

Cambridgeshire Green Infrastructure Strategy



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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.

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.

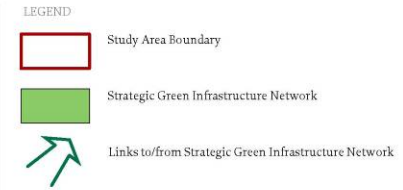
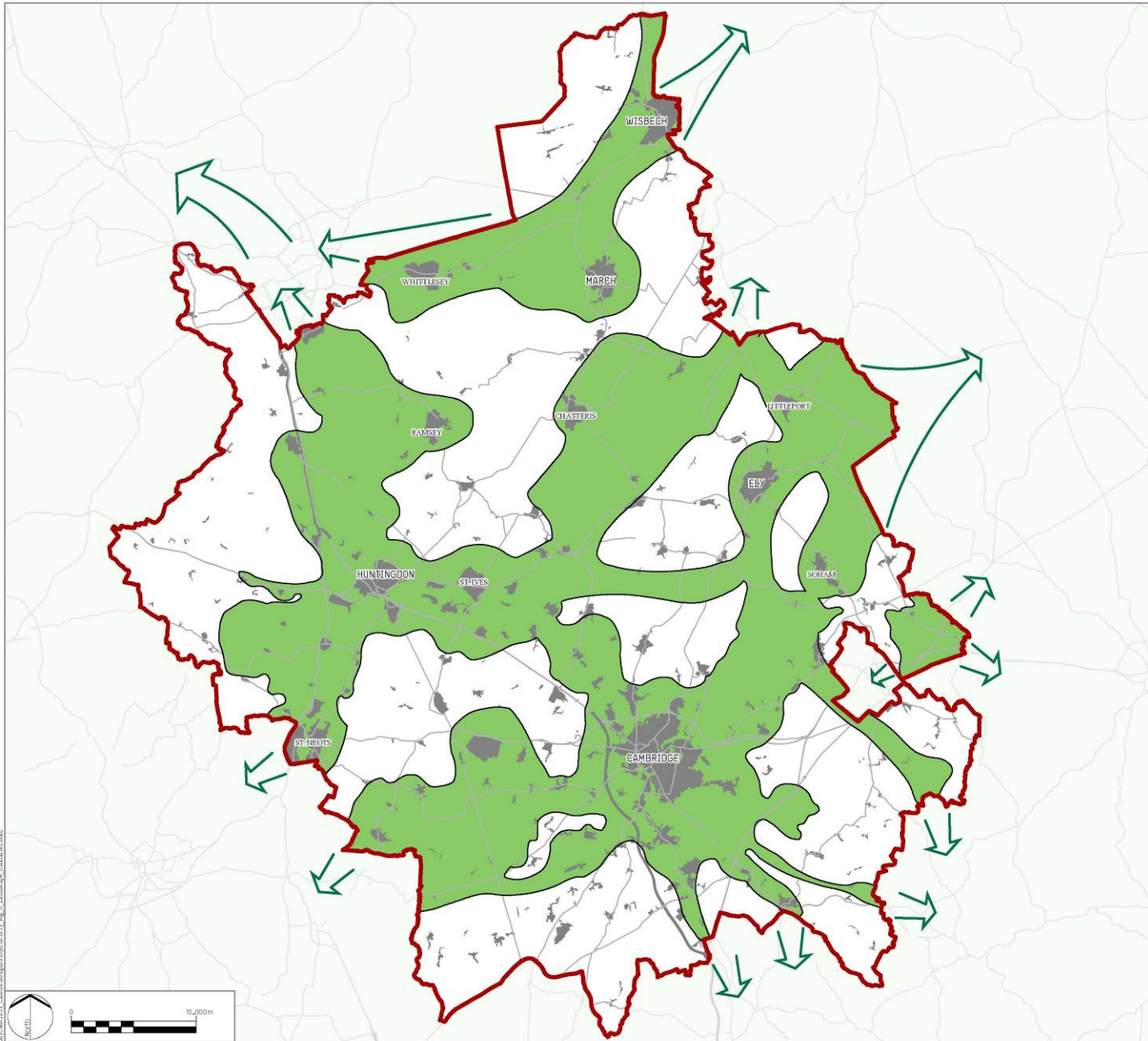
3.7 Climate Change

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.



REV.	DESCRIPTION	APP. DATE

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PROJECT TITLE
CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

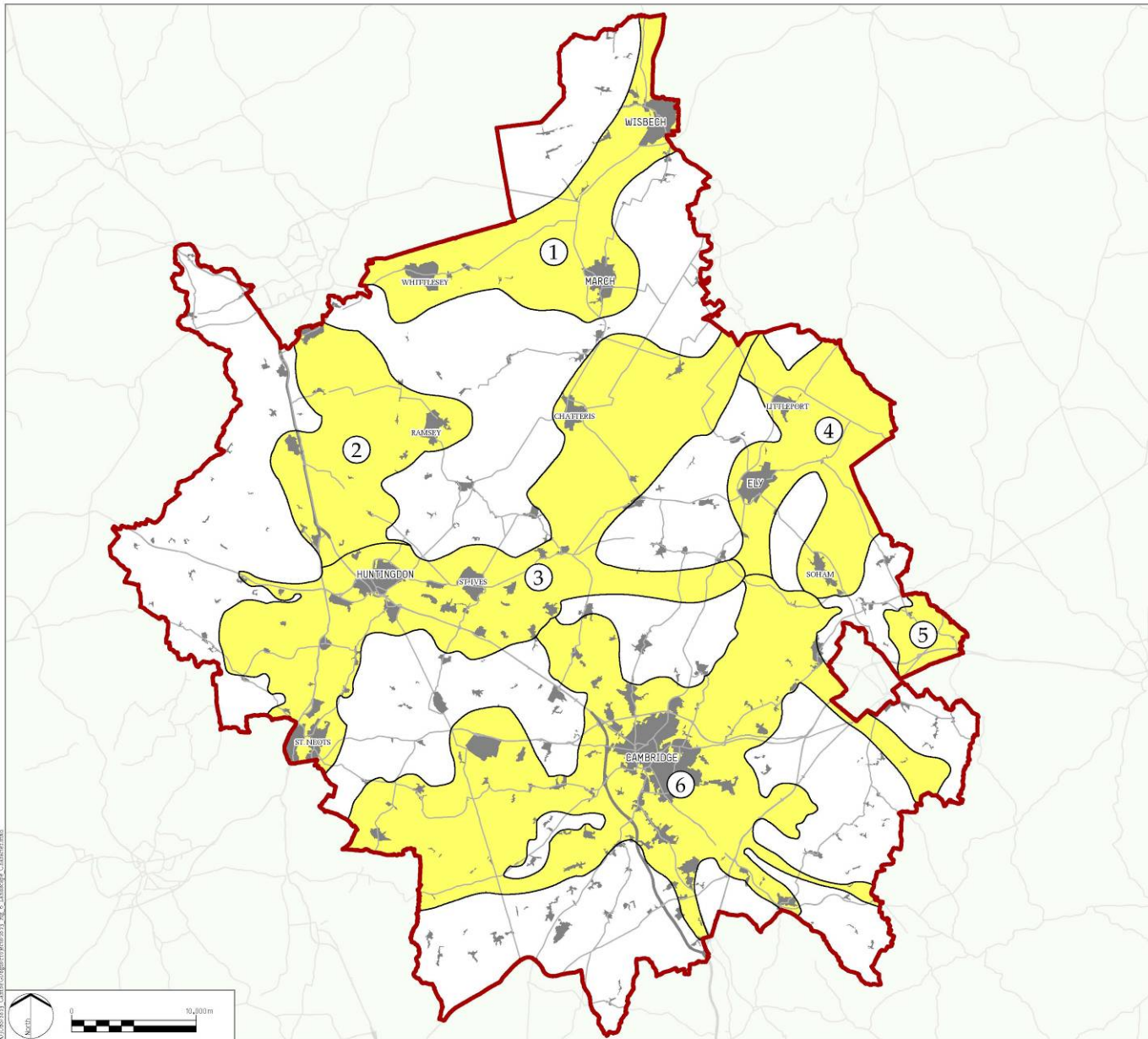
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Cambridgeshire Strategic Green Infrastructure Network

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 National Landscape Character Areas: © Natural England [June 2009]
 Sources: Ordnance Survey, Open Street Map, 2001 Census Area Data, Cambridgeshire County Council & Natural England.

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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

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PROJECT TITLE

CAMBRIDGESHIRE GREEN INFRASTRUCTURE STRATEGY

DRAWING TITLE

Strategic Network 'Strategic Areas'

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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.

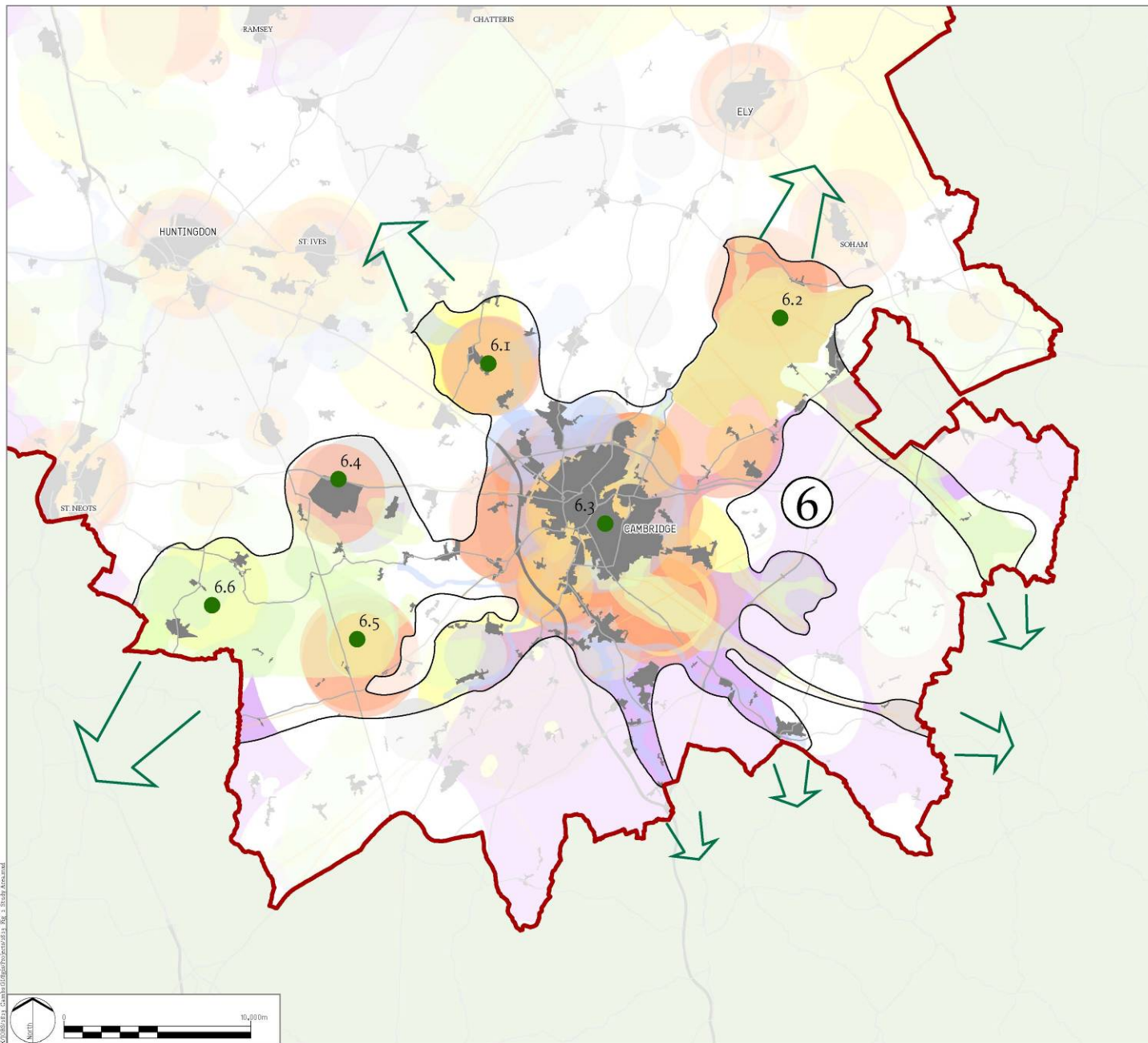
The area to the north of Cambridge falls gently towards the valley of the river Great Ouse and the villages of the fen edge and includes the proposed new settlement of Northstowe.

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

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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.

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

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

Extracted pages 81- 82, 94 - 97 of Appendices

Essex.²⁸ However, Cambridgeshire is the national stronghold for the White-spotted Pinion moth, with the population considered to be stable.²⁹

The national decline of the White-spotted Pinion moth is most likely due to the large-scale loss of elms (larval food plant) as a result of Dutch Elm disease. Small areas of mature elm trees have survived within Cambridgeshire, which has contributed to the survival of this species within the county. The long-term survival of this species will depend on the retention of, and planting of, elms resilient to Dutch Elm Disease.

Biodiversity Partnership 50 Year Vision Map³⁰

The Biodiversity Partnership for Cambridgeshire and Peterborough has produced a 50 year wildlife vision to show how they hope the county will look in 2050. This groundbreaking and bold vision was the first of its kind in Britain.

The 50 Year Vision Map aims to show what members of the biodiversity partnership in the county are working towards and has had input from organisations such as Natural England. The map seeks to identify where habitat fragmentation can be reversed and where opportunities to link habitats exist to allow species to move in response to climate change at a broad scale. The Vision identifies the following four targets for habitat creation:

- Chalk and Limestone Grassland.
- Wetland habitats including Meadows.
- Acid Grassland and Heath.
- Woodlands and Hedgerows.

The Wildlife Trust's Living Landscapes

In response to the threat that climate change represents to plants and animals, The Wildlife Trust published in 2009 '*A living landscape: A call to restore the UK's battered ecosystems, for wildlife and people*'.³¹ This report captures a new and ambitious approach to conservation and enhancement of landscapes and ecosystems.

The Wildlife Trust is identifying key areas to protect for wildlife by enlarging, improving and joining them up. There are currently over 100 Living Landscapes schemes around the U.K. Five major schemes have been identified within

²⁸ Cambridgeshire and Peterborough Biodiversity Partnership (2010) Update 2010 newsletter

²⁹ Personal communication with Sharon Hearle, Butterfly Conservation (Dec, 2010)

³⁰http://www.cambridgeshire.gov.uk/environment/natureconservation/action/partnership/publications/vision_map.htm

³¹ <http://www.wildlifetrusts.org/index.php?section=environment:livinglandscapes>

Cambridgeshire. Living Landscapes projects in and around Cambridgeshire are illustrated on figure 5.6. A brief description of the Cambridgeshire schemes follows:

The West Cambridgeshire Hundreds Living Landscape Scheme

This aims to enhance biodiversity through the better management, expansion and linkage of habitats, concentrating on the ancient woodlands and hedgerow network across the area. 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 and to accomplish greater success than could be realised by landowners working independently. It is a joint project between local landowners, the Wildlife Trust, Woodland Trust, National Trust, Forestry Commission, Natural England and the Farming and Wildlife Advisory Group (FWAG).

The Gog Magogs Living Landscape Scheme

This aims to create an inter-connected network of species-rich chalk grassland and other habitats south of Cambridge and to create a large and accessible Green Infrastructure resource for the expanding population of Cambridge. It will work through a mixture of land acquisition to expand existing nature reserves and working with farmers to identify opportunities for habitat linkages and promoting agri-environment schemes to secure these enhancements. This is being promoted by a partnership involving the Wildlife Trust, Cambridge Past, Present and Future, and the Magog Trust.

The Ouse Valley Living Landscape Scheme

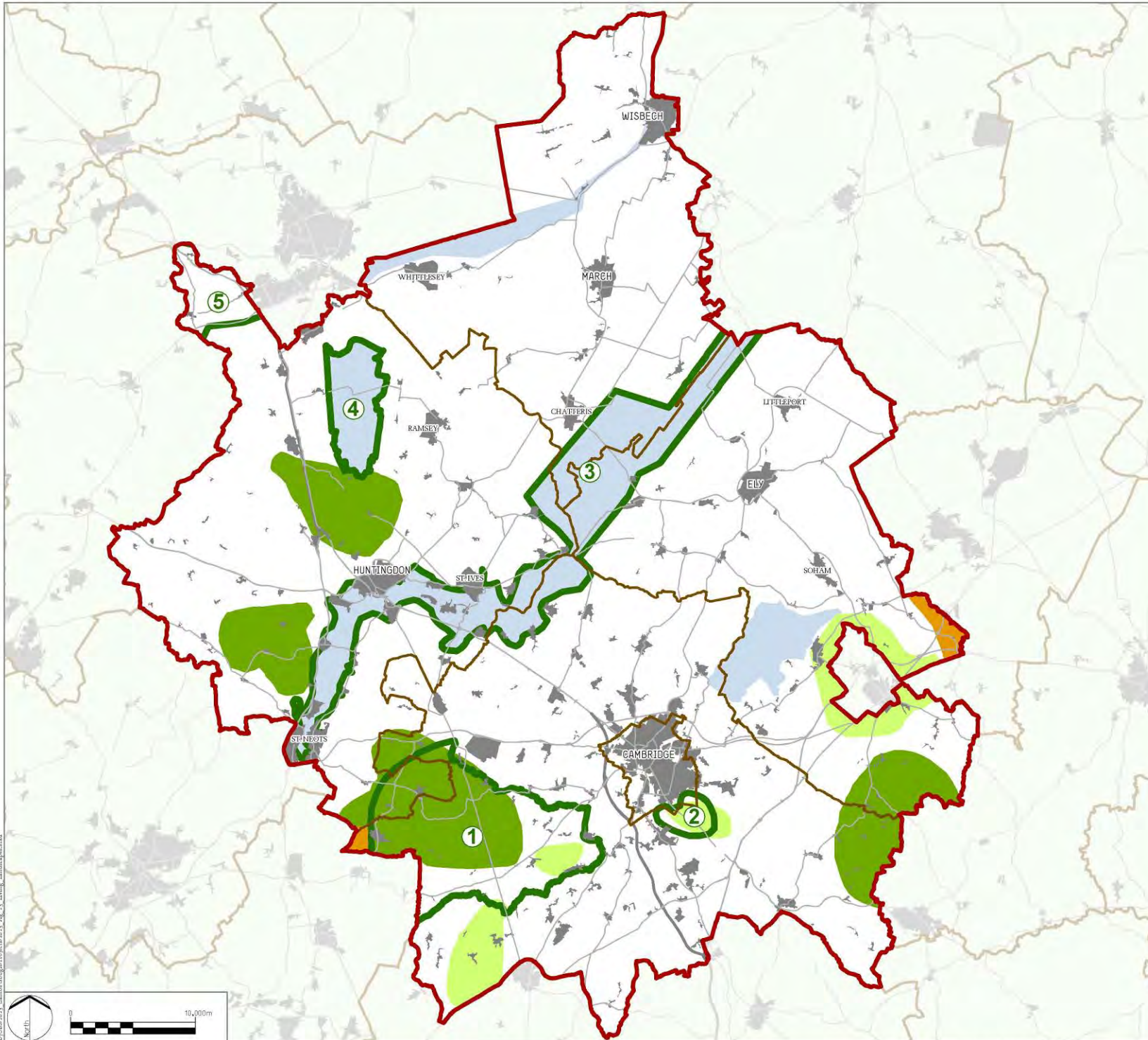
This aims to create a network of species-rich flood meadows, floodplain grazing marsh and wet woodland along the Ouse Valley from St Neots to the Ouse Washes. The main approaches are through the expansion and management of existing nature reserves, targeted advice to owners of County Wildlife Sites, seed harvesting of species-rich meadows to aid the restoration of improved meadows and the creation of wet grassland for breeding and wintering water birds. This is a partnership project between the Wildlife Trust, Huntingdonshire District Council, FWAG (Farming and Wildlife Advisory Group), Forestry Commission and the Environment Agency.

The Great Fen Living Landscapes Scheme

This will restore 3700 ha of fenland habitat between Huntingdon and Peterborough, by connecting two vitally important existing National Nature Reserves, Holme Fen and Woodwalton Fen. This will provide a haven for wildlife and create a massive green space for people, opening new opportunities for business, education and recreation. The project is a

Wildlife Trust's Living Landscapes Projects and Cambridgeshire and Peterborough Biodiversity Partnership's 50 Year Vision Areas: The Cambridgeshire and Peterborough Biodiversity Partnership has identified areas for large-scale habitat creation to support Biodiversity Action Plans (BAP) for habitats and species. These reflect in part the location of existing habitats. The Wildlife Trust has identified similar areas called 'living landscapes'. These show where large-scale habitat creation would be best located, based on the existing habitats in Cambridgeshire. This map illustrates extracts from the Wildlife Trust's Living Landscapes Projects and Biodiversity Partnership's 50 Year Vision plan.

Figure 5.6 Wildlife Trust's Living Landscapes projects and Biodiversity Partnership's 50 Year Vision (Next page)



LEGEND

- Study Area Boundary
- Biodiversity Partnership's 50 Year Vision Target Habitats**
- Chalk and Limestone Grassland
- Habitats Including Meadows
- Acid Grassland and Heath
- Woodlands and Hedgerows
- Wildlife Trust Living Landscapes (within Cambridgeshire)**
- 2 1. West Cambridgeshire Hundreds
- 2. Gog Magogs
- 3. Ouse Valley
- 4. Great Fen
- 5. Nene Valley

REV. DESCRIPTION

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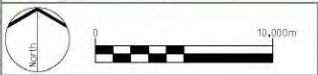
PROJECT TITLE
Cambridgeshire Green Infrastructure Review and Second Edition

DRAWING TITLE
Wildlife Trust's Living Landscapes Projects and Biodiversity Partnership's 50 Year Vision

ISSUED BY	Oxford	T 01865 8870
DWG.NO	2823_T13	
DATE	17/05/2011	DRAWN
SCALE@A3	1:300,000	CHECKED
STATUS	FINAL	APPROVED

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The biodiversity theme was developed by analysing these key baseline maps to identify where larger areas of particular habitats, or clusters of smaller habitats, existed. A buffer zone was then drawn around each area to form 'reservoirs' or opportunities for strategic investment in habitat protection, enhancement and creation. When compared to the Biodiversity Partnership's 50 Year Vision Target Areas for biodiversity enhancement, there is a strong overlap between the areas identified.

The biodiversity reservoirs identified by this process are:-

- ***Woodland, Farmland and Hedgerows Habitat Reservoirs*** - eight Reservoirs have been identified:-
 - Alconbury and Sawtry
 - Chippenham and Fordham
 - Longstowe, Wimpole and Great Eversden
 - Hayley and Hatley
 - Gamlingay and Gransden
 - Croxton and Eltisley
 - Stetchworth and Kirtling
 - Grafham Water Fringe

These largely occupy the southern and western portion of the county, where woodlands are a characteristic feature of the landscape, and where the majority of the county's Ancient Woodland sites are located.

A particularly noticeable cluster has been identified across the West Anglian Plain centered on the clay hills and ridges between Cambridge and St Neots. Here the most ecologically important woodlands are largely ancient in origin. Indeed, several are nationally renowned, such as Hayley Wood which has been the subject of extensive study³⁴.

Whilst many of the woodlands in the Habitat Reservoirs are influenced by the underlying boulder clay geology, the influence of acidic soils is also evident, albeit very locally. For example to the west of Gamlingay, acidic soils influence the tree species and ground flora present.

- ***Parkland, Neutral Grassland and Lowland Meadow Habitat Reservoirs*** - eight Reservoirs have been identified:
 - Ouse Valley, Huntingdon and Brampton

³⁴Oliver Rackham, *Hayley Wood its History and Ecology*, Cambridgeshire Wildlife Trust, 1990

- Ouse Valley - St Ives and Hemingford
- Wimpole Hall Park
- Soham Commons
- Cambridge Commons, Southern Fringe and Cam Meadows
- Croxton Park
- Kingston and Bourn
- Caldecote

Areas of parkland and remnant species rich neutral grassland associated with verges and dismantled rail lines are notable nature conservation features across the claylands of the West Anglian Plain. Indeed, public rights of way often preserve strips of species-rich grassland. Further grasslands are located on the commons fringing Soham in the east of the county and often form an important component of many ancient woodland rides.

Several sites are currently designated, largely on account of the neutral grassland indicator species present such as Cowslip, Green-winged Orchid, Pepper Saxifrage or Yellow Rattle, or Great Burnet, Marsh Marigold or Ragged Robin which are found in the floodplain meadows. This Reservoir is also important because of the various other habitat features they support including veteran trees, ditches and wetland areas. Veteran trees are particularly valued features for their micro habitats and the invertebrates they support.

- *Calcareous Grassland Habitat Reservoirs* - up until relatively recently, botanically rich calcareous grasslands would have been a more common feature across the rolling chalk hills in the south of the county which were created and maintained through low intensity sheep farming well into the nineteenth century.

However, intensive agricultural regimes and decades of improvement for arable farming have reduced the remaining resource to a relatively small number of fragmented sites in well protected locations, roadside verges and former quarries. Six small clusters have been identified:

- Litlington and Morden
- Gog Magog Hills and Roman Road
- Fleam Dyke and Chilly Hill
- Devil's Ditch and Newmarket Heath
- Limekilns