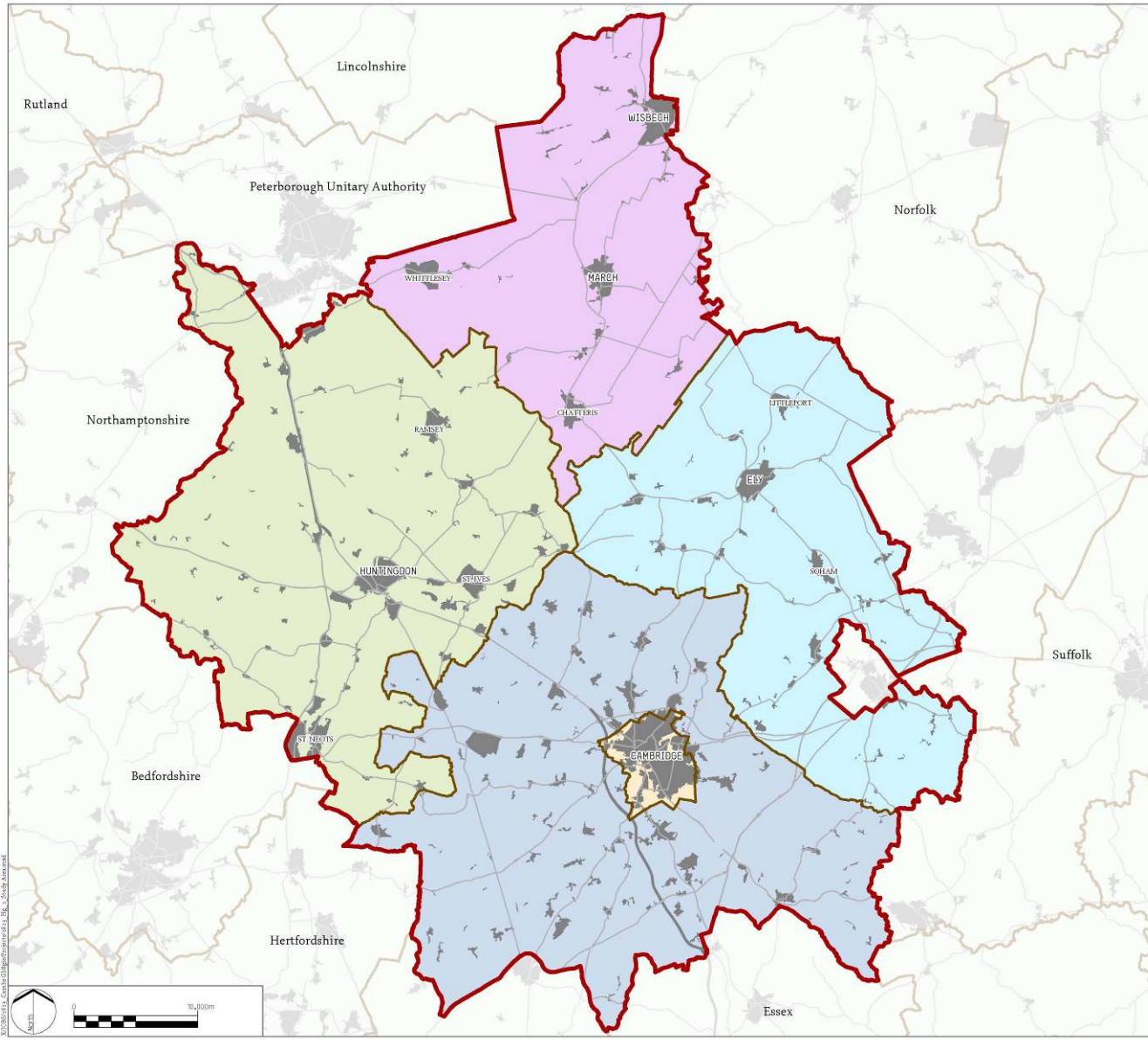
2.3 Why is Green Infrastructure important for Cambridgeshire?

Cambridgeshire is a 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 itself (Figure 2-1).

Figure 2-1: Cambridgeshire, showing administrative boundaries and settlement pattern (Next page)

⁷ Climate change adaption is the ability of a place to adapt to both extreme weather events and long-term changes to climate patterns. Climate change mitigation aims to reduce the impact of climate change by taking action to reduce greenhouse gas emissions and develop carbon sinks (stores of carbon that do not decompose to produce carbon dioxide).

⁸ The Cambridgeshire Quality Charter for Growth was created by a wide range of public, private and voluntary sector organisations. Participating local authorities and agencies have adopted the Charter as a clear policy statement of their aspiration to create high quality new communities.



- LEGEND
- Study Area Boundary
 - Fenland District Council
 - East Cambridgeshire District Council
 - Huntingdonshire District Council
 - South Cambridgeshire District Council
 - Cambridge City Council

Urban areas are derived from the Census 2001 dataset and includes all built up and developed areas.

REV.	DESCRIPTION	APP. DATE

LDĀDESIGN

PROJECT TITLE
Cambridgeshire Green Infrastructure Review and Second Edition

DRAWING TITLE
Cambridgeshire, showing Administrative Boundaries and Settlement Pattern

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DWG.NO	2823_T02		
DATE	17/05/2011	DRAWN	DL
SCALE@A3	1:300,000	CHECKED	PL
STATUS	FINAL	APPROVED	IH

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The development of Cambridgeshire has been influenced by a 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. Manmade waterways and three distinct river valleys - the Nene, Cam and Great Ouse - flow across a largely open agricultural landscape with Holme Fen in Huntingdonshire as 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. Much of the county's land is actively drained by pumping, which has a significant carbon footprint.

Cambridgeshire is a predominantly farmed landscape, with some three-quarters of the county devoted to the production of food, fuel and fibre. While the development of Green Infrastructure and housing growth is an important aspect of the county's growth agenda, food production remains an important priority.

Green Infrastructure helps provide 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 enhancement of cultural and historic heritage, health and well-being, 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.

Due to Cambridgeshire's low lying nature the County acts as a floodplain more widely for a number of river catchments in the East of England. Green Infrastructure can play a significant role here, by 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 have or may have an important role to help manage water include Wicken Fen, The Great Fen, the Nene Washes and the corridor of Green Infrastructure that supports the River Great Ouse Valley.

As the population of Cambridgeshire grows it is vital that quality places are provided, where people want to live and work, now and in the future. Green Infrastructure provides opportunities to exercise, and spaces to play in, learn from and enjoy, therefore encouraging healthier lifestyles and a sense of well-being (such as Wandlebury and Hinchingsbrooke Country Parks). It is important that growth and development help protect and enhance existing Green Infrastructure. Gardens and allotments are also important components of Green Infrastructure within new developments and they can

help provide opportunities for local food production by individuals and communities.

Cambridge and Cambridgeshire attracts visitors from across the globe as a place to develop careers and to enjoy the historic and cultural leisure activities, both on land and on water. Green Infrastructure such as the Backs in Cambridge, Wimpole Hall, Devil's Dyke, the Great Fen and Icknield Way 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 2006 Green Infrastructure Strategy for the Cambridge Sub-region,⁹ 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 Horizons¹⁰ 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 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 Strategy there has been greater recognition of Green Infrastructure's contribution to sustainable

⁹ Green Infrastructure Strategy for the Cambridge Sub-region. Cambridgeshire Horizons. 2006.

¹⁰ The not for profit organisation responsible for driving forward the delivery of sustainable new communities in Cambridgeshire.

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 was:

- 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 Authorities' 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)¹¹. 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, with benefits for climate change, health and well-being, heritage and the delivery of sustainable communities.
- Building on national guidance such as those produced by Natural England (Green Infrastructure Guidance 2009¹²), the Landscape Institute¹³, Town and Country Planning Association¹⁴, Forest Research¹⁵, and Environment Agency's River Basin Catchment Management Plans. These provide a comprehensive overview of the

¹¹ An Integrated Development Programme (IDP) 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.

¹² Natural England, Green Infrastructure Guidance, 2009.

¹³ Green Infrastructure: connected and multifunctional landscapes. Landscape Institute Position Statement. Landscape Institute, 2009.

¹⁴ Biodiversity by Design. TCPA, September 2004.

¹⁵ Benefits of Green Infrastructure. Report by Forest Research. October 2010.

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 Strategy and replace it with a new Cambridgeshire Green Infrastructure Strategy. As part of the review, public consultation was undertaken from January to March 2010 (see Appendix 3).

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 Green Infrastructure 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 characteristics of Cambridgeshire's settlements and countryside.
- Identifies the benefits that can be achieved by coordinating Green Infrastructure planning and investment at community, local and 'sub-regional' scale.
- Identifies Green Infrastructure investment opportunities at a strategic level 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).¹⁶

¹⁶ The Community Infrastructure Levy (the levy) came into force in April 2010. It allows local authorities in England and Wales to raise funds from developers undertaking new building projects in their area. The money can be used to fund a wide range of infrastructure that is

- Provides support for bids for funding and other resources for Green Infrastructure projects.

The Strategy must be responsive to the needs of local communities and businesses and should show where to target investment to support both the new and continued development of Green Infrastructure networks, whilst allowing for local flexibility and determination in its delivery.

2.6 Guide to the document

The Green Infrastructure Strategy includes a number of illustrative figures which summarise large amounts of spatial information. These can best be viewed and interpreted in detail using a Geographic Information System.

This document also includes a number of case studies throughout the text. These are included to give some real-world examples of how Cambridgeshire's Green Infrastructure Strategy is being delivered now and could be further developed in future.

needed as a result of development. This includes transport schemes, flood defences, schools, hospitals and other health and social care facilities, parks, green spaces and leisure centres.

Case Study - Fen Rivers Way

The Fen Rivers Way is a recreational 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 by The Fen Rivers Way Association volunteer group. The Association was formed by the Parish Councils 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 and Ely along the river. The Fen Rivers Way demonstrates how an existing network can be developed as a result of local interest and support of the County Council and how Green Infrastructure can have community development, health, recreational and tourism benefits.



Photo provided by Cambridgeshire Horizons.

Case Study - Fens Waterways Link

The Fens Waterways Link (FWL) is a waterway enhancement project that will connect the cathedral cities of Lincoln, Peterborough and Ely via river navigations and canals. Within Cambridgeshire it will link Cambridge on the River Cam to the River Great Ouse market towns of March, Littleport, Whittlesey Ramsey, Huntingdon, St Ives 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, providing access to the heritage, culture and history of the Fens and benefiting the natural environment by linking major wetland sites and creating new habitats. It will also 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.

The link will promote waterways as a venue for learning, training and skills development and it will enable visitors, businesses and others to become champions for the waterways at the heart of local communities. The Fens Waterways Link will demonstrate how Green Infrastructure can be a major economic and tourism resource in an area of deprivation and/or limited economic diversity.

The FWL vision is being delivered in 6 key phases, the first of which was completed in Boston, Lincolnshire in 2009. Phase 5 will link the River Nene near Peterborough to the River Welland near Crowland. Phase 6 will enhance linkages from the River Nene to the River Great Ouse via the Middle Level Navigations, across Huntingdonshire, Fenland and East Cambridgeshire Districts.



Photo provided by Cambridgeshire Horizons.

3 Developing the Cambridgeshire Green Infrastructure Strategy

This chapter explains the methodology for developing the Green Infrastructure Strategy developed by the Project Group and Forum. Figure 3-1 shows the general process and timescale for developing the Strategy through to adoption by the Local Authorities.

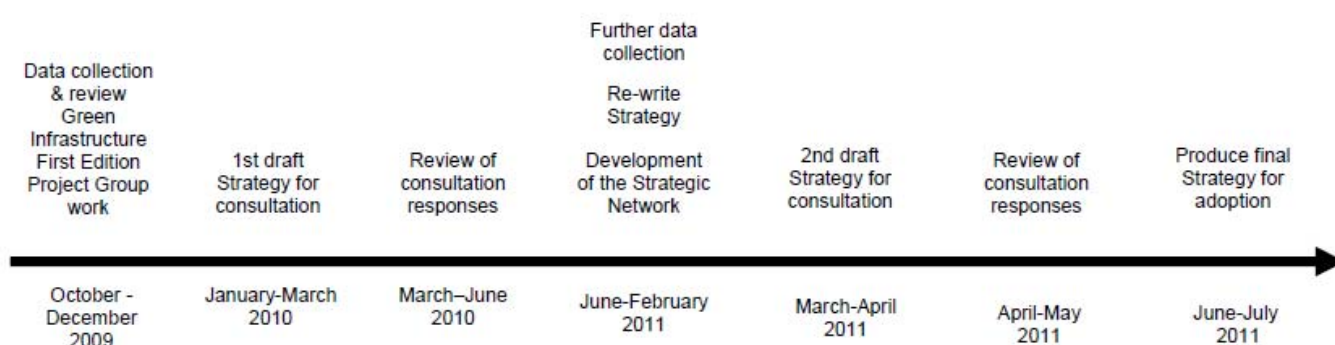


Figure 3-1: Timescale and key stages of preparation of the Green Infrastructure Strategy Review.

3.1 How the Strategy fits together

The Green Infrastructure Strategy has four objectives that relate to agreed priorities for Cambridgeshire. The purpose of the objectives is to ensure that the Green Infrastructure Strategy helps address the key issues facing Cambridgeshire. Chapter 6 “Delivery of the Strategic Network” assesses how the Strategy will help to meet the four objectives.

Green Infrastructure is based on physical assets (natural and man-made) that can be grouped under a series of themes such as ‘landscape’, ‘heritage’ and ‘publicly accessible open space’, and which have a range of immediate and wider benefits. This Strategy is based on the analysis of key baseline data grouped into seven themes identified as being important aspects of Green Infrastructure, and public policy documents including planning and environmental policy.

The Strategy identifies existing Green Infrastructure 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, regeneration, tourism, and adaptation to climate change. Ultimately, the Strategy will help to deliver the four objectives. The Strategy does all of this through identification of a 'Strategic Network' identifying priorities for Green Infrastructure action within a county-level and multi-functional framework. The Green Infrastructure objectives, themes and other influencing factors and benefits are detailed in the rest of **Chapter 3** (below).

Figure 3-2 shows the methodology used to develop the Strategy.

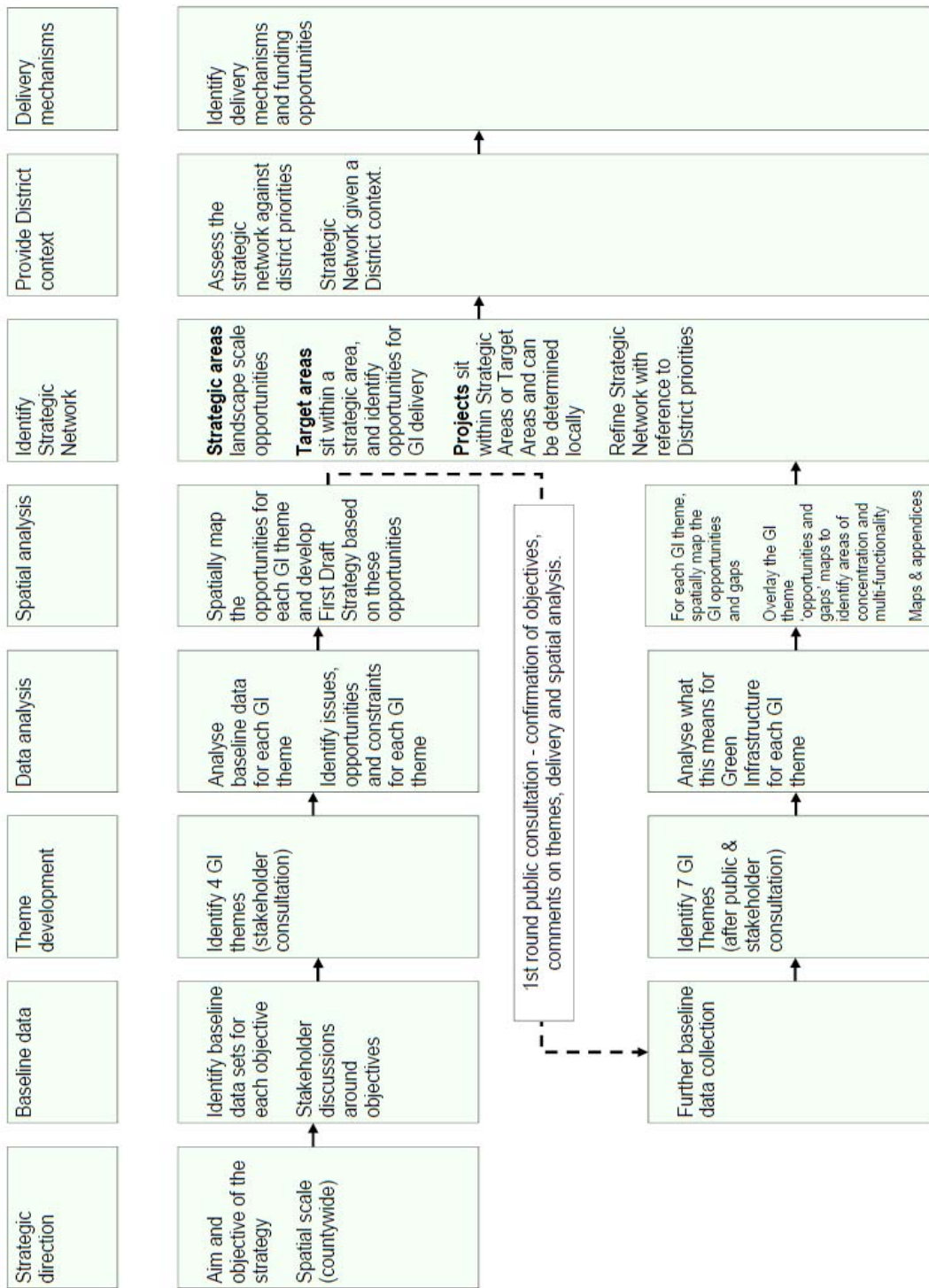


Figure 3-2: Methodology for developing the Cambridgeshire Green Infrastructure Strategy.

3.2 Objectives of the Strategy

The Green Infrastructure Strategy objectives were first developed for the 2006 Green Infrastructure Strategy. The objectives will ensure that the Green Infrastructure Strategy helps address the key issues facing Cambridgeshire. A range of documents, including Cambridgeshire's Vision 2007 - 2021 and the Cambridgeshire Quality Charter for Growth have informed the review of the Green Infrastructure Strategy and have supported the objectives (see Appendix 1). The four objectives are:

Objective 1:

Reverse the decline in biodiversity - conserving and enhancing biodiversity and geo-diversity, through the protection and enhancement of habitats¹⁷ and wildlife sites and linkage of key habitats.

Objective 2:

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 create Green Infrastructure that supports our adaptation to a changing weather pattern through, for example, flood control.

Objective 3:

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 and attract visitors, as well as contributing to the character of our settlements and countryside to 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.

From January to March 2010 a public consultation¹⁸ on the first draft of the revised Green Infrastructure Strategy was undertaken. Responses to the consultation supported the objectives, and the development of the Strategy

¹⁷ Including both terrestrial (land) and aquatic (water) habitats.

¹⁸ The first draft public consultation responses also flagged the importance of a clearer structure and more accessible written style for the document and the importance of the document as a part of a robust evidence base for future planning policy and funding bids. A full report of the first draft public consultation is available from the organisations detailed in Appendix 3.

was checked back against the objectives at different stages to ensure that the Strategy remained focused 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) that may be grouped under a number of overarching themes. Such an approach is common and in developing this Strategy the themes were selected on the basis of the main types of Green Infrastructure assets in the county. In Cambridgeshire seven themes were identified/confirmed by stakeholders and informed by the 2010 public consultation. The themes are:

- Biodiversity
- Climate change
- Green Infrastructure gateways
- Heritage
- Landscape
- Publicly Accessible Open Space
- Rights of Way

The themes are defined and described in the following sections. In the Strategy these themes have been combined to develop a network of Green Infrastructure. However, each theme is valid in its own right and can be examined separately if needed. Themes can also overlap, for example, there is often a strong link between landscape and the historic environment. More information on the evidence to support these themes can be found in Appendices 5 to 11.

3.4 Overarching factors that influence Green Infrastructure

In addition to the seven Green Infrastructure themes, three more important cross-cutting factors that have a significant influence on Green Infrastructure were considered. These are;

- Economic development
- Health and well-being
- Land and water management

The first two reflect two of the objectives of the Strategy, while the third is one of the key delivery mechanisms for Green Infrastructure.

The links between Green Infrastructure and economic development, health, and well-being are relatively well documented. For example the recent (2010) Forest Research report on 'Benefits of Green Infrastructure' (described in Appendix 12) highlights benefits around adapting to climate change, health and well-being, economic growth and development, land management and regeneration and biodiversity in terms of creating stronger communities.

To support the delivery of the four objectives and the Strategic Network it is also worth considering current and future land management practices as these can have an impact on the quality and scale of Green Infrastructure that can be delivered. The same applies to water management, particularly how the quality of the water environment impacts on the quality of habitats and biodiversity but also how water management can reduce flood risk for example through natural flood plain restoration and how water can be used to combat urban heat island effect¹⁹ for larger settlements.

Further information on these overarching factors, including how they relate to planning and growth, can be found in Appendix 4 and Appendices 12 to 14.

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

For each theme (and the influencing factors) relevant 'baseline datasets' were identified and analysed. Data was plotted onto maps of Cambridgeshire to give a comprehensive picture for each theme. For example, Biodiversity datasets of the principal terrestrial and wetland habitat types and 'buffers' were mapped together with the Biodiversity Partnership's 50 Year Vision Target Habitats²⁰ and nature conservation designations. This process identified the geographic distribution and concentration of features of each of the themes.

Maps were prepared for each theme as a way of presenting the large number of datasets. The first round of public consultation raised some suggestions about making the maps easier to 'read' and understand. Maps now include an explanation of key points of interest and an appendix has been created for each theme to explain in more detail the baseline information that was used in data analysis. Other appendices contain information giving the context for the Green Infrastructure Strategy,

¹⁹ An urban heat island effect refers to the phenomenon whereby air temperatures may be several degrees warmer in built up areas compared to the wider countryside.

²⁰ The Cambridgeshire and Peterborough Biodiversity Partnership promote the conservation of habitats and species through the production and implementation of the Local Biodiversity Action Plan (BAP). The BAP aims to conserve and enhance biological diversity and outlines the necessary action for the next 10 years to preserve and enhance biodiversity in target habitats, including farmland, woodland, wetland, grassland and urban areas.

progress with the 2006 Strategy and planning policy and growth proposals for Cambridgeshire.

To understand how each Green Infrastructure theme and each of the other influencing factors is important for Cambridgeshire stakeholders interpreted the 'baseline data' and expressed this as opportunities, constraints and issues that have particular relevance to Green Infrastructure. In this context, 'opportunities' are ways that themes and influencing factors can help deliver Green Infrastructure. 'Constraints' are existing barriers to, or something that is preventing, the delivery of Green Infrastructure. 'Issues' are points of interest emerging from the dataset analysis that have particular relevance to Green Infrastructure.

An example of an issue can be provided from the analysis of climate change data. 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 to help mitigate these hotter summers, for example through providing more shaded areas through tree planting or parks close to urban areas.

For detailed information on how each theme was developed see Appendices 5 to 11.

The individual Issues, opportunities and constraints identified by partners can be found in the next sections.

3.6 Biodiversity

Cambridgeshire contains a rich biodiversity resource and potential. However, the county has suffered declines in a number of its species and habitats for many different reasons, most notably increased development pressure and agricultural intensification. Overall, Cambridgeshire has a smaller proportion of natural habitats than most counties in Britain. Many species have already been lost, and some of those that remain are isolated and declining.

The protection of existing resources and the potential for enhancement should be a priority of the Green Infrastructure Strategy. Whilst the mapped areas are strategy priorities, they represent only a part of the rich biodiversity and habitats in Cambridgeshire that require protection and enhancement.

Issues

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

- Balance between public access and protection of species and habitats

Opportunities

- Creating 'bigger, better and joined-up' networks of biodiversity, that connect and enlarge habitats and provide landscape-scale conservation²¹ 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 Schemes offer a way to enhance habitat networks e.g. through grants to provide linear features to connect habitats.

Constraints

- Biodiversity easily drops off agendas as its value in underpinning life support systems, natural processes and all other economic activity is not always recognised.

3.7 Climate Change

Cambridgeshire is within a particularly dry part of the country. Changes in weather patterns such as summer conditions are likely to exacerbate potential drought problems with widespread impacts on native woodlands, habitat persistence and agricultural productivity. By contrast, much of the north of county is low lying and is at risk of flooding. Growth and development will serve to further exacerbate the potential human and economic impacts.

Issues

- Changing average temperatures with hotter summers and milder winters.
- Increase in extreme weather events and changing rainfall patterns - with drier summers and wetter winters.

²¹ Landscape scale conservation is an approach to conservation planning that looks beyond protected areas and discrete wildlife sites to wider natural processes functioning across various landscapes.

- Flooding.
- 'Urban heat island' effects.
- Sea level rises.
- Water resources availability.

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, tree planting and the creation of wetlands can mitigate urban heat island effects and provide water storage, especially in densely built up areas such as Cambridge and 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, where possible. This is especially important in Cambridgeshire and supports the national strategy 'Making Space for Water'²², 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.

3.8 Green Infrastructure gateways

Gateways can strengthen the development of a strategic Green Infrastructure network by providing locations that link strategic projects

²² Defra, Making Space for Water: Taking forward a new Government strategy for food and coastal erosion risk management in England, 2005. The Making Space for the Water Strategy is to be replaced by a new Flood and Coastal erosion risk management strategy which was subject to public consultation until the 16th February 2011.

with areas of need and opportunity. Gateways can radiate from urban locations and increase the capacity for urban greenspaces to cope with an increased use or need for outdoor recreation associated with development. Gateways also provide key infrastructure to fill the gaps in a given network and join up Green Infrastructure resources at a strategic scale.

Issues

- The variety of functions and 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 and services to encourage use and to act as stepping stones to other Green Infrastructure sites, such as through using navigable waterways, circular routes, trails and public rights of way.
- Opportunities to provide land for gateways through new development sites.

Constraints

- Limited land availability.
- Funding.

3.9 Heritage

The historic environment is a finite and non-renewable resource, which cannot be recreated or relocated, unlike a natural habitat. This naturally constrains some forms of activities that would damage or irretrievably alter a historic asset. Urban and rural historic and archaeological sites, as well as the broader historic environment (such as routeways); make an important contribution to sense of place, sense of time and local identity and distinctiveness. The historic environment is all around us; it is the legacy of the interaction between humanity and the environment.

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 a good 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 and of place and pride.
- There is an opportunity to restore and enhance heritage assets (including those “at risk”) through Green Infrastructure projects.
- 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, particularly by Registered Parks and Gardens e.g. Wimpole Hall and Denny Abbey and Farmland Museum.
- High biodiversity value e.g. ancient woodlands²³, historic parks and gardens.
- Community heritage schemes.
- Environmental Stewardship schemes and other grants.

Constraints

- Designations can influence management practices and options for the development and use of sites. In particular a lack of constructive dialogue and negotiation around heritage assets can act as a constraint.
- Private ownership and costs of works.
- Scope of grants available.

3.10 Landscape

For the purpose of this Strategy we have used the European Landscape Convention, landscape definition: “An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.” (Council of Europe 2000). The diversity of the Cambridgeshire landscape is a result of the complex interplay of a wide range of physical and cultural influences.

²³ An ancient woodland is an area which has been continuously wooded since at least the year 1600, irrespective of any management which may have taken place.

Issues

- Long-term investment to realise benefits e.g. the creation of a woodland or traditional fenland is a process that takes many years and requires investment throughout this time.
- 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) with associated management and funding structures.

3.11 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 the need for consistency at a county-wide level Natural England's Accessible Natural Greenspace Standards (ANGSt) have been used. This examines the level of publicly accessible natural greenspace provision in Cambridgeshire and defines the criteria of 'publicly accessible open space' used in the Strategy²⁴.

With data supplied by districts and other partners, Natural England has undertaken a full ANGSt analysis of the county, and indicative results to inform the Strategic Green Infrastructure Network have been provided (see Appendix 10). A 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 in 2011.

²⁴ The ANGSt analyses include both land-based and water-based publicly accessibly open space. See the introduction for Technical Appendix 10 for more detail.

Issues

- The analysis provides an ANGSt baseline for the county and therefore provides an analysis of open space in addition to that contained within Development Plan Documents. 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.
- Alternatively, well-planned and delivered development can create new accessible natural greenspace to address 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, publicly accessible can help address deficits.
- Investment in the creation or improvement of sites that meet the definition of accessible natural greenspace can help address deficits in ANGSt.

Constraints

- The definition of accessible natural greenspace used in the ANGSt analysis does not cover all Green Infrastructure assets that may exist in Cambridgeshire. Other forms of open space that are more 'manicured', including many recreation grounds and areas of sports pitches, as well as Public Rights of Way, are not included, and this may give a particular view of existing Green Infrastructure assets. For example, Cambridge's unique development, with significant amounts of land owned and managed by the Colleges of the University of Cambridge, mean that many spaces in the City do not formally meet the criteria for ANGSt. As such, the picture created by the ANGSt analysis may not represent a true picture of green space provision in Cambridge or elsewhere in the county.

3.12 Rights of Way

The Rights of Way network (including promoted 'long distance' routes and adding permissive routes) forms a pervasive network of linear sustainable access routes across Cambridgeshire. The network allows people to access the countryside and specific Green Infrastructure sites by a variety of means.

Issues

- Traditional approaches to accessing Green Infrastructure (given limited rural public transport) have emphasised use of the motor car (e.g. site with car park remote from settlement) rather than routes accessible on foot or on horseback or by cycle or boat. A more sustainable approach is now required to encourage more people to access the countryside using rights of way, permissive paths or other multi-user pathways, without having to drive. Enabling effective provision of easy access for walking, riding and cycling and boating from where people live to the countryside and key destinations is an important issue for Green Infrastructure.

Opportunities

- Sustainable movement corridors can provide pathways for biodiversity to move, e.g. in response to climate change or habitat loss, as well as providing a means of human access and movement.
- The Green Infrastructure Strategy should build on the Cambridgeshire Rights of Way improvement Plan (ROWIP)²⁵ actions to identify gaps in existing rights of way provision and help deliver an enhanced network, providing routes to and between key destinations, together with circular routes close to settlements.
- Ensure existing rights of way are improved and well maintained along river corridors and that connections are made to surrounding Green Infrastructure sites, other destinations and areas of accessible countryside. The rivers themselves also provide opportunities for water-based recreation and sustainable movement.
- There are economic benefits associated with investing in promoted walking, cycling, horse riding and boating routes.
- Analysis of land-based countryside access in the north of the county has revealed a lack of accessible open space and countryside access in and around principal settlements in Fenland and East Cambridgeshire.

²⁵ The Rights of Way Improvement Plan (ROWIP) for Cambridgeshire is a statutory responsibility imposed by the Countryside and Rights of Way (CROW) Act 2000. The ROWIP document was launched in 2006 and forms a constituent part of the Council's Local Transport Plan (LTP) 2006 – 2011.

- Carbon savings through the use of more sustainable modes of transport.

Constraints

- Reduced funding for investment and maintenance will have a significant effect on countryside access provision. This will make the availability of external funding to deliver network improvements still more important.
- Land ownership can restrict development of a linked-up network. However, navigable waterways can help alleviate this by providing linkages along river corridors, where appropriate.
- 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).
- Loss of access incentives in Environmental Stewardship for farmers will constrain countryside access provision.

3.13 Other influencing factors

In addition to the themes identified in the preceding section, three other factors have influenced the development of the strategy and will assist the achievement of its objectives. The third of these, water and land management, also strongly influences the development and delivery of the Green Infrastructure Strategy. For example, 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.

3.13.1 Economic Development

Green Infrastructure provides benefits to the quality of life in a place and for assisting inward investment, business development and attracting well qualified and skilled staff to an area. Green Infrastructure is important for tourism with the growth in green tourism - cycling, horse riding, walking, adventure holidays and also short breaks and the more active older/retired population.

Issues

- Impacts of climate change.
- Limited diversification of the rural economy.

Opportunities

- Transport route improvements in those areas with significant gaps to assist with greater connectivity between villages and to access services.
- Green Infrastructure can create tourism activities and attract inward investment e.g. wetland projects, circular bridleway routes and associated equestrian business development.
- Growth in cycling and outdoor pursuits.
- High quality places and Green Infrastructure can attract inward investment of jobs and people and can add value to residential and commercial property.
- Woodland creation and management for woodfuel production and timber products.
- Using our waterways for more functions, such as freight and commuting. Examples such as the river bus/water taxi system in Spalding, Lincolnshire, the proposed water taxi scheme in Peterborough, and The Fens Waterways Link, demonstrate how similar schemes in Cambridgeshire can 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 - these ecosystem services have an associated value in economic terms. Care must be taken to ensure that improvements do not compromise flood and water management.

Constraints

- Limited public funding for route improvement (for example, improving the surface of rights of way, upgrading access furniture such as gates or improved waymarking and signage).
- Business reticence to invest in current climate.

3.13.2 Health

Access to Green Infrastructure and opportunities for outdoor physical exercise are shown to improve health and physical and mental well being. The health and wellbeing of Cambridgeshire's residents varies greatly, with clearly defined geographic concentrations of poor health and inequality. Whilst Cambridgeshire has a wealth of green spaces, many areas of the county have limited access to Green Infrastructure and poor 'green' connectivity to the countryside and between towns and villages. Improving

and expanding the county's Green Infrastructure resources can help to address these health inequalities.

Issues

- Climate change impacts, such as more extreme winter and 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, heart disease, mental health and social isolation.
- Changes to the NHS structure.

Opportunities

- Green Infrastructure provides access to green spaces and routes that have benefits for mental and physical health through exercise, sport and leisure, social inclusion and enjoyment of open spaces and access networks (Rights of Way, cycle routes, navigable waterways).
- Quality greenspaces close to people's homes and new developments mean that people can live close to greenspaces of a range of sizes, delivering opportunities for easy, no/low cost physical exercise, and mental health benefits through reconnection with nature. They also provide places for people to meet and interact, and can be used for allotments and "grow your own" initiatives.
- Health benefits through reduced air pollution and cooling of higher summer temperatures. For example, trees filter out pollutants and provide shading to help reduce urban heat island effects.
- There may be opportunities if public health responsibilities are transferred to top tier Local Authorities.

Constraints

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

3.13.3 Water and Land Management

Water is an important element of Green Infrastructure and is composed of important environmental and landscape features such as rivers, wetlands, flood plains and estuaries. Management of Green Infrastructure sites can be conducive to improving or maintaining good water quality, reducing flood risk and improving surface water drainage.

Agriculture continues to have a role to play in supporting the rural economy. Variations in agricultural land use and farming practices influence not only landscape character and quality but also biodiversity. Good land management is a way of delivering and improving Green Infrastructure across the wider landscape of Cambridgeshire, and not just within specific Green Infrastructure sites and areas.

Issues

- Pressures on the 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 and Water Framework Directive compliance.
- Land use e.g. food production balanced against renewable fuels and/or biodiversity.
- Restructuring of the agricultural industry.
- Pressure on high quality agricultural land from growth and development.

Opportunities

- Diversification of land uses can improve biodiversity and provide alternative or additional income streams for farmers and land managers.
- Environmental Stewardship Schemes and English Woodland Grant Schemes.
- Reducing flood risk. The use of sustainable drainage systems (SuDS) as set out in the 2010 Flood and Water Management Act has many benefits. Appropriately design and positioned SuDS can reduce flood risk by capturing and storing rainfall and allowing it to evaporate or soak into the ground close to where it fell. They also provide benefits in terms of biodiversity, visual amenity, leisure and play within the open spaces and can contribute to the creation of a network of Green Infrastructure.
- 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, introducing more stringent standards and requires 'no deterioration' from current water status. High quality Green Infrastructure, incorporating SuDS (where appropriate) will help filter/hold back, and in some cases reduce pollutants entering river systems, thus aiding in maintaining and improving the quality of water bodies in Cambridgeshire.

- Ensuring that opportunities are taken for co-ordinating work between Green Infrastructure and other water-related strategic and plans (including Catchment Flood Management Plans, Water Cycle Studies, Surface Water Management Plans) and any other studies, including work by Internal Drainage Boards (such as the Middle Level Commissioners) on flood risk and flood management.
- Ensuring that opportunities are taken for co-ordinating work between Green Infrastructure and the emerging Local Flood Risk Management Strategy for Cambridgeshire.
- Cambridgeshire has the largest County Farms Estate in the country and the Estate has a key role in sustainable land management, the protection and enhancement of biodiversity and the provision of public access routes or areas - often to serve local communities.
- Although delivered through development, the Cambridgeshire and Peterborough Minerals and Waste Development Plan offers significant opportunities to provide additional Green Infrastructure through appropriate restoration schemes and post-restoration land and water management, for example at Block Fen/Langwood Fen.

Constraints

- Availability of sustainable water resources - Cambridgeshire is an Area of Serious Water Stress; therefore the effects of changes in the climate or over-abstraction could cause problems for biodiversity and food production.
- Flood risk may limit the type and functions of Green Infrastructure in certain areas.

3.14 Developing the Strategic Network

Once the Green Infrastructure themes had been considered individually, they were brought together and 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'.

The maps showing distribution and concentration of features for each theme, and maps for other datasets (for example Indices of Multiple Deprivation) were overlain onto each other to show which places had a concentration of themes, and therefore of opportunities. These places of

concentration, where there are opportunities for Green Infrastructure to achieve multiple objectives, were of particular interest. Through this process it was possible to identify a Strategic Network that focussed on the most important issues for Cambridgeshire.

The Strategic Network was refined as it emerged. Boundaries and other aspects of the emerging Strategic Network were checked with stakeholders with local knowledge and revisions made. Existing projects were considered against the Strategic Network and the analysis behind it to see if they responded to the gaps and opportunities. Changes to existing projects and potential new projects were also considered in this process.

The Strategic Network provides a county-wide framework upon which to provide or enhance Green Infrastructure in Cambridgeshire up to and beyond 2031.

It is designed to provide 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 and proposed Green Infrastructure and guides the development and delivery at a range of different scales - including neighbourhood, district and countywide.

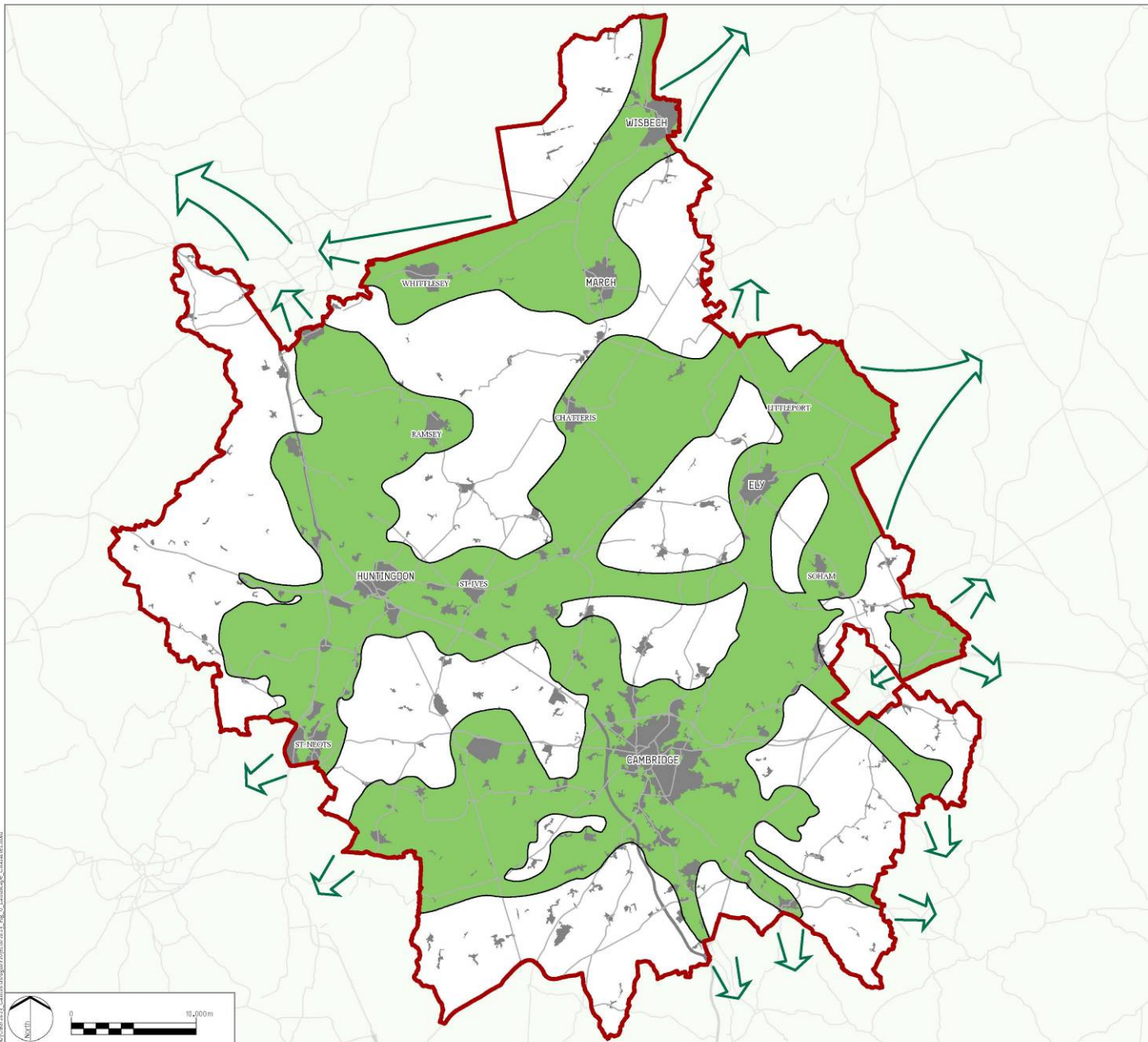
Areas outside of the network still contain Green Infrastructure and work can and will take place to protect and develop these spaces.

Figure 3-3 shows the Strategic Network that emerged from this analysis. The boundary of the Network is not a defined line and some flexibility will exist when delivering the Network 'on the ground'. Given Cambridgeshire's size and the complexity of the Strategic Network, it was determined that the Strategic Network should be sub-divided into three elements to aid development.




The three elements are:

- Strategic areas
- Target areas
- Projects

[Figure 3-3: Cambridgeshire Strategic Green Infrastructure Network \(Next page\)](#)



LEGEND

-  Study Area Boundary
-  Strategic Green Infrastructure Network
-  Links to/from Strategic Green Infrastructure Network

REV. DESCRIPTION APP. DATE

LDĀ DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Cambridgeshire Strategic Green Infrastructure Network

ISSUED BY Oxford	T 01865 887050
DWG.NO 2823_I1	
DATE 17/05/2011	DRAWN DL
SCALE@A3 1:300,000	CHECKED PL
STATUS FINAL	APPROVED IH

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 Sources: Ordnance Survey, Open Street Map, 2001 Census Area Data, Cambridgeshire County Council & Natural England.

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3.14.1 Strategic areas

The Strategic Network can be separated into six distinct geographical areas. They are based around landscapes and the connections within them, locations where multiple Green Infrastructure themes occur, areas that are particularly important for single themes and other important issues (such as housing growth, areas of deprivation, waterways) that these issues relate to. The boundaries of each of the strategic areas have been defined as a result of analysis of themes and based on knowledge of the localities.

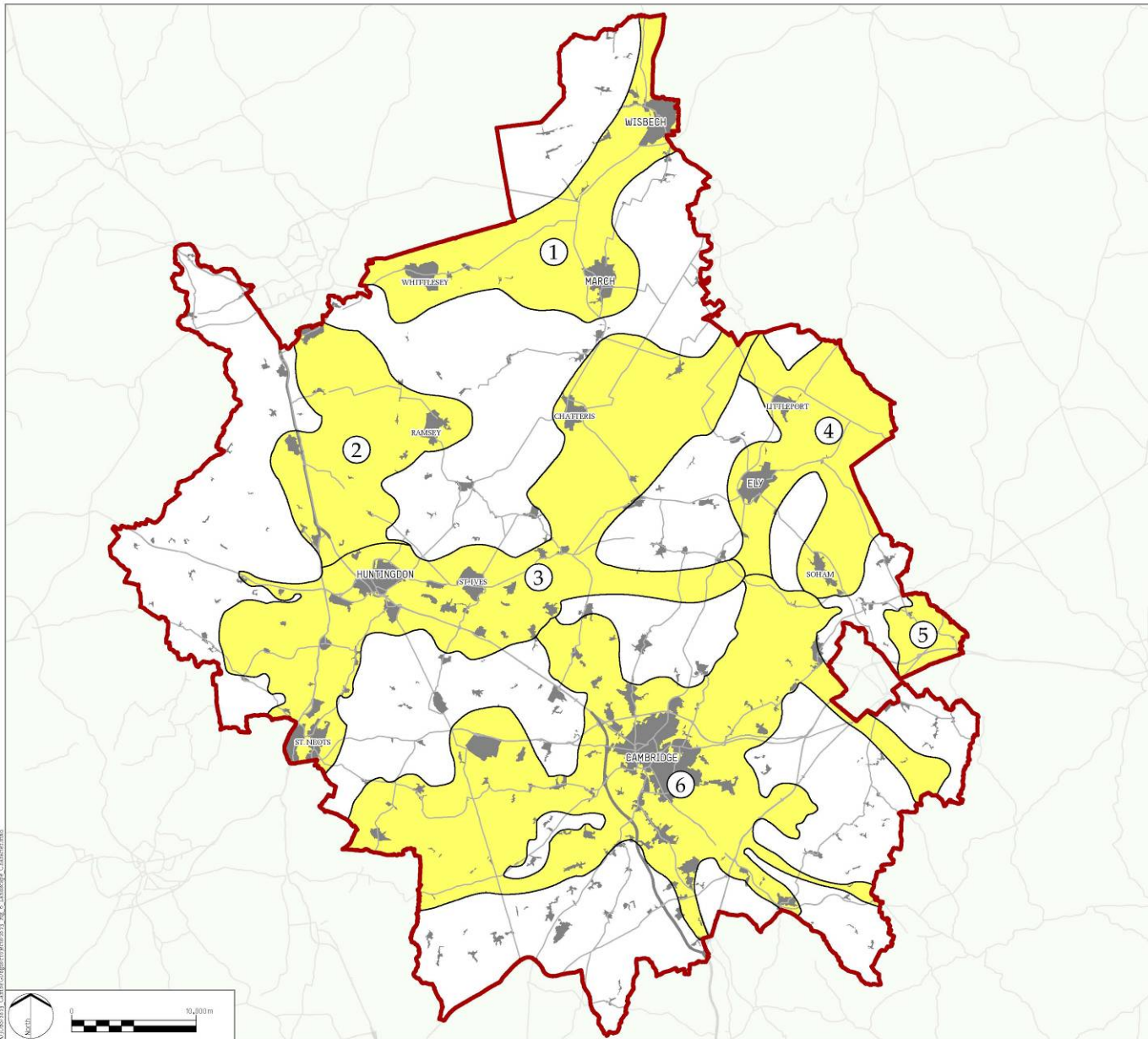
For example, the River Nene corridor forms a naturally distinct landscape. Examination of baseline data for the seven Green Infrastructure themes and three overarching influences revealed concentrations of opportunities for improving existing and developing new Green Infrastructure.

The six strategic areas are shown in Figure 3-4. 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

Chapter 4 The Strategic Network provides detailed descriptions of each Strategic Area, and the Technical Appendices provide the baseline data and analyses used to define them.

Figure 3-4: Strategic Network 'strategic areas' (Next page)



LEGEND

- Study Area Boundary
- Strategic Areas

- Strategic Areas:
- 1 River Nene
 - 2 Huntingdonshire Fens and Woods
 - 3 Great Ouse
 - 4 Eastern Fens and Towns
 - 5 Chippenham Fen
 - 6 Cambridge and Surrounding Areas

REV.	DESCRIPTION	APP. DATE
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PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

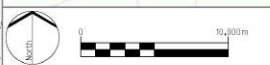
DRAWING TITLE
Strategic Network 'Strategic Areas'

ISSUED BY	Oxford	T 01865 887050
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DATE	17/05/2011	DRAWN DL
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3.14.2 Target areas

Within each of the strategic areas, smaller 'target areas' are identified that highlight locations where concentrations of multiple Green Infrastructure Themes, as well as other issues such as major housing growth areas, exist. Target areas do not cover the entirety of each strategic area but rather are intended to provide a prioritised overview of where work to develop the Strategic Green Infrastructure Network can be focussed. They can be thought of as 'hotspots' where Green Infrastructure opportunities are concentrated.

For example, within Strategic Area 6 for Cambridge and surrounding areas, there are five target areas, including one target area covering Cambridge and its immediate hinterland as a whole. Target areas do not cover the entirety of each strategic area. For example, Northstowe was identified as a target area because of planned housing growth and the potential for significant Green Infrastructure improvement related to climate change, Green Infrastructure gateways, heritage, landscape and rights of way; the West Cambridgeshire Woodlands were identified as a target area because of their existing biodiversity and publicly accessible open space as well as the potential for enhancements related to climate change and landscape.

Table 3-A shows how the Green Infrastructure Themes contributed to the identification of the target areas.

Chapter 4 The Strategic Network provides detailed descriptions of each target area.

3.14.3 Projects

Projects represent the most detailed level of work. They are how Green Infrastructure is delivered at the district and county scale. Projects can sit within target areas or in other parts of strategic areas, or may straddle a number of target areas.

The projects detailed in Table 4-A and Appendix 15 'Strategic Network Projects' have been included because they are already underway or planned, and are justified and supported by the Strategic Network and the individual Green Infrastructure themes. New projects have been, and can continue to 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 Strategy's four objectives. More small-scale and local projects are not included in this tier of the network. These will be dealt with at the local, rather than the strategic, scale and do not formally comprise part of the Strategic Network.

Chapter 4 The Strategic Network provides detailed descriptions of the current projects under each target area.

Strategic Area	Target Area	Green Infrastructure Theme						
		Biodiversity	Climate Change	GI Gateways	Heritage	Landscape	Publicly Accessible Open Space ²⁶	Rights of Way
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	✓	✓		✓	✓	✓	
	Ouse Valley / Paxton Pits	✓	✓	✓				
	Huntingdon	✓	✓	✓	✓	✓		✓
	St Ives	✓	✓	✓	✓	✓		✓
	Fen Drayton	✓	✓	✓				✓
	Needingworth	✓	✓			✓		✓
	Earith		✓		✓			
	Chatteris				✓	✓	✓	✓
	Block Fen	✓	✓			✓		✓
Eastern Fens and Towns	Ouse Washes	✓	✓			✓		✓
	Littleport	✓		✓		✓		✓
	Ely	✓	✓	✓	✓	✓		✓
	Soham	✓		✓	✓	✓		✓
	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	Publicly Accessible Open Space	Rights of Way
		Green Infrastructure Theme						

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

²⁶ The Theme for Publicly Accessible Open Space is based on the 'all deficiency' Accessible Natural Greenspace Standards (ANGSt) analysis undertaken by Natural England during 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.

3.15 Assessing the Strategic Network against the Strategy's objectives

A series of questions were consistently answered 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 provided a further check, to demonstrate that the strategic areas and target areas were related clearly to the Strategy's objectives.

The assessment process is set out in Figure 3-5, and was carried out by stakeholders directly involved in the preparation of the Strategy. For each of the four objectives a score was assigned depending on the number of 'yes' answers in relation to each strategic and target area. A score of 1-3 indicated a 'limited' influence, 4-7 indicated a 'moderate' influence and 8-10 indicated a 'significant' influence. Results from this assessment are displayed illustratively 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?²⁷
- 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 Indices of Multiple Deprivation (IMD)?²⁸
- 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 Well-being

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

Figure 3-5: Process for assessing strategic areas and target areas against Strategy objectives.

The outcome of the assessment of the strategic areas against the Strategy's objectives confirms that all areas have significant potential to contribute towards delivering the Strategy's objectives.

²⁷ Carbon sequestration describes long-term storage of carbon dioxide or other forms of carbon to either mitigate or defer global warming. It has been proposed as a way to slow the atmospheric and marine accumulation of green house gases, which are released by burning fossil fuels.

²⁸ The Index of Multiple Deprivation (IMD) is a detailed measure of deprivation in England that provides a relative ranking of areas across England according to their level of deprivation. It contains seven domains (indicators) which relate to income deprivation, employment deprivation, health deprivation and disability, education skills and training deprivation; barriers to housing and services; living environment; deprivation and crime. These are weighted and combined to create a single deprivation 'score' for a discrete area (local authority wards are often used).

There is a slight exception for Chippenham Fen, which has limited potential to help promote sustainable growth, economic development and support healthy living and well-being. 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 part of the Strategic Network of Green Infrastructure in Cambridgeshire.

Confirmation that all strategic areas can contribute towards delivering the Strategy's objectives was important as this meant that the network could be developed using the strategic areas as a starting point. Knowing this means that target areas and Projects within each strategic area should also 'fit' well with the overall objectives. Results of the assessment of each target area are presented in [Chapter 4](#).

























Strategic Area	Objectives			
	Reverse the decline in Biodiversity	Mitigate and adapt to Climate Change	Promote Sustainable Growth & Economic Development	Support Healthy Living and Wellbeing
1 River Nene				
2 Huntingdonshire Fens and Woods				
3 Great Ouse				
4 Eastern Fens and Towns				
5 Chippenham Fen				
6. Cambridge & Surrounding Areas				



Figure 3-6: How the strategic areas deliver the strategy objectives.

3.16 Identifying Delivery Mechanisms

To realise the potential of the projects within the Strategic Network, a number of 'delivery mechanisms' are needed. A way of making the project happen is essential. Delivery mechanisms are ways in which Green Infrastructure projects can be facilitated or directly delivered. It is important to recognise and identify the role of the partners and others in bringing forward projects either as decision makers, e.g. the local authorities on planning policy documents and planning applications, or those who will actually deliver Green Infrastructure.

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 6](#).

Case Study - West Cambridgeshire Hundreds

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 worked 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, Environmental Stewardship and the English Woodland Grant scheme).



Photo provided by Cambridgeshire Horizons.

Case Study - Devil's Dyke

Devil's Dyke is a major landscape feature in the county. It is an Anglo-Saxon earthwork that runs from Reach to Woodditton, 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 site do not have to be limited to organised events or interpretation boards. Shape East, a UK Architecture Centre for the East of England, in conjunction with English Heritage, produced a downloadable podcast guided walk that covers the history, use, and importance of the Dyke, plus information on its wildlife and biodiversity.



Photo provided by Cambridgeshire Horizons.

4 The Strategic Network

4.1 Strategic areas Overview

This chapter works 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 that fall within strategic areas (for example the large-scale Fens Adventurers Partnership: Green Fen Way) and target areas (for example Soham Common restoration or Chatteris country park). **Table 4-A** gives an overview of the whole Strategic Network, presenting strategic areas, target areas within these, and projects.

Table 4-A Cambridgeshire Green Infrastructure Strategy - Strategic Network projects (Next page).

STRATEGIC AREA	STRATEGIC AREA PROJECTS	TARGET AREA	TARGET AREA PROJECTS	
Strategic Area 1 : River Nene	Fens Adventurers Partnership: Green Fen Way	Wisbech	Wisbech Country Park	
		Whittlesey		
	Fens Waterways Link	March	March Country Park	
		Nene Washes and River Nene (Old Course)	Links to Peterborough Green Wheel & Peterborough Waterspace Strategy	
Strategic Area 2 : Huntingdonshire Fens and Woods	Fens Adventurers Partnership: Green Fen Way	Great Fen	Great Fen Masterplan Delivery Great Fen/South Peterborough Access Link	
		Ramsey	Healthy Walks Programme The Great Fen	
	Fens Waterways Link	Huntingdonshire Ancient Woodlands	Woodland Linkage Programme	
Strategic Area 3 : Great Ouse	Fens Adventurers Partnership: Green Fen Way	Grafham Water	Woodland Linkage Project Grafham Water - Brampton Wood Link	
		St Neots	St Neots A428 Pedestrian Underpass St Neots Green Corridor Project	
	Fens Waterways Link	Ouse Valley & Paxton Pits	Ouse Valley Wet Meadows & Wet Woodlands	Ouse Valley Wet Meadows & Wet Woodlands
			Ouse Valley Way	Ouse Valley Way
			Paxton Pits Nature Reserve	Paxton Pits Nature Reserve
			Cow Lane Gravel Pits	Cow Lane Gravel Pits
	Huntingdon	Huntingdon	Huntingdon Green Spaces	Huntingdon Green Spaces
			Huntingdon West / Northbridge	Huntingdon West / Northbridge
	St Ives	St Ives	Houghton Meadows Restoration Project	Houghton Meadows Restoration Project
			St Ives Accessible Greenspace	St Ives Accessible Greenspace
	Fen Drayton	Fen Drayton	Fen Drayton Lakes	Fen Drayton Lakes
			RSPB habitat and visitor infrastructure management	RSPB habitat and visitor infrastructure management
	Needingworth	Needingworth	Hanson RSPB wetland project	Hanson RSPB wetland project
	Earith	Earith	Rights of Way improvement projects	Rights of Way improvement projects
Chatteris Country Park			Chatteris Country Park	
Chatteris	Chatteris	Chatteris - Somersham Railway Corridor Enhancement	Chatteris - Somersham Railway Corridor Enhancement	
		Block Fen Minerals After use Wetland & Restoration Project	Block Fen Minerals After use Wetland & Restoration Project	
Block Fen	Block Fen	Creation of wet grassland following mineral extraction	Creation of wet grassland following mineral extraction	

		Ouse Washes	Environment Agency Ouse Washes Habitat Creation Project Ouse Washes - management of the Ouse Washes	
Strategic Area 4 : Eastern Fens and Towns	Fens Adventurers Partnership: Green Fen Way Fens Waterways Link	Littleport	Littleport Urban Greenway New River Town Park Cycleway Improvements Woodland Creation	
		Ely	Ely Country Park Woodland Creation North Ely Development Ouse SuDS Sustainable Access across A10	
		Soham	Soham Commons Restoration Improved public open space and town parks	
		Ely Ouse	Environmental Stewardship Schemes - Commons Eastern Gateway Green Infrastructure Expansion	
Strategic Area 5 : Chippenham Fen		Chippenham Fen	Continued Reserve management Water management investigation	
Strategic Area 6 : Cambridge & Surrounding Areas	Chalk Rivers Project Fowlmere Nature Reserve Extension and Development of Facilities Linear Monuments Woodland Linkage Project Fens Waterways Link	Northstowe	Enhance Rights of Way Links	
		Wicken Fen and Anglesey Abbey	Wicken Fen Vision Wicken Fen Heritage Trails	
		Cambridge	Cambridge Nature Conservation Strategy Cambridge Fringe Sites Cambridge 'Necklace' Projects Cambridge City Centre	
		Cambourne	Large scale public open space	
		Wimpole	Wimpole Cycling Link	
		West Cambridgeshire Woodlands	West Cambridgeshire Hundreds Habitat Enhancement Project Bourn Brook Enhancement	

4.2 Strategic Area 1: River Nene

4.2.1 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 with 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)²⁹, Special Protection Area (SPA)³⁰, Special Area of Conservation (SAC)³¹ and Ramsar site³² of international renown, particularly for over-wintering birds. There is little in the way of tree cover in the area compared 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 of Chatteris, March, Wisbech and Whittlesey and a significant public sector employment presence in 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-distance Rights of Way. The A605, A141, and A47 are the main distributor roads in the area. The Ely to Peterborough railway also runs through the area with stations at March and Whittlesey.

The River Nene is a statutory navigation, linked to the Great Ouse via the Middle Level Navigations. Use of the waterway for boating, recreation and freight is expected to grow and develop in future years as part of the Fens Waterways Link vision to connect the River Nene near Peterborough to the River Welland near Crowland.

Looking at the Strategy's Objectives there is a particular emphasis in this strategic area on Green Infrastructure 'promoting sustainable growth and

²⁹ A site identified under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) as an area of special interest by reason of its flora, fauna, geological or physiographic features.

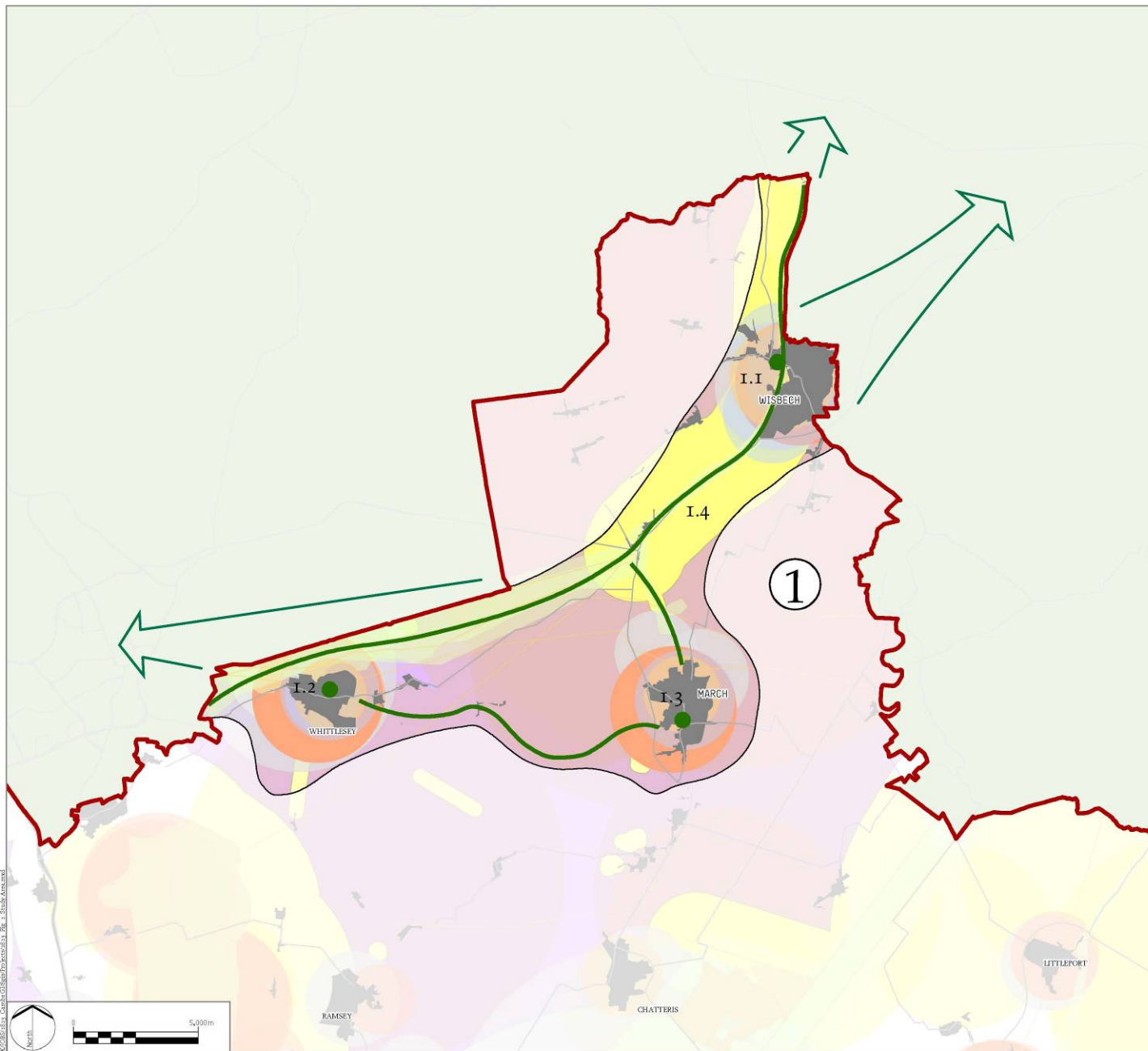
³⁰ Sites of European importance for wild birds designated under the Conservation (Natural Habitats, &c) Regulations, 1992 in the UK.

³¹ Areas that have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats.

³² Wetlands designated by the contracting parties of the Ramsar Convention for inclusion in the list of wetlands of international importance because they meet one or more of the Ramsar criteria.

economic development' and 'supporting healthy living and well-being'. The importance of the Nene for 'biodiversity' is also a key consideration in this area. The Nene 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 the benefit of the local community.

Figure 4-1 Strategic Area 1: River Nene (Next page)



LEGEND

- Study Area Boundary
- Settlement
- Biodiversity Theme
- Climate Change Theme
- Gateway Theme
- Heritage Theme
- Landscape Theme
- Sustainable Movement Theme
- Publicly Accessible Open Space Theme
- Target Areas:
 - I.1 Wisbech
 - I.2 Whittlesey
 - I.3 March
 - I.4 Nene Washes and River Nene (Old Course)
- Strategic Area Boundary
- Links to/from Strategic Green Infrastructure Network

REV.	DESCRIPTION	APP. DATE

LDĀ DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Strategic Area 1: River Nene

ISSUED BY	Oxford	T 01865 887050
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CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY - Strategic Area 1: River Nene



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. Enhancing the navigable waterways to allow access to Green Infrastructure sites and the wider countryside and linking to adjacent major population growth in Peterborough
- Heritage: by using historic assets which are associated with the market towns and the network of medieval drains and other linear archaeological features.
- Landscape: 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.
- Rights of Way: 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.

4.2.2 Strategic area projects (see Appendix 15 for further details)

Fens Adventurers Partnership: Green Fen Way

Fens Waterways Link (Phase 5)

4.2.3 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 4-2 shows that each of the target areas do have the potential to contribute towards delivering the Strategy's objectives. Wisbech, Whittlesey and March have significant potential to contribute towards promoting sustainable growth and economic development, and supporting healthy living and well-being. 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 to identify opportunities and realise the potential within each area.

Strategic Area 1: River Nene

Target Areas	Objectives			
	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)	●	●	●	●

Key
Significant Influence



Moderate Influence



Limited Influence



Figure 4-2: How the River Nene target areas deliver the strategy objectives.

4.2.4 Target Area 1.1: Wisbech

Background

Wisbech is a historic market town, renowned for its Georgian architecture, including Peckover House, which is a legacy from the town's history as an important trading centre focusing on the port and the River Nene. A new marina is due for completion in 2012-13.

Wisbech is the largest settlement in Fenland with a population of approximately 20,500. With an inland port located on the River Nene, Wisbech has long played an important role as a trading centre serving a wide rural catchment. Today it remains an important destination for retail and services for the surrounding rural communities.

Although all of Fenland's settlements contain pockets of deprivation, Wisbech is the town with the greatest need for regeneration and where the benefits of Green infrastructure provision could be most keenly felt.

Wisbech has a number of existing assets that can provide a catalyst for change. The town centre, although having suffered from steady decline, nevertheless boasts an exceptional built heritage and a historic waterfront. Combined with its location on the A47, this unique heritage already makes Wisbech a stopping point for tourists en route to the Norfolk coastline. There is an opportunity to capitalise more fully on the town's physical distinctiveness and attractive waterfront. The reuse of historic buildings alongside enhancements to open spaces would provide an attractive setting for high quality food/drink cultural, retail and visitor accommodation offer.

Opportunities within the target area to inform future project development

The target area 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.

It 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.

- 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 acts as a node linking the market town with strategic movement routes, navigable waterways (where possible), housing growth and into west Norfolk. Opportunities exist to utilise navigable waterways and the port to allow access to Green Infrastructure sites and the wider countryside.
- 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 archaeological features.
- Landscape: contributing to landscape character through growth and regeneration of the market town.
- Publicly Accessible Open Space: there are opportunities associated with growth and regeneration in Wisbech to help address deficiencies in Accessible Natural Space Standards (ANGSt).
- Rights of Way: by improving the Rights of Way network and utilising the Fens drain system, where appropriate, to allow access to Green Infrastructure sites and the wider countryside.

Current Projects (see Appendix 15 for further details)

- Wisbech Country Park

4.2.5 Target Area 1.2: Whittlesey

Background

Whittlesey is a broadly linear settlement situated in the west of the district with a population of around 13,000. It has a close functional relationship with Peterborough, which is located to the west of the town. Although Whittlesey is a local service centre in its own right, Peterborough's role as a major sub-regional employment centre (only six miles away) has seen Whittlesey emerge as an increasingly popular settlement for out-commuters. Nevertheless, Whittlesey is not purely a dormitory town and supports important local employers including a brickworks and McCain Foods.

The Green Infrastructure Network around Whittlesey includes 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. There is scope for environmental improvements to enhance the physical appearance of the centre, which is somewhat dominated by the A605 which runs east-west through Whittlesey. To the north of the town are the internationally protected Nene Washes.

Opportunities within the target area to inform future project development

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.

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 emphasised within any Green Infrastructure Network.

Better Green Infrastructure links 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.

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

Used/Disused Brick Pits are an existing, and are likely to become a more important future, Green Infrastructure resource because of their potential for providing wildlife habitats and recreational opportunities, balanced with any flood/water management role they may have. It is important that the potential for Green Infrastructure linkages with the rest of Whittlesey and beyond into Peterborough are investigated and evaluated.

- Biodiversity: opportunities in Whittlesey relate to the enhancement and expansion of Lattersey Local Nature Reserve to include neighbouring wildlife sites, habitat creation and public access enhancements associated with the restoration of brick pits to the west of the town. There are also opportunities to enhance and protect 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 management and green space creation.
- Green Infrastructure Gateways: developing Whittlesey as a gateway that acts as a node linking the market town with strategic movement routes, navigable waterways and housing growth. Improving the

navigable waterways to allow access to Green Infrastructure sites and the wider countryside and linking to adjacent major population growth in Peterborough.

- Heritage: by using historic assets which are associated with the market town and the network of medieval drains and other archaeological features around Whittlesey.
- Landscape: contributing to landscape character through growth and regeneration of the market town and through improving and maintaining the Nene Washes.
- Publicly Accessible Open Space: by enhancing and expanding Lattersey Local Nature Reserve to include neighbouring Wildlife Sites, habitat creation and public access enhancements associated with the restoration of brick pits to the west of the town to address deficiencies in Accessible Natural Greenspace Standards (ANGSt).
- Rights of Way: 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.

Current Projects

- Projects that relate to the opportunities identified above are yet to be identified by partners

4.2.6 Target Area 1.3: March

Background

March is an historic market town at the heart of Fenland with a population of around 20,000. It is relatively well connected by road and benefits from a railway station situated on the Stansted-Cambridge-Leicester-Birmingham line. 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. March is home to some pockets of deprivation, including East March, which are characterised by a high incidence of worklessness and poor health. March offers opportunities for linking existing Green Infrastructure such as the park with the river frontage, moorings, and town centre facilities.

Opportunities within the target area to inform future project development

To the north of March, the Norwood Road Local 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.

Improving and enhancing the open spaces to the south-west of the town that offer views of St Wendreda's Church, would increase opportunities for leisure activities.

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

- 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, balanced with any flood/water management role they may have. There are particular opportunities around enhancement of Wildlife Sites, Local Nature Reserves (LNR) and other green spaces to form a Green Infrastructure corridor in the north of March³³.
- 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 acts 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 archaeological features around March.
- Landscape: contributing to landscape character through growth and regeneration of March and through improving and maintaining the River Nene (old course).
- Publicly Accessible Open Space: There are particular opportunities around enhancement of Wildlife Sites, Local Nature Reserves (LNR) and other green spaces to form a Green Infrastructure corridor in the north of March, as well as the opportunity to provide larger spaces to meet deficiencies in Accessible Natural Greenspace Standards (ANGSt).
- Rights of Way: by improving the Rights of Way network and utilising the Fens drain system, where appropriate, to allow access to Green Infrastructure sites and the wider countryside.

Current Projects (see Appendix 15 for further details)

- March Country Park

³³ In particular linking Rings End LNR, Graysmoor Pit, Whitemoor nature reserve, Whitemoor Marshalling Yards and Norwood Road nature reserve.

4.2.7 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 walking) 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 kept 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. The River Nene is an Environment Agency main river and is a navigable watercourse, whilst the River Nene (Old Course) is a navigable ordinary watercourse under the jurisdiction of the Middle Level Commissioners. However, the Nene Washes and associated channels, are not navigable.

There are existing Moorings/Marinas at Whittlesey, Wisbech (which has links to the sea, and 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.

The Nene Washes, which are designated as a SSSI, SPA, SAC and Ramsar site, are used for flood storage and host 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.

Emphasis on the sustainable nature of the waterway 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, which will be further enhanced via the Fens Waterways Link vision.

Opportunities within the target area to inform future project development

- **Biodiversity:** the Nene Washes is already important for biodiversity. This could be significantly enhanced by converting arable land within the washes to grassland and bringing grassland into better condition where needed. Enhancing and protecting the adjacent network of drains and ditches that together form an important network of water-based habitats is an opportunity for this area. However, these opportunities need to be balanced with the flood alleviation facility that the Washes provide.
- **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, together with improving overall water quality is therefore important.

- Green Infrastructure Gateways: the Nene Washes and old course of the River Nene can provide better and more accessible links between the Washes, Peterborough, Whittlesey and March. There are opportunities to improve the river navigations to allow access to Green Infrastructure sites and the wider countryside.
- Heritage: interpreting the history of the Washes and their role in flood alleviation.
- Landscape: 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 along with improve public transport and cycle links.
- Rights of Way: promotion of existing footpaths, bridleways and cycleways linking to March, Whittlesey and Peterborough. Improving the Rights of Way network alongside the Washes and river channels and utilising the Fens drain system, where appropriate, to allow access to Green Infrastructure sites and the wider countryside.

Current Projects (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 and the Peterborough Waterspace Strategy.

4.3 Strategic Area 2: Huntingdonshire Fens and Woods

4.3.1 Description

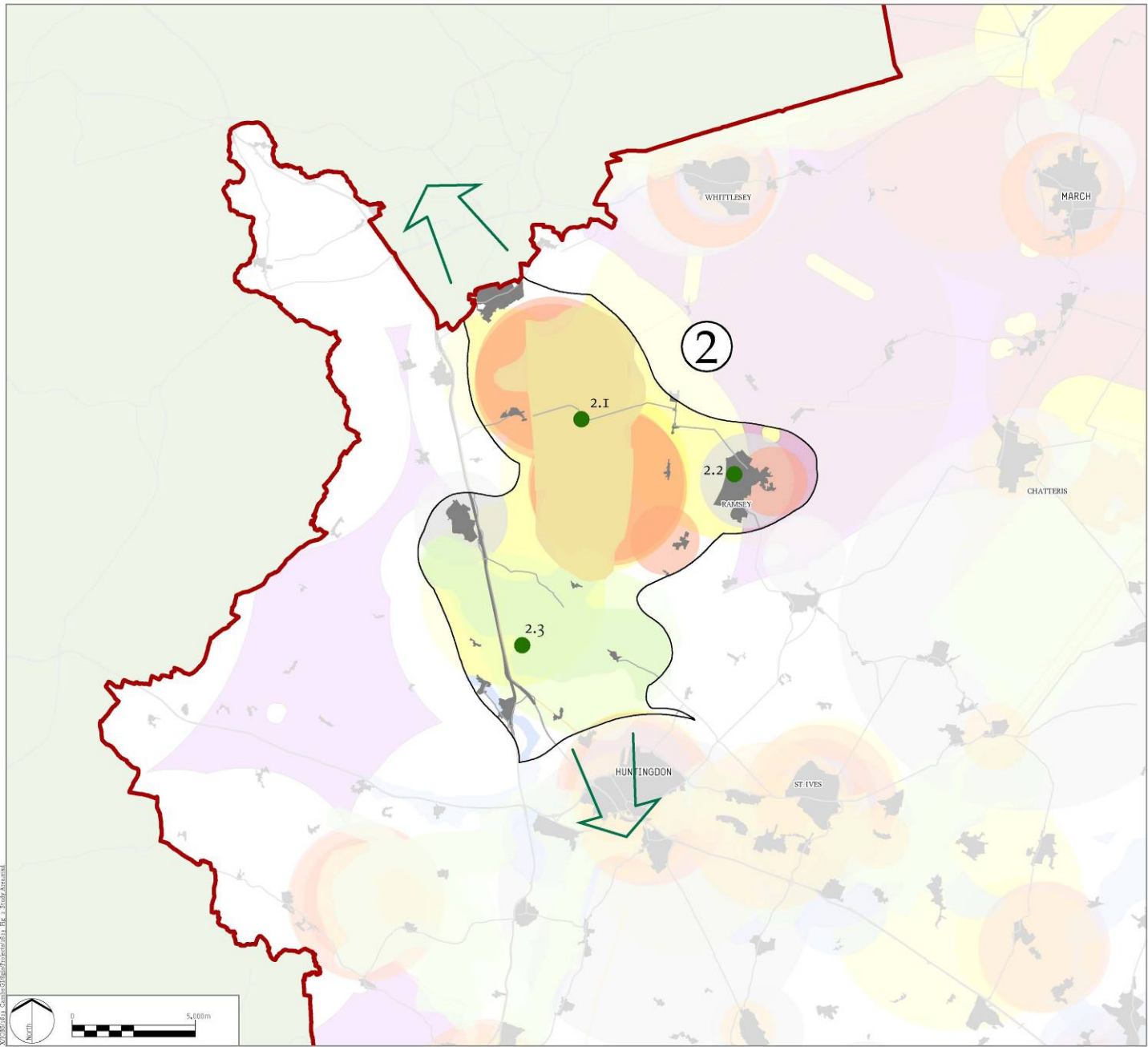
This area is focused on Ramsey, the Great Fen (including Woodwalton and Holme Fens) and the belt of ancient woodland that lies to the north of Alconbury (Aversley, Archers and Monks Woods). Monks Wood National Nature Reserve is home to over 1000 species of beetles and many other insects, birds and a 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 to 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 local physical and social infrastructure.

The navigable waterways of the Middle Level Navigations provide a link from the River Nene to the River Great Ouse, and use of these waterways for boating, recreation and freight transfer is expected to grow as the Fens Waterways Link vision is achieved.

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 well-being. There are localised health and well-being and economic development issues alongside significant opportunities regarding habitat creation with associated flood alleviation and carbon sequestration and storage.

Figure 4-3 Strategic Area 2: Huntingdon Fens and Woods (Next page)



LEGEND

- Study Area Boundary
- Settlement
- Biodiversity Theme
- Climate Change Theme
- Gateway Theme
- Heritage Theme
- Landscape Theme
- Sustainable Movement Theme
- Publicly Accessible Open Space Theme
- Target Areas
 - 2.1 Great Fen
 - 2.2 Ramsey
 - 2.3 Huntingdonshire Ancient Woodlands
- Strategic Area Boundary
- Links to/from Strategic Green Infrastructure Network

REV.	DESCRIPTION	APP. DATE
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LDĀ DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Strategic Area 2: Huntingdon Fens and Woods

ISSUED BY	Oxford	T	01865 887050
DWG.NO	2823_I4		
DATE	17/05/2011	DRAWN	DL
SCALE@A3	1:150,000	CHECKED	FL
STATUS	FINAL	APPROVED	IH

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Sources: Ordnance Survey, Open Street Map & 2001 Census Area Data.



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. Ramsey High Lode and associated channels in the Ramsey area are navigable watercourses under the jurisdiction of the Middle Level Commissioners. Improving waterway navigations to allow access to Green Infrastructure sites and the wider countryside.
- 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 target 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.
- Rights of Way: by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

4.3.2 Strategic area projects (see Appendix 15 for further details)

- Fens Adventurers Partnership: Green Fen Way
- Fens Waterways Link (Phase 6)

4.3.3 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 4-4 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 well-being. Ramsey has significant potential to contribute towards promoting sustainable growth and economic development, and supporting healthy living and well-being. Huntingdonshire's 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 to identify opportunities and realise the potential within each target area.

Strategic Area 2: Huntingdonshire Fens and Woods

Target Area	Objectives			
	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 4-4: How the Huntingdonshire Fens and Woods target areas deliver the strategy objectives.

4.3.4 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 re-wetting 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.

See also the Great Fen case study on page 143.

Opportunities within the target area to inform future project development

- Biodiversity: opportunities 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: restoration of "wild" fenland.
- Publicly Accessible Open Space: developing the Great Fen will contribute to meeting Accessible Natural Greenspace Standards (ANGSt).
- Rights of Way: 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 on land and water through the Great Fen area.

Current Projects (see Appendix 15 for further details)

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

4.3.5 Target Area 2.2: Ramsey

Background

Ramsey is a small market town located north of Huntingdon on the edge of the fen that extends north and east from the town itself. The parish of Ramsey extends for several miles across the fens of the Bedford Level and the long straight roads link several small communities including Ramsey St. Mary's, Ramsey Mereside, Ramsey Heights with its nature reserve and Wildlife Trust countryside classroom, and Ramsey Forty Foot. Ramsey is located to the east of the Great Fen and opportunities exist to develop and take advantage of this area.

See also the Huntingdonshire Healthy Walks case study on page 128.

Opportunities within the target area to inform future project development

- Biodiversity: Woodwalton Fen and Holme Fen are both National Nature Reserves close to Ramsey. The Great Fen aims to join these reserves by owning the 9,000 acres around them. The whole project has a very high biodiversity value.
- Climate Change: the Great Fen area will be used for flood storage which will protect some local housing but will primarily protect important agricultural and rural areas.
- Green Infrastructure Gateways: a visitor centre with car park will be built in the Great Fen. Information points in Ramsey and the surrounding area are also needed. There are opportunities for Ramsey to act as a gateway to the Great Fen and to take advantage of the Middle Level Commissioners' navigable waterways in this area. Improvements to the waterway terminus at Ramsey have also been proposed.
- Heritage: the heritage of the fen, especially Whittlesea Mere and Ramsey Abbey are priorities in the target area.
- Landscape: growth and development in Ramsey should reflect the fen landscape, particularly the straight drains, the flat land and the big skies.
- Publicly Accessible Open Space: the provision of visitor facilities at the Great Fen is the highest priority.
- Rights of Way: access routes from Ramsey, Peterborough, Huntingdon and from the west are all seen as equally high priority. The Rights of Way network throughout this area is very disjointed so new routes will need to be created, waymarking and signposting will also need to be undertaken.

Current Projects (see Appendix 15 for further details)

- Healthy Walks Programme
- The Great Fen

4.3.6 Target Area 2.3: Huntingdonshire Ancient Woodlands

Background

This area represents a cluster 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 links 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

- Biodiversity: linking, restoring and creating species-rich grassland and woodland are a key opportunity in this area.
- Climate Change: the creation of woodland (and in some circumstances grassland) will help to control storm water surge in this mainly arable area.
- Green Infrastructure Gateways: information points in the local villages and settlements showing the accessible woodlands in the area are a priority.
- Heritage: the Bullock Road, part of an ancient drove from Edinburgh to London, runs through this area. Promoting the history of the ancient woodlands in this area is another opportunity.
- Landscape: these ancient woodlands are on the clay uplands on the edge of the fen. They are currently isolated in a landscape of intensive arable agriculture.
- Publicly Accessible Open Space: the provision of safe cycle parking and improved pedestrian access are a priority.
- Rights of Way: the provision of an access route from Huntingdon to the Great Fen will then allow links to Peterborough to be created. Opportunities for improving the Rights of Way network to connect villages to Green Infrastructure sites and the wider countryside are also an opportunity in this area.

Current Projects (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.

4.4 Strategic Area 3: Great Ouse

4.4.1 Description

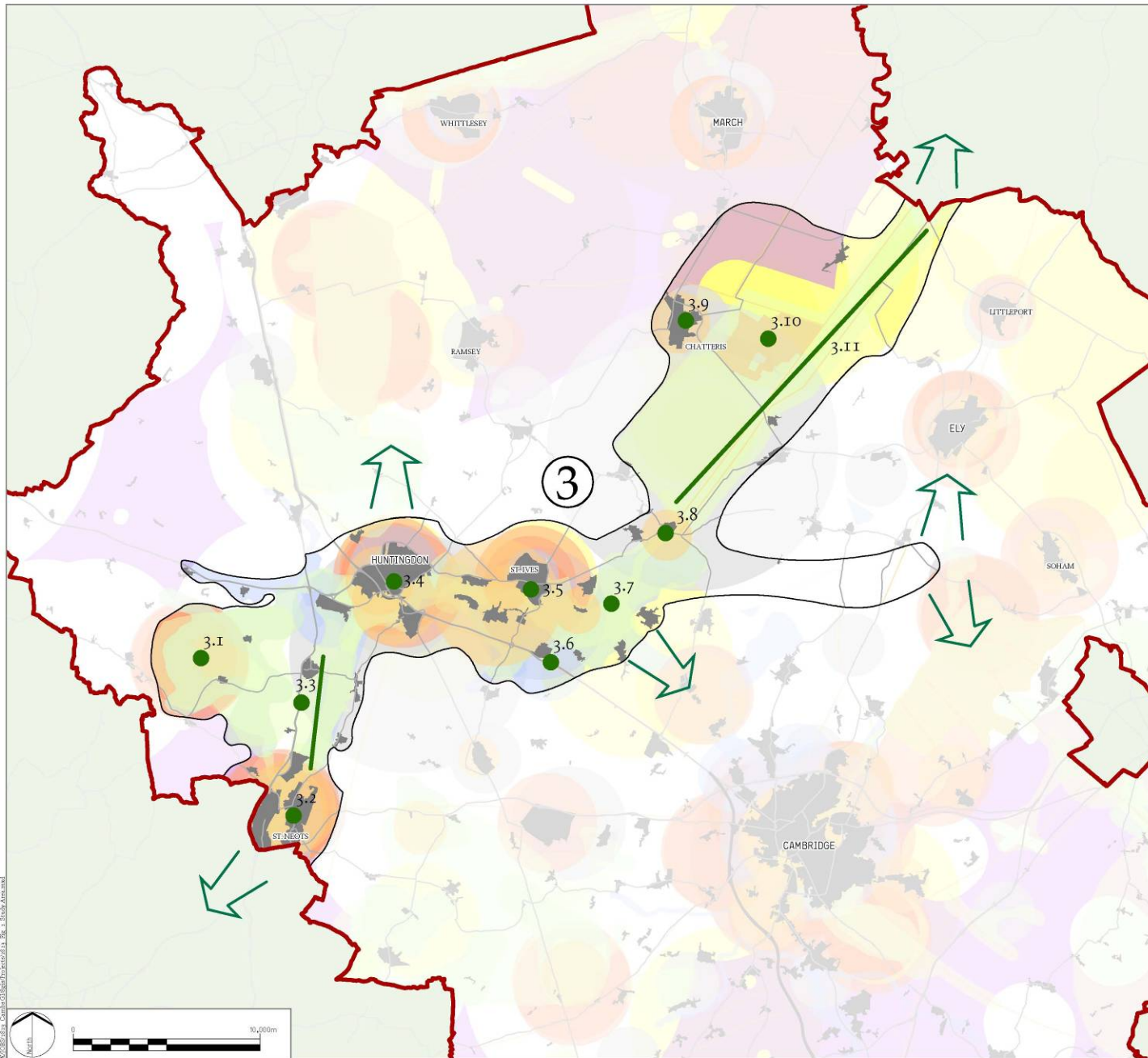
This area includes the Ouse Valley, Ouse Washes and the Old West River and encompasses the market towns of St Neots, Huntingdon, St Ives and Chatteris - crossing through or bordering four Local Authority areas and linking upriver into Bedfordshire and downstream into Norfolk. The Great Ouse forms a key 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, Hinchingsbrooke 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.

The River Great Ouse itself is a statutory navigation linked to the River Nene via the Middle Level Navigations. The navigable waterways offer considerable potential for enhanced tourism, leisure and recreation, particularly through delivery of the Fens Waterways Link vision. The rights of way along much of the river corridor provide key routes for pedestrians, cyclists and horse riders.

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 via 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 well-being. In this area there are localised issues regarding health and well-being, 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.

Figure 4-5 Strategic Area 3: Great Ouse (Next page)



LEGEND

- Study Area Boundary
- Settlement
- Biodiversity Theme
- Climate Change Theme
- Gateway Theme
- Heritage Theme
- Landscape Theme
- Sustainable Movement Theme
- Publicly Accessible Open Space Theme
- Target Areas
 - 3.1 Grafham Water
 - 3.2 St Neots
 - 3.3 Ouse and 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/Langwood Fen
 - 3.11 Ouse Washes
- Strategic Area Boundary
- Links to/from Strategic Green Infrastructure Network

REV.	DESCRIPTION	APP. DATE

LDĀ DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Strategic Area 3: Great Ouse

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CAMBRIDGESHIRE CAMBUSHAMPTON 01865 887050

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 sequestration³⁴, 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. Measures to enhance both water and land management within the Great Ouse catchment will also contribute towards improving water quality against Water Framework Directive targets.
- Green Infrastructure Gateways: 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. Enhancing river navigations to allow access to Green Infrastructure sites and the wider countryside.
- Heritage: by using assets which are associated with the market towns, mineral extraction sites and the network of historic drains.
- Landscape: 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 co-ordinating public access links, signage and promotion throughout the Great Ouse Wetland (see case study)
- Rights of Way by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

4.4.2 Strategic area projects (see Appendix 15 for further details)

Fens Adventurers Partnership: Green Fen Way

Fens Waterways Link (Phase 6)

³⁴ Carbon sequestration is the process of removing carbon from the atmosphere and depositing it in a reservoir.

4.4.3 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 4-6 shows that eight of the 11 target areas have the potential to contribute significantly towards delivering at least one of the Strategy's four objectives. The remaining three target areas (St Ives, Earith and Block Fen) have limited or moderate potential to contribute towards delivering the objectives. Needingworth has significant potential to contribute towards reversing the decline in biodiversity, mitigating and adapting to climate change and supporting healthy living and well-being. This assessment provided confidence that the target areas should be explored in more detail to identify opportunities and realise the potential within each target area.

Strategic Area 3: Great Ouse

Target Area	Objectives			
	Reverse the decline in Biodiversity	Mitigate and adapt to Climate Change	Promote Sustainable Growth & Economic Development	Support Healthy Living 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/Langwood Fen	●	●	●	●
3.11 Ouse Washes	●	●	●	●



Figure 4-6: How the Great Ouse target areas deliver the strategy objectives.

4.4.4 Target Area 3.1: Grafham Water

Background

Grafham Water is owned and managed by Anglian Water. It is situated in 2,400 acres, of which the majority is reservoir. It has a 10-mile circular access path which is heavily used by walkers and cyclists. Grafham is important both regionally and nationally for fly fishing, sailing and bird watching.

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, some of the woods also need restoration from conifers to native broadleaves.

Opportunities within the target area to inform future project development

- Biodiversity: Grafham Water is regionally important for its numbers of winter wildfowl, especially tufted tuck and coot. Its winter gull roost can have up to 30,000 birds of various species. The ancient woodlands surrounding Grafham Water contain a small population of dormouse which necessitate the linking of isolated woodlands. This will benefit the many species of invertebrates and plant life that require these corridors. Linking the woodlands in this area (particularly Grafham to Brampton) is also important.
- Climate Change: the Grafham Water area sits on a clay plateau above Huntingdon and Kimbolton with the majority of the land being arable agriculture which drains very quickly causing flooding, particularly in Kimbolton. Increasing the area of woodland will slow the storm water surge that occurs in this area.
- Green Infrastructure Gateways: overall the infrastructure at Grafham Water is very good, but the woodlands have limited parking, signage and accessibility.

- Heritage: interpretation of the various uses of the woodlands and the history of the reservoir.
- Landscape: restoration of woodland on the clay uplands that link to the north Bedfordshire woodlands and the woodlands surrounding the Great Fen and Huntingdonshire Ancient Woodlands target areas.
- Publicly Accessible Open Space: providing more access to some of the ancient woodland is desirable.
- Rights of Way: the Rights of Way networks are compromised by the A1 to the east and the A14 to the north. An eastern link over the A1 will enhance access to Grafham Water from the populated areas in the Ouse Valley, including Brampton.

Current Projects (see Appendix 15 for further details)

- Woodland Linkage Project
- Grafham Water - Brampton Wood Link

4.4.5 Target Area 3.2: St Neots

Background

St Neots includes the parishes of Eynesbury, Eaton Socon and Eaton Ford. The river Great Ouse splits the town with the "Eatons" on the west and St Neots and Eynesbury on the east of the river. The river is very susceptible to flooding, so a green corridor of open space has remained between the settlements. This green space is important for its recreational use and for access in a north/south direction. East/west access is limited due to the lack of bridges, but a new cycle bridge is being built between Eaton Socon and Eynesbury.

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

- Biodiversity: the St Neots Green Corridor is important for its biodiversity. In the south it contains Barford Road Pocket Park which has one of the few populations of water vole on the River Great Ouse, it also has transient populations of otter, bittern and snipe. To the north, St Neots Common is a SSSI for its botanical interest. Enhancement to the management of the land between these two sites will greatly enhance the biodiversity value of St Neots. Opportunities are also available for enhancement on the tributaries of the Kym, Hen Brook and Fox Brook. 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.

- **Climate Change:** the green spaces in St Neots serve a vital flood mitigation role. Flood water storage can be enhanced by the creation of wetlands.
- **Green Infrastructure Gateways:** there are a number of car parks and informal entry points into the green corridor, but there is no focal point for visitors. There is an opportunity to create a major visitor centre and hub for activity near to the town bridge. There is a need to enhance the river navigation, including services available to boaters and access to the river. A waterspace study has been proposed to develop a master plan for the river corridor in this area.
- **Heritage:** interpretation of the history of the area going back to the Ice Age is desirable.
- **Landscape:** the restoration of wildflower rich meadows is the highest priority for the area.
- **Publicly Accessible Open Space:** provision of enhanced cycleway and footpath links throughout the green spaces.
- **Rights of Way:** the Rights of Way network needs to be improved, particularly the links to the west (over the A1) and the south east (under the A428). The Ouse Valley Way links St Neots to Bedford and Huntingdon, but it is only available for walkers. There is a pressing need to develop safe cycling routes in the area.

Current Projects (see Appendix 15 for further details)

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

4.4.6 Target Area 3.3: Ouse Valley/Paxton Pits

Background

Paxton Pits Nature Reserve is approximately 100 acres of former gravel workings. It contains a small visitor centre, an education area and car park for 80 cars. It is visited by 120,000 visitors a year, and can be accessed on boat via the Great Ouse or the Ouse Valley Way.

A partnership of various organisations including Huntingdonshire District Council, the Wildlife Trust, Farming and Wildlife Advisory Group (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. 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 and interpretation as well as conservation and enhancement of the sites biodiversity.

Opportunities within the target area to inform future project development

- 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 Green Infrastructure site and enhancement of back waters and back channels for fisheries.
- Climate Change: flood storage capacity can be increased through the creation of back channels and ditches. Creation of wet meadows and wet woodlands will also contribute towards improving water quality and regulating water resources.
- Green Infrastructure Gateways: Paxton provides a gateway to the Ouse Valley, but parking capacity needs to be increased. There are also other opportunities for visitor gateways such as providing facilities at Cow Lane.
- Heritage: opportunities are available to interpret the Ouse Valley from the last Ice Age to the present day drainage from Milton Keynes to the sea.
- Landscape: the creation and restoration of species rich meadows, wet woodland and willow pollards.
- Publicly Accessible Open Space: there is a need for small car parking areas throughout the 26 miles of this stretch of the Great Ouse. There is also the need for a comprehensive access plan that covers this area.
- Rights of Way: the footpath network is fairly comprehensive throughout the area, but there are difficulties where the path is

eroding close to the river bank. There is a very limited off road cycle network.

Current Projects (see Appendix 15 for further details)

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

Future Projects (see Appendix 15 for further details)

- Cow Lane Gravel Pits

4.4.7 Target Area 3.4: Huntingdon

Background

Huntingdon sits to the north of the River Great Ouse. Future developments at Alconbury airfield and Northbridge to the North and West of Huntingdon will put pressure on existing greenspaces, such as Hinchingsbrooke Country Park, but it will also provide opportunities to enhance the Rights of Way network in these areas.

Enhancements to the riverside area of Huntingdon will provide substantial opportunities for recreation and biodiversity.

Opportunities within the target area to inform future project development

- **Biodiversity:** Portholme on the southern edge of Huntingdon is one of the finest lowland wet meadows in England. Other wet meadows can be significantly enhanced, such as those at Hinchingsbrooke, and there are opportunities for the creation of wet woodland and willow pollards.
- **Climate Change:** flood storage by the creation of wetlands on the tributaries into the Great Ouse will be important along with the creation of back channels and ditches.
- **Green Infrastructure Gateways:** the existing visitor facilities at Hinchingsbrooke Country Park and Huntingdon Riverside Park are in need of substantial improvements to service the need of the increasing population of Huntingdon. There is a need for enhanced facilities serving the navigable waterway. A waterspace study has been proposed to develop a master plan for the river corridor in this area.

- Heritage: the roman history based on the crossing of the River Great Ouse by Ermine Street and the management of the commons, particularly Portholme Meadow, is of particular prominence.
- Landscape: the restoration of wet meadow, wet woodland, including osier beds, and willow pollards is important.
- Publicly Accessible Open Space: Huntingdon is reasonably well served with open space, but much of it is heavily used and in need of increased management.
- Rights of Way: the Rights of Way network is in need of promotion particularly when new routes are created to the west of Huntingdon.

Current Projects (see Appendix 15 for further details)

- Huntingdon Green Spaces
- Huntingdon West / Northbridge

4.4.8 Target Area 3.5: St Ives

Background

St Ives is a small market town situated on the north bank of the River Great Ouse. To the south of the town is Hemingford Meadow which is a County Wildlife Site (wet grassland) and Holt Island is a former osier bed.

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 of St Ives 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

- Biodiversity: many of the wet grasslands to the south of the town are in need of enhancement. The osier beds and willow beds are also an important feature to enhance. Meadow creation and expansion is an opportunity in this area, particularly around Houghton Meadows.
- Climate Change: the whole area is very susceptible to flood risk, and the maintenance of flood meadows without obstructions is important to allow flow through the town.
- Green Infrastructure Gateways: information points are a priority for St Ives. The area is well-used by boaters, from rowers and canoeists

to narrowboats and cruisers, and there is a need for enhanced facilities providing a gateway to the river.

- Heritage: the cattle market at St Ives (now closed) was an important feature for the town as it linked to the grazing land in the Ouse Valley. Also, the production of osier for baskets such as those used by the Post Office is another heritage opportunity.
- Landscape: the flat-bottomed valley of the Ouse dominates the landscape. The land rises to the north and west of the town where there are opportunities for tree planting.
- Publicly Accessible Open Space: St Ives requires information points on the detail of what public space is available to them.
- Rights of Way: links to the bridleway alongside The Busway to the east of St Ives and the Thicket Path from Houghton need improving. The Rights of Way network to the north of the town is disjointed because of RAF Wyton.

Current Projects (see Appendix 15 for further details)

- Houghton Meadows Restoration Project

Future Projects (see Appendix 15 for further details)

- St Ives Accessible Greenspace

4.4.9 Target Area 3.6: Fen Drayton

Background

Fen Drayton Lakes are 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 and across 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 of 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

Opportunities within the target area to inform future project development

- 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 (including along navigable waterways) 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: enhancement of the landscape around the 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.
- Rights of Way: development of strong links with The Busway and the river navigations in the area.

Current Projects (see Appendix 15 for further details)

- Fen Drayton Lakes
- RSPB habitat and visitor infrastructure management

4.4.10 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.

Opportunities within the target area to inform future project development

- 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, the navigable river and proximity to Fen Drayton and The Busway.
- Heritage: opportunities for interpretation and education relating to historic landscapes and settlement.
- Landscape: 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.
- Rights of Way: creation of 32km of new public rights of way linking to the Ouse Valley Way , the navigable river and The Busway.

Current Projects (see Appendix 15 for further details)

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

4.4.11 Target Area 3.8: Earith

Background

Earith lies on a key river corridor at the point where the River Great Ouse separates into the Ouse Washes and the Old West River. The Ouse Valley Way and Rights of Way network provide access along the Ouse Valley, the Washes and adjacent countryside. Earith is a popular boating stop with a marina, moorings and local services.

Opportunities within the target area to inform future project development

- Biodiversity: opportunities exist around Earith to improve and maintain the river and washland habitats and to create new habitat as a result of post-mineral extraction restoration.
- Climate Change: the area is very susceptible to flood risk. The maintenance of flood meadows and washes without obstructions is important to mitigate against flood risk.
- Green Infrastructure Gateways: promote links with the Ouse Valley Way, River Great Ouse, Ouse Washes and local services and recreational opportunities (e.g. boating). Enhancement of facilities serving the navigable waterway.
- Heritage: opportunities for interpretation and education relating to historic landscapes, settlement and the Civil War fieldwork.

- Landscape: retain the fen-edge, Ouse Valley and open landscape and 'skyscape' of traditional fenland. Opportunities exist to enhance the landscape through post-mineral extraction restoration.
- Publicly Accessible Open Space: maintenance of access to the Ouse Valley and along the Washes.
- Rights of Way: maintenance of the Ouse Valley Way and the Rights of Way network along the Washes.

Current Projects (see Appendix 15 for further details)

- Projects that relate to the opportunities identified above are yet to be identified by partners

Future Projects (see Appendix 15 for further details)

- Rights of Way Improvement Projects

4.4.12 Target Area 3.9: Chatteris

Background

Located in the south of Fenland, Chatteris is the smallest of the four market towns with a population of approximately 10,000. Chatteris has grown quickly in recent years with the town's proximity to Cambridge acting as a catalyst for housing growth.

It boasts an attractive town centre, with narrow streets and a rich mix of historic properties forming a tight urban grain which contributes to the town's unique character. Chatteris offers opportunities for linking existing Green Infrastructure such as the former Chatteris to Somersham railway line and through improvements to existing open spaces.

Opportunities within the target area to inform future project development

Chatteris was included in the previous Green Infrastructure Strategy as it lies within the Cambridge sub-region. The original Strategy identified the development of the South Chatteris Country Park as an important project. The former Chatteris to Somersham railway line would provide a link to such an area from London Road, Chatteris, as well as providing a sustainable transport link to Somersham, Bluntisham, St. Ives and 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, although most transport was undertaken by road. The Forty Foot Drain is maintained as a navigation by the Middle Level Commissioners. A connection with this past use could be made based on improved Green Infrastructure.

Improvements to the existing parks and green spaces in Chatteris should be also included. At the moment there is a shortage of open space compared to the size/population of Chatteris. This could include improvements/enhancements to the Parkside Recreation Ground, off Wenny Road and Cromwell Community College playing fields. The cricket ground and 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 walkable town. Most of the facilities it has are within easy walking or cycling distance and this should be highlighted in the target area.

- Biodiversity: through enhancing and protecting 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 like tree planting, local flood alleviation through the creation of SuDS and green space creation.
- Green Infrastructure Gateways: developing Chatteris as a gateway linked 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: contributing to landscape character through the growth of Chatteris and through improving and maintaining the key habitats of the area.
- Publicly Accessible Open Space: Chatteris is deficient in all standards of Accessible Natural Greenspace (ANGSt). Green Infrastructure can help to address these deficiencies.
- Rights of Way: by improving the Rights of Way network, such as utilising the former Chatteris to Somersham railway line, to allow access to Green Infrastructure sites, navigable waterways 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

4.4.13 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 and 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 Cambridgeshire. It is, therefore, considered that this area deserves its own target area. Public transport links and the potential for possible cycle routes linking the area to nearby settlements should 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 water storage bodies adjacent to the Ouse Washes.

Opportunities within the target area to inform future project development

- Biodiversity: potential for the creation of complementary wet grassland and water storage bodies adjacent to the Ouse Washes and provision of significant area of wet grassland and open water 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. The potential to use strategic water storage as an irrigation resource to maintain high productivity of agricultural land.
- Green Infrastructure Gateways: possibility of linking with and developing access along the Ouse Washes and linking with Earith, Sutton and Mepal, and on to Chatteris as well as with the Fens Waterways Link.
- Heritage: restoration of traditional grazing practices.
- Landscape: retention of open landscape and skyline of traditional fenland, juxtaposed with flood defence embankments common to this landscape.
- Publicly Accessible Open Space: opportunity to plan and develop outdoor recreation and nature conservation in close proximity.
- Rights of Way: opportunity to improve cycling and walking links to nearby towns and villages, and links to the Fen Waterways Link, which will connect the cathedral cities of Lincoln, Peterborough and Ely.

Current Projects (see Appendix 15 for further details)

- Trial area of wet grassland creation following mineral extraction and inert landfill currently being undertaken by Aggregate Industries, RSPB and Mick George Ltd.

Future Projects (see Appendix 15 for further details)

- Block Fen/Langwood Fen
- New Green Infrastructure Gateway and boating facilities on the Hundred Foot River between Mepal and Welney.

4.4.14 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 Hundred Foot Washes Internal Drainage Board and the washes are managed largely by the RSPB, Wildlife Trust and Wildfowl and Wetlands Trust (WWT). The site holds internationally important numbers of wintering wildfowl and is important in the UK for its breeding birds during the summer. The WWT have a visitor centre at Welney in Norfolk and facilities for viewing wildlife also exist at Welches Dam, Manea.

See also the Great Ouse Wetland case study on page 16.

Opportunities within the target area to inform future project development

- Biodiversity: there are opportunities around the management of the Ouse Washes and for habitat creation either side of the Washes to mitigate against an increased frequency of flooding impacting on existing habitats, 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 different 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 and via the navigable waterway. There are opportunities to enhance the navigable waterway.
- Heritage: opportunities exist to promote the history of the drainage of the fens as the Washes are an important part of this history.
- Landscape: 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 signage and facilities at key points in Earith, Sutton and Mepal.
- Rights of Way: linkages with the Ouse Valley Way exist at Earith and there are opportunities to develop linkages to Chatteris and March.

Current Projects (see Appendix 15 for further details)

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

4.5 Strategic Area 4: Eastern Fens and Towns

4.5.1 Description

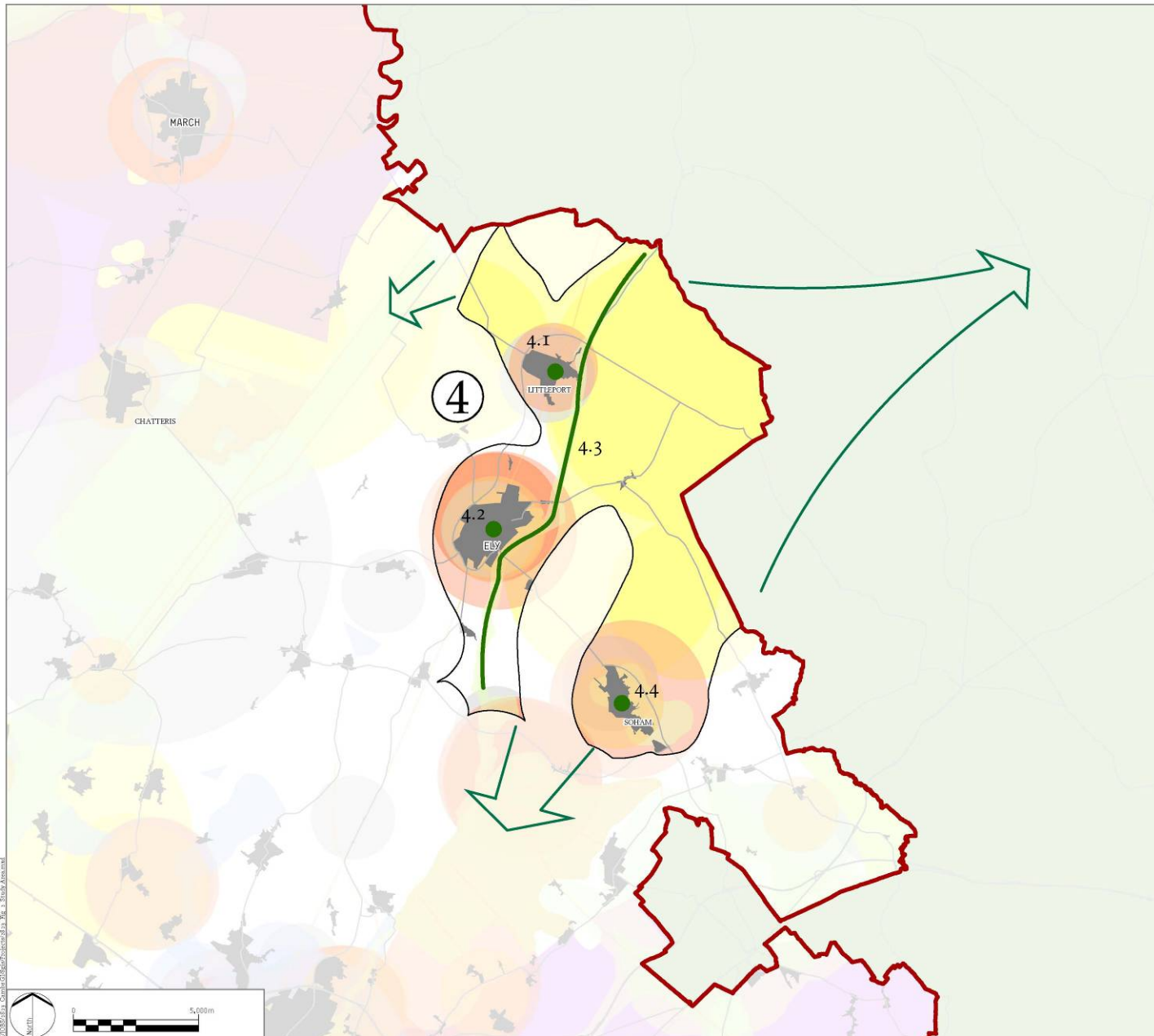
This area is focused on the three market towns of Ely, Littleport and Soham and their surrounding fenland landscape, along with the navigable Ely Ouse. The area is characterised by low-lying intensively farmed fenland - with many of the settlements located on higher ground on the old 'islands' in the fen. Flood risk in the area is a key issue, as much of the land lies at or below sea-level.

The area also contains a range of scattered villages and hamlets. Compared to other areas of Cambridgeshire incomes are lower, deprivation is more marked, and although it is predominantly an area of fertile agricultural land, it contains the majority of the industry and manufacturing associated with food production 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. There is an active boating community in the area and particularly at Ely.

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 well-being. There is 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 and use of the river navigation is expected to increase in future as the Fens Waterways Link vision is realised.

Figure 4-7 Strategic Area 4: Eastern Fens and Towns (Next page)



LEGEND

- Study Area Boundary
- Settlement
- Biodiversity Theme
- Climate Change Theme
- Gateway Theme
- Heritage Theme
- Landscape Theme
- Sustainable Movement Theme
- Publicly Accessible Open Space Theme
- Target Areas
 - 4.1 Littleport
 - 4.2 Ely
 - 4.3 Ely Ouse
 - 4.4 Soham
- Strategic Area Boundary
- Links to/from Strategic Green Infrastructure Network

REV.	DESCRIPTION	APP. DATE

LD A DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Strategic Area 4: Eastern Fens and Towns

ISSUED BY	Oxford	T	01865 887050
DWG.NO	2823_16		
DATE	17/05/2011	DRAWN	DL
SCALE@A3	1:150,000	CHECKED	PL
STATUS	FINAL	APPROVED	IH

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Sources: Ordnance Survey, OpenStreet Map & 2001 Census Area Data.

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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: through 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. Improving navigable waterways to allow access to Green Infrastructure sites and the wider countryside.
- Heritage: by using assets which are associated with the market towns and the historic features in the area.
- Landscape: contributed to 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 deficiency within the area.
- Rights of Way: by improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

4.5.2 Strategic area projects (see Appendix 15 for further details)

Fens Adventurers Partnership: Green Fen Way

Fens Waterways Link (Phase 6)

4.5.3 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 4-8 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 well-being. 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 offer opportunities. This assessment provided confidence that the target areas should be explored in more detail to identify opportunities and realise the potential within each target area.

Strategic Area 4: Eastern Fens and Towns

Target Area	Objectives			
	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	●	●	●	●

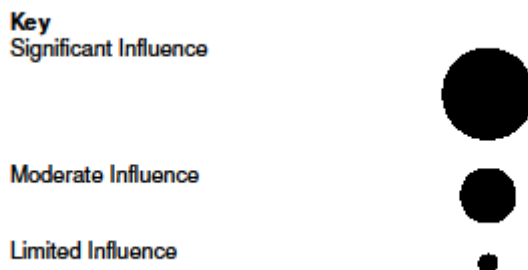


Figure 4-8: How the Eastern Fens and Towns target areas deliver the strategy objectives.

4.5.4 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 north west of the town are the Ouse Washes Site of Special Scientific Interest (SSSI), which is of national importance for its wildlife and rare breeding birds and the Wildfowl and Wetlands Trust's Welney Wetland Centre.

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: the town is characterised by its slightly elevated location above the surrounding Fenland landscape and the River Great Ouse and associated flood plain to the east of the town.
- Publicly Accessible Open Space: additional creation of formal and informal spaces associated with development that offers recreational, education, leisure and sustainable movement opportunities for all residents of the town.
- Rights of Way: improvement in cycling, walking and other Rights of Way links around the town, its surrounding areas, the navigable waterway and the railway station to allow people to use alternatives to the car.

Current Projects (see Appendix 15 for further details)

- Littleport Urban Greenway
- New River Town Park

- Cycleway Improvements
- Woodland Creation

4.5.5 Target Area 4.2: Ely

Background

Ely is one of England's 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. Ely is home to a number of nature conservation sites with national and international designations as well as a busy navigable waterway.

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 reason for allotment expansion in north Ely and the development of medium to large-scale Green Infrastructure projects to ease 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: maintaining the distinctive character of the Isle of Ely through careful open space provision that supports the wider environmental visions outlined in the City's 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.

- Rights of Way: promote a more extensive network of footpaths, bridleways and cycle routes that complement the navigable waterway and provide alternatives modes of transport for residents to and from the places they need to go.

Current Projects (see Appendix 15 for further details)

- Ely Country Park

Future Projects (see Appendix 15 for further details)

- Woodland Creation
- North Ely Development
- Ouse Sustainable Drainage System (SuDS)
- Sustainable Access across A10
- A waterspace study has been proposed to develop a master plan for the river corridor in this area.

4.5.6 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 help reduce 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.

Opportunities within the target area to inform future project development

- Biodiversity: continuing Higher Level Stewardship on Soham Commons to provide habitat opportunities and restoration for a wide range of species.
- Climate Change: protection of existing open spaces to reduce habitat loss as a result of climate change and developing new public realm locations that provide attractive and functional places that respond to climate change.
- 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 heritage of the town and working with residents to develop and interpret better open spaces within its historic centre.
- Landscape: the landscape character of Soham is typically Fenland in nature with a flat and continuous vista of the countryside and the town. The town's three registered Commons also provide the town with rural nature close to the town's centre.
- 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.
- Rights of Way: providing the infrastructure across the town and to neighbouring villages for people to walk, ride and cycle to the places they wish to go.

Current Projects (see Appendix 15 for further details)

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

4.5.7 Target Area 4.4: Ely Ouse

Background

The Ely Ouse runs from where the River Cam meets the Old West River north past Ely and Littleport. The river at this location has many County Wildlife Sites and is a key access and recreation corridor - not only for river traffic but also for cyclists and walkers. The economic value of the Ely Ouse must be balanced against maintaining the wildlife habitats, character and flood management aspects of the river.

Opportunities within the target area to inform future project development

- Biodiversity: can be improved through the restoration of floodplain grassland along the Ely Ouse and the maintenance and improvement of the County Wildlife Sites along the river. The Ely Ouse links to the Cam and Old West River as a continuous habitat.
- Climate Change: continued management of the river for flood alleviation.
- Green Infrastructure Gateways: opportunities exist for promoting and strengthening the river as a key recreational link between Cambridge and Ely, to Wicken Fen and along the Old West River to the Great Ouse and the Market Towns in Huntingdonshire. These opportunities relate to use of the river itself and the adjacent Rights of Way network.

- Heritage: there are opportunities to promote the history of the landscape and drainage of the fens and to link to neighbouring historic attractions including Stretham Old Engine, Denny Abbey, Ely and Cambridge.
- Landscape: continued management of the river and adjacent habitats to maintain and improve the landscape character along this corridor.
- Publicly Accessible Open Space: the river forms a key corridor of Accessible Natural Greenspace.
- Rights of Way: continued management of important routes along the river (Ouse Valley Way, Fen Rivers Way) and opportunities to link the river corridor to the wider Rights of Way network.

Current Projects (see Appendix 15 for further details)

- Environmental Stewardship Schemes - commons
- Eastern Gateway Green Infrastructure expansion
- A waterspace study has been proposed to develop a master plan for the river corridor in this area.

4.6 Strategic Area 5: Chippenham Fen

4.6.1 Description

This area is focussed on Chippenham Fen and the surrounding landscape. Chippenham Fen is a nationally important remnant of fen habitat and has 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 Spider³⁵ 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 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 well-being due to the nature of the area and its location within Cambridgeshire.

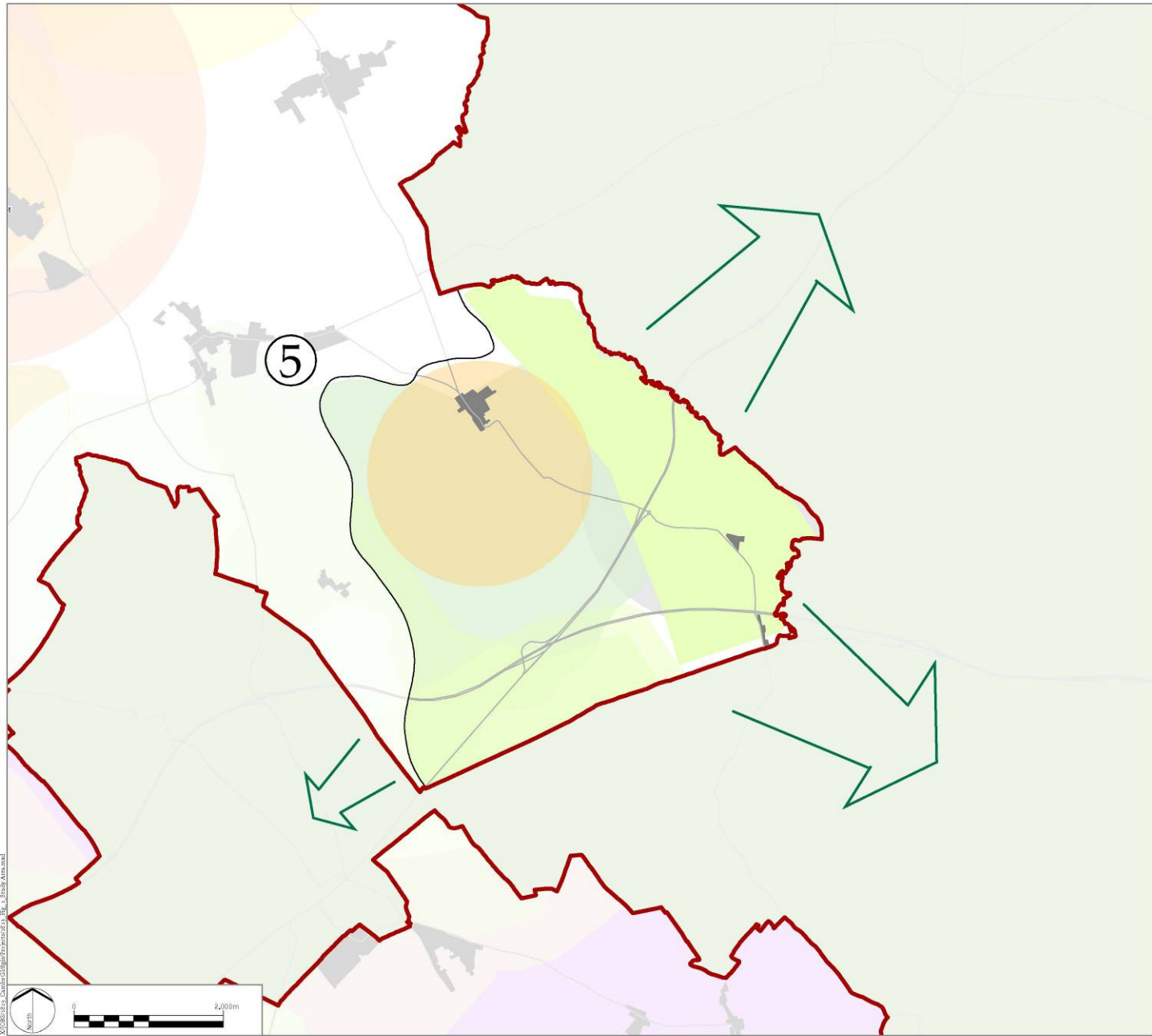
Looking at the Green Infrastructure themes, investment in this area offers significant opportunities for:

- 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 promote 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. 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.

Figure 4-9 Strategic Area 5: Chippenham Fen (Next page)

³⁵ <http://www.bbc.co.uk/news/uk-england-11806723>



- LEGEND
- Study Area Boundary
 - Settlement
 - Biodiversity Theme
 - Climate Change Theme
 - Gateway Theme
 - Heritage Theme
 - Landscape Theme
 - Sustainable Movement Theme
 - Publicly Accessible Open Space Theme
 - Strategic Area Boundary
 - Links to/from Strategic Green Infrastructure Network

REV.	DESCRIPTION	APP. DATE
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LDĀ DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Strategic Area 5: Chippenham Fen

ISSUED BY	Oxford	T	01865 887050
DWG.NO	2823_17		
DATE	17/05/2011	DRAWN	DL
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Sources Ordnance Survey, Open Street Map & 2001 Census Area Data.

4.6.2 How do target areas deliver strategy objectives?

In the Chippenham Fen strategic area, the target area is:

- Chippenham Fen

The bubble matrix Figure 4-10 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 area should be explored in more detail to identify opportunities and realise the potential within the target area.

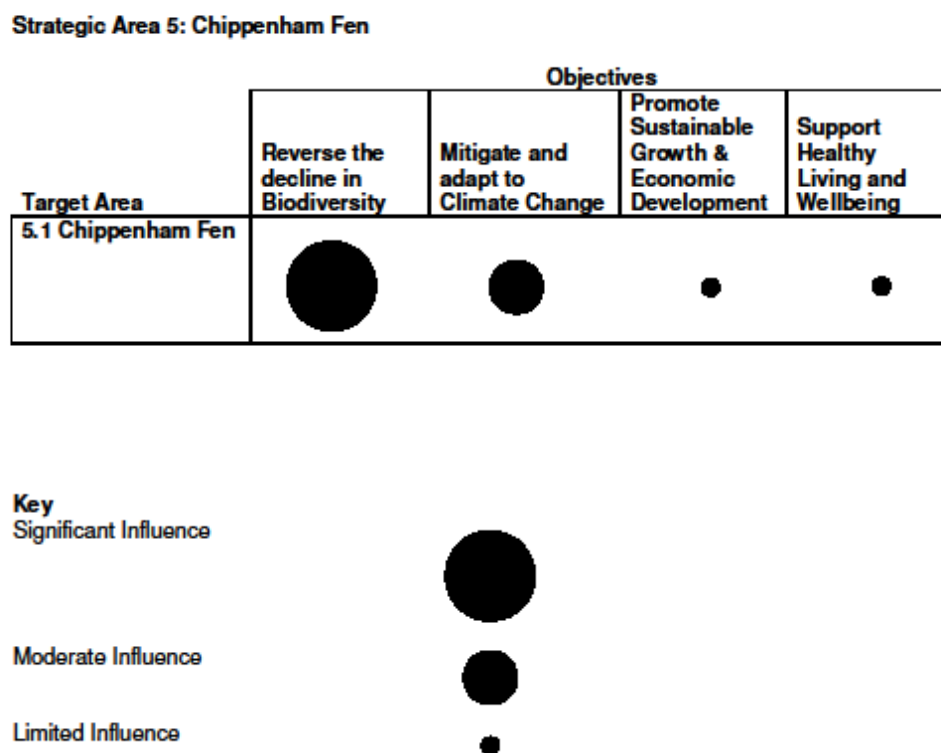


Figure 4-10: How the Chippenham Fen target area delivers the strategy objectives.

4.6.3 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 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, 2010³⁶.

Opportunities within the target area to inform future project development

- 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 areas.
- Contributing to landscape character: through improving and maintaining the fen landscape.

Current Projects (see Appendix 15 for further details)

- Continued reserve management (including scrub control, extensive grazing and monitoring).
- Water management investigation with the Environment Agency to understand the best method of mitigating the reduction in water in the aquifer due to settlement growth in Red Lodge, Newmarket and other parts of the catchment.

³⁶ <http://www.naturalengland.org.uk/outwork/conservation/designatedareas/nnr/1006036.aspx>

4.7 Strategic Area 6: Cambridge and surrounding areas

4.7.1 Description

This strategic area is centred on Cambridge with its high quality Green Infrastructure within the City and linking to the surrounding countryside and sites such as Milton Country Park, Coton Countryside Reserve, Wandlebury Country Park and the Gog Magog Hills (the latter two forming an important gateway to the chalklands south of Cambridge).

The Cambridge area is experiencing major housing growth and the strategic area includes areas where major developments have taken place or are proposed and which generate significant needs and opportunities for enhancement of Green Infrastructure.

Cambridge is internationally famous for the quality of its environment. It has a legacy of historic buildings built over the last 1,000 years. An essential part of Cambridge's character stems from the relationship between the City's buildings and its open spaces, and the important role of trees, landscape features and the River Cam running through the heart of the City.

Many open spaces in Cambridge link together, with frequent juxtaposition of public and private spaces of different sizes and functions. These spaces form a number of corridors which link the centre of Cambridge to the surrounding area. The corridors of green space allow the City to be viewed in its landscape from a number of key approaches. The Cambridge Green Belt³⁷ seeks to protect and enhance this very special setting for future generations.

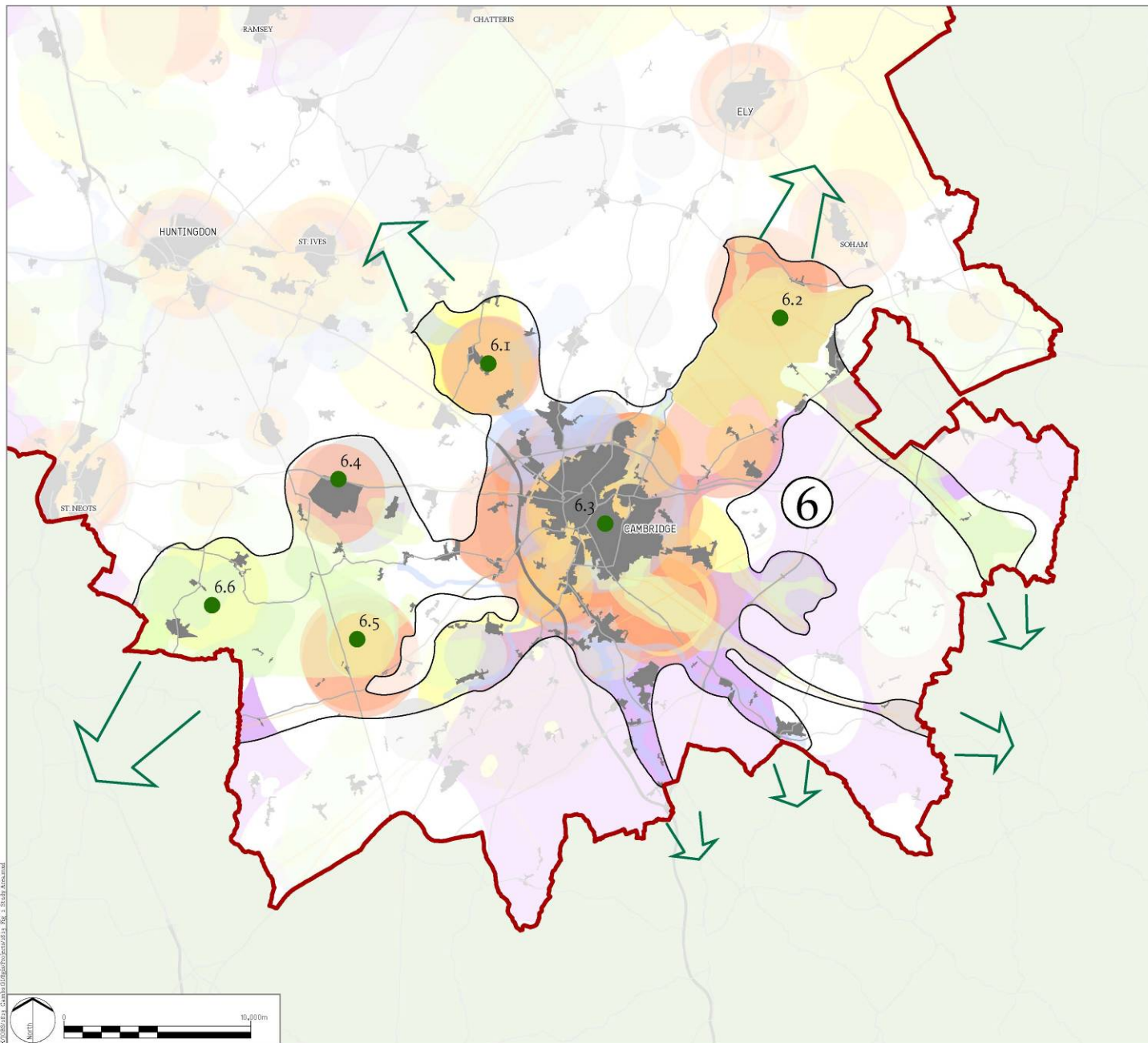
The area to the north of Cambridge falls gently towards the valley of the river Great Ouse and the villages of the fen edge and includes the proposed new settlement of Northstowe.

The area extends westwards along the Bourn Brook to encompass the growing 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 this sector.

³⁷ Green Belt is an area of land designated in Development Plans that restricts new built development in order to achieve a number of specific purposes, such as preventing the sprawl of large built-up areas. Green Belts are expected to offer long-term certainty, with their boundaries being altered only in exceptional circumstances.

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.

Figure 4-11 Strategic Area 6: Cambridge and surrounding areas (Next page)



LEGEND

- Study Area Boundary
- Settlement
- Biodiversity Theme
- Climate Change Theme
- Gateway Theme
- Heritage Theme
- Landscape Theme
- Sustainable Movement Theme
- Publicly Accessible Open Space Theme
- Target Areas
 - 6.1 Northstowe
 - 6.2 Wicken Fen & Anglesey Abbey
 - 6.3 Cambridge
 - 6.4 Cambourne
 - 6.5 Wimpole
 - 6.6 West Cambs Woodlands
- Strategic Area Boundary
- Links to/from Strategic Green Infrastructure Network

REV.	DESCRIPTION	APP. DATE
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LDĀ DESIGN

PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE
Strategic Area 6: Cambridge and Surrounding Areas

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The River Cam, a busy statutory navigation managed by the Conservators of 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 formal parklands and the landscape to the north and north west is one of extensive fenland fields with fewer hedges and other features.

Looking at the how the 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 well-being 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, chalk grassland 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 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 (including improvement), neighbouring strategic destinations and wider countryside connectivity.
- Heritage: by using assets which are associated with Cambridge, housing developments and the network of historic linear features and sites (such as Devil's Dyke, Denny Abbey and Wandlebury) across the strategic area.

- Landscape: contributing to landscape character through the growth of Cambridge, and through improving and maintaining the key habitats of the area.
- Publicly Accessible Open Space: 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 in the far west of the area. At the 2ha plus standard there are significant deficiencies across the whole area.
- Rights of Way: 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.

4.7.2 Strategic area projects (see Appendix 15 for further details)

Some significant Green Infrastructure projects that are located within the strategic area are outside any of the target areas (see Appendix 15 for further details).

- Chalk Rivers project
- Fowlmere Nature Reserve extension and development of facilities
- Linear monuments (see the Devil's Dyke case study on page 55)
- Woodland linkage project
- Fens Waterways Link

4.7.3 How do target areas deliver strategy objectives?

In the Cambridge and surrounding areas strategic area, the target areas are:

- Northstowe
- Wicken Fen and Anglesey Abbey
- Cambridge
- Cambourne
- Wimpole
- West Cambridgeshire woodlands

There are 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 4-12 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. Cambridge has significant potential to contribute towards all of the Strategy's objectives, and emerging plans for the proposed new town of Northstowe display significant potential to contribute towards mitigating and adapting to climate change, promoting sustainable growth and economic development, and supporting healthy living and well-being. This assessment provided confidence that the target areas should be explored in more detail to identify opportunities and realise the potential within each area.

Strategic Area 6: Cambridge & Surrounding Areas

























Target Area	Objectives			
	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 and Anglesey Abbey				
6.3 Cambridge				
6.4 Cambourne				
6.5 Wimpole				
6.6 West Cambridgeshire Woodlands				



Figure 4-12: How the Cambridge and surrounding area target area delivers the strategy objectives.

4.7.4 Target Area 6.1: Northstowe

Background

A key part of the development strategy for South Cambridgeshire District Council is the development of a new town, 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)³⁸, with much of the development lying on the former airfield at Oakington. Areas of 'green separation' will run between Northstowe and 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 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.

³⁸ An Area Action Plan is used to provide a planning framework for areas of change and areas of conservation. Area Action Plans have the status of Development Plan Documents.

Northstowe was included in the second round of the eco-town process and the Government has awarded a grant to fund a coordinated set of studies, along with a further capital grant for two eco-town demonstrator projects.

These projects include retro-fitting existing 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.

Opportunities within the target area to inform future project development

- Biodiversity: although currently limited in opportunities for biodiversity, the existing, partially brownfield site³⁹ 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 urban heat island effects.
- 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 that 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, as well as historic landscape elements near 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 be utilised in the future.
- Landscape: 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 a priority,

³⁹ Brownfield sites describe areas with permanent structures such as unused buildings and infrastructure, and usually some bare ground and a range of habitats, such as shrub areas and temporary water pools. These sites are also known as previously developed land, and they are largely confined to urban areas.

utilising existing landscape features such as stream valleys, historic field patterns and maturing airfield woodlands.

- **Publicly Accessible Open Space:** The ANGSt analysis indicates that Northstowe is deficient at the 2ha plus and 20ha plus standards and is mostly deficient at the 100ha plus standard apart from the northwest of Northstowe either side of Station Road, as this area falls within the catchment for Fen Drayton Lakes and the Ouse river corridor. There is no deficiency at the 500ha plus standard due to the River Ouse corridor. 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.
- **Rights of Way:** 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.

Current Projects (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.

4.7.5 Target Area 6.2: Wicken Fen and Anglesey Abbey

Background

The Wicken Fen Vision 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 range 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.

See also the Reach lode Bridge case study on page 142.

Opportunities within the target area to inform future project development

- Biodiversity: opportunities for biodiversity relate to the increase in habitats and the links between them.
- Climate Change: mitigating and adapting to climate change by providing space for flood water storage and through capturing and storing carbon through habitat restoration/creation.
- Green Infrastructure Gateways: opportunity to create a gateway for local communities and visitors to over 2,500 acres.
- Heritage: interpretation of the biodiversity, landscape and social history of the area.
- Landscape: enhancement through returning land to an earlier historic fen landscape.
- Publicly Accessible Open Space: opportunities to address deficiencies in Accessible Natural Greenspace Standards (ANGSt) by creating more areas of publicly accessible spaces.
- Rights of Way: opportunities to create a network of way-marked routes for walkers, cyclists and horse riders linking Cambridge, local villages, Wicken Fen, Anglesey Abbey and the wider countryside.

These will continue to be developed as the Vision progresses

Current Projects (see Appendix 15 for further details)

- Wicken Fen Vision

Future Projects (see Appendix 15 for further details)

- Wicken Fen Heritage Trails

4.7.6 Target Area 6.3: Cambridge

Background

Cambridge is a compact City with an historic core and riverside that attracts over 4.1 million visitors a year, and is surrounded by attractive and accessible green spaces. The City sits within arable lowland, with the landscape allowing a number of key views into and out of Cambridge.

Cambridge has a distinct character and landscape setting and is renowned for its history and architecture. The variety of listed buildings and conservation areas, the colleges, river and the commons, residential areas, open spaces and gardens (such as The Backs), archaeological and historic sites, natural features and habitats all contribute to the distinctiveness and uniqueness of the City's landscape. The rural hinterland is especially close to the west of the City, although nowhere in Cambridge is very far from the countryside or the green corridors that run into the City. The green spaces strongly define and encircle the central area, allowing the historic core of Cambridge to be seen across open ground. The transition between the relative peace and space of the open space and the bustle and intimacy of the densely packed City streets is very marked. These qualities are fragile, finite and irreplaceable, and should be safeguarded. 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 economy, both locally and nationally. The distribution, physical separation, setting, scale and character of the necklace of villages surrounding the City are essential to the Green Belt designation.

The City has just over 1500 listed buildings, of which approximately 10% are Grade I and just under 4% are Grade II*. Cambridge has five Scheduled Monuments and 11 Historic Parks and Gardens. There are 11 Conservation Areas⁴⁰ 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.

Cambridge 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. 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 nine times the average income of Cambridge residents, placing home ownership out of the reach of many of the City's residents and workers⁴¹. In order to provide new homes close to jobs, a significant level of growth is proposed on the edge of Cambridge. This growth will provide more homes

⁴⁰ Conservation Areas are areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.

⁴¹ Hometrack monitoring data, March 2010.

for key workers and other groups, increasing 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.

A key aspect of the development strategy for the Cambridge area is a number of major new urban extensions to the City. The 2003 Cambridgeshire and Peterborough Structure Plan required a review of the Cambridge Green Belt to release land for the long term development needs of Cambridge, in specified locations and subject to the purposes of the Cambridge Green Belt (Structure Plan policy P9/2b).

The required review of the Cambridge Green Belt has already been completed through the development plans of the City Council and of South Cambridgeshire District Council. These plans have released land to meet the long-term development needs of Cambridge at the southern fringe, at north west Cambridge and at Cambridge Airport. Many of the urban extensions include land in both Cambridge City Council and South Cambridgeshire District Council's administrative area, and are reviewed within this section. They are dealt with in various different planning policy documents and are at various stages of implementation. These sites are on the southern, north west and eastern fringes of Cambridge, partly within the City's boundaries and partly within South Cambridgeshire.

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 urban extensions to Cambridge are particularly relevant to the Green Infrastructure Strategy as they create additional demands for access to Green Infrastructure at the same time as providing opportunities to deliver new areas of Green Infrastructure, both strategic and local. These areas of Green Infrastructure play a key role in linking the urban area with the surrounding countryside.

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

Cambridge Southern Fringe:

Trumpington Meadows

Trumpington Meadows comprises 1200 new homes alongside supporting facilities. It lies within both Cambridge City and South Cambridgeshire District Councils' areas, and 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 and woodland alongside 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, and 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, and 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 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 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 agreement⁴², in 2008. Bell School has 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 ending in a crescent on its southern end and a landscaped area adjacent to Greenlands on its northern end. The layout provides an

⁴² A Section 106 agreement is a package of funding, land, or other contributions from a developer to help set up and support the local community. For example, S106 money is used to fund transport improvements, build community centres and provide land for green spaces.

opportunity for an attractive pedestrian link with views out to the countryside beyond the site, including the Gog Magogs to the south. The open spaces on Bell School are not in themselves strategic in nature. As a part of the greater offer of the Southern Fringe, Bell School's open space forms a local part of the strategic provision of open space for the South of the City.

Clay Farm

This site lies entirely within Cambridge's administrative area and provides 2300 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 of overall character of the proposed development, with the existing trees, plantations, hedges, Hobson's Brook and associated ditches characterising the development, and providing the background around which the new landscape will be designed.

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 Busway's Addenbrooke's spur. South of The 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 site, 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 edges. Along the sides of the site that face Hauxton Road and the Addenbrooke's Access Road is a buffer 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, and 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 and Ride crossing. The open spaces on Glebe Farm are not in themselves strategic in nature. As a part of the wider Southern Fringe, Glebe Farm's open spaces form a local part of the strategic provision of open space for the South of the City.

Addenbrooke's 20:20

The site lies within Cambridge's administrative area but is highly visible from public vantage points beyond the City to the south and 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.

Whilst there are recognised opportunities to green the wider site, the open spaces are not likely to be of such a size to warrant definition as a strategic project. As with Bell School and Glebe Farm, smaller open spaces will contribute to the high-quality sustainable environment being created in the Southern Fringe.

North West Cambridge:

Land between Huntingdon Road and Histon Road (NIAB 1)

A park is proposed in the centre of this development of 1780 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. A park will be provided in the centre of the development, near the 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 play areas will be provided throughout the site. Some of the open spaces are purely local in nature, whilst the green corridor has a more strategic role.

Land between Huntingdon Road and Histon Road (NIAB 2)

A second phase of development at NIAB is proposed for 1100 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 2000 students and 3000 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 publicly accessible open space such as the Coton Countryside Reserve and the NIAB 1 and 2 developments. The open spaces which make up the green corridor and the strategic gap are of strategic importance.

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 to 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 is bounded by the A14, Histon Road and Kings Hedges Road and 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 planning 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.

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 10 years (2006 to 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.

Many of these actions are local in nature, whilst the majority of strategic schemes are already underway or are outlined in the Green Infrastructure Strategy as future projects, both in Cambridge and South Cambridgeshire.

See also the Byron’s Pool case study on page 155, the River Cam Habitat and Access Enhancement case study on page 156 and the Coton Countryside Reserve case study on page 129.

Opportunities within the target area to inform future project development

- 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. There are deficits in the existing levels of parkland habitat in the north of Cambridge and in Queen Edith's ward.

- **Climate Change:** there are opportunities around remediation of the urban heat island effect and flood alleviation. The whole of the City forms an urban heat island. Surface water drainage needs to be a key consideration for the City, given its densely built-up nature. Existing open space should be protected and planting regimes for open spaces should consider climate change.
- **Green Infrastructure Gateways:** the growth areas provide opportunities for enhanced linkages between the City, the surrounding countryside, the navigable river and Green Infrastructure sites. Examples of linkages between the City and the surrounding countryside include Cambridge East, northwest Cambridge, Grantchester Meadows, Trumpington Meadows and Haslingfield, and examples of Green Infrastructure sites are Coton Countryside Reserve, Wandlebury/Gog Magogs and Milton Country Park.
- **Heritage:** by the protection and enhancement of the historic built and natural environment.
- **Landscape:** by ensuring that the growth of Cambridge protects and enhances the setting of the historic City and 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/south-east of the City, for 20ha plus in the northern and southern fringes, for 100ha plus on the eastern side of Cambridge and at the 500ha plus standard the majority of the City except the very northern edge near Milton.
- **Rights of Way:** by ensuring that all communities have access to sustainable modes of movement and enhanced 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, the river 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. The north of the City has a limited Rights of Way network, whilst the network in the south-east of the City is fragmented.

Current Projects (see Appendix 15 for further details)

Cambridge Southern Fringe

- Trumpington Meadows:
 - Country Park
 - Haslingfield to Trumpington Meadows Footpath Link
- Clay Farm Green Corridor

North West Cambridge

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

Cambridge 'Necklace' projects

- Coton Countryside Reserve
- Gog Magog Countryside Project (including Wandlebury Country Park)
- 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 meadows

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.

4.7.7 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 comprises 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.

See also the Cambourne case study on page 15.

Opportunities within the target area to inform future project development

- Biodiversity: opportunities exist to continue with Cambourne green spaces management and 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, with Fen Drayton Lake, Coton Countryside Reserve and Wimpole all within 10km of Cambourne.
- Heritage: opportunities for conservation, enhancement and interpretation.
- Landscape: Cambourne lies on a relatively high Clay plateau and the immediate area features small mature woodlands, mature hedgerows and wooded stream valleys, with long views of the surrounding landscape. There are opportunities to preserve and enhance existing landscape elements while also restoring the historic field patterns close by, 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 potential for community uses such as markets.

- Rights of Way: 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.

Current Projects (see Appendix 15 for further details)

- Large-scale public open space provision (including greenways, village greens, woodland, lakes, SuDS areas and access routes).

4.7.8 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 are 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 2500 acre estate for walkers, cyclists and horse riders together with links to neighbouring quiet lanes and to Cambridge are important. There are over 20 listed buildings or structures (including four Grade II* buildings and the Grade I listed house) and the parkland is a Grade I Registered Park and Garden. 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

- Biodiversity: through the organic farming and nature conservation interest of the SSSI and woodland belts.
- Green Infrastructure Gateways: Wimpole acts as a public park for South West Cambridgeshire. As such, cycle tracks will provide a gateway resource for public access into the wider footpath and bridleway network.
- Heritage: opportunities through interpretation of the site which is Grade 1 and Grade II* listed and includes a Schedule Ancient Monument and a Grade I Registered Park and Garden.
- Landscape: maintaining and improving the historic landscape of the Estate.
- Publicly Accessible Open Space: maintaining and improving the Estate as an area that continues to contribute to meeting Accessible Natural Greenspace Standards (ANGSt).

- Rights of Way: provision of 12 miles of tracks over new routes and publicly accessible open space, which will need careful design to maintain the important heritage designations and landscape character of Wimpole.

Current Projects (see Appendix 15 for further details)

- Wimpole Cycling Link

4.7.9 Target Area 6.6: West Cambridgeshire Woodlands

Background

The West Cambridgeshire Woodlands target area encompasses the clay plateau between the Bourn Brook and River 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.

See also the West Cambridgeshire Hundreds case study on page 54.

Opportunities within the target area to inform future project development

- Biodiversity: 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.
- Climate Change: through the creation and management of woodland to contribute to woodfuel production and for the storage of carbon.
- Green Infrastructure Gateways: develop small gateways to woodlands and the wider countryside from local villages within the target area.
- Heritage: promoting and explaining the history of traditional woodland management, the landscape and the social history of ancient woodlands.
- Landscape: contributing to improving and maintaining the landscape through woodland creation and management and through enhanced land management across the area.
- Publicly Accessible Open Space: create new areas of accessible greenspaces through woodland creation. Accessible natural

Greenspace analysis identifies deficiencies in the area at the very local (2ha) and very large (over 500ha) standards.

- Rights of Way: better links from local villages to neighbouring woodlands that currently have limited access routes.

Current Projects (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 and involvement

Future Projects (see Appendix 15 for further details)

- Bourn Brook Enhancement (Countryside Restoration Trust vision)

Case Study - Huntingdonshire Health Walks

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, 542 people attended a total of 8081 times. In the first six months of 2010-11 452 people attended a total of 4142 times, using the scheme as a way to benefit their health.

This nationally accredited 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 five 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

Case Study - Coton Countryside Reserve

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 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 a 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 improvements. 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.

5 Local Authority Issues and Green Infrastructure Priorities

5.1 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 countywide issues and assets. However, the 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 5 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. It also gives a summary of the main characteristics of each district.

5.2 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.

5.2.1 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 nine times the average income of Cambridge residents, placing home ownership out of the reach of many of the City's residents and workers⁴³, meaning there is a particular need for affordable housing in the City. In order to maintain and strengthen the worldwide 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.

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 north eastern fringe was previously earmarked for housing development but, after further research, this is now being considered for

⁴³ Hometrack monitoring data, March 2010.

employment-led development (see section 6.3). 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.

5.2.2 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 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.
- Protection and improvement of people's health and levels of physical activity.

5.3 Cambridge Fringe Sites

As mentioned in the background to strategic area 6 (section 4.7.6) a key aspect of the development strategy for the Cambridge area is a number of major new urban extensions. 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, and a review of the Cambridge Green Belt is now complete. Many of the urban extensions include land in both Cambridge City Council and South Cambridgeshire District Council's administrative areas and have extensive inputs from both authorities; therefore we are reviewing these areas together. They are dealt with in various different planning policy documents and are at various stages of implementation.

5.4 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 housing 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, particularly through a number of business parks located in the countryside around Cambridge. Future development is focused on a few major sites on the fringes of Cambridge (some including land in Cambridge City) and on a planned new town at Northstowe.

5.4.1 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 South Cambridgeshire 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 high house prices 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 well-being 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.

5.4.2 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 and 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. These woodlands could 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 in some areas, 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 which has over 20 listed buildings or structures (including four Grade II* buildings and the Grade I listed house), the parkland is a Grade I Registered Park and Garden, as well as other designations including SAM and SSSI. Heritage can also increase public understanding and enjoyment of an area through information boards and signs.

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 into the countryside, integrating them with the Green Infrastructure network and exploiting their collective value.

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, 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 Green Infrastructure 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.

5.4.3 Green Infrastructure priorities for South Cambridgeshire

- Providing Green Infrastructure to meet the needs of the expanding population of the district, Cambridge and sub-region.
- 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.
- 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 with and supporting people, groups and initiatives to help deliver Green Infrastructure.
- Making real improvements to places and quality of life.
- Reducing the causes and impacts of climate change.

5.5 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 76,231⁴⁴. The district contains three market towns, and 50 other villages and hamlets varying in size, including the fringe areas of Newmarket.

5.5.1 Key issues for East Cambridgeshire

The role of the larger scale places in East Cambridgeshire (including Wicken Fen, Ouse Washes and land next to rivers) 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 very important as East Cambridgeshire meets the challenges of an ageing and less healthy population. Work 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 masterplanning 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 East Cambridgeshire District Council strategic objectives will help to deliver the District's spatial vision and guide development in the district. These objectives will also help to provide a framework for developing appropriate indicators and targets for monitoring purposes. These have been developed with regard to other relevant plans and strategies, national and regional planning guidance, and community views expressed through the Sustainable Community Strategy and Local Development Framework (LDF) consultation process. They have also taken

⁴⁴ Cambridgeshire County Council mid-year population estimate 2006

account of the overriding aim of land-use planning, which is to achieve 'sustainable development':

- 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.

5.5.2 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 Green Infrastructure 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 populations that support prosperous and involved communities in East Cambridgeshire.
- Promotion of a District wide initiative to increase woodland creation and outdoor recreation.

5.6 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.

5.6.1 Key issues for Fenland

- Generally high levels of deprivation in the east of the district, March and Wisbech areas.
- Below average Gross Value Added (GVA) per head compared to the national average.
- A significant percentage of Fenland's work force commutes 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 (especially 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. Lower provision of Public Rights of Way in Fenland with a need to improve access for health, recreation and sustainable movement for pedestrians, cyclists and horse-riders.
- Shortage of quality employment premises for small and medium enterprises including incubation (or new business 'start up') facilities, offices and managed workspaces.
- Several employment sites in the District include areas of under-utilised or vacant land.
- Much of the District lies in Flood Risk Zones 2 and 3.
- Lack of hotel accommodation in the District to serve tourists and business travellers.

5.6.2 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 the District.
- Exploiting existing Green Infrastructure 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.
- 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 District's 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, facilitate the provision of the relevant infrastructure and develop the 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 biodiversity and maintain the landscape character of the District, whilst serving to promote tourism.

5.7 Huntingdonshire

Huntingdonshire is still predominantly rural in character with an area of approximately 913km² and a population of 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.

5.7.1 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, with Green Infrastructure a vital part of this provision that will 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.

5.7.2 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.
- 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 Hinchingsbrooke 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 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 other key destinations.
- Heritage: using assets that are associated with the Market Towns, mineral extraction sites, 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, restoration of mineral extraction sites and through improving and maintaining the key habitats of the area, particularly the historic fen and ancient woodlands.
- Rights of Way: improving the Rights of Way network to allow access to Green Infrastructure sites and the wider countryside.

Case Study - Reach Lode Bridge

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

Case Study - Great Fen

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 carbon and 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 3700 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 benefits, including flood protection, tourism and enhanced local access.



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6 Delivery of the Strategic Network

6.1 Introduction

This chapter sets out three key areas that need to be explored to ensure delivery of the strategic network and Strategy as a whole: planning policy, funding, and skills/partnership working.

When delivering a project it is important that the long-term management and maintenance of Green Infrastructure is planned from the start. Management and maintenance will vary depending on the nature of the project, but some examples of management/maintenance options include;

- Charitable Management Trusts
- Community Development Trusts
- Co-operatives & partnerships
- 'Friends' Groups
- Landowners, farmers and land managers
- Local Authorities (including Parish councils)
- Management Companies
- Voluntary organisations

The chapter begins by asking whether, if delivered, the Strategic Network would meet the objectives of the Strategy.

6.2 Meeting the objectives of the Strategy

If the projects in the strategic network were delivered would the objectives of the whole Strategy be met? If new projects were developed based on the opportunities identified in the Strategic Network would the objectives of the whole Strategy also be met? Figure 6-1 shows how aspects of the strategic network will help to meet the objectives of the Strategy, and gives some examples of specific projects that will contribute towards this. Throughout the development of the strategic network reference was made to the objectives to ensure that projects within the strategic network were 'aligned' to overarching objectives.

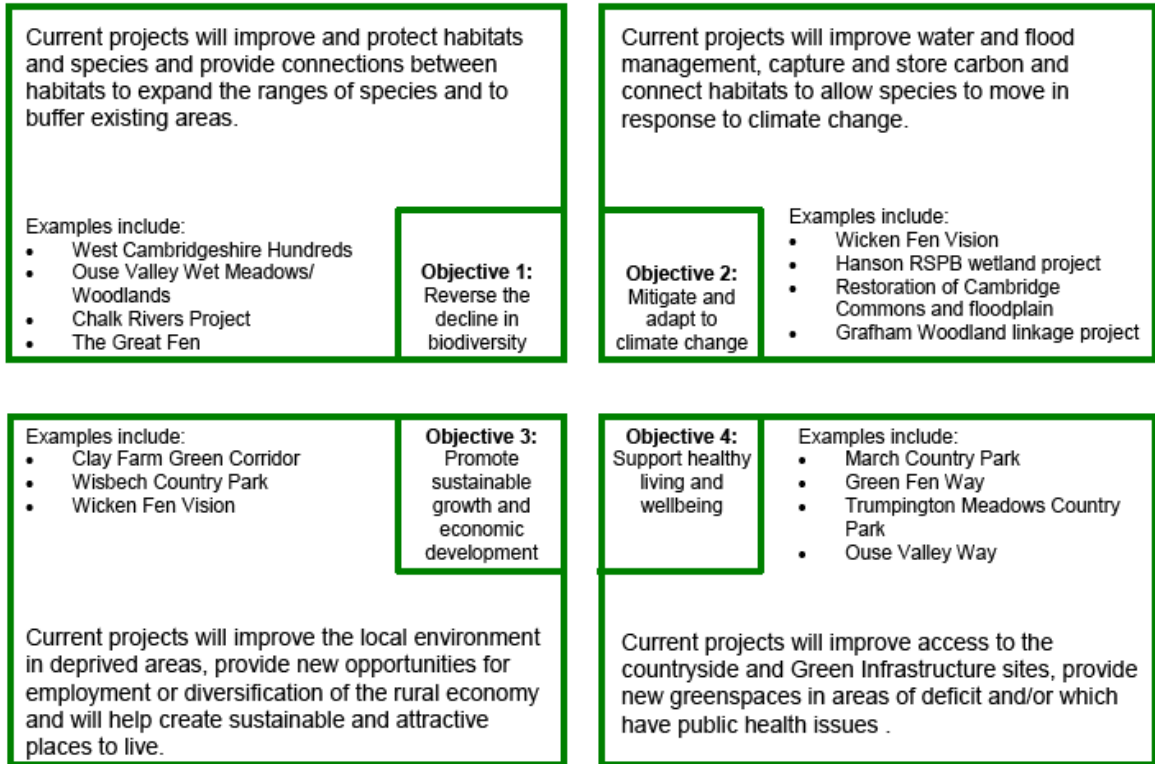


Figure 6-1 How the strategic network helps to meet the objectives of the Green Infrastructure Strategy

For each target area, the strategic network provides opportunities for developing new Green Infrastructure projects. If these opportunities are taken, and projects are developed that capitalise on the opportunities, the strategic network will continue to meet the objectives of the Strategy.

Figure 6-2 shows how new projects have the opportunity to meet the objectives. It is worth noting that new development has the opportunity to contribute towards meeting all of the objectives. In developing new projects Local Authorities and other stakeholders should ensure that they work with local communities.

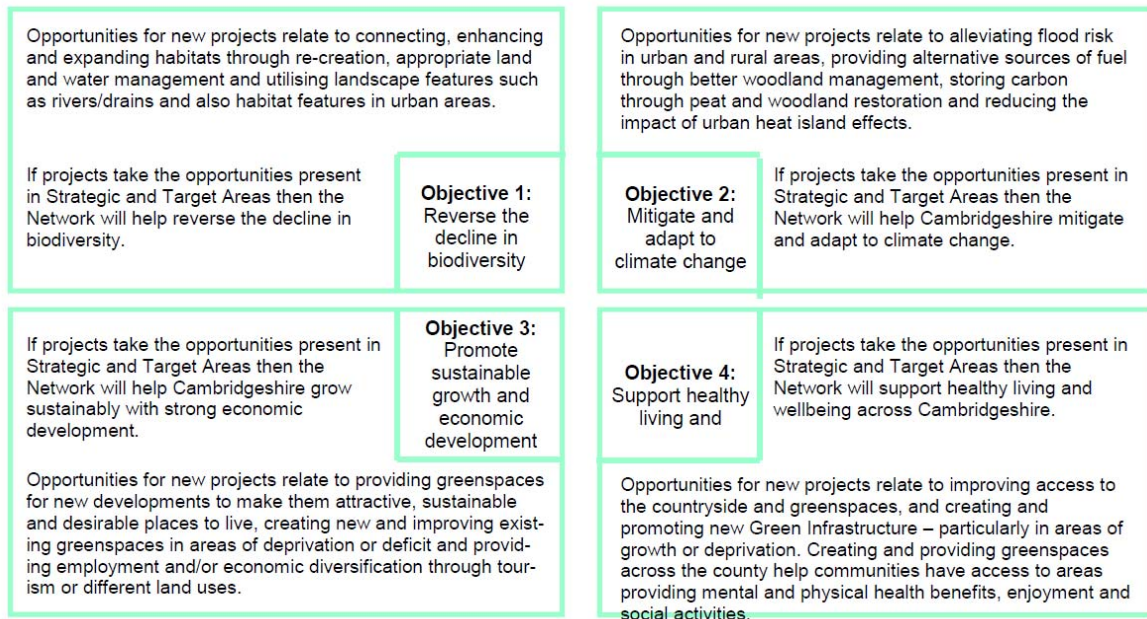


Figure 6-2 How future projects can help to meet the objectives of the Green Infrastructure Strategy

6.3 The context for delivery

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

- 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 District local authority development plans and policies as a means for delivering 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/partnership working** - Cambridgeshire is fortunate to have a wide variety of organisations and individuals with the skills and capacity to deliver the strategic network. It is critical for the

success of the Strategy that experienced Green Infrastructure specialists from across sectors continue to work in partnership.

6.4 How will the Strategy be delivered?

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

6.4.1 Planning policy

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 new and enhancing existing provision.

An important role of the Strategy is to provide a robust evidence base to support existing policies and assist in 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. It will provide continuity across local authority boundaries whilst allowing for local flexibility in terms of implementation and delivery.

Local Planning Authorities will need to take a view on how to embed Green Infrastructure into Local Development Plans to provide the context for both on and off-site Green Infrastructure delivery and its relationship to means of funding.

6.4.2 Funding delivery of the strategic network

The funding for delivery of the strategic network could come from a variety of sources. This section identifies some of the funding opportunities that may be available. Some of these are still in the early development phases in Cambridgeshire, such as a local carbon offset mechanism,⁴⁵ but it is anticipated these will contribute over the lifetime of delivering the strategic network.

Section 106 and Community Infrastructure Levy (CIL)

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 or S106 agreements). This is likely to continue to be an important means of funding

⁴⁵ 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.

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, which 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 funding strategic projects through the levy could be agreed. This Strategy is expected to provide a key element of the evidence base to inform the preparation of CIL charging schedules. These schedules will set out the types of infrastructure to be funded by developer contributions through CIL, and will include Green Infrastructure.

Agri-environment, land management and improvement funds

Higher level stewardship and entry level stewardship grants and English Woodland Grant Schemes made to farmers, landowners and land managers. A good local example is the work that the Cambridgeshire County Council's County Farm Estate has been used to work with tenants improve access to the countryside with new bridleways and footpaths, to improve the landscape with new woods and hedges and to protect biodiversity and archaeology (see Appendix 14 for more details).

Local business/organisation sponsorship

Businesses and organisations may choose to financially support local Green Infrastructure improvements, for example as part of their corporate social responsibility programmes. An example is Cambridge University Press, who, in partnership with the Wildlife Trust, are creating a conservation area and orchard on its Shaftesbury Road site in Cambridge. This is adjacent to Hobson's Brook and will link into the wider network of Green Infrastructure sites across Cambridge

Endowments

A financial endowment is a transfer of money or property donated to an institution or Trust, which may come with stipulations regarding its usage. In some circumstances an endowment may be required to be spent in a certain way or for it to be invested and 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.

Charitable donations

Giving from private donors in larger or smaller sums can provide significant funding for organisations – either supporting their core functions or to help with a particular project or initiative.

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.

Tax Increment Financing

Tax Increment Financing will enable local authorities to borrow against future increases in business rates as a result of new development, to fund infrastructure and capital projects. The costs of forward-funded infrastructure would be 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

Revenues from development schemes requiring off-site mitigation of habitat loss are collected into a central fund and invested in specific habitat creation projects. Habitat banking is being researched and developed as a means of 'offsetting' by Defra and Natural England similar to models around Carbon Offsetting.

Carbon Offsetting

This is a means of compensating for all or part of unavoidable carbon emissions made by businesses, organisations and individuals. 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.

There are also opportunities to explore:

EU funding

For example, LIFE, the EU's financial instrument for supporting environmental and nature conservation projects on Natura 2000 site, designated under the Birds Directive and Habitats Directive.

Local Authority capital and revenue programmes

With regard to those programmes that focus on public open space, publicly-owned land, leisure services and highways/rights of way, etc there could be

potential to support the delivery of the Strategic Network. For example, linking with the “Making Assets Count” project in Cambridgeshire where the all public sector assets are being looked at to identify their best use.

Public agency infrastructure funding;

Public agency revenue funding

For example, schemes such as Environmental Stewardship (ELS/HLS) and the English Woodland Grant Scheme, which are discussed above.

Lottery funds

The National Lottery funds environmental and Green Infrastructure projects through Lottery Funders. For example, the Heritage Lottery Fund provides funding for improving and sustaining a wide range heritage - including museums, parks and historic places, archaeology, the natural environment and cultural traditions.

Third Sector inputs could include:

- Voluntary contributions as part of community action
- Third sector funds, e.g. RSPB, Wildlife Trust, Woodland Trust, National Trust, British Horse Society
- Charitable trusts
- Community initiatives, e.g. co-operatives, community woodlands, community woodlands

6.4.3 Capacity and skills/partnership working to deliver the strategic network

A Green Infrastructure Forum was established in 2006 to oversee the delivery of Green Infrastructure in Cambridgeshire. The role of the Forum is central to the success of the Strategy and the delivery of the strategic network. Its membership is wide and varied and holds within it the skills and experience to advise, develop and deliver projects by working together and with other experts within the Councils and partner organisations. The Forum has a role coordinating stakeholders’ views, identifying opportunities for securing delivery raising awareness on key issues or barriers to delivery (e.g. with Councillors or Board Members). The Green Infrastructure Forum also has a role in encouraging community engagement in delivering the Strategy. A full list of Green Infrastructure Forum members is at the front of this document.

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

Little Downham Local Nature Reserve (LNR) is a wildlife resource offering a range of opportunities for local people to actively engage with their local environment. The creation of a new adjacent community orchard has diversified its ecological value for great crested newts, specimen trees and 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 including Natural England and the local County and District Council to develop designate and then manage an important local green space.



Photo provided by East Cambridgeshire District Council

6.4.4 Overview of project delivery mechanisms

Figure 6-3 shows how the three key delivery mechanisms discussed above, together with land acquisition and management, need to be used together to deliver projects and achieve the Strategy's objectives.

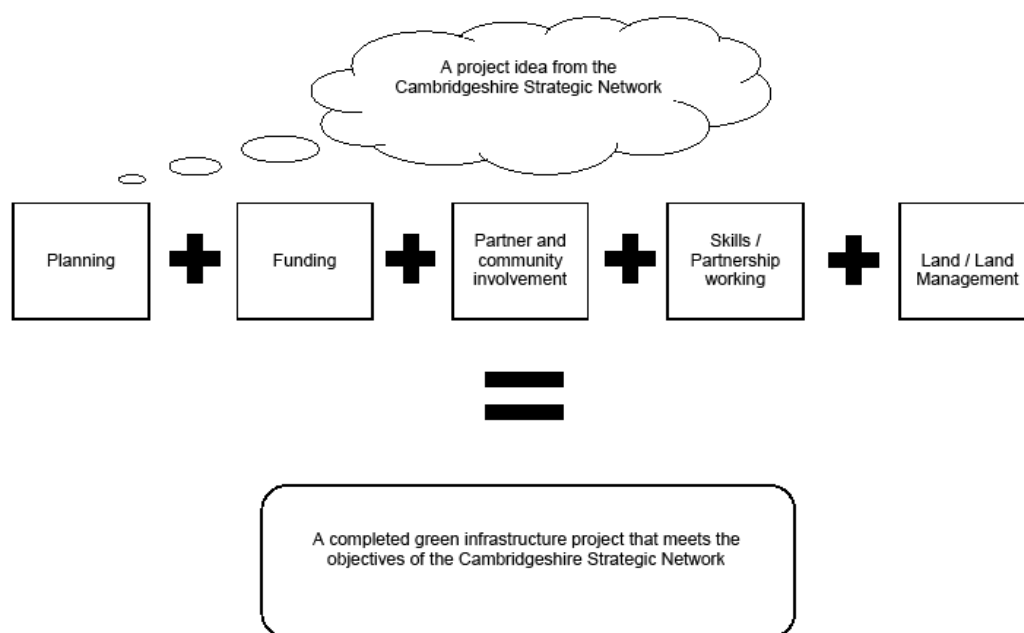


Figure 6-3 Summary of process for project delivery

6.5 Further work and next steps

This section sets out some recommendations for further work and actions that should be taken to ensure that the Strategy is delivered. They build upon the recommendations set out in the 2006 Green Infrastructure Strategy and are not necessarily in priority order.

Action 1: Manage Strategy implementation

- The Green Infrastructure Forum to be maintained and will provide a central point of co-ordination to oversee the implementation, monitoring and reporting of the Strategy.
- The Green Infrastructure Forum (or successor body) will need to make appropriate links into relevant high-level partnership groups, possibly including the Greater Cambridge and Greater Peterborough Local

Enterprise Partnership⁴⁶ (LEP), subject to the LEP's role and responsibilities. The Forum will provide support and advice on implementation of Green Infrastructure to these high-level partnership groups and will work on tasks that will benefit the delivery of the Green Infrastructure Strategic Network and the Strategy's Objectives.

Action 2: Establish a funding strategy

- The Green Infrastructure Forum (or successor body) will work to develop a common approach to funding from the Community Infrastructure Levy to support delivery of the strategic network.
- Create a funding strategy based on short, medium and long-term investments.

Action 3: Develop Green Infrastructure projects

- Green Infrastructure stakeholders (including statutory and non-statutory environmental organisations) will work to develop and deliver Green Infrastructure projects and establish suitable long-term management and maintenance arrangements.
- Local Authorities will ensure that Green Infrastructure is delivered through growth and new developments drawing on the evidence base provided by the Strategy.
- Local Authorities will support the development of Green Infrastructure projects through their own work and by providing Green Infrastructure project development assistance and advice to partners and stakeholders, including parish councils, local community groups, and third sector organisations.

Action 4: Increase knowledge of Green Infrastructure

- Partners will develop the skills of local communities and businesses to support and understand the value of Green Infrastructure for health and well-being, climate change adaptation and mitigation, economic development and biodiversity enhancement.

Action 5: Harness community support

- Partners will work with local groups, including Green Infrastructure project stakeholders, parishes, and neighbourhood groups, and others to

⁴⁶ The Greater Cambridge Greater Peterborough Local Enterprise Partnership has been created to help drive forward sustainable economic growth in the LEP area – with local business, education providers, the third sector and the public sector working together to achieve this.

plan and implement local Green Infrastructure projects, and to deliver the strategic network at all levels.

Action 6: Strategy promotion, communication and education

- Partners will develop a partnership Green Infrastructure communications and engagement plan to increase knowledge and understanding of Green Infrastructure and the Strategy and its benefits.
- The Green Infrastructure Forum (or successor body) will 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

- The Green Infrastructure Forum (or successor body) will monitor and report delivery of the strategic network, including to communities and relevant high level partnership groups.

6.6 Conclusion

The final Strategy presented here includes an explanation of what Green Infrastructure is, and why it is important for Cambridgeshire - as a way of improving people's health and wellbeing, of attracting inward investment and supporting sustainable growth, protecting and enhancing biodiversity, contributing to flood risk management and supporting climate change mitigation and adaptation. A clear methodology has been presented to show how and why the 'Strategic Network' was developed: to highlight the areas in Cambridgeshire where, at a county-wide scale, Green Infrastructure can contribute most to people's lives and to the natural environment.

Opportunities have been identified for improving Green Infrastructure through a number of projects. Partnership working across local authorities and other stakeholders has allowed a comprehensive and robust set of projects to be brought together. The final sections of the Strategy show how existing local authority priorities for Green Infrastructure can be supported and influenced by the Strategy, and how the projects within the Strategy might be delivered.

The Strategy needs to be delivered if Cambridgeshire is to benefit from the opportunities presented by Green Infrastructure. The responsibilities for delivering the Strategy are spread across a number of organisations. Local authorities have a key role to play, both in securing new high quality Green Infrastructure through the development process and in managing existing and new Green Infrastructure, but also in supporting and facilitating other organisations and communities to deliver the Strategy.

Case Study - Byron's Pool

A number of biodiversity and access improvements have been undertaken at Byron's Pool Local Nature Reserve, which is in close proximity to the proposed developments at Trumpington Meadows and Clay Farm. The Byron's Pool improvements build on the aspirations of Cambridge City Council's Nature Conservation Strategy to enhance the river valley habitat and the Local Nature Reserve.

Key outcomes are the protection and enhancement of existing habitats, whilst allowing improved recreational access, prior to development being constructed. The works complement the creation of the adjacent Trumpington Meadows Country Park allowing visitors to move between the sites without damaging sensitive areas.

The project has been funded by a number of sources including: S106 contributions from the nearby developments for both capital and revenue costs, Housing Growth Funding and the Environment Agency. The City Council's Community Reserves Officer and Sustainable Urban Drainage Engineer have overseen the design and construction of these works, whilst weekly conservation volunteers undertook some of the access works and tree planting.

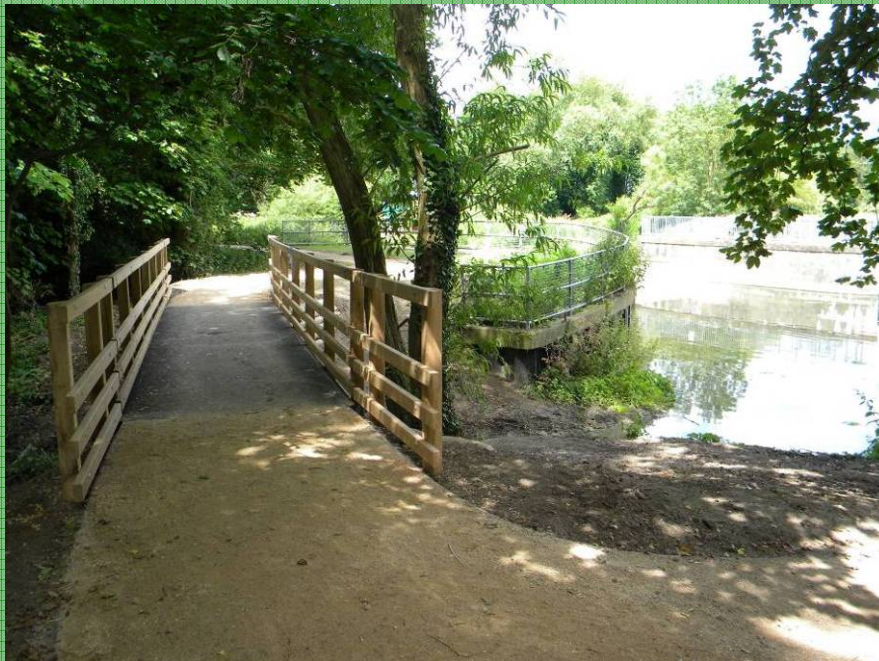


Photo provided by Cambridge City Council

Case Study - River Cam Habitat and Access Enhancement

The River Cam Habitat and Access Enhancement work 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. A 60 hectare Community Riverside Park is proposed as part of the development to provide formal and informal Green Infrastructure and 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 many different benefits, but particularly biodiversity through innovative river restoration, and how a committed funding source from the Housing Growth Fund 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

7 List of 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) Rights of Way
- 12) Economic Development
- 13) Health and Wellbeing
- 14) Water and Land Management
- 15) Strategic Network Projects

8 Glossary

Accessible Natural Greenspace Standards (ANGSt)

These Natural England standards recognise the importance of nature in the urban context in terms of improving the quality of people's lives and people's entitlement to have access to, and experience of, nature near to where they live.

These standards recommend that people living in towns and cities should have:

- an accessible natural greenspace of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home
 - at least one accessible 20 hectare site within two kilometres of home
 - one accessible 100 hectare site within five kilometres of home
 - one accessible 500 hectare site within ten kilometres of home
 - one hectare of statutory Local Nature Reserves per thousand population.
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Agri-Environment Scheme

An agricultural or farming management scheme that incorporates environmental enhancements or benefits.

Ancient Woodland

An area which has been continuously wooded since at least the year 1600, irrespective of any management which may have taken place.

Ancient Semi-Natural Woodland (ASNW)

Ancient semi-natural woodland has the greatest value for wildlife. It has a significant proportion of the native species present and has been continuously wooded for at least 400 years.

Area Action Plan (AAP)

Used to provide a planning framework for areas of change and areas of conservation. Area Action Plans have the status of Development Plan Documents.

Area of Outstanding Natural Beauty (AONB)

An Area of Outstanding Natural Beauty (AONB) is an area of countryside considered to have significant landscape value. The primary purpose of the AONB designation is to conserve and enhance the natural beauty of the landscape, with two secondary aims: meeting the need for quiet enjoyment of the countryside and having regard for the interests of those who live and

	work there. To achieve these aims, AONBs rely on planning control and practical countryside management.
Baseline Data	Basic information that describe the situation to be addressed by a programme or project and that serve as the starting point for measuring the performance of that programme or project.
Biodiversity	Biological diversity - all living things, their habitats and the relationship between them.
Biodiversity Action Plan (BAP)	A strategy prepared for a local area aimed at conserving and enhancing biological diversity. The plans outline the necessary action for the next 10 years to preserve and enhance biodiversity in farmland, woodland, wetland, grassland and urban areas.
Biodiversity offsetting	Biodiversity offsetting provides conservation benefits that compensate for any significant adverse biodiversity impact as a result of development that remains after appropriate prevention and mitigation measures have already been taken.
Brownfield sites	Brownfield sites describe areas with permanent structures such as unused buildings and infrastructure, and usually some bare ground and a range of habitats, such as shrub areas and temporary water pools. These sites are also known as previously developed land, and they are largely confined to urban areas.
Cambridgeshire and Peterborough Biodiversity Partnership	The Cambridgeshire and Peterborough Biodiversity Partnership promote the conservation of habitats and species in Cambridgeshire and Peterborough through the production and implementation of the Local Biodiversity Action Plan (see above).
Cambridgeshire Horizons	Cambridgeshire Horizons is the not-for-profit organisation charged with driving forward the delivery of sustainable new communities in Cambridgeshire.
CambridgePPF	Cambridge Past, Present & Future (formerly the Cambridge Preservation Society) is a local charity working to keep Cambridge and its surroundings special by positively influencing planning developments, delivering environmental education and managing the green spaces and historic buildings in its care.
Cambridgeshire Quality Charter for Growth	The Cambridgeshire Quality Charter for Growth sets out basic principles for achieving excellence in the new housing developments planned for Cambridgeshire. The Charter was created by a wide range of public, private and voluntary sector organisations. Participating local authorities and agencies have adopted the Charter as a clear policy statement of their aspiration to create high quality new communities.
Carbon offsetting	A carbon offset is a reduction in emissions of carbon or greenhouse gasses made in order to compensate for, or to 'offset', an emission made elsewhere. It usually refers to a mechanism whereby individuals and

	corporations pay for reductions elsewhere in order to offset their own emissions from transportation, electricity use, and other sources.
Carbon sequestration and storage	Carbon sequestration describes long-term storage of carbon dioxide or other forms of carbon to either mitigate or defer global warming. It has been proposed as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels.
Carbon sink	A carbon sink is a natural and potentially manmade feature on the earth's surface where carbon dioxide is removed from the atmosphere. The major natural sinks are forests and oceans which have processes that absorb CO ₂ . On a smaller scale, a pond that is home to plants and algae can store CO ₂ through photosynthesis. Carbon sinks are vital to fighting global warming because they counteract sources of carbon emissions, such as industry and transport. Carbon sinks act as carbon storage and are a form of carbon sequestration.
Climate Change Adaptation	The ability of a place to adapt to both extreme weather events and long term changes to climate patterns.
Climate Change Mitigation	Mitigation aims to reduce the impact of climate change by taking action to reduce greenhouse gas emissions and develop carbon sinks (stores of carbon that do not decompose to produce carbon dioxide).
Community Infrastructure Levy (CIL)	A government fund to support transport infrastructure costs required to enable faster housing development in Cambridgeshire, and three other growth areas in the UK.
Sustainable Community Strategy	Sustainable Community Strategies are prepared by local strategic partnerships (LSPs) as a set of goals and actions which they, in representing the residential, business, statutory and voluntary interests of an area, wish to promote. It should inform the local development framework (LDF) and act as an umbrella for all other strategies devised for the area. It is a statutory requirement to produce a Sustainable Community Strategy.
Conservation areas	Areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.
Core Strategy	Sets out the long-term spatial vision for the local planning authority area and the spatial objectives and strategic policies to deliver that vision. The Core Strategy has the status of a Development Plan Document.
County Wildlife Sites (CWS)	Designated by the County Wildlife Sites Panel (comprising the Cambridgeshire Local Authorities, the Wildlife Trust and representatives from Natural England) and considered to be of county or regional importance.
Countryside and Rights of Way (CROW)	The Countryside and Rights of Way Act (2000). Legislation that contains new provisions for access in the countryside and for protection of Sites of Special Scientific Interest (SSSIs).

Act	
Delivery mechanism	A way of making a project or initiative happen.
Development Plan Document (DPDs)	Documents prepared by local planning authorities. All DPDs must be subject to rigorous procedures of community involvement, consultation and independent examination.
Ecosystem services	The essential services and benefits that are derived from a fully functioning natural environment, including the management of basic resources such as water, and the sequestration of carbon.
Environment Agency (EA)	The Government agency concerned mainly with rivers, flooding and pollution.
Environmental Stewardship (ES) and Higher Level Stewardship (HLS)	Environmental Stewardship (ES) is an agri-environment scheme which offers payments to farmers and land managers in England for effective land management to protect and enhance the environment and wildlife. The scheme is delivered for Defra by Natural England and forms part of the Rural Development Programme for England. ES includes Higher Level Stewardship (HLS), an environmentally targeted, competitive scheme with 10-year tailored agreements of high environmental value involving complex and specialised land management.
Geodiversity	Geological diversity is the range of rocks, minerals and topographic characteristics/ landform, together with the processes instrumental in forming these features over geological time. The various components of our geological heritage can give insights into past climates, earlier environments and the development of life on earth.
Green Apple Award	Green Apple Environment Awards form part of an annual international campaign by The Green Organisation to recognise, reward and promote environmental best practice around the world. The Green Organisation is an independent, non-political, non-activist, non-profit environment group dedicated to recognising, rewarding and promoting environmental best practice around the world.
Green Belt	An area of land designated in Development Plans that restricts new built development in order to achieve a number of specific purposes, such as preventing the sprawl of large built-up areas. Green Belts are expected to offer long-term certainty, with their boundaries being altered only in exceptional circumstances.
Green Space	A plot of vegetated land separating or surrounding areas of intensive residential or industrial use and devoted primarily to recreational or park uses. Green Space is a key component of a Green Infrastructure network, often classified within the typology devised by Planning Policy Guidance 17 (PPG17): Planning for Open Space, Sport and Recreation.

Greenhouse gas	A gas which traps energy radiated by the earth within the atmosphere. Carbon dioxide is the most important of these.
Green Infrastructure	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.
Green Infrastructure Gateways	Green Infrastructure Gateway sites are areas that introduce people to the countryside and green spaces through accessible, safe links such as circular routes, trails and public rights of way.
Green Infrastructure Network	A series of connected Green Infrastructure sites and features that exist across an area.
Habitat banking	Measures 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 is being developed as 'Biodiversity Offsetting' by Defra and Natural England.
Heritage asset	A building, monument, site, or landscape that has been positively identified as having a degree of significance meriting consideration in planning and decision making. Heritage assets are the valued components of the historic environment, whether they are designated or not.
Housing Growth Fund (HGF)	A Communities and Local Government fund available from 2008-11 to support Housing Growth in key Growth Areas, such as Cambridgeshire. HGF funding has been used to deliver Green Infrastructure.
Infrastructure	Infrastructure is a term used to describe new facilities, such as roads, community centres, schools, IT provision and cycle paths, with a development. It means anything that is required, other than houses, to make a new development work.
Indices of Multiple Deprivation (IMD)	The Index of Multiple Deprivation (IMD) is a detailed measure of deprivation that provides a relative ranking of areas across England according to their level of deprivation. It contains seven domains (indicators) which relate to income deprivation, employment deprivation, health deprivation and disability, education skills and training deprivation; barriers to housing and services; living environment; deprivation and crime. These are weighted and combined to create a single deprivation 'score' for a discrete area (local authority wards are often used).

Integrated Development Programme (IDP)

The Integrated Development Programme (IDP) considers the goals for Cambridgeshire's growth agenda, including housing and employment, and identifies the individual strategic infrastructure projects needed to deliver them. The IDP's principle purpose is to set out infrastructure projects of sub-regional scale within Cambridgeshire. These projects are strategic in nature, having greater than district-level impact. The IDP acts as an evidence base for sub-regional infrastructure needs.

Green Infrastructure is considered to be one of the four key infrastructure needs for the County alongside water, energy and transport.

Land-use plans

Land-use planning is a branch of public policy which encompasses various disciplines seeking to order and regulate the use of land in efficient ways. It means the scientific, aesthetic and orderly disposition of land, resources, facilities and services with a view to securing the physical, economic, social and environmental efficiency, health and well-being of urban and rural communities.

Landscape

A landscape consists of varied land forms, ecosystems, vegetation types, and land uses, including natural and man-made features.

Landscape scale and Landscape-scale conservation

A landscape-scale refers to a variety of different types of landscapes and ecosystems, free from administrative boundaries. Landscape scale conservation is an approach to conservation planning that looks beyond protected areas and discrete wildlife sites to wider natural processes functioning across various landscapes.

Landscape character

The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas of the landscape.

Listed buildings

Buildings of special architectural or historic interest held on a list administered by English Heritage. Decisions on changes are made by the Secretary of State for Culture, Media and Sport. The buildings or structures are graded I, II* or II to reflect their relative importance. Listing gives statutory protection to historic buildings against unauthorised alteration or demolition. Special permission is required for works that may affect their character or appearance.

Local Development Documents (LDDs)

These include Development Plan Documents and Supplementary Planning Documents. LDDs collectively deliver the land use strategy for the local planning authority's area.

Local Development Framework (LDF)	A folder of documents which includes all the local planning authority's local development documents. An LDF comprises of Development Plan Documents, Supplementary Planning Documents, Statement of Community Involvement, the Local Development Scheme and the Annual Monitoring Report.
Local Development Scheme (LDS)	The local planning authority's time-scaled programme for the preparation of Local Development Documents.
Local Delivery Vehicle (LDVs)	Partnerships which bring the public and private sectors together to deliver large-scale social, economic and environmental change.
Local Enterprise Partnership (LEP)	Local Enterprise Partnerships have been created by Department for Business, Innovation and Skills (BIS) and the Department for Communities and Local Government (CLG) to bring businesses and the public sector together at a local area level to help tackle issues such as local transport and infrastructure, economic development, employment, planning and housing, enterprise and supporting business start-ups.
Local Nature Reserve (LNR)	A statutory term denoting an area of land designated under the National Parks and Access to the Countryside Act 1949 as being of importance for nature conservation and where public understanding and enjoyment of nature conservation is actively promoted.
Middle Level Commissioners	The Middle Level Commissioners are a land drainage authority in eastern England that undertakes the main water level management function in the Fens area bounded on the northwest and east by the Nene and Ouse Washes, on the north by previously drained Marshland silts and to the south and west by low clay hills. This Middle Level river system consists of over 120 miles (190km) of watercourses most of which are statutory navigations and has a catchment of over 70,000 hectares.
Multi-functional	The ability to provide multiple or 'cross cutting' functions, by integrating different activities and land usage, on individual sites and across a whole Green Infrastructure network.
National Trust (NT)	The National Trust is a conservation organisation that works to reserve and protect the coastline, countryside and buildings of England, Wales and Northern Ireland. The Trust owns many heritage properties, including historic houses and gardens, industrial monuments and social history sites.
Natural England (NE)	Natural England is the government's advisor on the natural environment. Natural England works with farmers and land managers; business and industry; planners and developers; national, regional and local government; interest groups and local communities to help them improve their local environment.
National Nature Reserve (NNR)	A statutory term, denoting an area of land designated under the National Parks and Access to the Countryside Act 1949 or the Wildlife and Countryside Act 1981 as being of national (and sometimes international) importance. Sites may be in a variety of ownerships, but the essential characteristic is that they are primarily used for nature conservation.

Northstowe Area Action Plan	The document that sets out the core development strategy for the new town of Northstowe.
Parish Paths Partnership (P3) scheme	Cambridgeshire County Council works in partnership with local parishes to improve, maintain and promote the public rights of way network within individual parishes. Parishes that are members of the Parish Paths Partnership receive the support of a Rights of Way Officer based at the County Council and grant-funding for work on registered rights of way.
Planning Policy Guidance (PPG)	Planning policy guidance notes set out the Government's policies on different aspects of planning. Local authorities must take their content into account in preparing their development plans.
Planning Policy Statements (PPS)	Documents issued by Central Government to replace existing Planning Policy Guidance (PPG) notes.
Primary Care Trust (PCT)	A PCT is an NHS trust created to provide, or commission the provision of, some primary and secondary health services in a particular area. NHS Cambridgeshire covers the requirements for the county of Cambridgeshire, excluding Peterborough.
Project	Projects are how Green Infrastructure is delivered at the district and county scale. Projects can sit within target areas or in other parts of strategic areas, or may straddle a number of target areas. Project can be existing or planned and new projects can come forward and be developed throughout the life of the Strategy. Projects have a definite start and end point.
Publicly Accessible Open Space	Places that are available for the general public to use free of charge and without time restrictions (although some sites may be closed to the public overnight and there may be fees for parking a vehicle). The places are available to all, meaning that every reasonable effort is made to comply with the requirements under the Disability Discrimination Act (DDA 1995). An accessible place will also be known to the target users, including potential users who live within the site catchment area.
Ramsar Site	Wetlands designated by the contracting parties of the Ramsar Convention for inclusion in the list of wetlands of international importance because they meet one or more of the Ramsar criteria.
Regional Economic Strategy	The Regional Economic Strategy for the East of England is currently being developed by EEDA, in conjunction with EERA to create a long-term vision for the economic future of the East of England.

Regional Spatial Strategy (RSS)	A strategy for how a region should look in fifteen to twenty years time and possibly longer. The RSS identified the scale and distribution of new housing in the region, indicates areas of regeneration, expansion or sub-regional planning. Regional Spatial Strategies were prepared by Regional Planning Bodies.
Registered Historic Parks and Gardens	English Heritage compiles and maintains the Register of Parks and Gardens of Special Historical Interest in England. The register identifies designed, ornamental landscapes which are of 'special historic interest' in the national context.
Rights of Way Improvement Plan (ROWIP)	The Rights of Way Improvement Plan (ROWIP) for Cambridgeshire is a statutory responsibility imposed by the Countryside and Rights of Way (CROW) Act 2000. The ROWIP document was launched in 2006 and forms a constituent part of the Council's Local Transport Plan (LTP) 2006 - 2011.
Royal Society for the Protection of Birds (RSPB)	The Royal Society for the Protection of Birds (RSPB) is a British charitable organisation which works to promote conservation and protection of birds and the wider environment.
Rural-Urban Fringe	Transitional zones between distinctly urban and unambiguously rural areas.
Scheduled Monument	Monuments included in the Schedule of Monuments of National Importance, which the Secretary of State for Culture, Media and Sport has a duty to compile and maintain under Section 1 of the Ancient Monuments and Archaeological Areas Act 1979.
Section 106	A Section 106 agreement is a package of funding, land, or other contributions from a developer to help set up and support the local community. For example, S106 money is used to fund transport improvements, build community centres and provide land for green spaces.
Site of Special Scientific Interest (SSSI)	A site identified under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) as an area of special interest by reason of its flora, fauna, geological or physiographic features.
Spatial planning	Spatial planning is land use planning that brings together and integrates policies for the development and use of land with other amenities and infrastructure and includes the methods used by the public sector to influence the distribution of people and activities in spaces at various scales as well as the location of the various infrastructures, recreation and nature areas. Spatial planning activities are carried out at different administrative or governmental levels (local, regional, and national).
Spatial Analysis	Spatial analysis includes any of the formal techniques which study entities using their topographical, geometric or geographic properties. The phrase

	is often used to describe techniques applied to structures at the human scale, most notably in the analysis of geographic data.
Special Area of Conservation (SAC)	Sites of European importance for habitats and species other than wild birds, designated under the Conservation (Natural Habitats, &c.) Regulations, 1992 in the UK.
Special Protection Areas (SPA)	Sites of European importance for wild birds designated under the Conservation (Natural Habitats, &c) Regulations, 1992 in the UK.
Statutory	Is something that is defined in legislation.
Supplementary Planning Document (SPD)	A Local Development Document that may cover a range of issues, thematic or site specific, and provides further detail of policies and proposals in a 'parent' Development Plan Document.
Sustainable Development	Making provision for the needs of the existing population without compromising the ability of future generations to meet their own needs.
Sustainable Drainage Systems (SuDS)	SuDS are systems designed to reduce the potential impact of new and existing developments on surface water drainage. SuDS try to replicate natural drainage systems that can drain away dirty and surface water run-off through collection, storage, and cleaning before allowing it to be released slowly back into the environment, often via watercourses. SuDs also aim to control pollution, recharge ground water, control flooding, and often provide landscape and environmental enhancement.
Tax Increment Financing (TIF)	Tax Increment Finance is a method of borrowing funds to pay for infrastructure, on the basis that additional housing requiring that infrastructure will increase tax revenues.
Urban Fringe	An urban fringe is an area in between rural and urban with multifunctional spaces and complex structures. The urban fringe can sometimes be referred to as the 'outskirts' of a town or city, or as an 'urban hinterland'. An urban fringe is predominantly open land on the edge of a settlement where a broad variety of land uses and activities come together and where development pressure is often intense.
Urban Heat Island Effect	Whereby air temperatures may be several degrees warmer in built up areas compared to the wider countryside.

Water Cycle Strategy

A Water Cycle Strategy provides a plan and programme of Water Services Infrastructure implementation for a defined area. It is determined through an assessment of the environment and infrastructure capacity for water supply, sewage disposal, flood risk management, and surface water drainage.

Woodfuel

Woodfuel can be burned to generate heat or electricity and is an important part of the UK's renewable energy supply. It is a sustainable, low carbon, source of energy that is produced from managed woods, where felled trees are replanted.



Cambridgeshire
County Council



EAST CAMBRIDGESHIRE
DISTRICT COUNCIL



Cambridgeshire
Horizons

driving forward sustainable communities



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