South Cambridgeshire District Council and Cambridge City Council

Greater Cambridge Green Infrastructure Opportunity Mapping

Part 2 Recommendations Report

Prepared by LUC

September 2021

South Cambridgeshire District Council and Cambridge City Council

Greater Cambridge Green Infrastructure Opportunity Mapping

Version	Status	Prepared	Checked	Approved	Date
1.	Part 2 draft report	G Tooze D Manson S Langer	D Manson	S Young	30.06.2021
2.	Part 2 final report	G Tooze D Manson S Langer	D Manson	D Manson S Young	23.07.2021
3.	Updated Part 2 final report	G Tooze D Manson	D Manson	D Manson	10.09.2021

Bristol
Edinburgh
Glasgow
Lancaster
London
Manchester

landuse.co.uk

Land Use Consultants Ltd
Registered in England
Registered number 2549296
Registered office:
250 Waterloo Road
London SE1 8RD

100% recycled paper

Landscape Design
Strategic Planning & Assessment
Development Planning
Urban Design & Masterplanning
Environmental Impact Assessment
Landscape Planning & Assessment
Landscape Management
Ecology
Historic Environment
GIS & Visualisation

Contents

Executive Summary

South Cambridgeshire District Council and Cambridge City Council ('the Councils') are preparing a joint Local Plan for Greater Cambridge. This Green Infrastructure (GI) Opportunity Mapping project has been undertaken to ensure the forthcoming joint Local Plan is based on sound evidence and supports deliverable interventions to enhance the GI network. GI is multifunctional: it delivers many benefits, including mitigation and adaptation to climate change, conserving and enhancing biodiversity and improving health and wellbeing.

Methodology

The study was undertaken in three stages. The Part 1 Baseline Report (November 2020) presents the findings from Stages 1 and 2 which included an assessment of the existing GI network and identification of broad opportunity areas for its enhancement.

This Part 2 Recommendations Report presents the findings from Stage 3. This includes:

- evidence updates since the Part 1 Baseline Report was published;
- refinement of broad opportunity zones into 14 Strategic Initiatives;
- policy recommendations for GI; and
- next steps for Greater Cambridge Shared Planning (GCSP).

A detailed description of the study methodology is provided in Chapter 1.

Building on Baseline (Part 1 Report) Evidence

Additional evidence supported the refinement of the broad opportunity zones into 14 Strategic Initiatives. A review of the following evidence including the implications and relevance for the GI study is presented in Chapter 2:

- Greater Cambridge Local Plan development strategy note which enabled each Strategic GI Initiative to be evaluated in terms of its relationship (spatial or otherwise) to the areas of proposed development.
- Updated Local Plan evidence, namely the Net Zero Carbon Study and Integrated Water Management Study.

- Greater Cambridge Local Plan Call for Green Sites responses.
- Nature strategies prepared by the respective Councils.
- Ongoing relevant work led by stakeholders, namely the Cambridge Nature Network and Water Resources East Natural Capital Plan.
- Updated evidence on recreational pressure, for example Natural England's Site of Special Scientific Interest (SSSI) Impact Risk Zones.
- Involvement of Greater Cambridge in Piloting Natural England's National GI Standards Framework, which informed the policy recommendations.

Strategic Initiatives

Figure A maps the 14 Strategic Initiatives across Greater Cambridge. The Strategic Initiatives fall within two categories: a) spatially specific (Initiatives 1-9) or b) dispersed (Initiatives 10-14). Chapter 3 presents detailed information for each Initiative covering its objective, spatial extent, relationship with existing projects and the Local Plan, and details relating to delivery. Examples of similar projects from elsewhere in the country and within Greater Cambridge are also included.

The objectives of each of the 14 Strategic Initiatives are provided below, followed by policy recommendations to guide the Councils on delivering the Strategic Initiatives (with further detail in Chapter 4):

1. Revitalising the chalk stream network

- Conserve and restore chalk streams to increase their ecological value, by addressing the the three primary issues affecting the chalk stream network – flow pressures, channel modifications and poor water quality. Restoration measures include restoring natural flows, floodplain reconnection, channel realignment, reconnecting rivers to groundwater, removal of barriers to fish passage, and the rewilding of degraded rivers.
- Protect the East Anglian chalk groundwater resource by enhancing GI features through landscape-scale management, and improving the condition of the ecosystem by reducing pollution and contamination.

2. River Cam Corridor

- Enhance the River Cam Corridor to strengthen its existing role as a key linear GI asset across Greater Cambridge, by linking together existing active travel routes, connecting existing and proposed neighbourhoods to the Cam Corridor, improving wayfinding and interpretation, balancing accessibility improvements with nature conservation, restoring floodplains, implementing natural flood management, and increasing riparian planting.

This Strategic Initiative divides the River Cam corridor into three stretches:

- A: The northern section running from north east Cambridge to Waterbeach.
- B: The section running through the city of Cambridge.
- C: The section running south of Cambridge city.

3. Gog Magog Hills and chalkland fringe

- Conserve and enhance priority habitats, including chalk grassland and woodland.
- Provide a high quality, connected GI network to accommodate growing recreational need and enable residents to access, enjoy and learn about this part of Greater Cambridge's countryside.
- Ensure access to the countryside is managed in a way which avoids increasing recreational pressure on existing conservation sites at risk (e.g. SSSIs).

4. Enhancement of the eastern fens

- Conserve and enhance priority habitats including fen, grazing marsh and grassland (within and around the four designated SSSIs) for the benefit of wildlife.
- Create wildlife corridors to connect and expand these habitats where possible.
- Ensure negative impacts from access and recreational pressure on these sensitive ecological sites are minimised through habitat buffers and educating visitors.

5. The Great Ouse fenland arc

- Create a resilient network of fen and fen-edge habitat across the northern part of Greater Cambridge through habitat restoration, protection of peatland, sustainable soil, water and habitat management, and natural flood management.

- Enhance accessibility by linking existing and new routes to settlements and promote education of the rich geology, wildlife and heritage.

6. North Cambridge green space

- Provide new strategic green space(s) to the north of Cambridge, connected to the wider GI network by green corridors, to address the deficit in accessible GI in this area, reduce recreational pressure on existing sites and provide an important asset to meet growing demand from proposed development.

7. West Cambridge GI buffer - Coton corridor

- Enhance the recreational and habitat offer to ensure there is sufficient high-quality and accessible GI to keep pace with growing development (and associated recreational pressure) west of Cambridge. This includes improving accessibility to and between GI assets and surrounding settlements, providing more opportunities for recreation and nature (making sites 'work harder'), expanding GI where possible, and enhancing habitats.

8. Western gateway multifunctional GI corridors

- Provide opportunities to improve biodiversity by expanding and joining up the existing woodland, hedgerow and grassland habitat network. This will be delivered through new woodland planting, natural regeneration, hedgerow extension and management, and habitat restoration. Ensure opportunities for biodiversity offsets from East West rail are sought.
- Ensure negative impacts from access and recreational pressure on sensitive ecological sites (Eversdon and Wimpole SAC, and woodland SSSIs) are minimised, by providing additional GI sites for recreation, promoting alternative or new access routes, and educating visitors on the value of conserving habitats.
- Improve access throughout the area for people (where it will not cause detrimental impact on ecological sites - as above) through opportunities associated with East West rail as well as along river corridors.

9. Pollinator corridors

- Create a network of linear 'pollinator corridors' by promoting locally appropriate wildflower diversity and abundance in line with the National Pollinator Strategy.

10. Expanding Greater Cambridge's 'urban forest'

- Increase tree canopy cover and its distribution, by protecting the existing tree canopy and planting new trees using locally-appropriate species, to help settlements adapt to climate change and sustainably enhance the urban environment for people and wildlife.

11. Woodland expansion and resilience

- Expand woodland areas (and hedgerows) through planting and natural regeneration, and improve their management outside urban areas to deliver benefits for carbon sequestration, create wildlife corridors, contribute to flood resilience and enhance the wider landscape.
- Mitigate pressures on woodlands, including recreational pressure, fragmentation and the impacts of climate change.

12. Urban greening and 'de-paving'

- Introduce urban greening interventions (e.g. green roofs, SuDS, street trees and pocket parks) within existing, regenerating and newly proposed urban areas across Greater Cambridge to deliver multiple benefits for people, wildlife and the environment.

13. Allotments and community gardening

- Create a patchwork of allotments and community growing sites across Greater Cambridge, delivered through expansion and upgrading of existing sites and providing new sites in areas of deficiency and new development.

14. Environmentally friendly farming

- Ensure that farming and food production across Greater Cambridge's predominantly rural landscape is undertaken in a way that maximises the delivery of ecosystem services (e.g. biodiversity, carbon sequestration, water quality, soil quality, health and wellbeing) by promoting partnership working and uptake of agri-environment schemes.

Greater Cambridge Green Infrastructure Opportunity Mapping
for South Cambridgeshire District Council and Cambridge City Council

LUC

Figure A: Strategic Initiative summary

Swavesey
Cottenham
Waterbeach
Histon
Milton
Girton
Cambourne
Bourn
Cambridge
Fulbourn
Great Shelford
Balsham
Sawston
Linton
Duxford
Melbourn

5
6
2A
9
4
2B
7
8
3
2C
1

- Greater Cambridge
- Large natural greenspace (all access types)
- SSSI

Spatially-specific Strategic GI Initiatives

1. Revitalising the chalk stream network
2. River Cam Corridor
3. Gog Magog Hills and chalkland fringe
4. Enhancement of the eastern fens
5. The Great Ouse fenland arc
6. North Cambridge green space
7. West Cambridge GI buffer - Coton Corridor
8. Western gateway multifunctional GI corridors
9. Pollinator corridors

Dispersed Strategic GI Initiatives

10. Expanding Greater Cambridge's 'urban forest'
11. Woodland expansion and resilience
12. Urban greening and 'de-paving'
13. Allotments and community gardening
14. Environmentally friendly farming

N

0 5 10 km

Map scale 1:160,000 @ A3

South Cambridgeshire District Council

CAMBRIDGE CITY COUNCIL

CB: EB:Manson D LUC 11017_FIGA_r3_Strategic_initiative_summary_A3L 30/07/2021

Source: Ordnance Survey, Natural England, BCN WT, EA, Buglife

Policy Recommendations

A series of policy options to help ensure the Greater Cambridge Local Plan facilitates and maximises the delivery of green infrastructure throughout the plan period have been considered. The role of the local plan is wide ranging and therefore, so are the opportunities that it can provide to deliver green infrastructure.

There are however limitations to what a local plan can do. Its purpose broadly relates to new development and therefore it can sometimes have little influence over current uses of land unless these are required to change under the planning system. For example the local plan cannot require an agricultural unit to be managed in a more environmentally sustainable manner, nor for improved management of existing woodland to improve biodiversity, unless this is specifically related to mitigating the impacts of planned development.

Taking account of the above, it is recommended that the Greater Cambridge Local Plan includes new policies which seek to create new areas of accessible green infrastructure, support green infrastructure projects and also to help support organisations which are involved in environmental improvement and green infrastructure provision and management.

Key GI policy recommendations are as follows:

1. Identify the areas covered by Strategic Initiatives 1-9 set out in this report on the adopted policies map

Local plan policy wording should set out that development within these Strategic Initiative areas should support the objectives of the relevant Initiative within which they lie. As identified areas on the policies map, these Initiatives will be considered in the decision-making process and are likely to become a key focus for green infrastructure improvements within the area.

2. Support the other Strategic Initiatives (10-14) set out in this report

These Initiatives cannot be identified on the policies map due to their dispersed locations. However, in order to demonstrate their importance, local plan policy should set out that development is expected to deliver these where the development has a realistic opportunity do

so, for example, being in a suitable location to support them, or being designed to include relevant elements such as urban greening and community allotments.

3. Set out a requirement for new development to achieve a minimum of 20% biodiversity net gain

In order to reverse trends in biodiversity declines and make up for the relatively low amount of space that is safeguarded for nature (compared to other districts) in the Greater Cambridge area, a minimum 20% biodiversity net gain target should be included in the Local Plan. Where Net Gain cannot be achieved on development sites there will be a requirement for offsetting by undertaking or funding projects off-site, to ensure that a minimum of 20% Biodiversity Net Gain (BNG) is achieved. The areas identified in the Strategic Initiatives could be the focus of offsetting schemes or payments.

4. Require a green infrastructure-led design approach to new development

To ensure that development sites are well designed, with an emphasis on green infrastructure, local plan policy should promote green infrastructure focussed design tools as standard. This will help to ensure that developments are designed consistently and to maximise green infrastructure opportunities on and immediately surrounding the site. Complemented with a requirement for measurable biodiversity net gain, this approach will lead to better planning and delivery of green infrastructure on development sites.

5. Strengthen open space requirements

Natural England has identified that a number of nationally designated sites in Greater Cambridge are facing recreational pressure. This is likely to be exacerbated by new development within the relevant SSSI Impact Risk Zones (IRZ) that have been defined by Natural England. New development should take account of this recreational pressure and seek to ensure it is not exacerbated.

Organisational changes to support green infrastructure delivery

In addition to the policies of the local plan helping to promote and ensure green infrastructure is delivered, there are opportunities for the two local authorities to support green infrastructure provision by making structural and organisational changes. These include:

- **Create a staff post related to green infrastructure delivery** - Creation of a staff post to help facilitate the delivery of the green infrastructure related policies in the local plan will have a significantly positive effect on the delivery of green infrastructure. This has been demonstrated in authorities where a green infrastructure officer has been put in post.

- **Identify specific councillor remit for the delivery of green infrastructure projects -** The creation and management of green infrastructure in order to help address key challenges facing Greater Cambridge, such as the climate change and ecological emergency declarations, is exceptionally important. It is recommended that a remit for ‘green infrastructure’ is given to a senior political post within each local authority.

Next Steps for GCSP

The emerging Local Plan provides an opportunity to embed the Strategic Initiatives in policy for Greater Cambridge. The policy recommendations set out in this report provide an assessment of the role the local plan can play in helping to identify and facilitate the delivery of GI.

It is also recommended that the report and list of Initiatives are maintained as a 'live resource' so that they can be updated as new evidence and opportunities emerge over time. This will also include keeping an eye on the emerging GI Standards that are due to be published in the future by Defra.

Throughout the development of this evidence base, the stakeholders in Greater Cambridge have remained engaged and have continually demonstrated a willingness to contribute to the Doubling Nature vision for the region. The report seeks to harness this potential and secure continued buy-in and engagement and recommends that:

- an interactive, online resource is developed to demonstrate successes in delivering on Strategic Initiatives and constituent delivery projects. An online portal would bring stakeholders together and continue to make connections between projects and partners.
- ongoing dialogue is maintained with neighbouring authorities and organisations who are also have an interest in GI. GI doesn't stop at local authority boundaries and partnership working is critical to ensure that the GI network within Greater Cambridge is well connected to wider networks.

Finally, the success of the delivery of GI within Greater Cambridge is going to require careful monitoring through the Local Plan annual monitoring process. Clear indicators will need to be identified to ensure that the Local Plan policies and proposed initiatives are delivering on the vision to enhance and the expand GI to create a coherent, thriving and resilient network.

Chapter 1 - Introduction

1.1 A high quality and resilient natural environment is increasingly recognised as a ‘must have’, rather than ‘nice to have’. It helps us mitigate the effects of climate change and adapt to it, conserves and enhances biodiversity, improves health and wellbeing, whilst restoring and maintaining local distinctiveness. The declaration of emissions targets and a climate emergency by South Cambridgeshire District Council and Cambridge City Council ('the Councils'), as well as the ‘Doubling Nature vision’, have increased the importance of these issues locally.

1.2 The Councils have committed to preparing a joint Local Plan for their combined area, to cover the period to 2041, and commissioned LUC to undertake a Green Infrastructure (GI) Opportunity Mapping project to ensure the forthcoming joint Local Plan is based on sound evidence; including deliverable interventions to enhance the GI network.

1.3 The overall aims of the study were twofold:

- to provide a robust evidence base on the quantity and quality of existing GI assets and networks within Greater Cambridge; and
- through analysis and consultation, identify specific and deliverable opportunities to enhance and expand the network, supported by appropriate local plan policies.

1.4 The National Planning Policy Framework (NPPF) provides the overarching rationale for the study, guiding what the study should comprise, and how the network of existing and new GI assets should be strategically planned. The study also draws upon a range of national, regional and local policies and was developed in close collaboration with others progressing existing initiatives and consultants preparing the wider evidence base for the Local Plan. The study was supported by a comprehensive stakeholder engagement programme with relevant officers of the Councils, neighbouring authorities and local stakeholders. Some key definitions are set out overleaf.

Key definitions

Green Infrastructure

Green infrastructure is the term used to describe the network of natural and semi-natural spaces and corridors in a given area. These include open spaces such as parks and gardens, but also allotments, woodlands, fields, hedges, lakes, ponds, playing fields, coastal habitats, footpaths, cycle routes and water courses. Crucially, GI provision is not limited to traditional green spaces such as parks and other open spaces, but can involve various interventions to thread nature into streetscapes, or provide corridors of connectivity between the GI features described above, known as 'assets'.

Above all, GI is defined by its multifunctionality. A single GI asset can deliver a range of benefits to people (both physical and mental wellbeing), as well as biodiversity and landscape. GI can help to create high quality, attractive and functional places that will provide a setting for day- to-day living. It can also address the negative impact of habitat loss and fragmentation by promoting habitat creation, enhancement and connectivity (on site as part of development or through biodiversity off-setting), and plays an important role in reducing local temperatures, climate change adaptation and mitigation, and alleviating flood risk and soil erosion.

Green infrastructure is the tool by which ecosystem services can be planned and delivered through policy.

Ecosystem Services

Ecosystem services is the term used to describe the benefits provided to people by natural capital (ecosystems and the biodiversity they contain). Services broadly comprise:

- Provisioning services e.g. food, fibre, fuel and clean water;
- Regulating services e.g. climate control, flood regulation, carbon storage, pest control and pollination;
- Cultural services e.g. recreation, spiritual, educational, intrinsic and aesthetic value.
- Supporting services (e.g. soil formation, photosynthesis, biodiversity) originally distinguished are now typically seen as functions or processes associated with natural capital ‘stocks’.

Ecosystem services may be described as ‘flow’, as explained below.

Natural Capital

Natural capital (as defined by the Natural Capital Coalition) is another term for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people. All this means is that any part of the natural world that benefits people, or that underpins the provision of benefits to people, is a form of natural capital.

Natural capital is a stock, and from it flows ecosystem services or benefits. These services (where service is defined as ‘a system supplying a public need’) can provide economic, social, environmental, cultural and spiritual benefits. The value of these benefits can be understood in qualitative or quantitative (including economic) terms, depending on context.

Methodology

1.5 The three main stages of the project are set out in Figure 1.1. The Part 1 Baseline Report (November 2020) presents the findings from Stages 1 and 2. These stages include:

- a review of the relevant policy framework;
- a desk-based exercise to develop a comprehensive map of the GI network;
- a desk-based evaluation of the various functions of the GI network to identify issues and opportunities relating to GI in Greater Cambridge;
- a programme of stakeholder engagement; and
- the identification of broad opportunity zones for enhancing the GI network.

1.6 GI assets provide ecosystem services (the benefits provided to people by ecosystems and the biodiversity they contain) for environmental, social and economic benefit. To provide a comprehensive baseline and evaluation of the GI network in Greater Cambridge, a 'themed' approach to the assessment was undertaken. This desk-based analysis was undertaken in order to understand the various functions and ecosystem services, including the multi-functional benefits, provided by the GI network. Ecosystem services were categorised into seven 'GI themes', as indicated below:

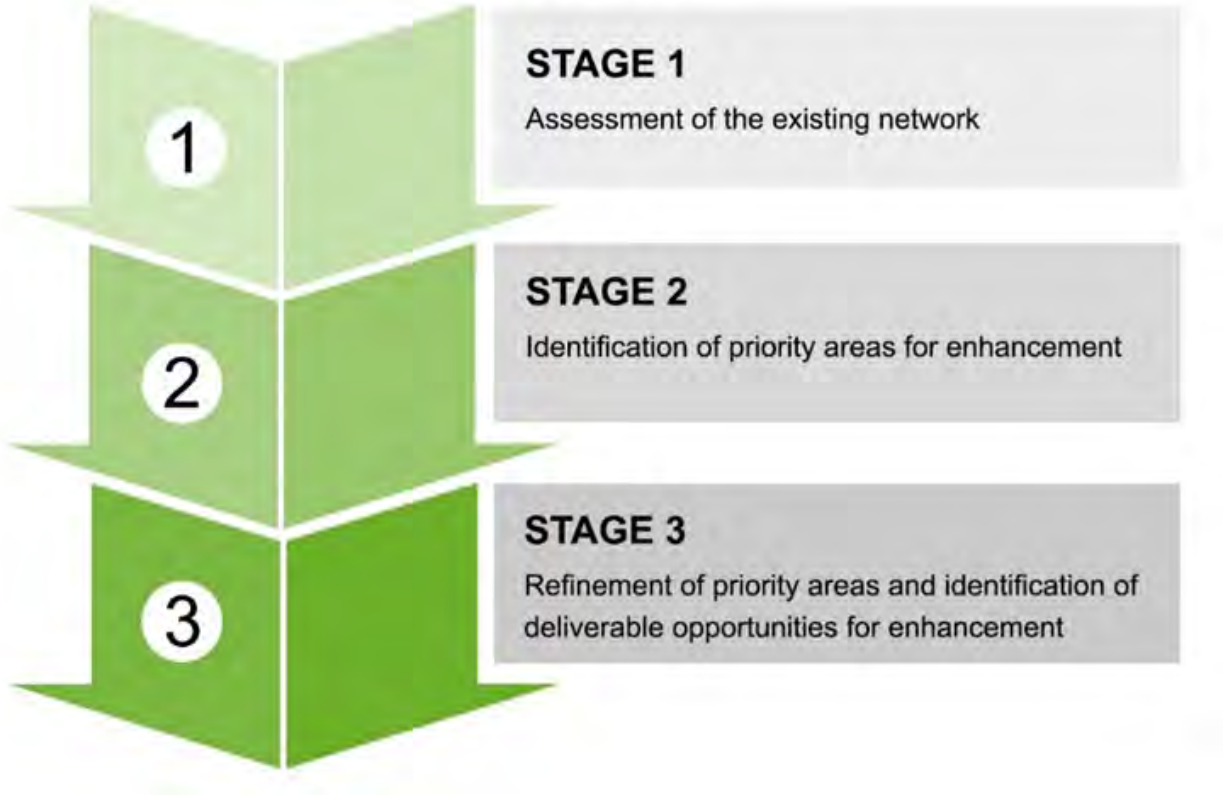
- Landscape, cultural heritage and sense of place;

- Biodiversity and geodiversity;
- The water environment;
- Access and connectivity;
- Recreation and play;
- Carbon sequestration; and
- Agriculture and community food growing.

1.7 In addition to these seven themes, the cross-cutting themes of climate change, wellbeing and social inclusion, and environmental factors (which includes, for example, air quality, rainfall, temperature regulation and noise) are considered throughout.

1.8 All of the information gleaned from the review of evidence and stakeholder consultation was brought together to support the identification of priority areas for enhancement, culminating in the mapping of 'broad opportunity zones' in Geographic Information Systems (GIS). The opportunity zones for all seven themes are shown in a combined map in Figure 1.2. The cumulative view shows the areas where GI interventions might deliver a number of ecosystem services and related benefits. These broad enhancement zones are refined in Stage 3 of this study, the methodology of which is set out below.

Figure 1.1: GI study methodology



Greater Cambridge Green Infrastructure Opportunity Mapping
for South Cambridgeshire District Council

LUC

Figure 1.2: Combined Broad Opportunities Map

Swavesey
Cottenham
Waterbeach
Histon
Milton
Girton
Cambourne
Bourn
Cambridge
Fulbourn
Great Shelford
Balsham
Sawston
Linton
Duxford
Melbourn

Greater Cambridge

Number of GI themes

1
2
3
4
5
6
7

0 5 10 km

Map scale 1:160,000 @ A3

CB:DM EB:Manson D LUC FIG1_2_11017_r2_Combined_opps_A3L 20/07/2021
Source: OS, LUC

South Cambridgeshire District Council

CAMBRIDGE CITY COUNCIL

1.9 This Part 2 Recommendations Report presents the findings from Stage 3 which includes:

- An update on evidence relevant to GI that has emerged subsequent to the publication of the Part 1 Baseline Report (Chapter 2).
- Refinement of the broad opportunity zones into 14 Strategic Initatives that could be delivered to enhance the GI network in Greater Cambridge (Chapter 3).
- Policy recommendations for GI (Chapter 4).
- Summary and an overview of the next steps for Greater Cambridge Shared Planning (GCSP) (Chapter 5).

1.10 The methodology for identifying priority GI areas and deliverable opportunities for enhancement from the broad opportunity zones is summarised in Figure 1.3. The sequence of steps is as follows:

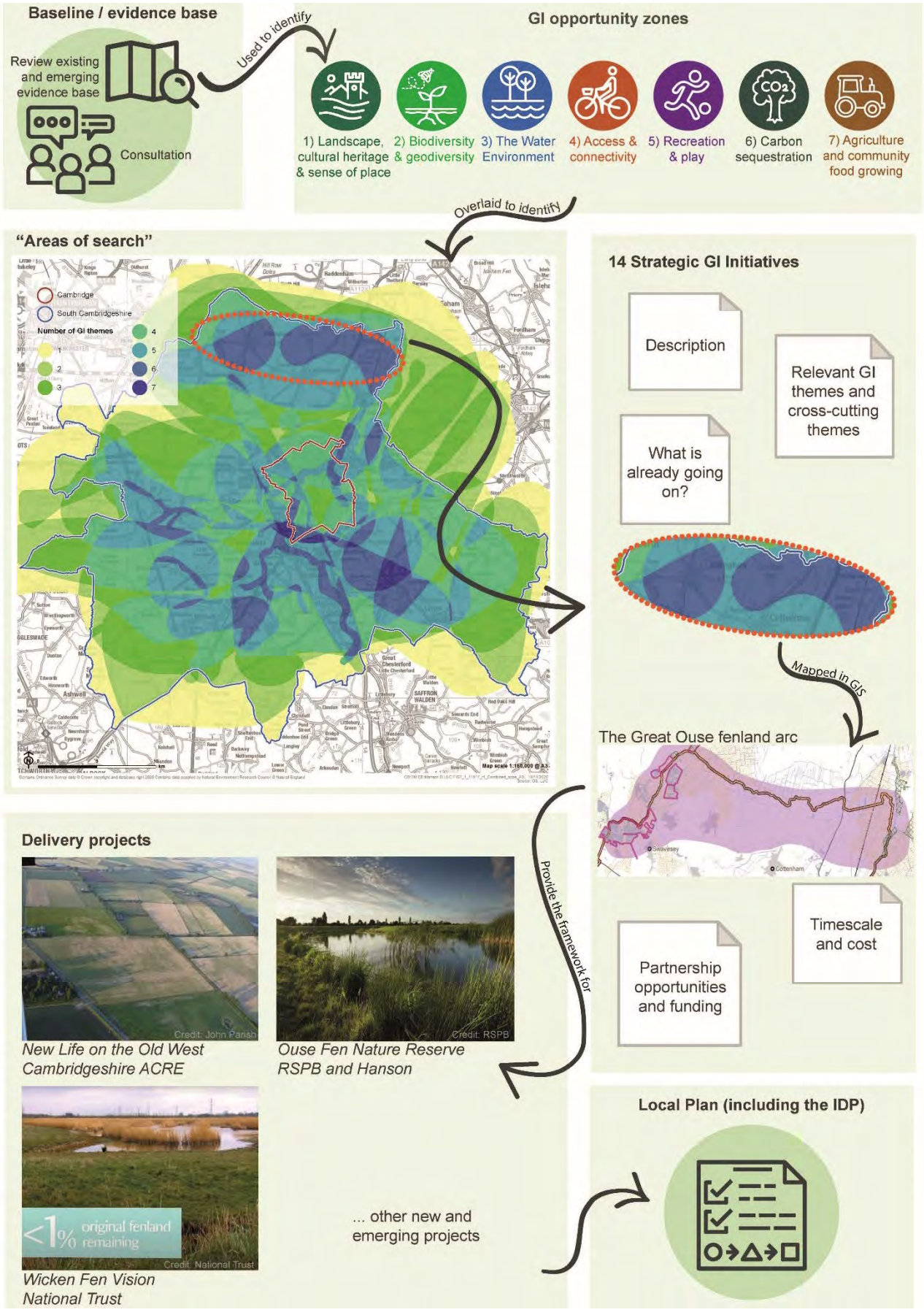
- Broad GI opportunity zones - identified in Stage 1 and 2 of this study, these zones represent spatial areas that emerged from the baseline review of issues and opportunities for each of the seven themes. These formed the GI opportunity zone long list. The long list is included as Appendix A (Table A.1) of this Report and is also a live spreadsheet provided to the Councils which can be added to and updated on a ongoing basis.
- Areas of search - identified to optimise the multifunctional benefits of GI by combining similar opportunities or natural assets across the seven themes (and three cross-cutting themes). These were based on professional judgement and further targeted engagemement with stakeholders.
- Strategic Initiatives - identified from the GI opportunity zone long list and areas of search. These represent the GI priorities for Greater Cambridge based on the natural capital assets, climate change vulnerabilities and GI needs assessed in Stage 1 and 2. The spatial extent of these Strategic Initiatives has been mapped or identified as 'dispersed'.
- Delivery projects - the Strategic Initiatives provide a framework to support the design and enable implementation of 'delivery projects' that will support the Local Plan and contribute to the development of the Infrastructure Delivery Plan (IDP) which sets out the infrastructure required to support the Local Plan. Delivery projects include ongoing or planned projects and proposals within, or aligned to, the Strategic Initiative. These have been identified through the evidence review or stakeholder engagment.

1.11 The 14 Strategic Initiatives are presented in Chapter 3, each of which presents the following information:

- **Overview**
  - Objectives of the Initiative;
  - GI themes which the Initiative supports;
  - A figure showing the spatial extent of the Initative; and
  - Overview and description of the Initiative.
- **Context**
  - Relationship with existing projects and initiatives in Greater Cambridge; and
  - Relationship with the development strategy.
- **Delivery**
  - Potential delivery partners;
  - Potential delivery mechanisms / funding;
  - Timescale;
  - Cost;
  - Priority; and
  - Case study (typically from elsewhere in the country) and/or spotlight (typically on existing projects or GI assets within Greater Cambridge).

1.12 The Strategic Initatives have the potential to make an important contribution towards the targets for Net Zero Carbon and Doubling Nature. However, other activities will be required to ensure these targets are achieved in full, informed by ongoing and future evidence, and partnership working across Greater Cambridge.

Figure 1.3: Detailed methodology to identify Strategic Initiatives



1.13 In order to ensure that there is a strong supporting policy framework to promote and deliver the Strategic Initiatives, a range of policy approaches were explored. Chapter 4 presents these findings and first outlines the role of local plans, different local plan policy approaches, and the key challenges relating to GI which the Greater Cambridge Local Plan Review is seeking to address. Three policy recommendations are discussed, including:

- identifying areas for environmental protection or improvement;
- identifying standards for new development (e.g. Biodiversity Net Gain target); and
- providing policy support for specific projects.

1.14 The following information is provided for each policy recommendation:

- overview of approach;
- review of related evidence and justification for approach;
- example approaches in other Local Plans;
- addressing the key challenges;
- feasibility/ deliverability; and
- policy recommendation.

1.15 In addition to the policies of the Local Plan helping to promote and ensure GI is delivered, non-policy specific recommendations in relation to the preparation of the Local Plan and advocacy for green infrastructure are discussed.

Chapter 2 – Building on Baseline (Part 1 Report) Evidence

2.1 Subsequent to the publication of the Part 1 Baseline Report, there has been further engagement with stakeholders and a review of a number of the evidence bases being developed to inform the Local Plan Review. This section highlights key additional evidence that has contributed to the identification of the Strategic Initiatives presented in Chapter 3 of this report.

Greater Cambridge Local Plan development strategy

2.2 To inform the preparation of this evidence report ahead of the Preferred Options Plan consultation taking place in autumn 2021, officers from Greater Cambridge Shared Planning on behalf of the two councils shared a working assumption preferred option development strategy, including dwellings, jobs and associated population assumptions.

2.3 Please note that use of the working assumption preferred option development strategy to inform this evidence base does not confer formal support by either council for that strategy. No decisions will be taken on development strategy assumptions until relevant member committees meet and approve documents for the Local Plan preferred options consultation. Such decisions will be informed by appraisal of reasonable alternatives. Setting out working assumptions in this and other notes does not prejudice those decisions.

2.4 Information from the working assumption preferred option development strategy was used to evaluate each Strategic Initiative in terms of its relationship (spatial or otherwise) to the areas of proposed development.

Updated Local Plan evidence

2.5 Greater Cambridge emerging net zero carbon evidence base reports were shared in March 2021. The recommendations to achieve net zero focus on renewable power generation, infrastructure and buildings. However, there is significant overlap with the GI Study in relation to transport and land use, notably: to safeguard land for expansion of walking and cycling routes; to protect peat and carbon-rich soils; and, to maximise sequestration and storage through afforestation, agro-forestry, hedge creation, broadleaf management and habitat restoration (of peatland, woodland, wetland and grassland). The recommendations have helped to develop and prioritise the Strategic Initiatives.

2.6 The draft Integrated Water Management Study (part of the Water Cycle Study), led by Stantec, was shared in June 2021. It provides a number of recommendations to ensure future flood resilience and water quantity and quality, several of which link to green infrastructure. Relevant recommendations from the study are incorporated into those Strategic Initiatives aimed to enhance the water environment, for example fen restoration, natural flood management and Sustainable Drainage Systems (SuDS) within urban greening.

Greater Cambridge Local Plan Call for Green Sites responses

2.7 To support exploration of GI opportunities within Greater Cambridge, as a part of the First Conversation consultation held in January-February 2020, the Councils invited respondents to submit sites for green space and wildlife habitats to be considered through the Local Plan.

2.8 The Councils shared green space proposals responding to this consultation question, together with green space site ideas submitted following the close of consultation, with LUC for consideration. Full details of the Call for Green Sites results are available in the Greater Cambridge Local Plan Document Library.

2.9 The green sites considered in this study are included in Appendix A (Table A.2 and A.3). These were considered alongside the GI opportunity zone long list to develop the Strategic Initiatives. Where the submission fits within the overall objectives and is located within the area

covered by the Strategic Initiative, reference has been made to these projects in the relevant Strategic Initiative description.

Nature strategies prepared by the respective Councils

2.10 During the period of preparing this Report, Cambridge City Council and South Cambridgeshire District Council have respectively prepared their own nature or biodiversity strategies which amplify their ambitions to double nature within their own areas, focusing particularly on their own respective estates, as well as their influence with stakeholders. Both strategies refer to and complement this Opportunity Mapping Report.

South Cambridgeshire Doubling Nature Strategy

2.11 The South Cambridgeshire Doubling Nature Strategy, adopted by the Council's Cabinet in February 2021, is a high-level strategy setting out an approach to increasing wildlife-rich habitats and the tree canopy and improving access to green spaces in the district. Given that the council directly controls only a tiny area of land in the district, a significant focus of the strategy is on using its direct influence through policies and making the most of its wider influence through partnerships and within South Cambridgeshire communities. The strategy is supported by an action plan which will be updated on an annual basis.

Draft Cambridge Biodiversity Strategy 2021-30

2.12 Cambridge City Council will be consulting on the draft Cambridge Biodiversity Strategy 2021-30 over summer 2021. The draft strategy sets out a series of objectives under three main themes, with specific actions relating to each one:

1: 'Biodiversity Mainstreaming' – making biodiversity an integral concern of all Council services and ensuring that protection and enhancement opportunities are given due consideration in all decision making.

2: 'The Core' – sets out how the council will enhance the 'core' wildlife sites and habitats it manages, such as local nature reserves, commons, cemeteries and larger parks, in order to increase the number and types of plants and animals they support.

3: ‘Nature in your Neighbourhood’ – explains how the council will work with residents, businesses and other landowners to improve biodiversity in gardens and other urban green spaces which it does not manage itself.

2.13 In developing the proposed strategy, a baseline of habitats and their condition has been established for the open spaces managed by the council, to help ensure that gains in biodiversity can be accurately measured.

Ongoing relevant work led by stakeholders

2.14 As highlighted through stakeholder engagement in earlier stages of this study, a number of stakeholders and organisations are actively working on initiatives and projects that relate to GI in the region. It is essential that the Strategic Initiatives and policy recommendations put forward through this GI Study are complementary to these parallel work streams and make best use of the emerging evidence. Of particular relevance since the publication of the Part 1 Report is the publication of the Cambridge Nature Network (CNN) and Water Resources East Natural Capital Plan.

Cambridge Nature Network

2.15 In response to the rapid growth of Cambridge and the twin threats of the biodiversity and climate emergencies, the Cambridge Nature Network (CNN, published May 2021) aims to inform both the Local Plan and future Local Nature Recovery Strategy (LNRS) by setting out a spatial plan for nature. LNRS are a flagship measure in the Environment Bill and aim to drive a coordinated, practical, focused action and investment to help nature and people flourish together, whilst delivering wider nature-based environmental benefits such as carbon capture, water quality and recreation. The CNN report also proposes actions that will be required to take forward its recommendations.

2.16 The independent baseline evidence review undertaken in Part 1 of this study to identify issues, risks and opportunities for GI in Greater Cambridge supports the CNN Priority Areas. and as such, the Councils have publicly endorsed the Network proposals. Although there was engagement with the CNN project team throughout the development of the Part 1 GI Study Report, in the latter stages of both studies, the spatial boundaries of the Nature Recovery

Network Priority Areas were shared. The five Priority Areas and one Opportunity Area are shown on Figure 2.1. These Nature Recovery Network Priority Areas formed an important source of information for this next stage of this study.

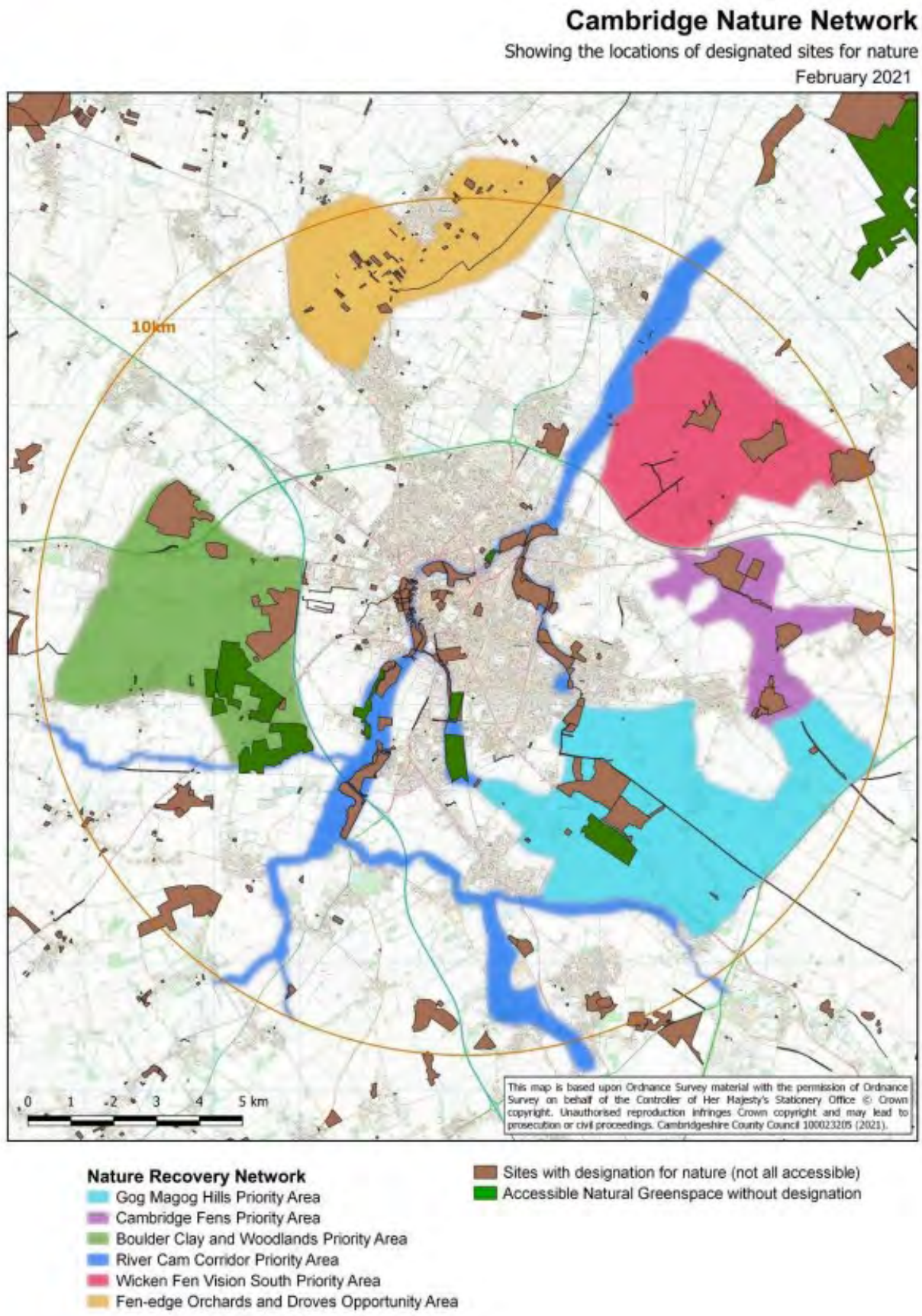
2.17 As part of the development of the CNN, detailed habitat surveys of each of the areas were undertaken. Where possible, this detailed habitat information has fed into the Part 1 GI Study mapping of GI. There was also an assessment of strategic natural greenspace undertaken. For this assessment, all areas of Accessible Natural Greenspace at least 5 hectares (Ha) in size within a 20Km radius of Cambridge were mapped. With the aim of mapping access catchments using the existing Natural England Accessible Natural Greenspace Standards (ANGSt), each site was categorised in terms of its type of access and level of access. Local knowledge of access types for each of the strategic sites enabled a series of maps to be generated for each of the ANGSt criteria. These are presented in the CNN. For the purposes of this assessment, it was considered a useful extension to the CNN work to understand the location of areas that are not meeting more than one of the ANGSt criteria. A cumulative view of the ANGSt mapping was generated, and is shown in Figure 2.2.

2.18 This assessment suggests that Cambridge and surrounds are severely deficient in larger strategic natural greenspaces above 100 Ha. This assessment supports stakeholder feedback from earlier stages in the GI Study and provided more nuanced spatial evidence on this topic. The CNN also tests an approach to quantifying the deficiency in access through the application of Natural England's Suitable Alternative Natural Greenspace standards (SANGS). SANGS were developed to protect internationally important nature conservation sites, where recreational pressure on these sites needs to be offset through provision of alternative options for recreation. Whilst in Greater Cambridge, recreational pressure is impacting nationally important nature conservation sites, similarities are drawn between the impacts on SSSIs in Greater Cambridge and internationally important sites elsewhere, and the application of a SANGS-type approach to mitigating recreational impacts on national sites would likely be beneficial.

2.19 Six relevant recommendations emerged from the CNN natural greenspace assessment that have been considered alongside other evidence (e.g. Local Plan development strategy) in forming the Strategic Initiatives; most notably Strategic Initiative 6 (North Cambridge green space):

- The Greater Cambridge area should actively plan for the creation of three new strategic natural greenspaces to the south / south-east, west and north / northeast of the city.
- South of the city a strategic natural greenspace site (or agglomeration of sites) of at least 500 Ha in size should be provided.
- West of the city a strategic natural greenspace of between 100 and 500 Ha should be provided.
- North / north-east of the City a strategic natural greenspace of at least 100 Ha should be provided.
- New strategic greenspaces should include a variety of experiences to cater for the widest range of local needs.
- Wherever possible sites should be close to population and highly accessible.

Figure 2.1: Cambridge Nature Network



Greater Cambridge Green Infrastructure Opportunity Mapping
for South Cambridgeshire District Council

LUC

Figure 2.2: Accessibility of strategic natural greenspaces

Swavesey
Cottenham
Waterbeach
Histon
Milton
Girton
Cambourne
Bourn
Cambridge
Fulbourn
Great Shelford
Balsham
Sawston
Linton
Duxford
Melbourn

Greater Cambridge

Large accessible natural green space assessment undertaken for Cambridge Nature Network

- Full
- Paid
- Footpath
- Limited footpath
- Visual only
- Planned

Large ANGSt catchment analysis

- Outside of 2km, 5km and 10km ANGSt catchments
- Within 1 ANGSt catchment
- Within 2 ANGSt catchments
- Within 3 ANGSt catchments

0 5 10 km

Map scale 1:160,000 @ A3

CB:DM EB:Manson D LUC FIG2_2_11017_r1_Strategic_natural_greenspace_A3L 20/07/2021
Source: BCN Wildlife Trust

South Cambridgeshire District Council

CAMBRIDGE CITY COUNCIL

Water Resources East Natural Capital Plan

2.20 The Water Resources East Natural Capital Plan for Eastern England is being developed by Water Resources East, Biodiversify and WWF-UK with the financial support of The Coca-Cola Foundation. The process is stakeholder-led and uses Systematic Conservation Planning (SCP), a spatial decision support approach for landscape level management of biodiversity, the environment and natural capital which identifies the most cost-effective places for intervention. .

2.21 The plan aims to identify priority areas across the region where actions should take place to achieve natural capital objectives set by stakeholders for water, nature and people. It is not statutory, but is designed to inform and coordinate on-the-ground action delivered by government bodies, environmental organisations, farmers, local communities, volunteer groups, the private sector and any other person or organisation who feels they can contribute.

2.22 The first iteration of the Water Resources East Natural Capital Plan (published April 2021) presents the output of a spatial prioritisation analysis for each action of conserving, restoring and establishing natural capital, undertaken to identify how and where to act to improve natural capital in the most cost-effective manner across the Water Resources East region. Stakeholder consultation on the first iteration is underway at the time of writing (June 2021). This will inform review and revision of the plan, before finalising the plan later in 2021. Use of the finalised plan (once published) alongside the Strategic Initiatives is encouraged to develop location-specific projects that will help to deliver nature recovery with maximum benefits, coordinate projects and opportunities, as well as encourage cohesive action across local authority boundaries.

Updated evidence on recreational pressure

2.23 The Part 1 Baseline Report highlighted some significant gaps in the current understanding of spatial deficiencies in access to open space and recreation facilities in Greater Cambridge. Work continues on the Greater Cambridge Open Space & Recreation Strategy. This work will quantify deficiencies in local open space and play facilities in the settlements.

2.24 Additional evidence for development and recreational pressure on SSSIs has been obtained through consultation with Natural England and use of the SSSI Impact Risk Zones (IRZs) GIS data. This data supports rapid initial assessment of the potential risks to SSSIs

posed by development proposals, to ensure SSSIs are protected and enhanced in line with the policies in the NPPF and development plans. The IRZs define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

2.25 Natural England provided a list of SSSIs considered to be under recreational pressure. These SSSIs are shown on Figure 2.3 alongside the evidence on strategic recreation developed through the CNN. This indicative catchment mapping using the distance and size criteria set out in ANGSt has enabled indicative 'deficiency' mapping to be developed to support the identification of Strategic Initiative 6 specifically targeting this concern.

Piloting Natural England's National GI Standards Framework

2.26 Between January and February 2021, Greater Cambridge took part in the Natural England National GI Standards Trials. The trial had two objectives:

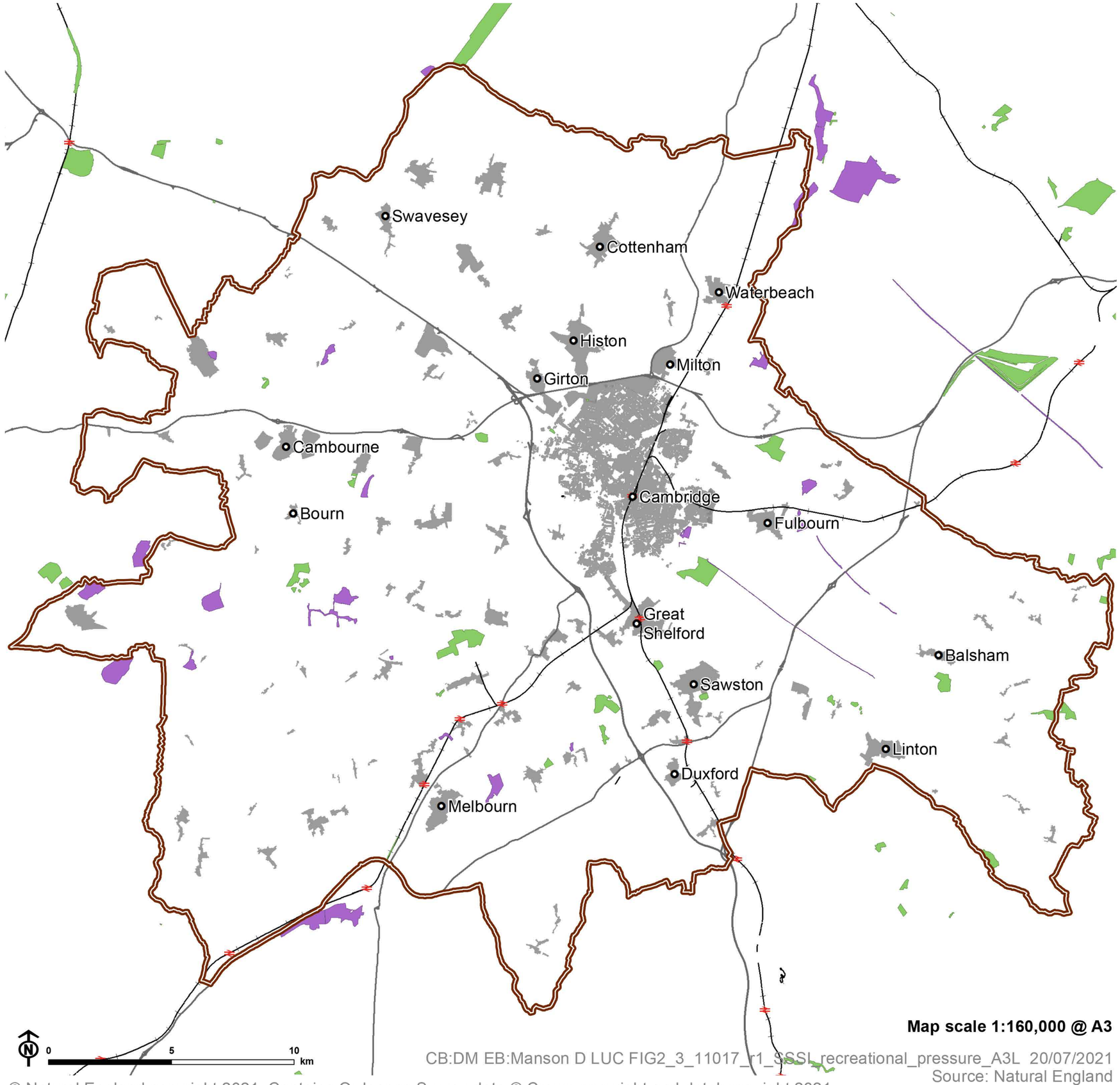
- Objective 1: Assess whether and how the GI principles and process maps (set out in the Draft National Green Infrastructure Standards) could enhance the process of developing green infrastructure policies for the Greater Cambridge Local Plan.
- Objective 2: Evaluate the usefulness of proposed Accessible Natural Greenspace Standards (ANGSt) and Urban Greening Factor standards in supporting robust Local Plan-making policies, in a Greater Cambridge context, that in turn would prove beneficial in terms of delivering high quality accessible natural green space close to where people live. Urban Greening Factors (UGF) are a composite metric that quantifies the amount and quality of urban greening that a development scheme provides.

2.27 The National GI Standards Framework is in the process of being updated to reflect the findings of trial partners. The trial process was useful in informing the policy recommendations set out in Chapter 4.

Greater Cambridge Green Infrastructure Opportunity Mapping
for South Cambridgeshire District Council

LUC

Figure 2.3: Recreational pressure on the SSSI network



Greater Cambridge

SSSIs under recreational pressure

Other SSSIs

Map scale 1:160,000 @ A3

CB:DM EB:Manson D LUC FIG2_3_11017_r1_SSSI_recreational_pressure_A3L 20/07/2021

Source: Natural England

South Cambridgeshire District Council

CAMBRIDGE CITY COUNCIL

Chapter 3 - Strategic Initiatives

3.1 The 14 Strategic GI Initatives are presented in this chapter and shown on Figure 3.1. They are grouped into 'spatially specific' and 'dispersed' as follows:

- Spatially specific Initatives:
  1. Revitalising the chalk stream network
  2. River Cam Corridor
  3. Gog Magog Hills and chalkland fringe
  4. Enhancement of the eastern fens
  5. The Great Ouse fenland arc
  6. North Cambridge green space
  7. West Cambridge GI buffer - Coton corridor
  8. Western gateway multifunctional GI corridors
  9. Pollinator corridors
- 'Dispersed' Initiatives relevant to the whole of Greater Cambridge:
  10. Expanding Greater Cambridge's 'urban forest'
  11. Woodland expansion and resilience
  12. Urban greening and 'de-paving'
  13. Allotments and community gardening
  14. Environmentally friendly farming

3.2 As set out in the methodology (Chapter 1), each Strategic Initiative is presented using the following structure:

- **Overview**
  - Objectives of the Initiative;
  - GI themes that the Initiative supports – drawing on the findings of consultation and research undertaken in earlier stages;

- A figure showing the spatial extent of the Initative; and
- Overview and description of the Initiative.

- **Context**
  - Relationship with existing projects and initiatives in Greater Cambridge - including reference to sites submitted through the Local Plan Call for Green Sites process undertaken in 2020/2021; and
  - Relationship with the development strategy – considering spatial (or other) relationships with planned development.
- **Delivery**
  - Potential delivery partners – drawing on information from stakeholders, other evidence studies, reference to potential funding opportunities and research into ongoing initiatives and projects;
  - Potential delivery mechanisms / funding – a high level assessment of options;
  - Timescale - split into three categories:
    - quick win (next 5 years)
    - medium term (5-10 years); and
    - long term (10+ years).
  - Cost - split into four categories:
    - £0-£10,000;
    - £10,000 - £100,000;
    - £100,000 - £1 million; and
    - above £1million.
  - Priority – split into three categories:
    - critical importance– delivery is critical to ensure the GI network is conserved and enhanced to keep pace with proposed development, mitigate recreational pressures on sensitive conservation sites, and to tackle the climate emergency and biodiversity crisis.

- higher importance – of higher importance to ensure the GI network provides benefits for people, nature and the environment.
- high importance – of high importance to ensure the GI network provides benefits for people, nature and the environment.

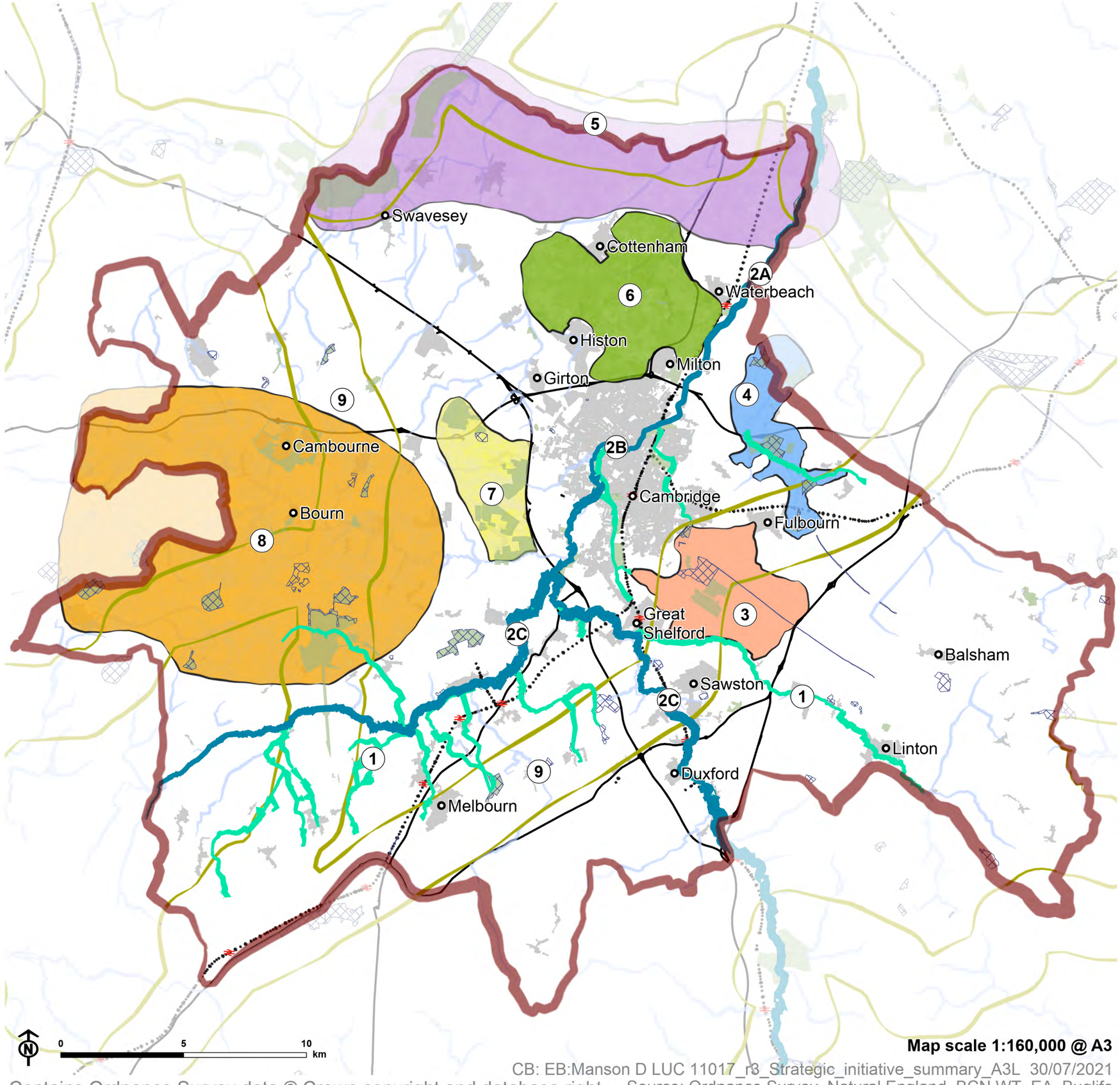
– Case study (typically from elsewhere in the country) and/or spotlight (typically on existing projects or GI assets within Greater Cambridge).

3.3 In addition to providing an overview of the potential delivery partners and delivery mechanisms within each description, Chapter 4 goes on to recommend ways in which the Local Plan can provide a supportive and positive framework for delivering these Strategic Initiatives.

Greater Cambridge Green Infrastructure Opportunity Mapping
for South Cambridgeshire District Council and Cambridge City Council

LUC

Figure 3.1: Strategic Initiative summary



Greater Cambridge
Large natural greenspace (all access types)
SSSI

Spatially-specific Strategic GI Initiatives

1. Revitalising the chalk stream network
2. River Cam Corridor
3. Gog Magog Hills and chalkland fringe
4. Enhancement of the eastern fens
5. The Great Ouse fenland arc
6. North Cambridge green space
7. West Cambridge GI buffer - Coton Corridor
8. Western gateway multifunctional GI corridors
9. Pollinator corridors

Dispersed Strategic GI Initiatives

10. Expanding Greater Cambridge's 'urban forest'
11. Woodland expansion and resilience
12. Urban greening and 'de-paving'
13. Allotments and community gardening
14. Environmentally friendly farming

Map scale 1:160,000 @ A3

CB: EB:Manson D LUC 11017_r3_Strategic_initiative_summary_A3L 30/07/2021

Source: Ordnance Survey, Natural England, BCN WT, EA, Buglife

South Cambridgeshire District Council

CAMBRIDGE CITY COUNCIL

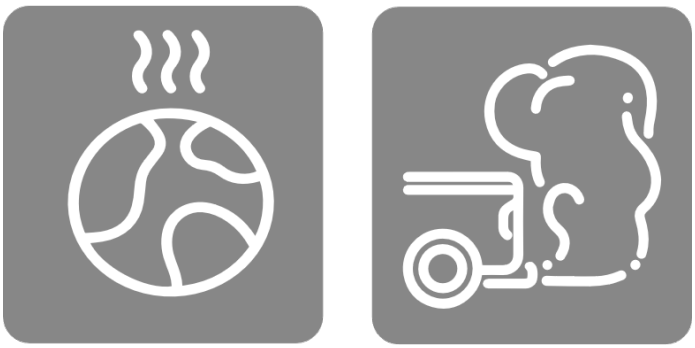
Strategic Initiative 1: Revitalising the chalk stream network

Objectives of Strategic Initiative

- Conserve and restore chalk streams to increase their ecological value, by addressing the the three primary issues affecting the chalk stream network – flow pressures, channel modifications and poor water quality. Restoration measures include restoring natural flows, floodplain reconnection, channel realignment, reconnecting rivers to groundwater, removal of barriers to fish passage, and the rewilding of degraded rivers.
- Protect the East Anglian chalk groundwater resource by enhancing GI features through landscape-scale management, and improving the condition of the ecosystem by reducing pollution and contamination.

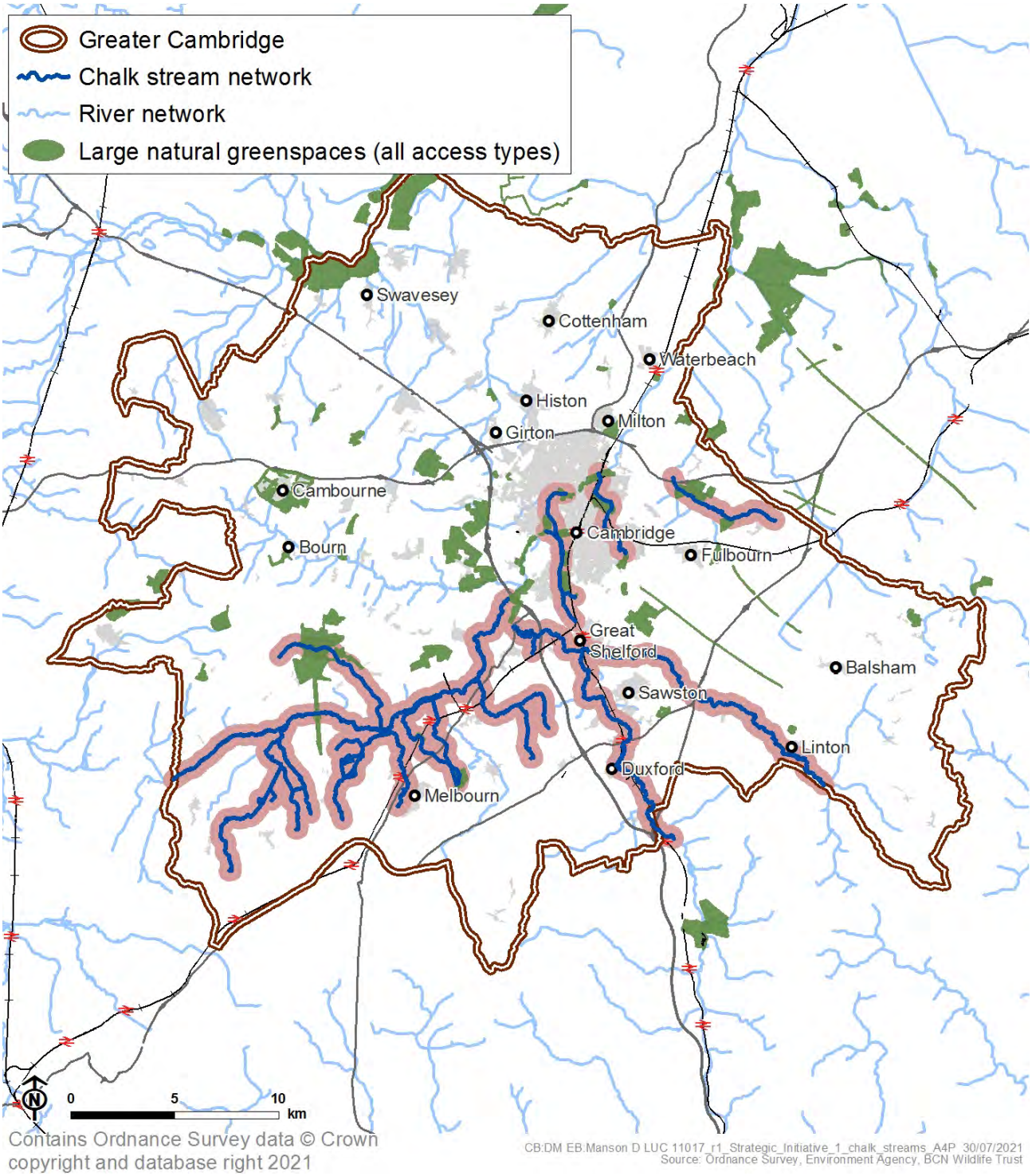
GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; and, the water environment.



The cross-cutting themes this Initiative supports are: climate change and environmental factors.

Figure 3.2: Revitalising the chalk stream network



Overview of Strategic Initiative

Chalk streams are internationally rare habitats. Greater Cambridge's chalk streams therefore form a network of flagship habitat for restoration within the wider drive for river restoration. Conservation management at their source aquifer, and restoration of the chalk streams themselves, will enhance the ecological value of rivers at a catchment scale by building on ongoing initiatives as part of the Greater Cambridge Chalk Streams Project (led by Cambridge City Council, Cambridge Water Company, BCN Wildlife Trust and Wild Trout Trust). Interventions to enhance the chalk stream network should also be informed by emerging evidence, including the Integrated Water Management Study and Water Resources East Natural Capital Plan.

Around 85% of the world's chalk streams are in the UK, mostly in the south and the south-east of England. In Cambridge, Bin Brook, Cherry Hinton Brook, Coldham's Brook, Hobson's Brook and Vicar's Brook are all chalk streams. The chalk aquifer they emerge from, to the south-east of the city, is a main source of water for residents and businesses (Cambridge Chalk Streams Project).

The chalk streams are habitats of conservation priority within Greater Cambridge and are experiencing three major problems - flow pressures (in part due to over abstraction), channel modifications, and poor water quality. There is growing concern over the impact of high abstraction rates and reduced recharge, which is impacting bird numbers and the wider ecosystems they form part of. Greater Cambridge is in one of the driest parts of the country and depletion of aquifers and reduced flows can led to long-term habitat damage. In May 2020, the lowest flows were recorded in the River Cam for that month since records began in 1949 (Cam Valley Forum: River Cam Manifesto). In particular, this study highlighted that Hobson's Brook (between Nine Wells and Cambridge city centre) needs intervention.

Restoration towards natural structure and function can be delivered in the shorter term, for example by restoring river channels to a more natural shape, form and flow – removal of artificial substrate, creation of gravel riffles, etc. Restoration measures include restoring natural flows, floodplain reconnection, channel realignment, reconnecting rivers to groundwater, removal of barriers to fish passage, and the rewilding of degraded rivers. This Initiative should capture a range of localised projects within the network, and will largely be guided by, and

delivered under, the established Cambridge Chalk Stream Project – based on an audit of Cambridge's chalk streams commissioned by Cambridge City Council and Cambridge Water in 2020. Actions under this project should be given high priority, given the focus on a particularly stressed component of Greater Cambridge's GI network. The project identifies a series of projects for each stretch of river.

This Strategic Initiative will also require action at their source – the chalk aquifer. It is vital to protect the East Anglian chalk groundwater resource by enhancing GI features through landscape-scale management, and improving the condition of the ecosystem by reducing pollution and contamination. In the long term, action on chalk streams must include shifts to sustainable water use and to make changes to how water is abstracted, stored and managed, reducing abstractions that negatively impact the environment. Problems need to be tackled at source by changing the ways in which water is taken from the Chalk aquifer, and bringing in supplies from elsewhere. While water abstraction is largely a matter under the control of central Government, the water industry and its regulators, how it is managed is highly relevant to the future health of the local environment. This may, for example, require the exploration of a new reservoir in the lower Cam Valley.

Importantly, coordinated action among multiple partners will require the development of a chalk streams strategy and the promotion of groundwater recharge, mapping these areas to ensure they become a material consideration for planning. Given that natural catchment boundaries do not necessarily align with administrative boundaries, cross-boundary working with neighbouring authorities will also be important. The emerging Water Resources East Natural Capital Plan should help to prioritise actions for conserving, restoring and establishing natural capital to protect Greater Cambridge's water environment, alongside delivering benefits for nature and people.

As part of the wider River Cam corridor and its tributaries, this Initiative is closely linked to Strategic Initiatives 2A, 2B and 2C along the Cam corridor. More sustainable management of agricultural land in the sensitive chalk catchment (Strategic Initiative 14) will also have an important role to play in minimising diffuse rural pollution. This will also maximise benefits to the water environment – of concern in Greater Cambridge due to overabstraction and prevalent drought – through protecting the source protection zone and river network.

Relationship with existing projects and initiatives in Greater Cambridge

- Many of the actions under this Strategic Initiative will largely be guided by, and delivered under, the established Cambridge Chalk Stream Project.
- Emerging Integrated Water Management Study.
- Emerging Water Resources East Natural Capital Plan (first iteration published April 2021).
- Let it Flow! report which details proposals to restore the River Cam (Cam Valley Forum).
- Chalk stream restoration at Little Wilbraham River (Cam Valley Forum).
- Projects flowing from the Hobson's Brook Corridor: 10 Year Vision.
- Extension and enhancement of Nine Wells Local Nature Reserve (Natural Cambridgeshire Double Nature vision).

Relationship with development strategy

Proposed small scale development on small sites around key villages in the south of Greater Cambridge to support rural communities, and near the southern cluster of jobs in Greater Cambridge may link to this Strategic Initiative, particularly where development is proposed in close proximity to the chalk stream network itself and within the upstream catchments.

Potential delivery partners

- Wildlife Trust
- Cambridge Water Company
- Wild Trout Trust
- Cam Valley Forum
- Environment Agency
- Water Resources East
- Conduit Trust

- Natural England

Potential delivery mechanisms / funding

- Water company grant funding.
- Environment Agency flood risk mitigation funding streams.
- S106 agreements and Biodiversity Net Gain (BNG) contributions dedicated to chalk stream restoration as part of the nature recovery network. To support the GI network, this type of strategic infrastructure must be prioritised in the pipeline of infrastructure projects which underlie the Local Plan.
- Links to recommendations within the Integrated Water Management Study to address issues which impact chalk streams, including water efficiency measures (e.g. surface water and rainwater harvesting, and grey water recycling) in new development.

Time scale

Long term (10+ years)

Indicative costs

Above £1m

Priority

Critical

Case Study: Test & Itchen River Restoration project (Hampshire)

This project was a joint, collaborative project between Natural England and the Environment Agency. It responded to surveys which discovered poor conditions of the SSSIs at the Rivers Test and Itchen in Hampshire - important chalk stream habitats. It involved a suite of river restoration techniques that helped to restore important habitats - including dredging, contouring, narrowing and dropping in woody material, in order to restore velocity and restore habitats. The project, which restored a 15 kilometre stretch of the rivers, also sought to mitigate flood risk and was funded through Environment Agency flood risk mitigation funding streams. Key to the project was working with 28 different land owners, as well as commercial fisheries. Landowners also part-funded the restoration activities.

Figure 3.3: Activities as part of restoration works on the Test & Itchen

Credit: Environment Agency

Strategic Initiative 2: River Cam Corridor

Objectives of Strategic Initiative

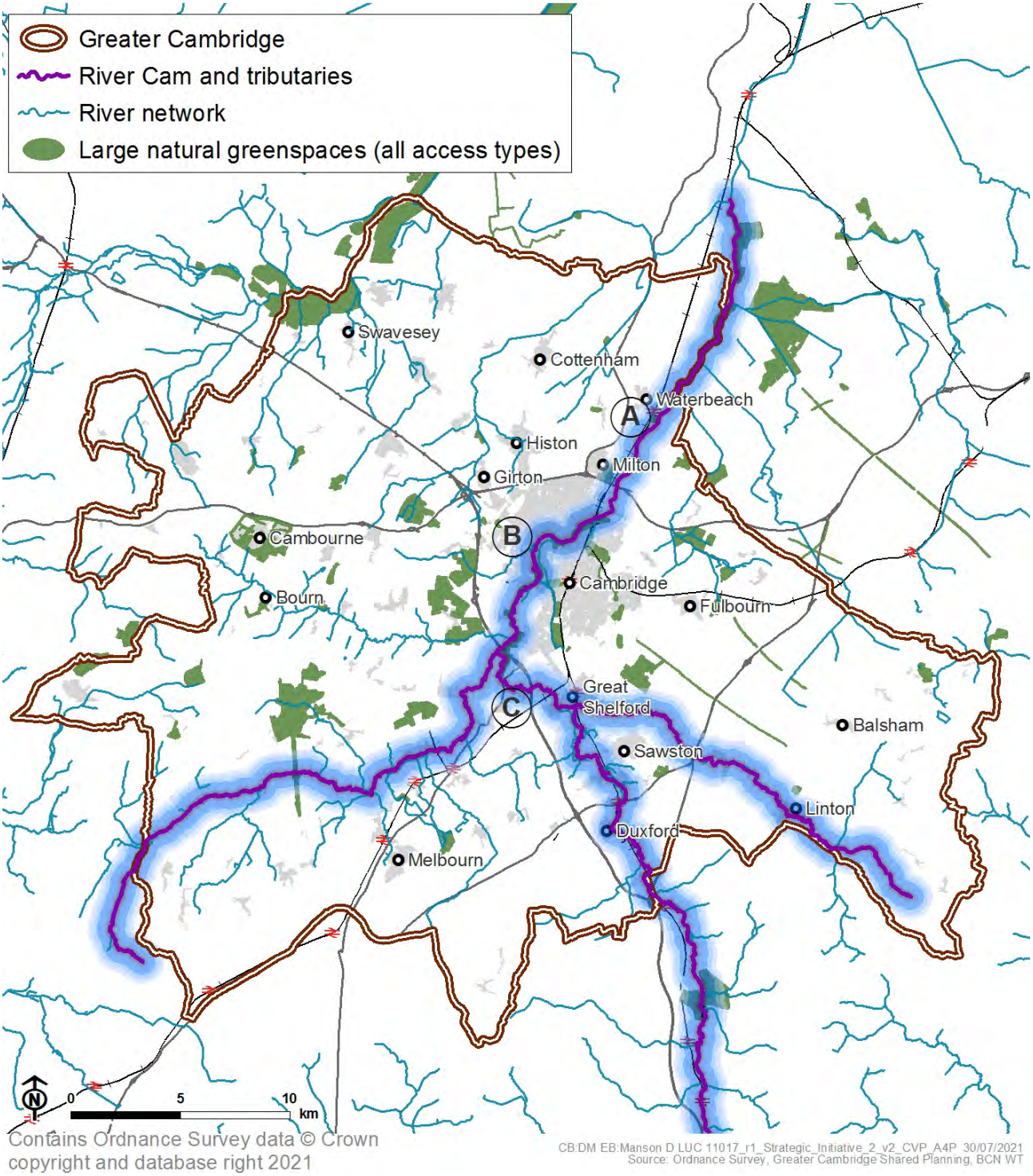
- Enhance the River Cam Corridor to strengthen its existing role as a key linear GI asset across Greater Cambridge, by linking together existing active travel routes, connecting existing and proposed neighbourhoods to the Cam Corridor, improving wayfinding and interpretation, balancing accessibility improvements with nature conservation, restoring floodplains, implementing natural flood management, and increasing riparian planting.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; access and connectivity; recreation and play; and, carbon sequestration.

The cross-cutting themes this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.4: River Cam Corridor



Overview of Strategic Initiative

The iconic River Cam and its associated landscape already offers huge value as a key linear GI asset crossing Greater Cambridge. A coordinated approach is required to enhance the River Cam corridor to ensure further benefits for people, nature and the climate are realised.

This Strategic Initiative divides the River Cam corridor into three stretches:

A: The northern section running from north east Cambridge to Waterbeach.

B: The section running through the city of Cambridge.

C: The section running south of Cambridge city.

The River Cam Corridor is the focus of this Strategic Initiative. However, it should be thought of as a grouping of green and blue spaces which complement each other and are closely inter-related. The Initiative reflects a need to establish a clear focus within the GI network on river corridors. Enhancements to the River Cam Corridor will be delivered through careful interventions, projects and Initiatives. These will help to better connect neighbourhoods, enhance climate resilience, act as a health and wellbeing asset, provide rich habitats for Cambridge's wildlife and boost flood resilience. It will also offer the opportunity to better tell the story of the Cam and the heritage assets along its route – through the provision of high quality wayfinding and interpretation assets.

For all stretches of the Cam corridor, improvements should be sought within, but may not be restricted to, the area 50 metres each side of rivers, streams and brooks. Priorities should include:

- The delivery of a continuous "River Cam Trail" which links together high quality walking and cycling routes.
- Improved wayfinding and interpretation resources (particularly along the River Cam Trail) which tell the story of the Cam, boosting the potential of the corridor as part of a sustainable and nature-based visitor economy which reaches beyond the city centre.

- Careful balancing of improvements to accessibility and walking and cycling routes with nature conservation and enhancement objectives. This will require careful planning of routes and the potential to designate 'safeguarded' zones to give space to habitats.
- Restoration of natural floodplains and integration of green infrastructure through natural flood management interventions to protect communities at risk of flooding. This will include reconnecting the River Cam floodplain with the river, e.g. by creating new inlets, ponds, ditches and ephemerally wet grasslands, and the daylighting of existing culverted watercourses where possible.
- Riparian planting (ranging from woodland to grassland, reed and marsh) where appropriate. This provides both important linear habitat connections and contributes to the 'sense of place' along riverscapes.

Relationship with development strategy

This Initiative spans the entirety of the River Cam Corridor. Significant development at Waterbeach New Town and North East Cambridge is in proximity to the North East Cambridge to Waterbeach part of the corridor (2A). Proposed small scale development on other small sites, around key villages to support rural communities and near the southern cluster of jobs in Greater Cambridge may also link to this Initiative.

Case Study: Wandle Valley Regional Park

Figure 3.5: Wandle Valley Regional Park

Credit: Wandle Valley Regional Park Trust

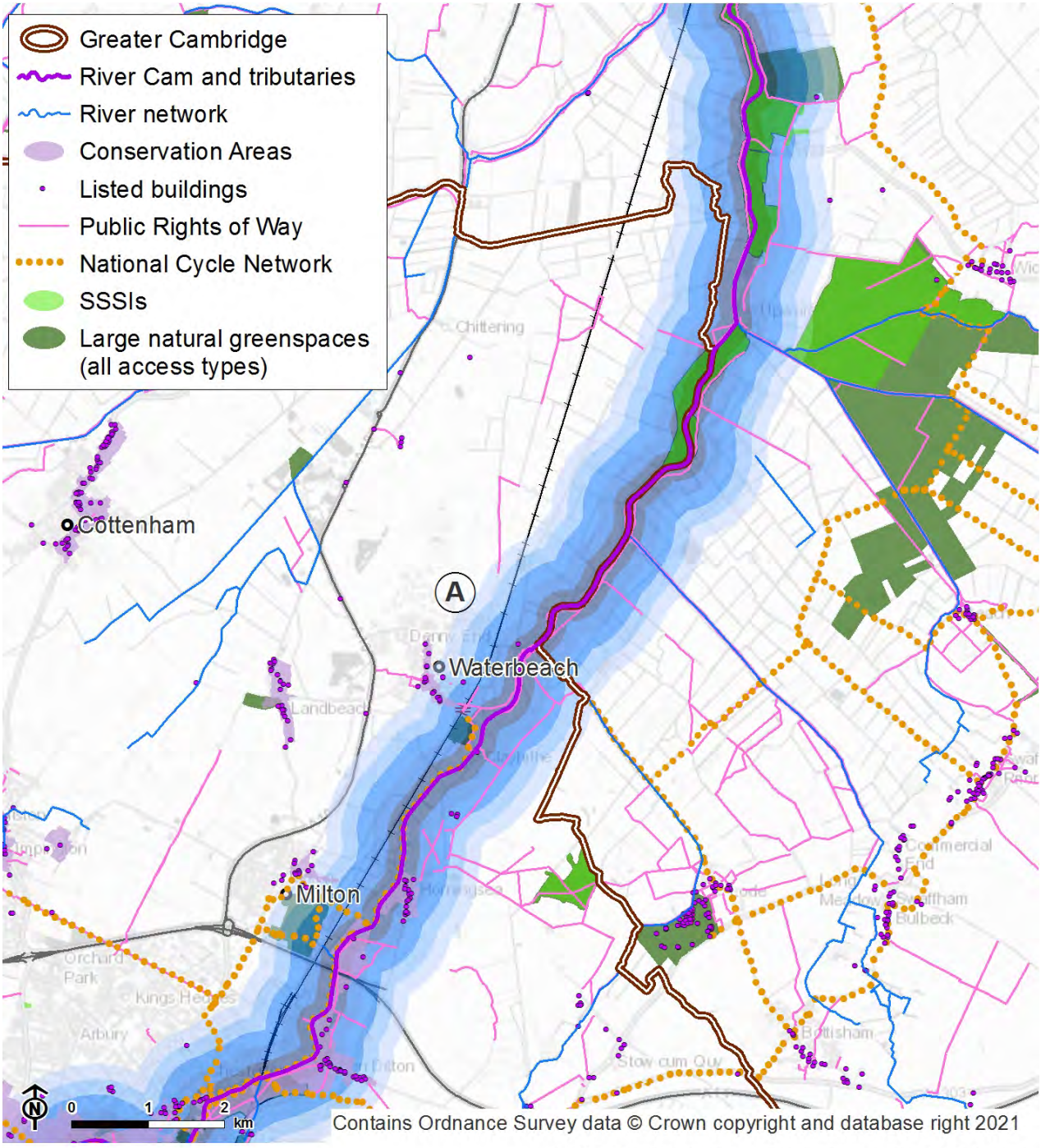
The Wandle Valley Regional Park is a key strategic blue-green corridor within the wider All London Green Grid. The Valley is a tributary of the Thames to the south west of London and incorporates not only the river corridor but the network of green spaces alongside it. It also takes in heritage assets such as Merton Priory and several important cemeteries. Similarly to the Cam, the River Wandle is also an important chalk stream, with 15 miles of rich chalk stream habitat.

Since 2012, the Park has been managed by the Wandle Valley Regional Park Trust (WVRPT) in close collaboration with the Mayor and Greater London Authority (GLA). This helps to provide leadership and coordination across the various authority areas and the series of spaces the valley flows through. It also provies a single place-based identity to the corridor.

The challenge for the park was to create "an asset bigger than the sum of its parts" and as such provides inspiration for the future of the River Cam Corridor. The riverside 'Wandle Trail' plays an important role in the local visitor economy and provides connections to key public transport nodes.

Strategic Initiative 2A: River Cam Corridor (North East Cambridge to Waterbeach)

Figure 3.6: River Cam Corridor (North East Cambridge to Waterbeach)



This northern stretch of the Cam Corridor runs from north east Cambridge toward the major new development at Waterbeach and further north toward Ely. This area of Greater Cambridge was highlighted during consultation for this study as having particular deficits in green infrastructure and requiring enhancement.

Enhancement of this stretch of the Cam will be important in order to absorb the significant increase in recreational pressure on the surrounding green infrastructure network, including sites such as Milton Country Park, resulting from planned development including North East Cambridge, Waterbeach New Town and others. A strengthening of the wider Cam corridor in this area, including adjacent green spaces and fen areas, would help to expand the green infrastructure network north of Milton Country Park. It should also 'bridge' the railway line and River Cam to support sensitive access to an enhanced Chesterton Fen.

This Initiative will create a multifunctional blue-green corridor with improved walking and cycling routes, enhanced habitats and greater flood resilience. The area lies within a focal area for floodplain connectivity and riparian woodland planting. As such, it offers opportunities for tree planting, carbon sequestration and storage.

There are a number of existing proposals for enhancements along this corridor. The proposed Cambridge Country Park and Sports Lakes within this area proposes a 3.7km permanent 'green corridor' between the Cambridge North East development and Waterbeach, providing links with a bus transport route, the planting of 6,000 trees, 100 acres of wooded parkland, 120 acres of freshwater habitats, and a large purpose-built sports facility suitable for international competition. Flood risk could also be reduced through the flood storage capacity created by the Sports Lakes.

In addition, the planned Waterbeach Greenway (one of 12 planned by the Greater Cambridge Partnership) would also form an important active travel spine through this Strategic Initiative – with links toward the south with the Chisholm Trail and Cambridge North railway station.

To the north of this area, the Waterbeach masterplan has a strong focus on natural assets and embedding water bodies into the structure of the new town. The River Cam Corridor in this area would have an important relationship with the Great Ouse Fenland Arc (Strategic Initiative 5) to the north and to the Eastern Fens (Strategic Initiative 4) to the east.

Relationship with existing projects and initiatives in Greater Cambridge

- 'River Cam Corridor' priority area (Cambridge Nature Network).
- Let it Flow! report which details proposals to restore the River Cam (Cam Valley Forum).
- Cambridge Country Park and Sport Lakes (Cambridge Sport Lakes Trust)
- Waterbeach Greenway (Greater Cambridge Partnership).

Potential delivery partners

- Cambridge Sport Lakes Trust
- Cam Valley Forum
- Environment Agency
- Wildlife Trust
- Masterplanning teams at Waterbeach and North East Cambridge AAP
- Community or 'Friends' groups

Potential delivery mechanisms / funding

- S106/BNG contributions from development at North East Cambridge.
- Grant funding e.g. Lottery Funding.
- National sport bodies.

Time scale

Long term (10+ years)

Indicative costs

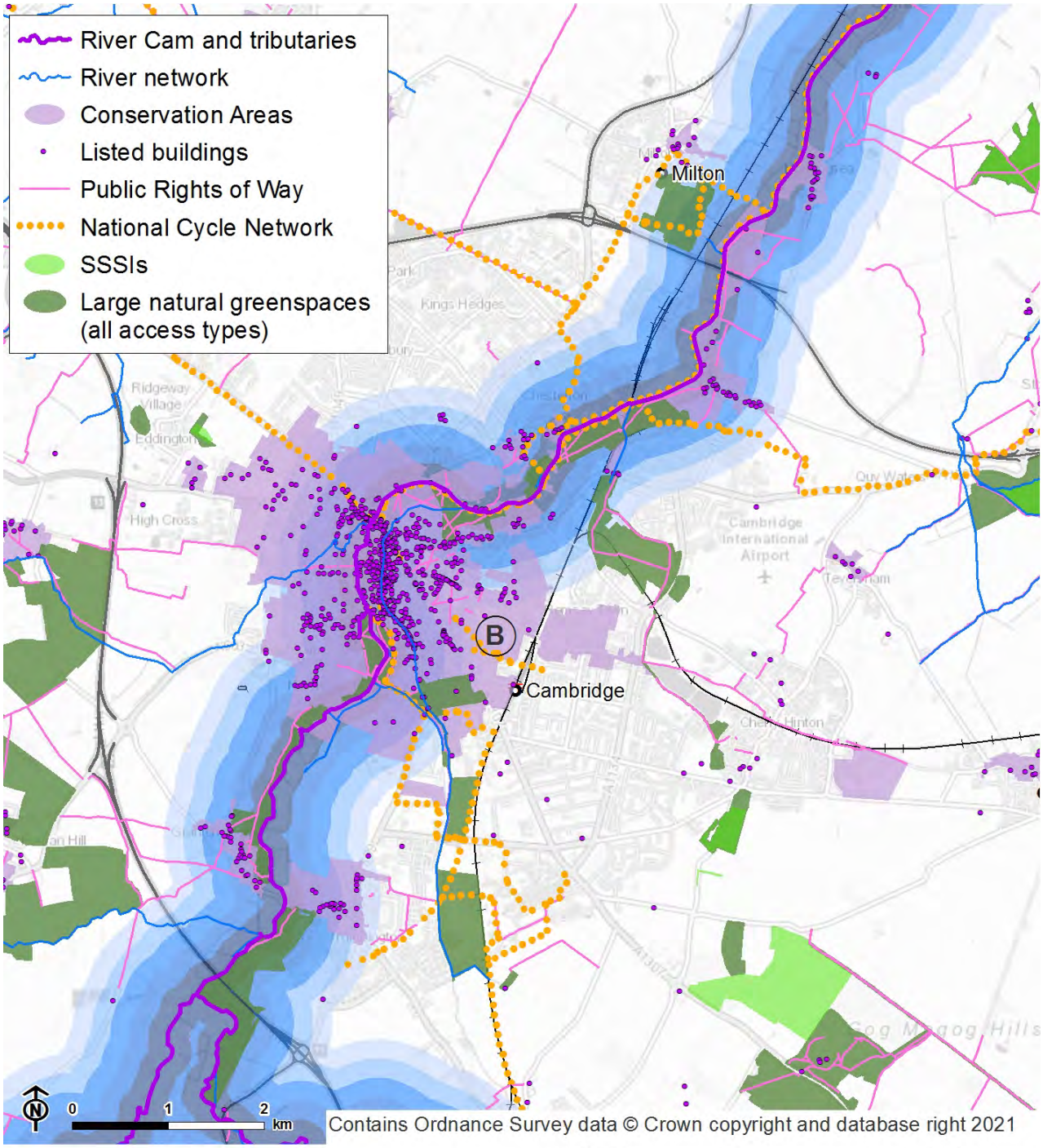
Above £1 million

Priority

Critical importance

Strategic Initiative 2B: River Cam Corridor (through Cambridge City)

Figure 3.7: River Cam Corridor (through Cambridge City)



CB:DM EB:Manson D LUC 11017_r1_Strategic_Initiative_2B_v2_CVP_A4P 30/07/2021
Source: Ordnance Survey, Sustrans, Greater Cambridge Shared Planning, Historic England, Natural England, BCN WT

This stretch of the Cam Corridor runs through the heart of the city of Cambridge. It sits at the centre of the expanding city as a place of escape and urban wilderness, for new and expanding corridors to connect with.

The Cam is already a strong and well-loved feature, which is closely interwoven with the history and character of Cambridge and which many people enjoy access to. This Strategic Initiative seeks to enhance this 'green lung' to deliver multi-functional benefits through the heart of Cambridge.

Enhancements include linking existing walking and cycling routes to ensure ease of access to the Cam for people of all ages and abilities across the city. The emerging Chisholm Trail began construction in 2019 and will form an important part of walking and cycling corridors through the northern part of this area. Whilst the route does not follow the course of the River Cam, it intersects in places - around Stourbridge Common and Ditton Meadows. The full vision entails a 26km traffic-free route stretching from Trumpington and Addenbrookes to St Ives and links together key green spaces. The delivery of this Strategic Initiative should ensure that linkages are made wherever possible with this strategic route. However, any changes to accessibility will require careful balance with the need to support quiet 'space to escape' that people currently enjoy, and to protect and enhance fragile habitats.

A key focus of the enhancement will be to better connect green spaces along the corridor, ensuring to retain their valued identity and character. Existing focal greenspaces include Stourbridge Common and Ditton Meadows, Jesus Green and Coe Fen Local Nature Reserve. Several of these are under increasing recreational pressure and require enhancement and protection.

It will also be important that this corridor considers green links for people and wildlife to other nearby open spaces and GI assets. In particular, green links along Coldham's Brook to Coldham's Common, and to the proposed Cherry Hinton Urban Country Park will be safeguarded and enhanced. Green links to existing green spaces which are undesignated but may support enhanced biodiversity value should also be sought, for example sites included in the call for green sites (Parker's Piece, woodland land strip between Cheddars Lane estate in Abbey ward, a field as an extension to Coldham's Common and area by Marleigh). Together, this necklace of assets offer important breathing space for the Cam corridor by permeating out to the growing city.

It will also provide enhanced context for the extensive natural heritage assets along the course of the River Cam. The river corridor takes in several of Cambridge's medieval urban green spaces (including The Backs, Sheeps Green, Lammas Land, Coe Fen, Grantchester Meadows, and ancient Ditton Meadows). The heritage features were described during consultation for this study as "equivalent to the best art that is in the Fitzwilliam Museum". The Initiative will explore opportunities for improved interpretation of the heritage assets (for example feasibility and support for a local heritage walking trail).

Finally, the potential to restore natural floodplains and daylight culverted watercourses should be explored and promoted in order to mitigate flood risk, provide additional high quality habitat, and improve water quality.

Relationship with existing projects and initiatives in Greater Cambridge

- 'River Cam Corridor' priority area (Cambridge Nature Network).
- Various habitat enhancements as part of Cambridge City Council's emerging Biodiversity Strategy.
- Let it Flow! report which details proposals to restore the River Cam (Cam Valley Forum).
- Newnham Croft School Wilderness Area by Coe Fen.
- Logan's Meadow Local Nature Reserve extension (also identified within call for green sites).
- Extension and enhancement of Stourbridge Common Local Nature Reserve and Coldham's Common Local Nature Reserve.
- Extension/enhancement of Coe Fen and Sheep's Green Local Nature Reserve.
- Enhancements at Bourn Brook and Hobsons and Vicars Brook (as part of the 'Hobson's Brook 10 Year Vision' by Cambridge City Council and Hobson's Conduit Trust).
- The Chisholm Trail (mostly off-road and traffic-free route between Cambridge Station and the new Cambridge North Station).

Potential delivery partners

- Greater Cambridge Partnership
- Cambridge City Council
- Cam Valley Forum
- Environment Agency
- Wildlife Trust
- University colleges and other major landowners along this stretch of the Cam Corridor.
- Community or 'Friends' Groups e.g. Friends of Stourbridge Common, Friends of Cherry Hinton Brook.

Potential delivery mechanisms / funding

- S106/BNG contributions from developments within Cambridge.
- Funds from water companies e.g. Cambridge Water PEBBLE fund and others.

Time scale

Long term (10+ years)

Indicative costs

Above £1 million

Priority

Critical importance

Spotlight: The Rush, Sheep's Green Flood Project

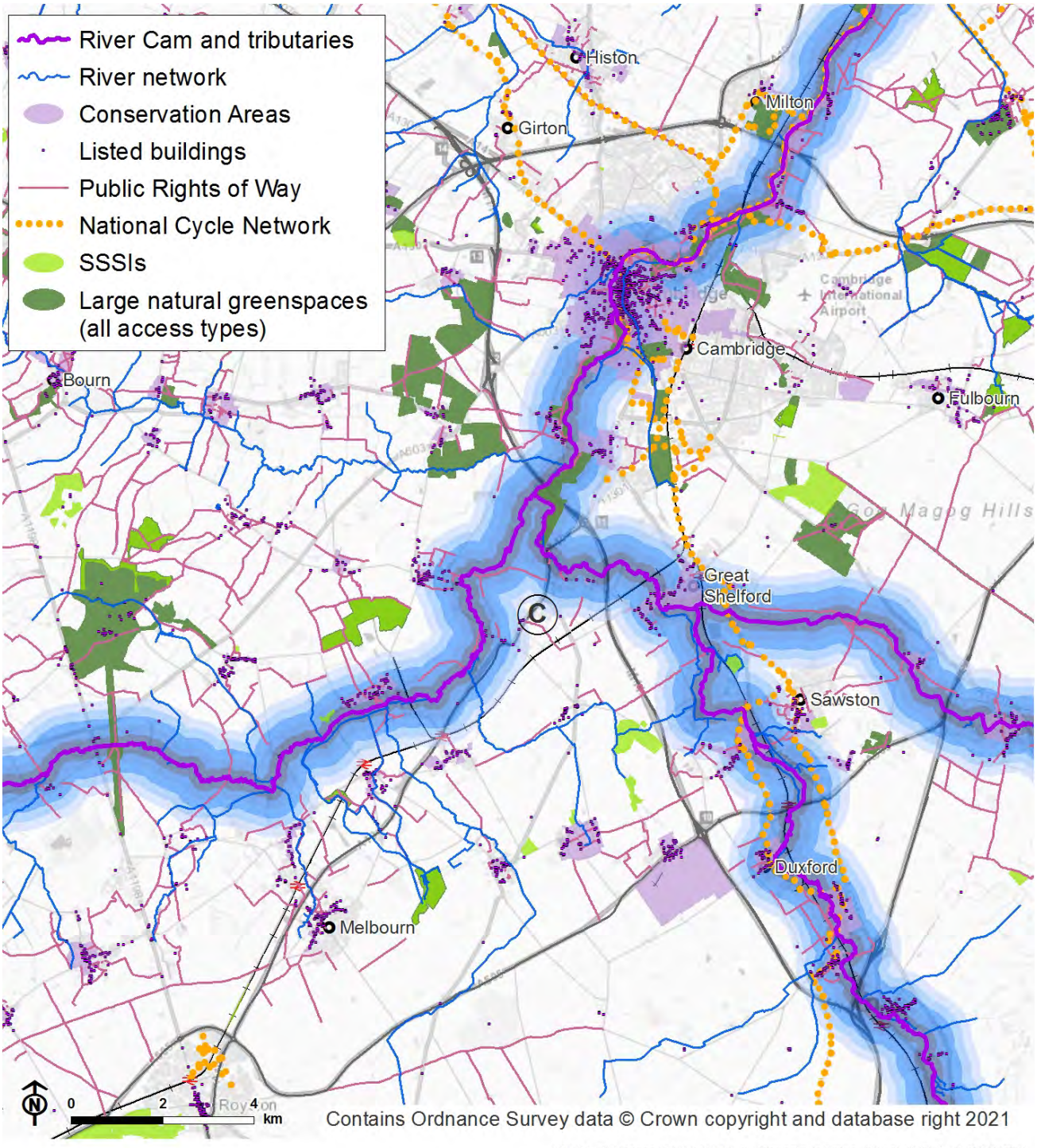
The Rush is a meandering watercourse that flows through Sheep's Green nature reserve into Coe Fen nature reserve. It was canalised in the 1800s and has suffered from poor biodiversity due to extreme siltation and the weir system preventing the movement of fish.
The project has reinstated the river through installation of a solar powered automated sluice, and downstream, locally sourced Crowfoot has been planted into the bed of the stream to provide cover for fish and invertebrates.

The project idea was championed by the Cam Valley Forum, funding was secured through developer contributions for informal public open space (Cambridge City Council) and Environment Agency grant funding, and the project was delivered by Cambridge City Council in partnership with the Environment Agency.

Monitoring undertaken between 2016 and 2019 has recorded many fish species, including Pike, Dace, Chubbs, Brown Trout, Spined Loach and Eels, their presence demonstrating that the restoration has resulted in favourable river conditions for fish.

Strategic Initiative 2C: River Cam Corridor (south of Cambridge City)

Figure 3.8: River Cam Corridor (south of Cambridge City)



CB:DM EB:Manson D LUC 11017_r1_Strategic_Initiative_2C_v2_CVP_A4P 30/07/2021
Source: Ordnance Survey, Sustrans, Greater Cambridge Shared Planning, Historic England, Natural England, BCN WT

The stretch of the River Cam south of Cambridge takes in two principal tributaries - the River Rhee and River Granta. There is a string of designated assets along the corridor – this includes SSSIs such as Thriplow Hummocky Fields and Denford Fen, in addition to the RSPB Reserve at Fowlmere. It also captures surrounding grasslands and woodlands and opens to the wider chalklands that fan out to the south east. Significant heritage features along this stretch include Wimpole Hall Registered Park and Garden, a number of Conservations Areas in Great Shelford, Barrington, Thriplow and elsewhere, and a number of scheduled monuments associated with the historic development of the river corridor.

This Initiative will also promote the River Rhee as a navigable waterway and river crossing with improved access to the Public Rights of Way network. There is currently variable access along the River Rhee compared to other parts of the Cam Corridor.

The Melbourn Greenway will form an important active travel corridor through this Strategic Initiative. It will enable sustainable and enjoyable travel in and out of Cambridge, as well as between local destinations. It will 'patch together' some existing paths in the area and create new routes.

Relationship with existing projects and initiatives in Greater Cambridge

- 'River Cam Corridor' priority area (Cambridge Nature Network).
- Let it Flow! report which details proposals to restore the River Cam (Cam Valley Forum).
- Melbourn Greenway (Greater Cambridge Partnership).
- Extension and enhancement of Nine Wells Local Nature Reserve, Byron's Pool Local Nature Reserve, Hobsons and Vicars Brook green corridor (Natural Cambridgeshire Doubling Nature vision).
- River Mel restoration (Environment Agency).
- Restoration on the River Rhee (Environment Agency).
- River Granta restoration and removal of fish barriers (Environment Agency).

Potential delivery partners

- Cam Valley Forum
- Friends Groups
- Environment Agency
- Wildlife Trust

Potential delivery mechanisms / funding

- S106/BNG contributions from development to the east of Cambridge.
- Funds from water companies (e.g. Cambridge Water PEBBLE fund and others).
- Other grant funding.

Time scale

Long term (10+ years)

Indicative costs

Above £1 million

Priority

Higher importance

Strategic Initiative 3: Gog Magog Hills and chalkland fringe

Objectives of Strategic Initiative

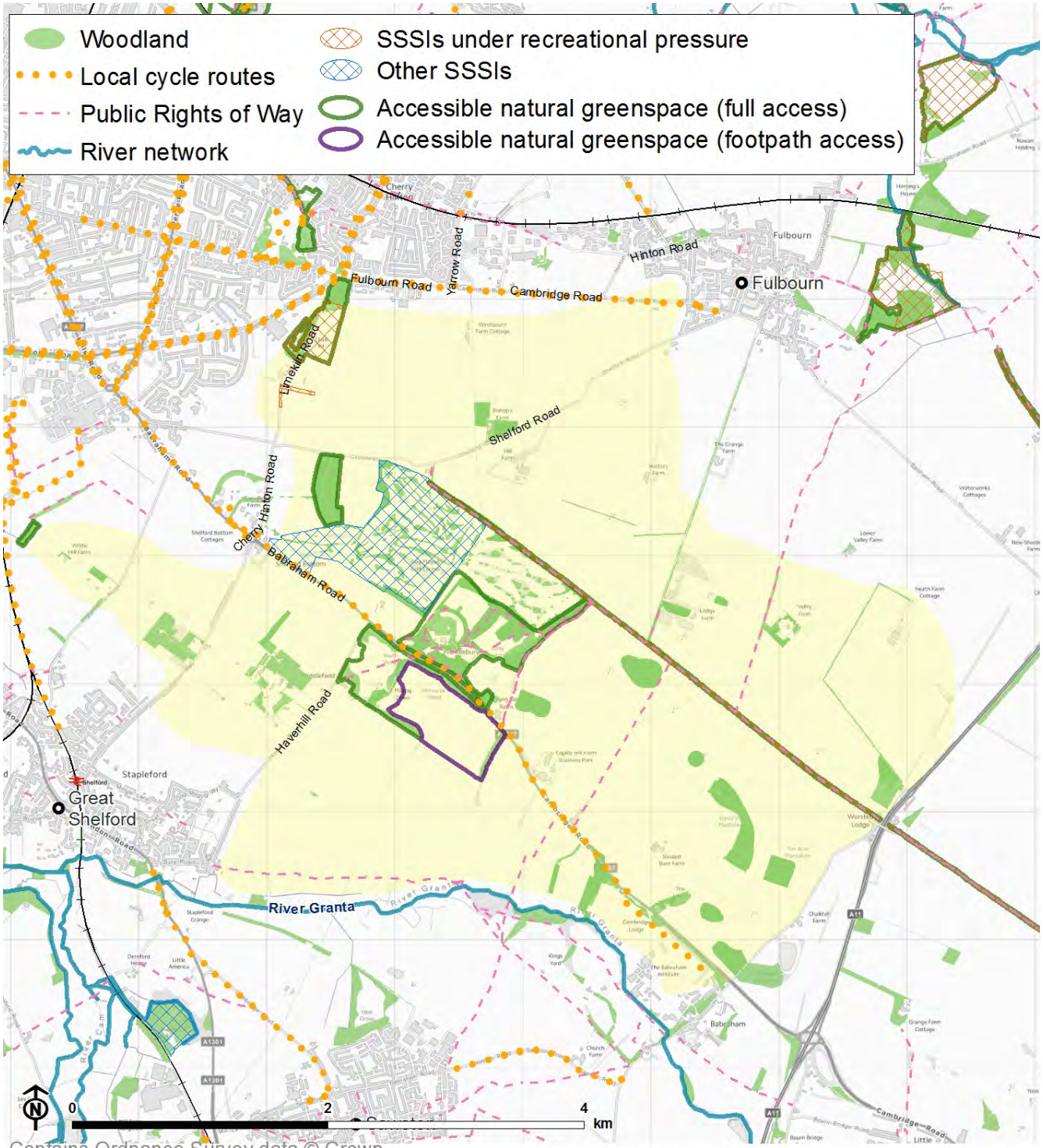
- Conserve and enhance priority habitats, including chalk grassland and woodland.
- Provide a high quality, connected GI network to accommodate growing recreational need and enable residents to access, enjoy and learn about this part of Greater Cambridge's countryside.
- Ensure access to the countryside is managed in a way which avoids increasing recreational pressure on existing conservation sites at risk (e.g. SSSIs).

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; access and connectivity; recreation and play; carbon sequestration; and, agriculture and community food growing.


The cross-cutting themes this Initiative supports are: climate change and, wellbeing and social inclusion.

Figure 3.9 - Gog Magog Hills and chalkland fringe



Contains Ordnance Survey data © Crown copyright and database right 2021

CB:DM EB:Manson D LUC 11017_r1_Strategic_Initiative_3_gog_magog_A4P 20/07/2021
Source: Ordnance Survey, BCN WT, Natural England, GCSP

Overview of Initiative

The fringes of south east Cambridge capture a number of designated sites for species-rich chalk grassland and woodland habitats, as well as being an important area for recreational access with the Gog Magog Hills. Enhancements for biodiversity are the primary focus of this Initiative. However, expanding the GI network and its cohesivity is important to help accommodate growing recreational need and ensure that people can access and enjoy the countryside, with care taken to mitigate existing pressures on those most sensitive ecological sites.

This Initiative fans out from the urban edge into the surrounding countryside in south east Cambridge, an area overlying Cambridge's vital chalk aquifer. It captures the wider southern chalklands, Cherry Hinton Chalk Pits SSSI, Wandlebury Country Park, Magog Downs, Roman Road SSSI, Beechwoods Local Nature Reserve and surrounding grasslands and woodlands. The boundaries of the Initiative area are marked by the River Granta which flows along the southern boundary, agricultural land to the north east (beyond which lie Fulbourn Fen and Fleam Dyke), and the A11 along the east. However, there are further opportunities to expand and link woodland, copses, shelterbelts and hedgerows, particularly where these help to guide and apportion recreational access throughout the landscape, extending east beyond the Initiative area towards Balsham Wood SSSI. Farmland near Balsham Wood has been identified in the call for green sites (see Strategic Initiative 11).

The GI network, including recreational spaces, should span key transport corridors and provide multi-user connections between green spaces and 'necklace villages' (e.g. Great Shelford, Stapleford) in South Cambridgeshire. The cohesivity of the network is to be improved by promoting connections with existing local cycle routes, bridleways and the Public Rights of Way network, and by integrating plans for the proposed Linton Greenway and Sawston Greenway. This will enable users to access the network via safe active travel which has benefits for health and wellbeing and improves air quality, noise and carbon efficiency by effectively reducing car use. The Fleam Dyke and Roman Road walk should be promoted to users both as a GI and heritage asset.

However, planned recreational access must protect existing sensitive sites and biodiversity imperatives. A number of sites are already at risk from overuse (e.g. Wandlebury Country Park

as indicated by car parks regularly exceeding capacity) and from incompatiable recreational use on sensitive SSSIs (Cherry Hinton Chalk Pits, Fleam Dyke and Roman Road).

Figure 3.10: Viewpoint from Wandlebury Country Park

Credit: Cambridge Past Present Future

The Initiative must ensure areas of ground flora of sensitive chalk grasslands are adequately protected, for example by the rotation of access routes. Biodiversity enhancements should capture elements of parkland and woodland to complement the chalk grassland focus. Wildlife corridors should link existing stepping stone grassland and woodland priority habitats to support the Cambridge Nature Network 'Gog Magog Hills Priority Area' and the Wildlife Trust's Cambridgeshire Chalk Living Landscape. Well-connected habitats in favourable condition typically increase biodiversity resilience to climate change and carbon storage capacity, vital to help to address the climate crisis.

Working with the farming community will be fundamental to effective delivery of this Initiative. This is particularly important to maximise benefits to the water environment, helping to address concerns of overabstraction and prevalent drought through protecting the source protection zone and river network. See Strategic Initiative 14 for information on environmentally friendly farming and the benefits of supporting farmer-led cluster groups.

Figure 3.11: Roman Road walking route

Credit: Geograph

Relationship with existing projects and initiatives in Greater Cambridge

- Cambridgeshire Chalk Living Landscape (Wildlife Trust)- Living Landscapes use wildlife corridors that connect smaller sites together and include roadside verges, hedgerows, field margins, rivers, streams and other natural connectors.
- 'Gog Magog Hills' priority area (Cambridge Nature Network).
- Buffering and extension of Cherry Hinton Chalk Pits (Cambridge Nature Network) A buffer is a landscape feature used to protect a sensitive area from a potentially harmful neighbouring land use.
- Stapleford and Great Shelford countryside enhancements (in Cambridge Southern Fringe Area Action Plan (2008) Policy CSF/5 Countryside Enhancement Strategy).
- Expansion and buffering of Balsham Wood SSSI (CPPF and call for green sites).
- Chalk pit restoration at Magog Down (Natural Cambridgeshire Doubling Nature Vision).

- Enhanced access to Gog Magog Hills (Natural Cambridgeshire Doubling Nature Vision, Cambridge Nature Network and Cambridge Nature Conservation Strategy).
- Identification, management and monitoring of Protected Road Verges within the Initiative area.
- Linton Greenway and Sawston Greenway (Greater Cambridge Partnership).

Relationship with development strategy

Proposed small scale development around key villages to support rural communities and near the southern cluster of jobs in Greater Cambridge link to this Initiative. There is also influence of inceased job provision – a significant increase of jobs at Cambridge Biomedical Campus to the west of the Initiative area, and a small increase of jobs in Babraham on the southern border of this Initiative area. This may increase the volume of commuters and residents requiring safe, accessible GI in the Initiative area.

Potential delivery partners

- Cambridge City Council
- Wildlife Trust – Cambridge Nature Network and Cambridgeshire Chalk Living Landscape
- CPPF at Wandlebury Country Park
- Farming community – private landowners and managers, NGO-owned, Council Farms Estate
- Natural England
- The Magog Trust
- Friends and other community groups (e.g. Friends of the Roman Road and Fleam Dyke)

Potential delivery mechanisms / funding

- S106/BNG and contributions for provision of new greenspace through development in the south of Cambridge.
- Funding raised by conservation charities through their own fundraising activities, revenue income and through grants.
- Agri-environment scheme funding including future E.L.M. scheme. Farm clusters supported by advice from Natural England and conservation charities to deliver environmentally friendly farming.

Time scale

Long term

Indicative costs

Above £1 million

Priority

Higher importance

Spotlight: Wandlebury Country Park

Wandlebury Country Park is owned and cared for by local charity Cambridge Past, Present & Future (CPPF) who seek donations and volunteer support to continue running, caring and managing the park. Non-profit land holders opening up access to land in their ownership and held in trust is a delivery mechanism for GI that is fairly distinctive to Greater Cambridge. Coton Countryside Reserve to the west of Cambridge is another GI asset owned and managed in this way by CPPF, which has progressively expanded acccess and converted agricultural land in an area where the provision of GI must be increased to keep pace with development and population growth.

Wandlebury Country Park is a County Wildlife Site important for chalk meadows and mature woodland and also contains a traditional orchard, a pond and many hedgerows, all of which are valuable for wildlife. The park is viewed as a 'green lung' on the outskirts of Cambridge, has a rich history and offers many walks through the woodland and wildflower meadows grazed by Highland Cattle. There are a range of things to see (e.g. Iron Age Hillfort, wildlife, viewpoints) and do (e.g. trails for children) and the park hosts events, is available for private hire and has an outdoor education centre which provides educational experiences for school children and other local youth groups.

Figure 3.12: Within the Iron Age Hillfort at Wandlebury Country Park

Credit: Geograph

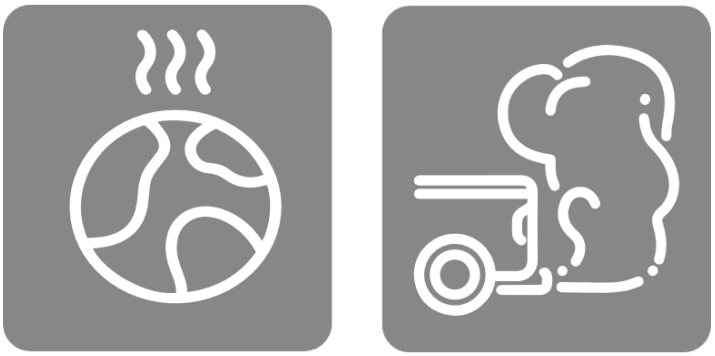
Strategic Initiative 4: Enhancement of the eastern fens

Objectives of Strategic Initiative

- Conserve and enhance priority habitats including fen, grazing marsh and grassland (within and around the four designated SSSIs) for the benefit of wildlife.
- Create wildlife corridors to connect and expand these habitats where possible.
- Ensure negative impacts from access and recreational pressure on these sensitive ecological sites are minimised through habitat buffers and educating visitors.

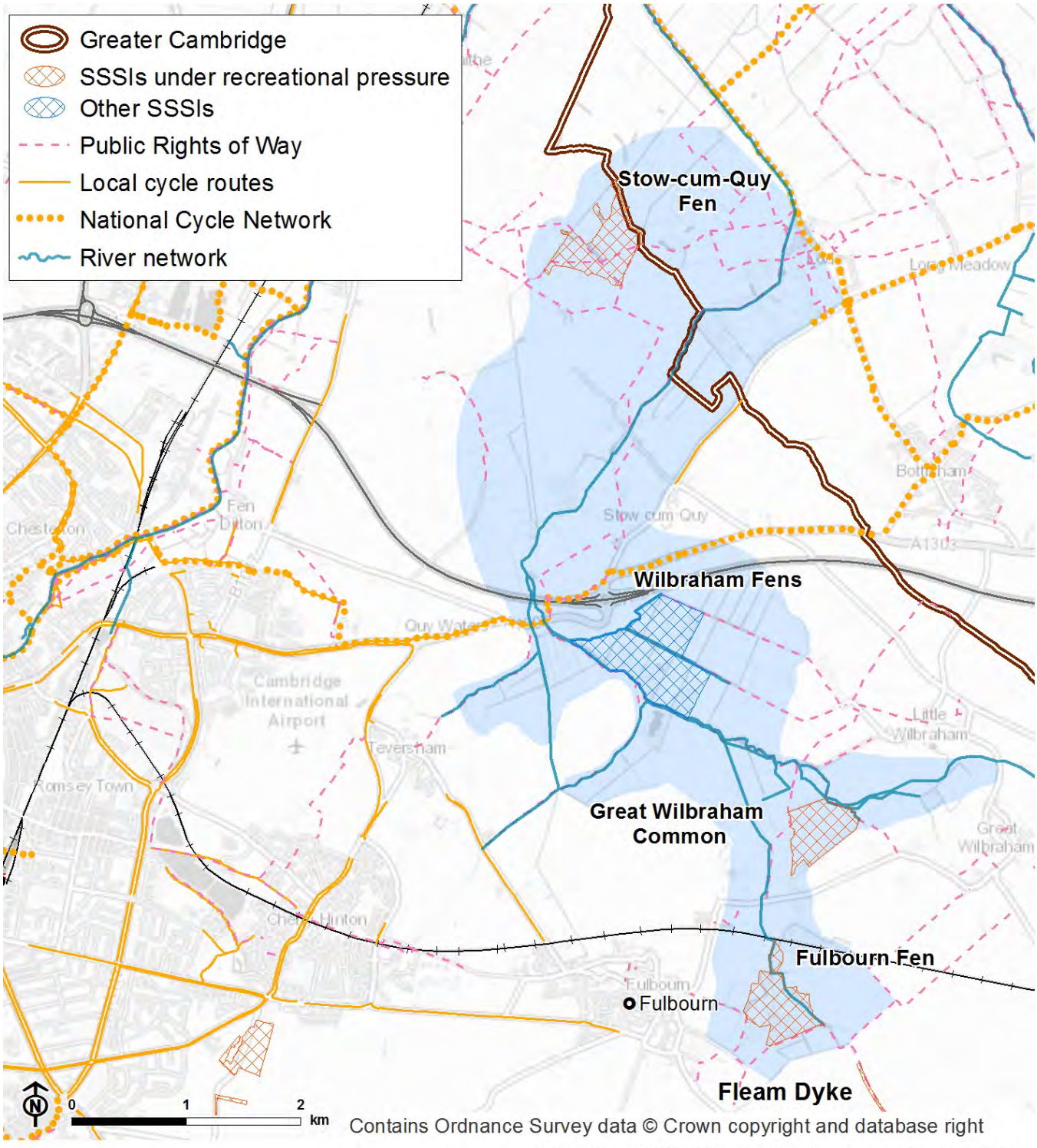
GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; and, carbon sequestration.



The cross-cutting themes this Initiative supports are: climate change and environmental factors.

Figure 3.13: Enhancement of the eastern fens



Overview of Initiative

The designated fen and grassland habitats to the east of Greater Cambridge are an important conservation priority, given the need to mitigate the impacts of development and to address the biodiversity crisis and climate emergency. The aims of this Initiative are to restore valuable fen and grassland habitats within the four SSSIs, create wildlife corridors between these sites and ensure human impacts on these sensitive sites are minimised through habitat buffers (enhance and extend interconnecting and surrounding habitat) and educating visitors. Public access to sensitive sites at risk from recreational activity and future growth is to be carefully managed to ensure biodiversity and carbon sequestration benefits are maximised.

The Initiative primarily captures Wilbraham Fen SSSI, Great Wilbraham Common SSSI, Fulbourn Fen SSSI and the associated watercourses (Little Wilbraham River and New Cut) which link these sites together. In the north, the Initiative includes Stow-cum-Quy Fen SSSI which is an extension to the National Trust's Wicken Fen Vision and falls within the south eastern portion of the proposed Fens Biosphere. In the south, strengthening habitat at Fulbourn Fen to Fleam Dyke SSSI should be encouraged for the benefits this will provide for resilience of wildlife to climate change and connectivity for people.

Landscape, biodiversity and flood resilience benefits will be derived from the enhancement of existing fen habitat in this area of Cambridge as well as the closely associated floodplain grazing marsh habitat found primarly along Quy Water and Great Wilbraham Fen. There is also opportunity for the expansion of priority grassland habitats at Great Wilbraham Common and Fulbourn Fen.

The public are able to access a number of these sites, but multiple functions must be evaluated and recreational access to sensitive sites carefully managed. Natural England have identified Fulbourn Fen, Stow-cum-Quy Fen and Great Wilbraham Common as already at risk from recreational pressure and likely to be affected by proposed growth. The planned Fulbourn Greenway will provide an active travel route from the city to Fulbourn and in doing so may increase the number of visitors being able to access Fulbourn Fen. Although links from the route to the wider GI network should be promoted, care needs to be taken to ensure this does not harm sensitive sites.

Figure 3.14: Great Wilbraham Common

Credit: Geograph

Figure 3.15: The sward in bloom at Fulbourn Fen

Credit: Wildlife Trust BCN

Opportunities should be identified to promote education about the fens, encouraging visitors to understand the importance of conserving this habitat to tackle the biodiversity and climate crises. One example by which this could be sought is via the The Fen Edge walking trail which

links fen habitats from Lincolnshire right the way to Suffolk. There are proposed walks as part of the Fen Edge trail from Fen Ditton to Fulbourn and to Stow-cum-Quy. The trail offers rich educational opportunities in terms of geology, heritage and wildlife; therefore, facilitating improved links to the trail and the wider GI network for residents will maximise social health and wellbeing benefits and greater appreciation for this precious landscape.

Engagement with agricultural communities and other landowners (e.g. conservation NGOs) will be key to co-delivering conservation and enhancement within this Initiative. It will be vital to successfully design, coordinate and implement sustainable management of soils and associated carbon capacity and enhance habitat connectivity across the landscape through environmentally-friendly farming (see Strategic Initiative 14).

Relationship with existing projects and initiatives in Greater Cambridge

- Wicken Fen Vision (National Trust).
- South eastern portion of the proposed Fens Biosphere (Cambridgeshire ACRE).
- 'Cambridge Fens' priority area in southern part of Initiative area and 'Wicken Fen Vision South' priority area in northern part of Initiative area (Cambridge Nature Network).
- Buffering and protection of Wilbraham Fen SSSI; Buffering and extension of Fulbourn Fen SSSI and connection with Fleam Dyke; and, Buffering and extension of Great Wilbraham Common SSSI (Cambridge Nature Network).
- Future Fens: Flood Risk Management (Environment Agency).
- Fulbourn Greenway (Greater Cambridge Partnership).

Relationship with development strategy

Significant development proposed at Cambridge Airport (edge of Cambridge non-Green Belt) is in close proximity to the western edge of this Strategic Initiative. Other small scale development around rural villages may also fall in proximity to the Initative area.

Potential delivery partners

- Environment Agency
- Natural England
- Internal Drainage Boards
- Association of Drainage Authorities (ADA)
- Lowland Agricultural Peat Task Force / Peatland Committee
- National Trust
- Cambridgeshire ACRE
- Conservation charities (e.g. RSPB, Wildlife Trust)
- Fens Biosphere (and associated partners)
- Farming community – private landowners and managers, NGO-owned, Council Farms Estate.
- Academic research partnerships

Potential delivery mechanisms / funding

- S106/BNG contributions from development to the east of Cambridge.
- Emerging E.L.M. scheme (Tier 2 for Local nature recovery and Tier 3 for landscape recovery) is to be kept under review for potential funding for fen restoration and enhancement on existing farm holdings. A farmer-led cluster group in this area could support delivery.
- Grant funding (e.g. Lottery funding and government grants such as Investment Readiness Funds)
- Private sector (e.g. nitrate neutrality, water environment and carbon credits)

Time scale

Long term

Indicative costs

Above £1 million

Priority

Higher importance

Spotlight: Wicken Fen Vision (South)

The National Trust has identified 53 square kilometres of land lying between the Wicken Fen National Nature Reserve (NNR) and Cambridge, to form an "inspirational place for people and a sustainable home for wildlife".

The long term vision is to extend the reserve southward toward the edge of the city of Cambridge, provding a 'gateway' from the city into the fens.

Using Stow-cum-Quy Fen as a nucleus, the aim is to restore high quality wetland and grassland habitat along the hydrological route of the old Quy Water to create a large corridor of core area linking ultimately to the expanded Wicken Fen.

Greater Cambridge should extend this vision to incorporate the wider eastern fen landscape, including Fulbourn Fen and Wilbraham Fen, creating a cohesive and connected nature network that ensures biodiversity resilience to climate change, boosts flood resilience, stores carbon and allows people to enjoy and experience the fens landscape.

Case Study: Caen Wetlands, North Devon

The Caen Wetlands conservation project in Braunton on the North Devon coast is spearheading a new approach to funding large-scale green initiatives.

The project is being led by the charity Devon Wildlife Trust and aims to restore a large wetland landscape around Horsey Island to help alleviate local flood risk, offer eco-tourism opportunities, create new habitat for wildlife and capture carbon.

Funding has been secured from the Esmée Fairbairn Foundation, Defra and the Environment Agency to carry out feasibility work. This is investigating opportunities for the site and working with surrounding landowners to enhance the area's rich wildlife whilst managing risks and supporting visitors' quiet enjoyment of the area.

The project has formed a collaboration with Triodos Bank UK to explore green finance models which will support long term restoration and management of the wetlands. There are opportunities for investment to support environmental improvements and potential ecotourism facilities that in turn generate an economic return. Also, they are exploring how the business sector may support habitat creation through the carbon sequestration and storage of new salt marsh.

Figure 3.16: Caen wetlands project area around Horsey Island

Credit: Lewis Clarke

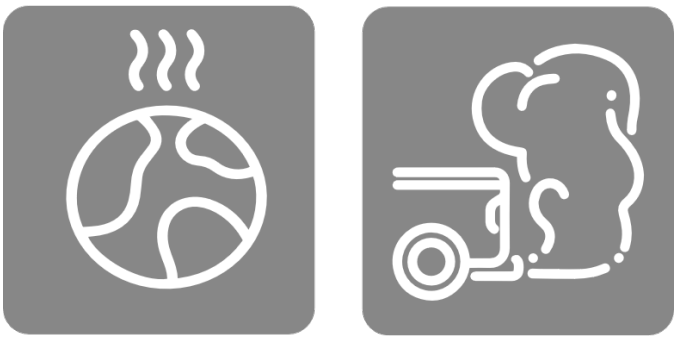
Strategic Initiative 5: The Great Ouse fenland arc

Objectives of Strategic Initiative

- Create a resilient network of fen and fen-edge habitat across the northern part of Greater Cambridge through habitat restoration, protection of peatland, sustainable soil, water and habitat management, and natural flood management.
- Enhance accessibility by linking existing and new routes to settlements and promote education of the rich geology, wildlife and heritage.

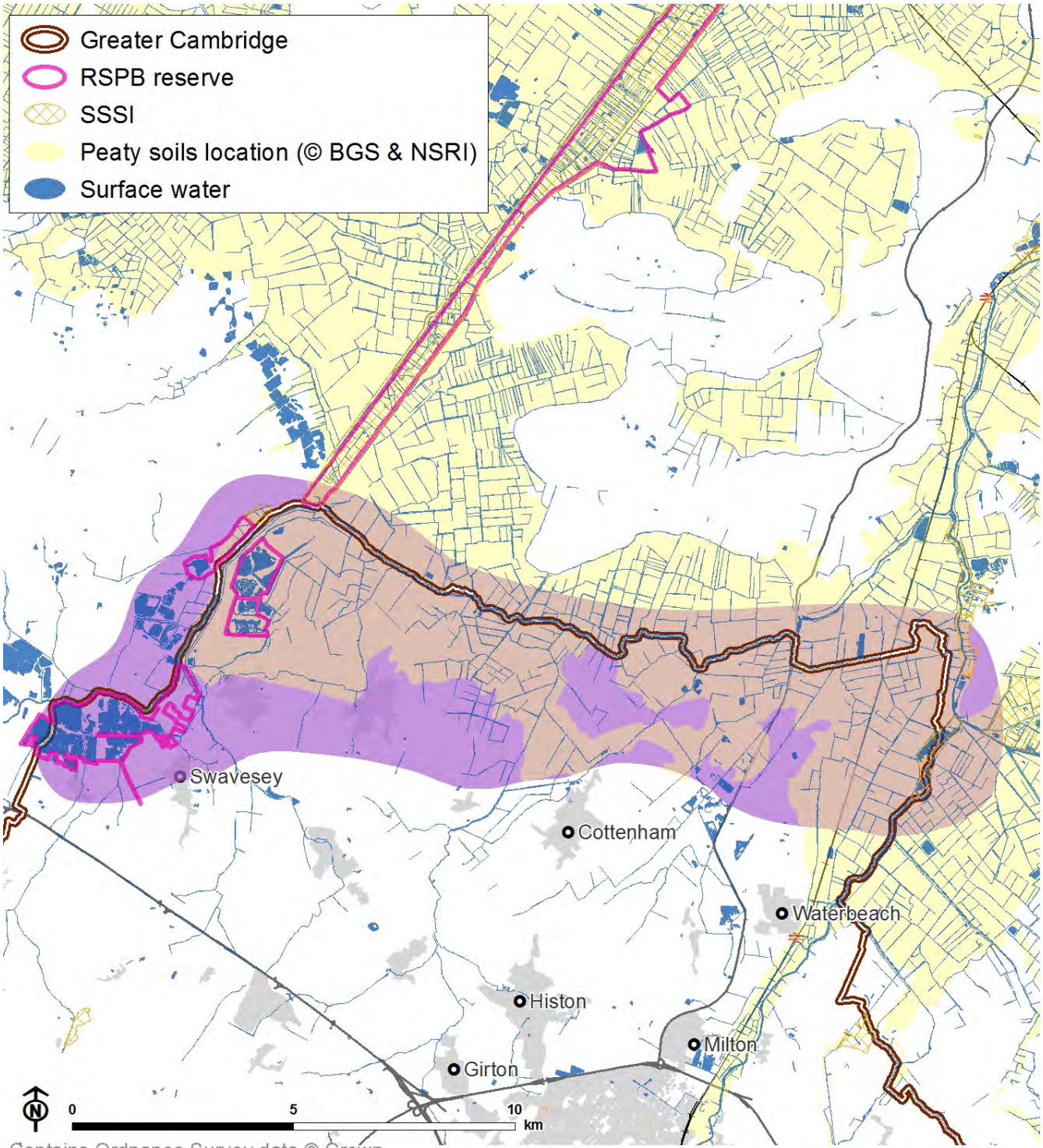
GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; access and connectivity; carbon sequestration; and, agriculture and community food growing.



The cross-cutting themes this Initiative supports are: climate change and environmental factors.

Figure 3.17: The Great Ouse fenland arc



Overview of Initiative

The vast fringe of the River Great Ouse stretches across the north of Greater Cambridge and encompasses important habitats within a predominantly farmed landscape. This Initiative will provide significant biodiversity and water environment benefits by extending and restoring fen and fen-edge (open water/wetland/grassland) habitats and implementing natural flood management techniques. The conservation and sustainable management of large swathes of peat soils (where these remain) also offers significant carbon sequestration and storage opportunities.

This Initiative forms a connecting arc across the farmland along the southern fringe of the River Great Ouse, tracing the Greater Cambridge boundary to link Wicken Fen and Cam Washes SSSI in the east with Ouse Fen Nature Reserve and Fen Drayton Lakes in the west. The Initiative extends south to capture principal open water and wetland priority habitats (e.g. floodplain grazing marsh) within the farmland associated with fen edge villages, including Swavesey.

As an extension to National Trust's Wicken Fen Vision and the ‘heartlands’ of the proposed Fens Biosphere that overlap Greater Cambridge, the Initiative forms an opportunity to create a resilient fenland buffer with benefits for landscape, biodiversity, flood resilience and carbon sequestration. It also encompasses existing RSPB projects to expand Fen Drayton visitor facilities and expand the habitats at Ouse Fen. Ouse Fen is a 'Wild and Wonderful' reserve, complementing the role of Fen Drayton Lakes, both of which provide a draw for visitors out of Greater Cambridge into the wider fens landscape.

Given that the majority of the River Great Ouse fringe is farmed land, engagement with agricultural communities and other landowners (e.g. conservation NGOs) will be key to co-delivering nature conservation and enhancement within this Initiative. Working with the farming community will be vital to successfully design, coordinate and implement sustainable management of peat soils, optimise associated carbon capacity, natural flood management techniques and the restoration and enhancement of terrestrial and aquatic habitats.

The Initiative captures an expanse of peat soils to the north east around North Fen and the north west around Middle Fen and Ouse Fen. Delivering sustainable soil, water and habitat management will enhance natural carbon sequestration and storage in the peatlands, a vital

mechanism to help Greater Cambridge tackle the climate emergency. Reducing CO_2 emissions from these areas by raising water levels may also benefit landowners by extending the productive lifetime of the soil, one of their key assets.

The network of ditches, drains and old droves – of distinct local character – must be enhanced to improve their function for wildlife. This can be delivered through appropriate ditch management, provision of field margins on farmland and other wildlife-sensitive farming measures.

Figure 3.18: View across farmland from the Fen Edge walking trail

Credit: Fen Edge Trail

An extensive part of this area lies within a flood risk zone. Flood risk is likely to be exacerbated in future due to the impacts of climate change on rainfall patterns and sea level rise impacting the low lying Ouse Valley. Natural flood management techniques, reconnecting watercourses to floodplains and flood management / SuDS schemes must be prioritised to protect those communities at greatest risk of flooding and to ensure future development does not increase flood risk, as identified within the Integrated Water Management Study. A number of opportunities to reduce flood risk through riparian woodland planting and floodplain reconnection across the catchment have been identified within the Working with Natural Processes (WWNP) research, although within this coarse-scale national mapping it is important to recognise local conservation priorities, for example to avoid planting trees on lowland peat.

Not only can riparian planting boost flood resilience and help to stabilise river valleys, but there are carbon storage benefits in expanded woodland. Large scale flood storage schemes should also be supported through this Initiative and build upon findings of the Environment Agency's River Great Ouse catchment storage and conveyance study currently being undertaken.

The rich heritage, ecological and geological value of the fen edge landscape also offers an opportunity for people to access nature, learn of the rich heritage and understand the threats this landscape faces from climate change and biodiversity decline. The Fen Edge Walking Trail passes through the area between St Ives, Willingham and Waterbeach, and extends beyond Cambridge to link Lincolnshire with Suffolk. It offers rich educational opportunities in terms of geology, heritage and wildlife; therefore, facilitating improved links to the trail and the wider GI network for residents will maximise health and wellbeing benefits and greater appreciation for this precious landscape. Accessibility to this area for local communities in the north of Cambridge should also be improved, for example by connecting to existing active travel routes (proposed Greenways) and connecting fragmented sections of the Public Rights of Way network.

Cambridgeshire ACRE's New Life on the Old West project (see case study) encompasses a large area of this Initiative and extends further north of the River Great Ouse towards Ely. It is identified as a key delivery vehicle for this Initiative; therefore, supporting Cambridgeshire ACRE in their partnership approach is recommended, as is supporting environmentally friendly farming (see Strategic Initative 14).

Relationship with existing projects and initiatives in Greater Cambridge

- 'Fen-edge orchards and droves' opportunity area (Cambridge Nature Network).
- Wicken Fen Vision (National Trust).
- Fens Biosphere (Cambridgeshire ACRE).
- New Life on the Old West (Cambridgeshire ACRE).
- Great Ouse Flood Storage and Conveyance Study (partnership led by Environment Agency and includes Anglian Water Services, Lead Local Flood Authorities, Local Planning

Authorities, Mineral Products Association, Natural England, National Farmers Union, RSPB and Water Resources East).

- Future Fens: Flood Risk Management (Environment Agency).
- Riparian woodland planting in Great Ouse Valley (The Great Ouse Valley Trust).
- Operation Turtle Dove project (RSPB) – A Turtle Dove Friendly Zone spans part of this Initiative area.
- Expansion of Fen Drayton visitor facilities (RSPB).
- Expansion of habitats at Ouse Fen Nature Reserve (RSPB).

Relationship with development strategy

There is no significant proposed development in the heart of this Initiative area, but significant development proposed at Northstowe and Waterbeach could provide links to specific projects on the edge of the Initiative area which extends across a large area of land in the north of Greater Cambridge. Small scale development in rural villages in the north may also fall within the Initiative area.

Potential delivery partners

- Environment Agency
- Natural England
- Lowland Agricultural Peat Task Force / Peatland Committee
- Internal Drainage Boards
- Association of Drainage Authorities (ADA)
- Cambridgeshire ACRE
- Conservation charities (e.g. RSPB, Wildlife Trust)
- Fens Biosphere (and associated partners)

- Farming community – private landowners and managers, NGO-owned, Council Farms Estate.
- Local communities interested in heritage of orchards (e.g. Orchards East and Cambridgeshire Orchards Group)
- Cambridgeshire Geological Society
- Academic research partnerships

Potential delivery mechanisms / funding

- S106/BNG contributions from development to the north of Cambridge (e.g. Northstowe and within North East Cambridge Area Action Plan).
- Emerging E.L.M. scheme (Tier 2 for Local nature recovery and tier 3 for landscape recovery) is to be kept under review for potential funding for fen restoration and enhancement on existing farm holdings. A farmer-led cluster group in this area could support delivery.
- Grant funding (e.g. Lottery funding and government grants such as Investment Readiness Funds).
- Funds from water companies (e.g. Cambridge Water PEBBLE fund and others)
- Environment Agency flood risk mitigation funding streams.
- Private sector markets (e.g. carbon credits and water quality).

Time scale

Long term

Indicative costs

Above £1 million

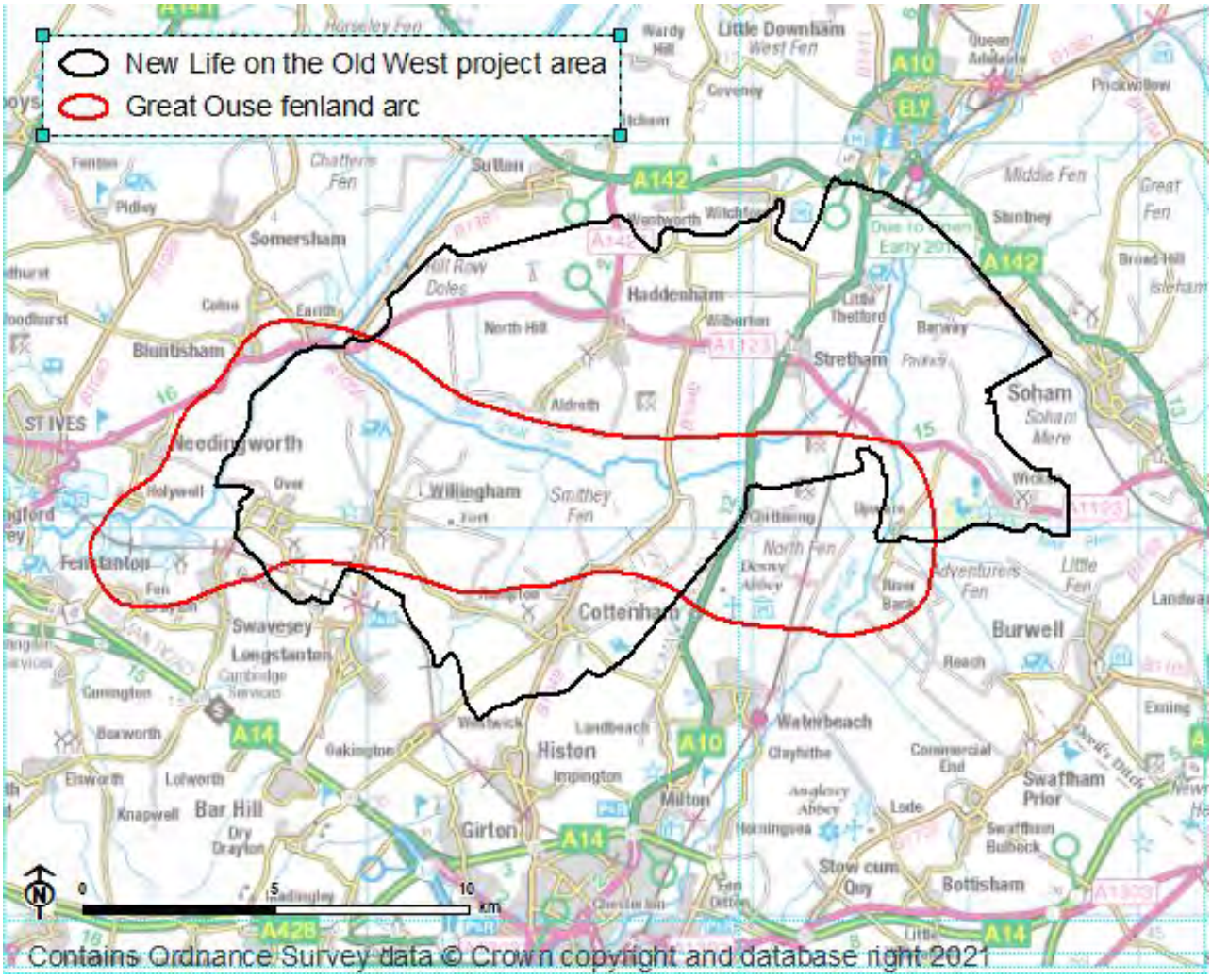
Priority

Higher importance

Case Study: New Life on the Old West

The New Life on the Old West project is a National Lottery Heritage Fund project which has been developed by Cambridgeshire ACRE, working closely with over 50 local and regional organisations, specialists, and community groups who have a stake in the conservation, land management and development of community green space and farmland assets in the landscape either side of the Old West River.

Figure 3.19: New Life on the Old West project area.



Credit: Boundary digitised from New Life on the Old West

The project will improve community green spaces and create a series of small-scale habitat improvements in the arable landscape, on the extensive ditch network and on community green spaces. Together, these will create a more resilient Fenland landscape, connecting up dispersed species and habitats, whilst creating demonstration sites for others to learn from.

The project will also ensure that a wider range of people can access and enjoy their local fenland countryside, achieved by putting hard to reach groups at the heart of the project's delivery programme. Through the project's diverse educational, events, citizen science and volunteering programme, there is the aim to engender a stronger connection of people with their local green space assets and the biodiversity on their doorstep and to create a sense of pride in the unique fens landscape.

Strategic Initiative 6: North Cambridge green space

Objectives of Strategic Initiative

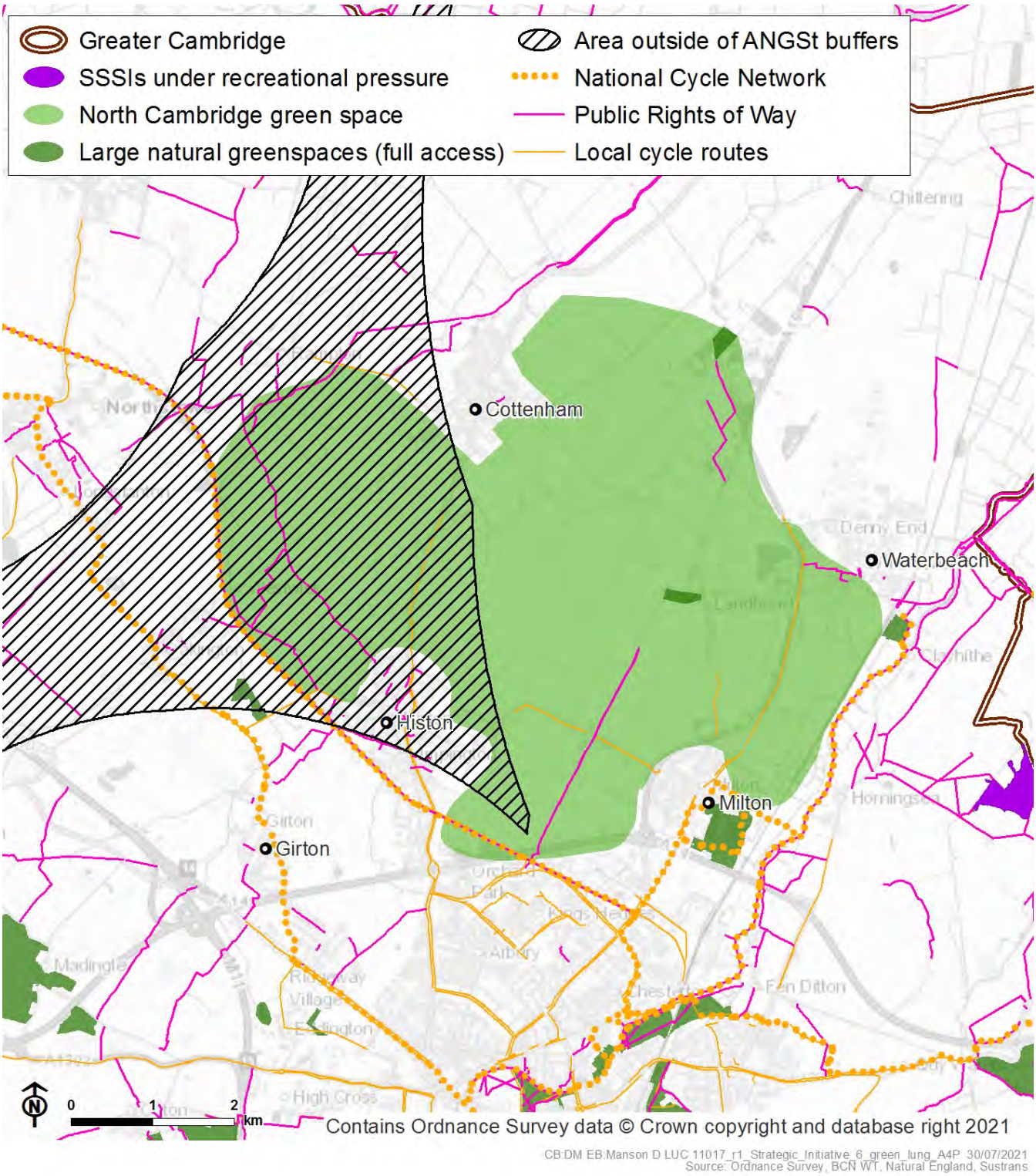
- Provide new strategic green space(s) to the north of Cambridge, connected to the wider GI network by green corridors, to address the deficit in accessible GI in this area, reduce recreational pressure on existing sites and provide an important asset to meet growing demand from proposed development.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; recreation and play; and carbon sequestration.

The cross-cutting themes this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.20: North Cambridge green space



Overview of Initiative

Green spaces deliver multifunctional benefits for people, nature and the climate. New strategic green space(s) to the north of Cambridge will address the deficit in accessible GI in this area, reduce recreational pressure on existing ecological sites, provide an important asset to meet growing demand from proposed development and link with other existing GI / nature recovery projects in the area. The Initiative should deliver GI which captures the local landscape character of fen-edge orchards and droves, and creates a cohesive GI network across the north of Greater Cambridge by connecting Cambridge City to the Ouse Valley.

This area fanning out to the north of Cambridge meets several criteria which make it a priority area in Greater Cambridge to provide a new, strategic GI asset that delivers multifunctional benefits. These criteria are:

- There is a deficit in accessible GI.
- The existing ecological network including SSSIs and County Wildlife Sites (CWSs) are under increasing pressure from their recreational use.
- Major development is underway or proposed
- There are potential opportunities to link with other existing environmental projects to deliver significant benefits for people and nature.

Across Greater Cambridge new recreational green spaces will be required to increase strategic GI provision, ensuring the GI network meets people's needs both now and into the future. Much of this area falls outside of existing ANGSt accessibility buffers for natural green spaces. Current ANGSt catchments, although due to be updated as part of the development of National GI Standards, are:

- 2km for 20ha+ sites;
- 5km for 100ha+ sites; and
- 10km for 500ha+ sites.

The Wildlife Trust have highlighted the area north of Cambridge as one location where strategic natural greenspace is needed (circa 100ha). Natural England has also suggested the need for a large (circa 500ha) National Nature Reserve or similar in this area.

The area also lies between three areas of significant existing and proposed development - Northstowe, Waterbeach New Town and North East Cambridge. Therefore, there is particular need here for a new accessible green space for nature and recreation to keep pace with demand and ensure increasing recreational pressures do not threaten already at risk sites within the GI network, particularly those with sensitive wildlife designations.

CPPF and Wildlife Trust have identified this area as the 'Fen-edge Orchards and Droves Opportunity Area' within the Nature Recovery Network, a 1,570 ha area stretching between Histon and Cottenham. There is a rich heritage of traditional orchards in this area, although much of the original orchard habitat has been removed to make way for agriculture and a proportion of the remaining orchards are now either unmanaged or densely overgrown. There are other opportunities to link together as part of this Initiative including: the National Trust's Wicken Fen Vision to the east; the relocation of Anglian Water's Cambridge Waste Water Treatment Plant (CWWTP); the planned St Ives Greenway which is an active travel route aimed to make it easier for walkers, cyclists and horse riders to travel from St Ives into Cambridge; and the St Ives to Cambridge sections of the Fen Edge Trail.

A new large-scale asset in this area must be carefully designed to deliver significant multi-functional benefits by carrying forward the principles of nature restoration and enhancing the delivery of ecosystem services (e.g. addressing the climate emergency and biodiversity crisis, and improving health and wellbeing). It will predominantly be area-based, although linear sites and connections should be promoted. This is important to ensure the wider GI network is inter-connected, providing a stepping stone between Cambridge City and the Ouse Valley (linking effectively into the Great Ouse fenland arc – see Strategic Initiative 5).

Relationship with existing projects and initiatives in Greater Cambridge

- 'Fen-edge Orchards and Droves' opportunity area (Cambridge Nature Network).
- New Life on the Old West (Cambridgeshire ACRE).

- District-scale green space within North East Cambridge AAP area.
- St Ives Greenway (Greater Cambridge Partnership)

Relationship with development strategy

This Initiative is located in proximity to four significant areas of development in Greater Cambridge: Northstowe, Waterbeach New Town, North West Cambridge and North East Cambridge. Small scale development in villages in the north may also fall within the Initiative area.

Potential delivery partners

- Cambridge City Council, South Cambridgeshire District Council
- Wildlife Trust
- Natural England
- CPPF
- Farming community
- The Land Trust

Potential delivery mechanisms / funding

- S106/BNG from development in the north of Cambridge.
- Funding raised by conservation charities through their own fundraising activities, revenue income and through grants.
- Grant funding (e.g. Lottery funding and government grants such as Investment Readiness Funds).
- Private sector (e.g. nitrate neutrality, water environment and carbon credits).

- The Land Trust – experience working with the public sector (including local authorities) to take land into long term ownership and management and engage local communities.

Time scale

Medium-long term

Indicative costs

Above £1million

Priority

Critical importance

Case Study: Ouse Fen Nature Reserve

Hanson UK and the RSPB are working in partnership, supported by Cambridgeshire County Council, to transform a working sand and gravel quarry into the Ouse Fen nature reserve. This ambitious 30-year wetland project began in 2001 and aims to recreate some of the lost wetland habitat that once dominated the entire fenland landscape, providing a nature and recreation asset.

The project is excavating over 28 million tonnes of sand and gravel at Needingworth Quarry. The quarry is being worked in defined sections which are progressively restored by Hanson before being handed over to the RSPB for future management.

The reserve is being created in 20-40 hectare blocks, divided by low earth banks. Each of these reedbed blocks have been carefully designed to include pools of open water linked by ditches and channels, allowing wildlife to move around the wetland. Once complete, the wetland will stretch for 700 hectares and include the largest reedbed in the UK, spanning 460 hectares.

The project aims to provide informal recreational opportunities for local communities and visitors, including 32 km of public access. As a strategic visitor access and engagement point within the GI network, the landscape and wildlife of Great Ouse wetland is to be accessed via a

network of long-distance cycle, walking and possibly boating routes. At present, there are two reserve trails which connect to a wider network of existing Public Rights of Way

Figure 3.21: Reedbed at Ouse Fen Nature Reserve

Credit: RSPB

Strategic Initiative 7: West Cambridge GI buffer - Coton Corridor

Objectives of Strategic Initiative

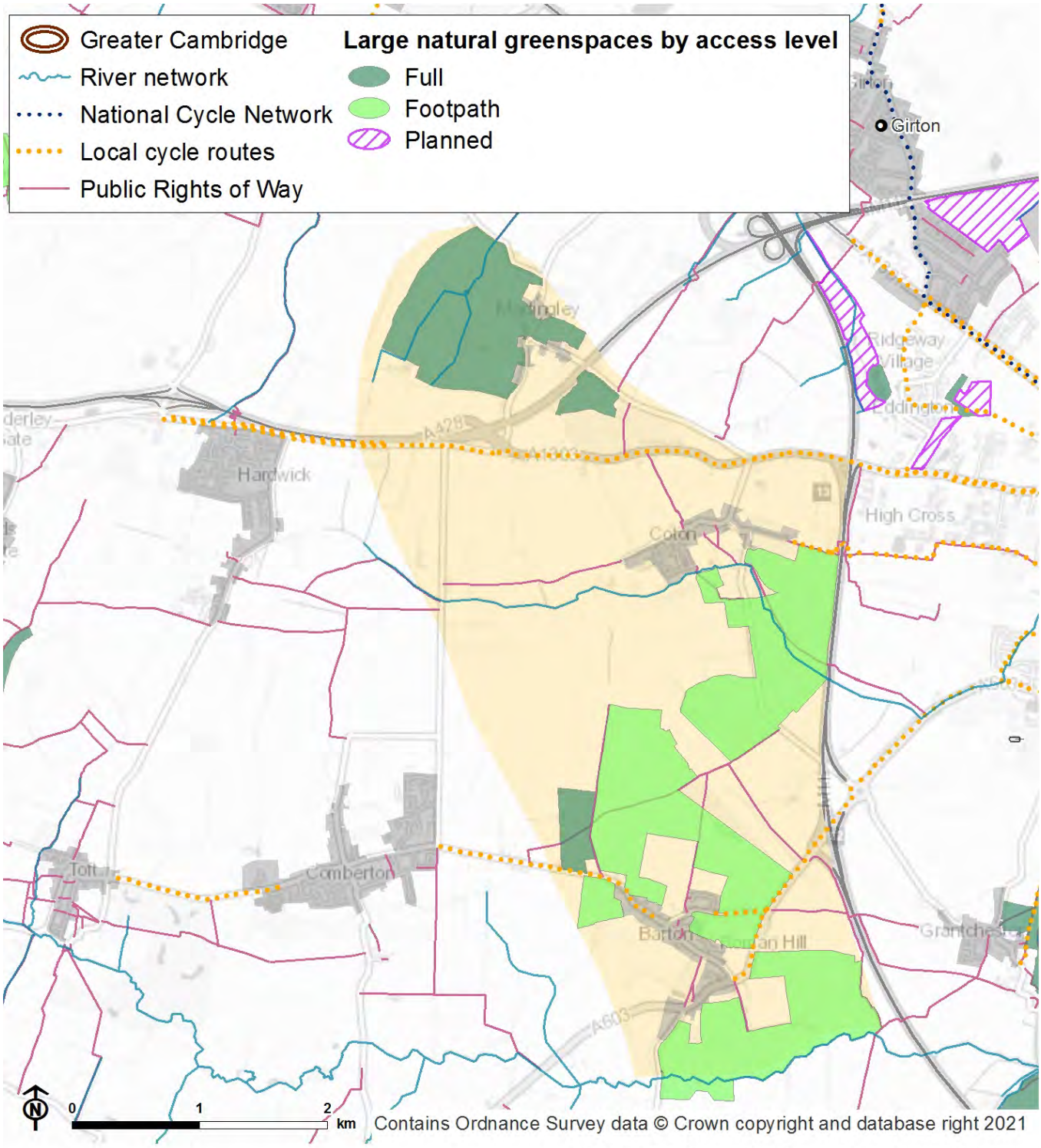
- Enhance the recreational and habitat offer to ensure there is sufficient high-quality and accessible GI to keep pace with growing development (and associated recreational pressure) west of Cambridge. This includes improving accessibility to and between GI assets and surrounding settlements, providing more opportunities for recreation and nature (making sites 'work harder'), expanding GI where possible, and enhancing habitats.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; recreation and play; access and connectivity; and, carbon sequestration.

The cross-cutting theme this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.22: West Cambridge GI buffer - Coton Corridor



Overview of Initiative

West Cambridge is experiencing significant development pressures and the GI network needs to be enhanced to keep pace. This Initiative seeks to enhance GI to promote this area of West Cambridge as a recreational asset, enhancing accessible links between recreational sites and from the edge of surrounding settlements. The Initiative will also support feasible opportunities to convert areas of unproductive farmland to accessible sites for recreation and nature conservation (see for example Coton Countryside Reserve). Expanding existing woodland and grassland habitats and implementing environmentally friendly farming techniques on agricultural land area also form important elements of this Initiative.

This Initiative lies to the west of Cambridge and forms a significant part of what has been termed the quarter to six quadrant of Cambridge, a major GI target area spanning the parishes of Barton, Coton, Grantchester and Madlingey. Significant development pressures in this area require the recreational and landscape offer to keep pace with that development and ensure the future population has access to a high quality GI network to meet their needs.

The proposed East West rail route passes to the south west of this Initiative area. Whilst creating severance in the landscape and threatening to disturb existing habitats, there will be opportunities to create biodiversity offsets, wider landscape enhancements and improved recreational access in this area west of Cambridge. Also, the rail corridor itself provides relatively undisturbed links to connect wildlife through a network of habitat stepping-stones.

Much of the existing recreational access in this area is through farmland (permissive rather than open access) at Coton Countryside Reserve, Burwash Manor Farm and Lark Rise Farm. Access must be improved through enhancing existing access to open access (where possible) and creating a more diverse network of routes, ensuring that these GI assets continue to provide the much needed space for people to access and enjoy the countryside. Accessible links further north to Madingley Hall, 800 Wood (planted in 2008 by University of Cambridge on former arable land to mark their 800th anniversary) and Madingley Wood SSSI should be enhanced as this provides additional area of accessible green space to the west of Cambridge.

Facilitating recreational and habitat improvements at various scales in this area is essential to cope with increasing visitor numbers. CPPF have been doing this at Coton Countryside

Reserve, bringing further former farmland areas out of agricultural use into new biodiversity and recreational functions. An example is along the Bin Brook where a new wetland is being created with the aim of improving water quality and creating a new wildlife habitat as a community resource with a new footpath and viewing area for engagement and education. Further opportunities should be identified along the river corridors of Bin Brook and Bourn Brook as they provide natural green corridors for wildlife and can provide wider benefits for people, biodiversity, the water environment and climate change. Supporting the farming community to implement environmentally friendly farming, including natural flood management, is important (see Strategic Initiative 14).

Figure 3.23: View towards the city from Coton Countryside Reserve

Credit: Cambridge Past Present Future

The severance of the A14/M11 corridors can pose issues for residents accessing the countryside from the Cambridge fringe. Existing footbridges need to be promoted, made safe and accessible to all and incorporate greening interventions to enhance their functionality for both people and for wildlife. Plans are to incorporate the Comberton Greenway which will connect Comberton and Hardwick at its westernmost ends into Eddington and Cambridge University West Campus, passing through Coton on its way. The Greenway - and other existing

or proposed routes - should seek to address severance, provide active travel routes and include wildlife friendly planting for pollinators, linking with Strategic Initiative 9.

This Initiative should link with the provision of allotments and community gardens (Strategic Initiative 13) and the enhancement and expansion of woodlands as identified within the Cambridge Nature Network 'Boulder Clay and Woodland Priority Area'. The West Cambridge Woodlands foci captures Madlingley and Coton and extends south around the urban edge to connect with the Bourn Brook. Woodland regeneration, extending and joining woodland copses, and sustainable management of hedgerows is important to create a cohesive network for wildlife and store carbon (see Strategic Initatives 11 and 14).

Relationship with existing projects and initiatives in Greater Cambridge

- Coton Loves Pollinators.
- 'Boulder Clay and Woodland' priority area in westernmost part of Initiative area (Cambridge Nature Network).
- Woodland expansion around Madingley Wood SSSI (Cambridge Nature Network).
- Quarter to Six Quadrant project.
- Enhancement of Coton Countryside Reserve (CPPF)
- Bin Brook improvement project (feasibility study by CPPF and Norfolk Rivers Trust).
- Comberton Greenway (Greater Cambridge Partnership).

Relationship with development strategy

This Stategic Initiative falls in close proximity to two areas of significant proposed development - North West Cambridge (Eddington) and the Western Cluster associated with extension to Cambourne and transport nodes of the proposed East West rail. Small scale development on other small sites and around rural villages may also fall within, or close to, this Initative area.

Potential delivery partners

- Local residents and community groups (e.g. Coton Loves Pollinators)
- Wildlife Trust
- CPPF at Coton Countryside Reserve
- Countryside Restoration Trust at Lark Rise Farm
- Farming community including the active farm cluster group.
- For active travel and severance engage with campaign groups and charities (e.g. CamCycle, Cambridge Carbon Footprint and Smarter Cambridge Transport).
- The Land Trust
- University of Cambridge

Potential delivery mechanisms / funding

- S106/BNG contributions from development to the west of Cambridge.
- The East West rail proposed route passes just beyond the south west boundary of this Initiative area so may also provide funding in future.
- For projects near the A14/M11, Highways England Designated Funds within the category 'environment and wellbeing'.
- Agri-environment scheme funding including future E.L.M. scheme. Farm clusters supported by advice from Natural England and conservation charities to deliver environmentally friendly farming.
- Funding raised by conservation charities through their own fundraising activities, revenue income and through grants.
- The Land Trust – experience working with the public sector (including local authorities) to take land into long term ownership and management and engage local communities.

Time scale

Medium-long term

Indicative costs

Above £1 million

Priority

Critical importance

Spotlight: Trumpington Meadows Country Park

This project demonstrates how the interests of wildlife, flood management, and people's enjoyment can all be met by taking an integrated approach to opportunities presented by significant new developments.

In 2009, 1,200 new homes were planned upstream of Byron's Pool. As part of the development, the arable land between the new estate and the river, previously inaccessible to the public, was converted into Trumpington Meadows Country Park by Trumpington Farm Company.

The main interventions and benefits delivered through the project include:

- Changes to the river and its banks (e.g. through re-grading and ditch widening) - balanced the interests of residents and space for recreation with that for wildlife.
- Gravel placed in the river - created riffles which disturb and quicken the flow, scouring silt from the river bed and oxygenating the water.
- Creation of a low-lying wild-flower meadow beside the river – provided an attractive asset for people and pollinating insects in summer and, in winter, when water levels are high, provides a sanctuary for wading birds and helps to reduce the risk of flooding downstream in Cambridge city.

Figure 3.24: Balancing pond at Trumpington Meadows Country Park

Credit: Geograph

Case study: Silverdale Country Park

Silverdale Country Park is a 83-hectare park which was created on the former Silverdale Colliery in Newcastle under Lyme, Staffordshire as part of a restoration project funded by the government's Homes and Communities Agency (HCA), using money from their National Coalfields Programme.

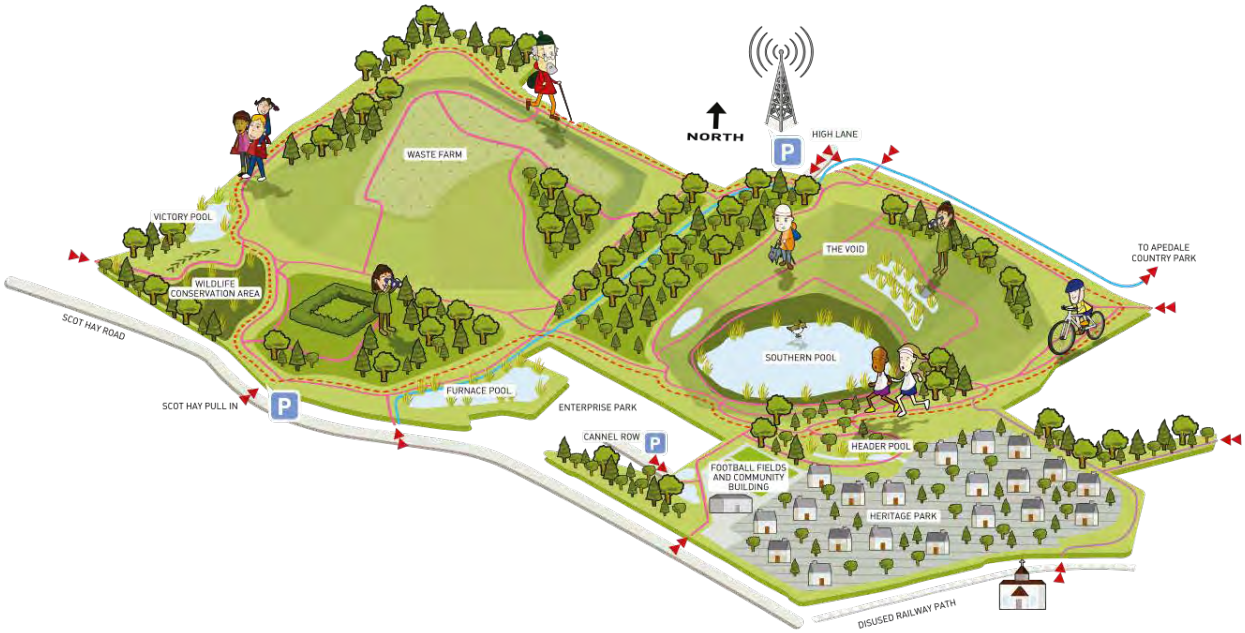
The park exemplifies how there can be a balance between public recreation and nature. There is a successful and sustainable ownership and management model operated through The Land Trust.

The Waste Farm plateau area to the west of the park is a largely open grassland landscape of varied topography as a result of the stockpiles colliery spoil. The area is colonized with natural grass, wildflowers and young trees for the benefit to nature.

The Void area to the east of the park is designated as a Site of Biological Importance (since 2015) owing to the important wildlife habitat present including lapwing and plover.

The ownership was transferred from the Homes and Communities Agency to the Land Trust to manage the site as a public open space for people and wildlife. The Land Trust works nationally with local organisations to ensure that spaces can be used by the community. Groundwork West Midlands manage the park on a day to day basis on behalf of The Land Trust. There is widespread community involvement in the park, for example through Green Gym which offer free outdoor sessions for anyone to get involved in practical management activities.

Figure 3.25: An illustrative map of Silverdale Country Park



Credit: The Land Trust

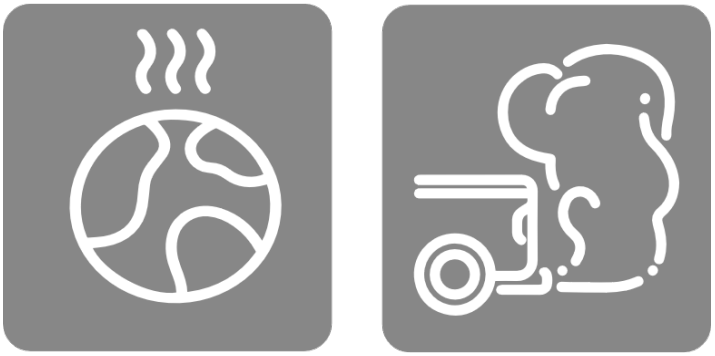
Strategic Initiative 8: Western gateway multifunctional GI corridors

Objectives of Strategic Initiative

- Provide opportunities to improve biodiversity by expanding and joining up the existing woodland, hedgerow and grassland habitat network. This will be delivered through new woodland planting, natural regeneration, hedgerow extension and management, and habitat restoration. Ensure opportunities for biodiversity offsets from East West rail are sought.
- Ensure negative impacts from access and recreational pressure on sensitive ecological sites (Eversdon and Wimpole SAC, and woodland SSSIs) are minimised, by providing additional GI sites for recreation, promoting alternative or new access routes, and educating visitors on the value of conserving habitats.
- Improve access throughout the area for people (where it will not cause detrimental impact on ecological sites - as above) through opportunities associated with East West rail as well as along river corridors.

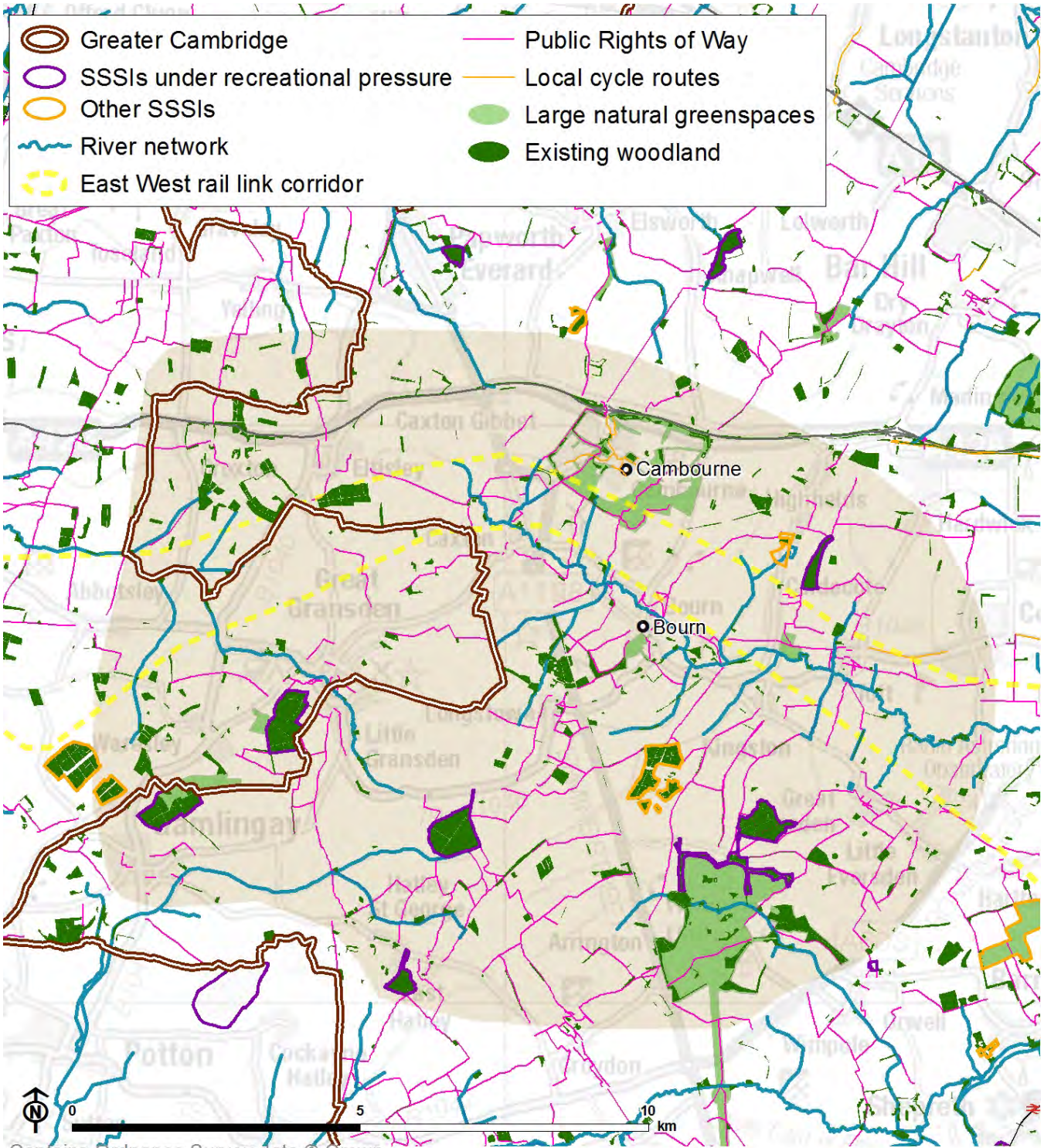
GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; access and connectivity; carbon sequestration; and, agriculture and community food growing.



The cross-cutting themes this Initiative supports are: climate change and environmental factors.

Figure 3.26: Western gateway multifunctional GI corridors



CB:DM EB:Manson D LUC 11017_r1_Strategic_Initiative_8_western_gateway_A4P_20/07/2021
Source: Ordnance Survey, BCN WT, SCDC, CCC, NE

Overview of Initiative

The west of Greater Cambridge contains important woodland and grassland habitats, which deliver benefits for nature, people and climate change mitigation. However, some of these sites are at risk from increasing recreational pressure associated with development. This landscape-scale Strategic Initiative focuses on reconnecting and strengthening the habitat network for wildlife through woodland and hedgerow planting, natural regeneration and habitat restoration. It also addresses the impacts of increasing recreational pressure through additional GI sites for recreation, promoting alternative or new access routes, and educating visitors on the value of conserving habitats. It recognises the existing project partnership of West Cambridgeshire Hundreds and the potential for East West rail to support delivery.

The west of Greater Cambridge contains a number of important habitats, including ancient woodlands (defined for over 1000 years by the old Anglo-Saxon regional divisions known as the 'Cambirdgeshire Hundreds') and species-rich grasslands. These habitats are valuable for wildlife, reflected in the designation of Eversden and Wimpole Special Area of Conservation and several SSSIs. However, they are also important heritage and landscape features, provide health and wellbeing benefits by enabling people to 'escape into nature', and help to mitigate and adapt to climate change.

This Strategic Initiative is largely underpinned by the West Cambridge Hundreds - a landowner-led project partnership between the Wildlife Trust, the Farming and Wildlife Advisory Group East, the National Trust, Natural England, the Forestry Commission and the Woodland Trust. It is a landscape-scale scheme aimed at creating a viable ecological network to connect the ancient woodlands and hedgerow network, Wimpole Park and other historic parks, and species-rich grasslands in south-west Cambridgeshire. The vision is for a landscape of connected woodlands between which wildlife can move freely.The primary aim of this Initiative is therefore to create a resilient landscape and new opportunities for biodiversity by supporting new woodland planting and natural regeneration to expand and join up existing woodlands and the hedgerow network. Links to pollinator corridors (Strategic Initiative 9) should also be sought since a large part of this

However, this Initiative extends the vision of the West Cambridge Hundreds (which focuses on nature and addressing the biodiversity crisis) to deliver enhancements to the GI network that provide benefits for people and the climate.

It will also alleviate recreational pressure on sensitive ecological sites. The public currently access a number of woodland SSSIs in this area and Natural England has identified Gamlingay Wood, Hayley Wood, Eversden and Wimpole Woods, Hardwick Wood, Buff Wood and Waresely Wood as SSSIs already at risk from recreational pressure and potentially affected by proposed growth in Greater Cambridge. Multiple ecosystem services and functions must be evaluated and access to these sites carefully managed in future to ensure wildlife can thrive. Opportunities to mitigate the pressures of public access and recreation include providing alternative public access routes and/or prioritising alternative or new GI recreational assets to ensure existing core habitats are buffered and given an opportunity recover and strengthen.

Raising public awareness of these sensitive woodlands and grasslands as key assets within the GI network is also important. Through education and appropriate interpretation, visitors should be encouraged to use and access sites in an appropriate way, and value the importance of conservating these habitats to tackle the biodiversity and climate crises.

The Initiative area is also a foci of peak estimated carbon density in soils. Partnership working with the farming community and conservation NGOs is important to maximise retention and overlay these soils with sequestration interventions, such as planting or sowing ‘high carbon capacity’ habitats in order to help address the climate crisis. Working with the farming community will be important to optimise value for biodiversity more widely (by improving wildlife corridors across private land) and to facilitate improved access across the countryside; both out from urban areas and to or between the dispersed rural villages into the GI network. (see Strategic Initiative 14).

Figure 3.27: A birds eye view of Hayley Wood

Credit: Wildlife Trust BCN

The eastern area of this Initiative is marked by the Bourn Brook, where river restoration to improve habitat for a variety of species, increase flood resilience and provide access and recreation opportunities is key. The Bourn Brook corridor captures the working with natural processes (WWNP) floodplain reconnection potential as well as riparian woodland, grassland and wetland habitat opportunities. The value of linear woodlands is recognised, particularly along watercourses where biodiversity benefits extend to shading, amelioration of storm run-off rates and filtration of silt-load. Also, providing navigable waterways, river crossings and multi-user paths along river corridors which are connected into existing access routes will help to create a cohesive GI network that overcomes issues ofseverance (e.g. A1198 and proposed East to West rail). This will help to promote active travel and reduce reliance on car.

The north / north eastern area of this Initiative area falls within the proposed East West rail corridor. Whilst creating a severance feature in the landscape and threatening to disturb existing habitats, there will be opportunities to deliver enhancements to the GI network which support the aims of this Initiative as outlined above. These include biodiversity offsets, enhancements to existing GI and improved recreational access and connectivity across the west of Greater Cambridge. The rail corridor itself provides relatively undisturbed links to connect wildlife

through a network of habitat stepping-stones and opportunity to provide corridors for pollinators (see Strategic Initiative 9). It will be important to strengthen the GI offer to deliver multifunctional benefits for people, nature and the climate. Potential severance issues posed by the route must be addressed, ensuring residents in necklace villages in South Cambridgeshire are able to use a safe, active travel network which connects them to the wider GI network in the area.

Relationship with existing projects and initiatives in Greater Cambridge

- West Cambridgeshire Hundreds Living Landscape habitat enhancement project (Wildlife Trust, Cambridgeshire GI Strategy 2011).
- Projects on the Bourn Brook to remove invasive species and protect water vole (Wildlife Trust).
- Development of Corridor C5 Wimpole Way Green Corridor (Cambridge City Nature Conservation Strategy – plans currently being updated).

Relationship with development strategy

This Stategic Initiative falls in close proximity to the Western Cluster area of significant proposed development associated with extension to Cambourne and transport nodes of the proposed East West rail. Small scale development around rural villages may also fall within, or close to, this Initative area.

Potential delivery partners

- Wildlife Trust
- National Trust
- Natural England
- Forestry Commission

- Woodland Trust
- Farming and Wildlife Advisory Group East
- Farming community including Cambridge County Farms Estate
- Schools and other youth centres
- Campaign groups and charities (e.g. CamCycle, Cambridge Carbon Footprint, Smarter Cambridge Transport).

Potential delivery mechanisms / funding

- Future funding from East West rail
- Woodland Carbon Code and Woodland Carbon Guarantee
- S106/BNG from new development in west Cambridge
- For projects near the A1198 and A428, Highways England Designated Funds within the category 'environment and wellbeing'.
- Agri-environment scheme funding including future E.L.M. scheme.

Time scale

Long term

Indicative costs

Above £1 million

Priority

Higher importance

Strategic Initiative 9: Pollinator corridors

Objectives of Strategic Initiative

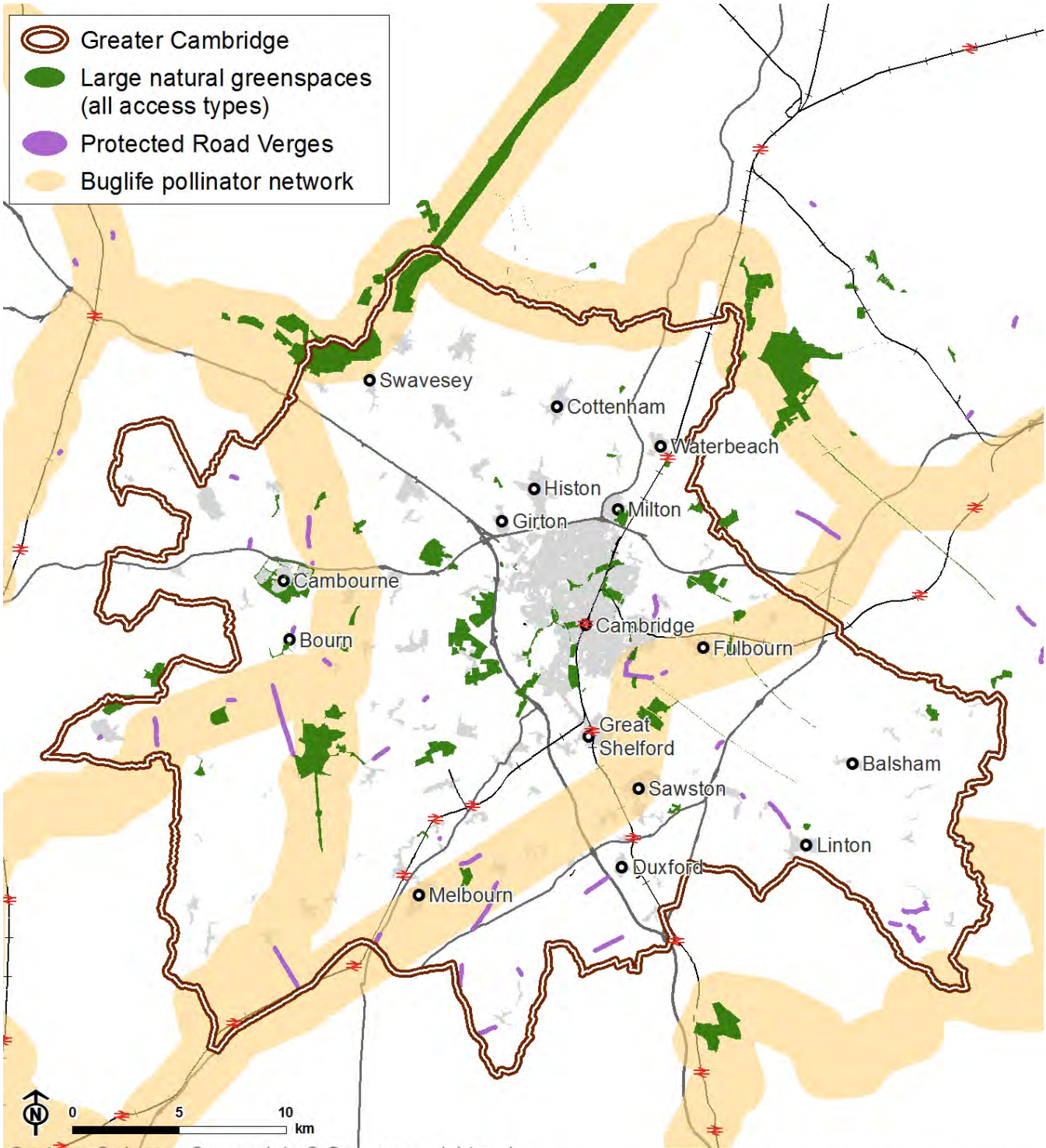
- Create a network of linear 'pollinator corridors' by promoting locally appropriate wildflower diversity and abundance in line with the National Pollinator Strategy.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; and, biodiversity and geodiversity.

The cross-cutting themes this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.28: Pollinator corridors



CB:DM EB:Manson D LUC 11017_r1_Strategic_Initiative_9_Pollinators_A4P_30/07/2021
Source: Ordnance Survey, Buglife, GCSP, BCN WT

Overview of Initiative

The UK has seen dramatic declines in pollinators in recent decades. This Initiative seeks to create a network of linear 'pollinator corridors' by promoting locally-appropriate wildflower diversity and abundance in line with the National Pollinator Strategy. The Initiative will focus on opportunities including road verges, walking and cycling infrastructure, community-led projects and collaboration with a range of institutions and landowners across Greater Cambridge.

Largely due to the loss of wildflower meadows and agricultural intensification, the UK has seen dramatic declines in pollinators in recent decades, leading to concerns over the ability to grow food crops.

Building on the strategic "B-lines" proposed nationwide by Buglife, these corridors would connect between, and extend from, existing and proposed sites of floristic diversity. New planting opportunities must recognise and complement the range of local conservation priority grassland types. Coordination with the Protected Road Verges (PRV) programme, for example, will be essential to ensure that the characteristic and locally rare species of the PRV are maintained under continued favourable management, distinct from that appropriate for newly sown neutral biodiverse swards.

There are a number of opportunities where these corridors could be focused and where partnerships could be formed:

- Opportunities associated with expansion of transport infrastructure (vehicular and active travel routes, including the 12 planned Greenways).
- 'Bee Hive' routes to school – with the potential to serve as an educational resource for students.
- Expectation of increased wildflower meadow can also be integrated firmly into expectations of new development areas and the associated GI features.
- Collaboration with landowners for the provision of wildflower meadows (schools, universities, Council-owned land, Ministry of Defence, National Trust, church land etc.)

- PRVs managed by Cambridgeshire County Council as part of their duty to conserve biodiversity form a key component of the local wildflower resource but require distinct recognition and management prescriptions.

The Gog Magog Hills chalk downlands have been highlighted as a particular opportunity to enhance and expand wildflower meadows of this soil type as part of pollinator corridors through the landscape (see Strategic Initiative 3).

Where biodiverse grasslands are created or enhanced through low intensity management, such as the transport network, potential maintenance cost savings may be acheived in the long term. This can be achieved through a simple change to 'business as usual' practices, without the need for significant upfront investment.

There may be a need for interpretation and educational resources in 'rewilded' areas such as this, to explain that they have been left "wild by design" and to boost community acceptance.

As a more dispersed Strategic Initiative, the considerations here should be woven through all of the Strategic Initiatives. Wherever new GI assets are created, areas of wildflower should be integrated into the landscape and green corridors wherever possible.

Relationship with existing projects and initiatives in Greater Cambridge

- Coton Loves Pollinators.
- Protected roadside verges across Greater Cambridge.

Relationship with development strategy

Significant proposed development to the west of Cambridge around Cambourne and the proposed East West rail station should seek to enhance the pollinator corridor which stretches north to south across West Cambridge, encompassing the development area. Likewise, small areas of development in other small settlements, dispersal to villages and the Southern Cluster should enhance pollinator corridors, together with interventions around rural employment locations identified for growth, including Cambridge Biomedical Campus and Babraham.

Potential delivery partners

- Buglife
- Wildlife Trust
- Cambridgeshire County Council (as manager of Protected Road Verges)
- Cambridge University colleges.
- Council Green Spaces teams.
- Farming community.

Potential delivery mechanisms / funding

- Enhanced management practices for existing and new green spaces managed by the Council (potential for cost savings) through best practice guidance for grounds maintenance teams. This also includes green space management undertaken by Parish Councils.
- Highways England projects. Highways England also has Designated Funds which any organisation can apply for, within which there is an 'environment and wellbeing' category.
- Community-led initiatives (e.g. Coton Loves Pollinators).
- Agri-environment schemes (see Strategic Initative 14).

Time scale

Quick win

Indicative costs

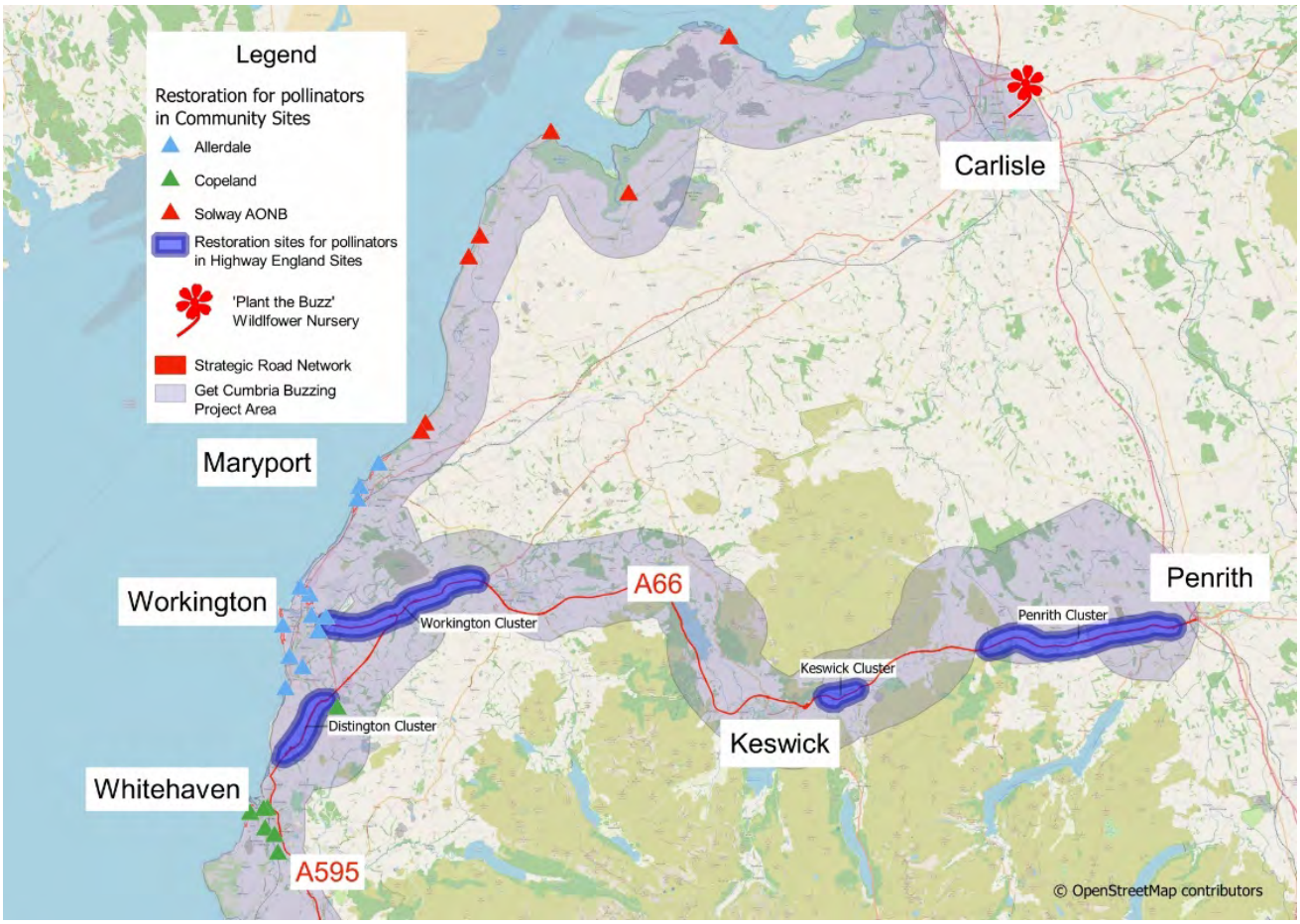
£0-10k per planted area depending on the scale of the area, but potential to be cost-neutral or produce cost savings in the medium term as a result of reduced management.

Priority

High importance

Case Study 1: Get Cumbria Buzzing (Cumbria Wildlife Trust)

Figure 3.29: Pollinator map as part of the 'Get Cumbria Buzzing' project



Credit: Cumbria Biodiversity Data Centre

This is a 3-year project including a wide range of partners, joining forces to help reverse the decline of pollinators across north west Cumbria. It was development by Cumbria Local Nature Partnership (LNP) and delivered by Cumbria Wildlife Trust. The project aimed to boost pollinating insect populations by creating a large network of wildflower havens throughout the county – creating 115 hectares of wildflower rich habitat as stepping stone habitats. It has a

significant focus on the Strategic Highway Network, in collaboration with Highways England. It began with the creation of an interactive 'pollinator network map' to display existing pollinator records.

Case Study 2: King's College wildflower meadow, University of Cambridge

Figure 3.30: The new wildflower meadow

Credit: Geoff Robinson Photography

Closer to home, a large swathe of one of Cambridge's iconic lawns was transformed into a wildflower meadow in 2019. A "monoculture" lawn since the 1720s, the aim was to create a more multifunctional feature , one which has a biodiversity-rich ecosystem and makes an important contribution to the cityscape, despite not being openly accessible to the general public.

The meadow makes an important contribution to pollinator corridors as well as creating an urban greening feature that sets the standard for other urban spaces (publicly accessible and private) in Greater Cambridge.

Strategic Initiative 10: Expanding Greater Cambridge's 'urban forest'

Objectives of Strategic Initiative

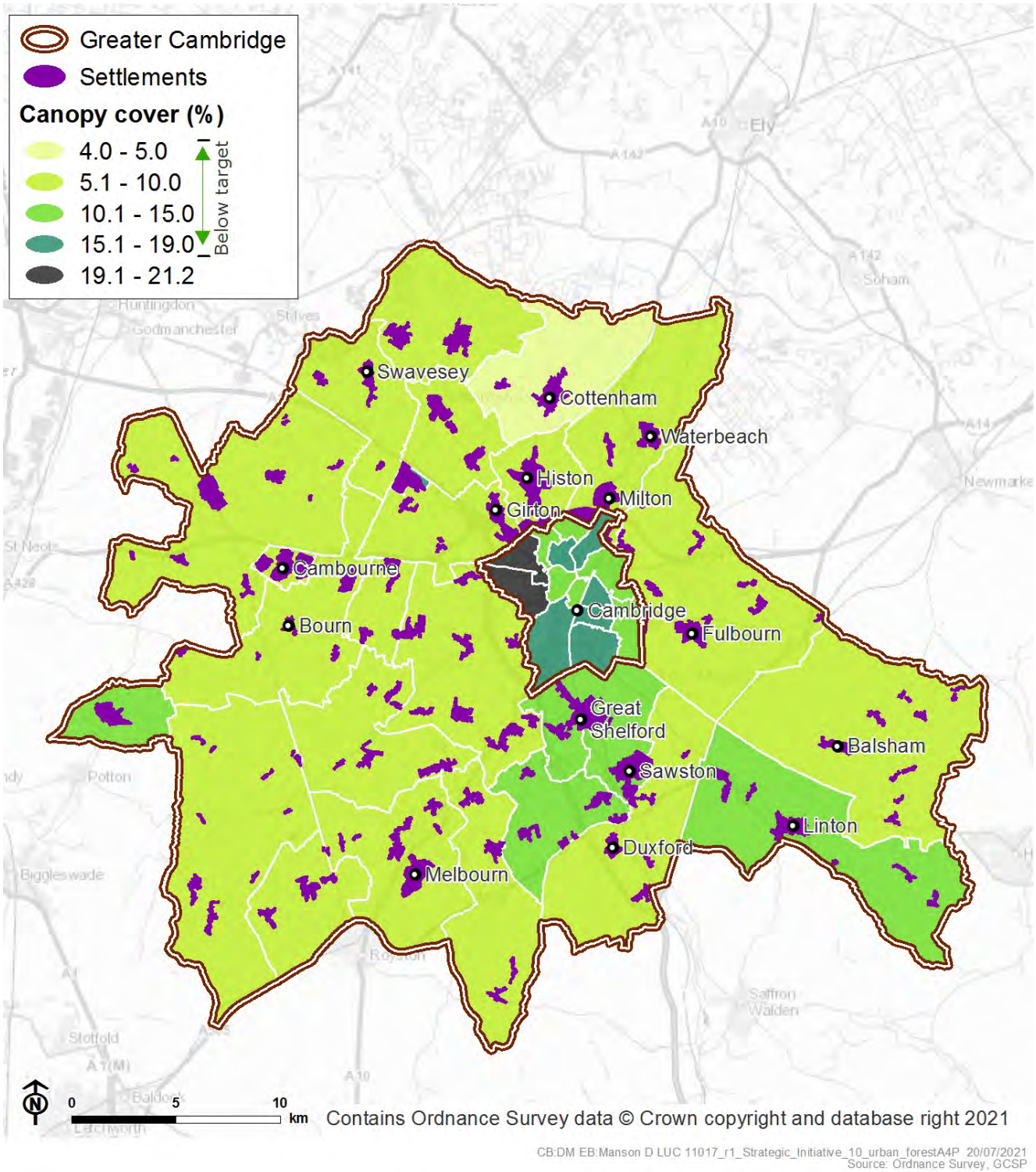
- Increase tree canopy cover and its distribution, by protecting the existing tree canopy and planting new trees using locally-appropriate species, to help settlements adapt to climate change and sustainably enhance the urban environment for people and wildlife.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; access and connectivity; recreation and play; carbon sequestration; and, agriculture and community food growing.

The cross-cutting themes this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.31: Expanding Greater Cambridge's 'urban forest'



Overview of Initiative

Trees serve as important multi-functional features in urbanised settings – providing shade, habitat, more attractive townscapes and carbon sequestration, among other benefits. The urban forest concept aims to move from the traditional model of tree management by ownership and primarily for amenity, to a more holistic or whole-forest approach, by directly and indirectly influencing tree canopy cover, regardless of actual ownership, to deliver the primary aims of sustaining and enhancing flows of urban forest ecosystem services for the benefit of people, wildlife and the climate. The Initiative applies to Cambridge and to other settlements in South Cambridgeshire. Within the City, delivery is currently led by the existing Cambridge Canopy Project.

Cambridge currently has 17% tree canopy, slightly above average national average figures. However the Cambridge City Council Citywide Tree Strategy 2016-2026 aims to increase this to 19% by the 2050s, which will require more than 800,000 sqm of new tree cover. The Strategy sets the framework for tree planting policy in Cambridge City, and which is currently being delivered via the Cambridge Canopy Project (2018-2022) – a GI investment pilot that forms part of a wider EU programme. It seeks to:

- Develop standard approaches to tree planting, protection and management, and to public engagement.
- Develop tools to assess canopy cover and identify areas for enhancement.
- Complement the City's existing arboricultural activities to boost tree planting and tree protection, to help mitigate the impacts of climate change.

There is currently no equivalent analysis of the canopy cover extent in South Cambridgshire, but the majority of trees are in villages and classified as non-woodland. South Cambridgeshire District Council has identified enhancing tree cover as a priority in its Doubling Nature Strategy, but has not to date set a specific target. The Cambridge Canopy Project model forms a blueprint that could be expanded into settlements in South Cambridgeshire and for work beyond 2022.

Recent amendments to the NPPF also place strong emphasis on urban tree cover, requiring all streets to be tree-lined. The Woodland Trust is also advocating for all development land to include a minimum 30% tree canopy cover.

It will be important to ensure that trees perform as robust and multi-functional GI assets. Key pedestrian/cycling routes should be prioritised for tree planting to create more desirable routes, in order to support a modal shift towards walking and cycling. Given the increased risk of flooding identified in urban areas (projected to become more severe with the impacts of climate change), the provision of SuDS which incorporate trees should also be prioritised and given significant weight in the planning system. This will allow trees to more effectively contribute to surface water management. It is recognised that urban trees in Greater Cambridge are under stress from drought and groundwater issues, with newly planted trees often not thriving. As such, significant attention should be paid not only to their number of trees but to their long term resilience through appropriate management.

Combined with other "greening" features, street trees are one component of Strategic Initiative 12 (Urban greening and 'de-paving').

Relationship with existing projects and initiatives in Greater Cambridge

- Citywide Tree Strategy 2016-26 (Cambridge City Council), including the existing Cambridge Canopy Project (2018-2022).
- Sites with tree and woodland potential identified in call for green sites (e.g. Cambridge Road, Impington; Meldreth Country Park).

Relationship with development strategy

Proposed significant development in Greater Cambridge at Waterbeach New Town, Northstowe, North East Cambridge, North West Cambridge, Cambridge Airport and Western Cluster (extension to Cambourne and East West rail) should support delivery of this Strategic Initiative. Likewise, small scale development should seek to enhance urban tree canopy cover, particularly for development on other small sites, at villages and in the Southern Cluster of Greater Cambridge.

Potential delivery partners

- Cambridge Canopy Project
- Woodland Trust
- Schools, community groups and university colleges.

Potential delivery mechanisms / funding

- Delivery of tree-lined streets is an integrated component of the design of new development (as a requirement of recent proposed amendments to the NPPF).
- National tree planting funding (e.g. Urban Tree Challenge Fund, Green Recovery Challenge Fund).
- Trees for Cities scheme.
- Trees for Streets programme (Start with Local and Trees for Cities).
- Tree Council grants.
- Town and parish Councils through Zero Carbon Communities grant funded projects for tree planting (see Cambourne Town Council) and woodland restoration (see Histon and Impington Trees Action Group for their work near the A14 expansion project).
- Schools and community groups (through Woodland Trust community tree packs).

Time scale

Medium term (5-10 years)

Indicative costs

£100k to £1 million

Priority

Higher importance

Case Study: Manchester City of Trees (Greater Manchester)

Figure 3.32: Ten sweet gum and serviceberry trees planted in Stockport as part of Manchester City of Trees and the recycling company Viridor's 'Street Tree' program, linking pedestrian routes as part of a wider regeneration effort.

Credit: Manchester City of Trees

City of Trees is a good example of a strategic, multi-stakeholder approach to expansion of urban tree cover across the wider geography of Greater Manchester. The Initiative is dedicated to delivering a green recovery and tackling climate change through planting trees and restoring woodlands, with a goal of planting a tree for every citizen within the next 5 years. In Manchester this equates to 3 million trees. In Greater Cambridge, this would equate to roughly 275,000 trees.

The Initiative was launched in 2013 by the Oglesby Trust and Community Forest Trust (CFT), on the basis of the previously existing Red Rose Forest. It makes considerable use of the pioneering i-tree project together with the University of Manchester.

The Initiative works with a range of different partners – including schools, allotment sites, community gardens, churches, hospitals. It has also used Heritage Lottery funding to celebrate, record and protect local tree heritage. The Citizen Forester initiative is a program that provides opportunities for people to learn new skills and connect to nature.

Strategic Initiative 11: Woodland expansion and resilience

Objectives of Strategic Initiative

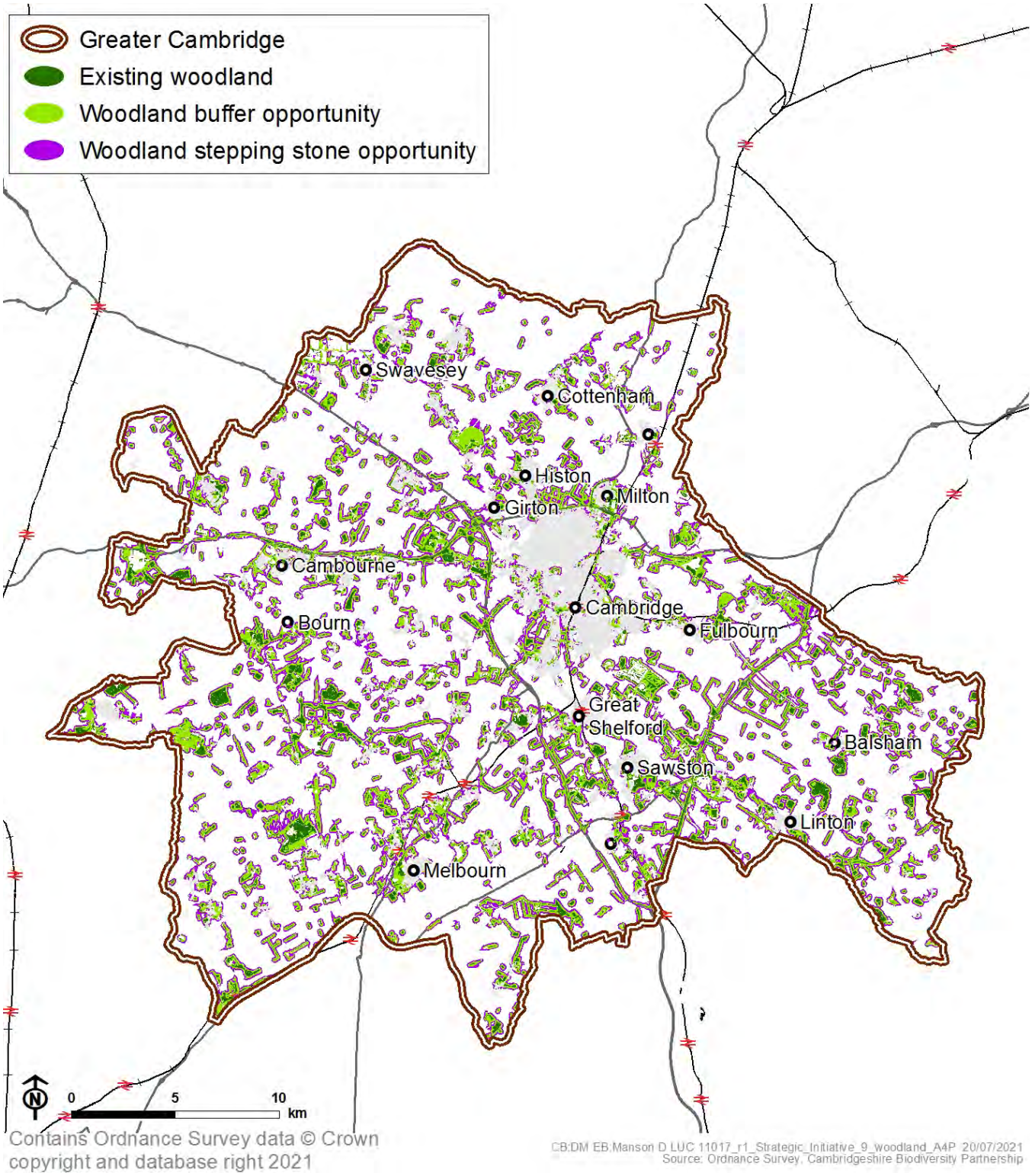
- Expand woodland areas (and hedgerows) through planting and natural regeneration, and improve their management outside urban areas to deliver benefits for carbon sequestration, create wildlife corridors, contribute to flood resilience and enhance the wider landscape.
- Mitigate pressures on woodlands, including recreational pressure, fragmentation and the impacts of climate change.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; access and connectivity; recreation and play; carbon sequestration; and, agriculture and community food growing.

The cross-cutting themes this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.33: Woodland expansion and resilience



Overview of Initiative

The national "net zero" policy agenda places significant emphasis on expanding tree cover to help mitigate climate change, in partnership with reduction of carbon emissions at source. This Strategic Initiative seeks to both expand woodland areas (and hedgerows) through new woodland planting and allow for natural regeneration, and improve their management outside urban areas (which are covered under Strategic Initiative 10). Beyond the benefits in boosting Greater Cambridge's 'carbon sink', expanding and joining up areas of woodland and the hedgerow network can create important wildlife corridors (see also Strategic Initiative 8), contribute to flood resilience and enhance the wider landscape character and quality. This dispersed approach to woodland creation and expansion will require a multi-stakeholder approach that works with a range of large landowners (e.g. farmers, NGOs and councils).

The role of trees as 'carbon sinks' has led to strong emphasis on their contribution to net zero targets. On a national level, the UK government has set itself a target of establishing 30,000 ha of new woodland in England by 2025, as outlined in the 2020 budget statement. This target is based on the Committee on Climate Change's net zero projections, advocating the need to take woodland cover in the UK from 13 to 17%. The Committee on Climate Change have also advocated a 40% expansion of the hedgerow network to achieve net zero, although this has received less attention then tree planting to date.

Woodlands and hedgerows perform multiple functions and deliver a wide range of ecosystem services beyond mitigating against climate change. They are important elements of the wider landscape character, support important (often fragile) habitats and species, provide recreational benefits, and can mitigate flood risk and reduce soil erosion.

A number of the woodland SSSIs in Greater Cambridge have been identified as being under significant recreational pressure – including Wimpole Woods, Hardwick Wood, Hayley Wood and Papworth Wood (see also Strategic Initiative 8). Creating buffers around existing woodlands will help to control and mitigate the level of impact.

The use of tree planting for offsetting is increasingly commonplace – many businesses now offer to plant trees as an incentive to buy their product, and landowners such as water companies have pledged to use more of their land for tree planting. Along with the sustainable

long-term management to optimise carbon capacity, the approach to tree planting must consider 'the right tree in the right place'. This approach tackles the questions of what species to plant and where. To ensure long-term resilience of newly planted trees, there should be planting of diverse species which are sourced locally where possible. In terms of where, in some areas (such as peat bogs or species-rich grassland) maintaining existing habitats is more beneficial than replacing with trees. Two areas of focus for new planting in Greater Cambridge include:

- Creating connections between isolated areas of existing woodland to contribute to the wider Nature Recovery Network. Similarly, connecting fragmented hedgerows and 'gapping up' hedgerows by improving their management.
- Riparian woodland planting at appropriate locations to provide services such as filtering agricultural run-off (improving water quality), keeping rivers cool (aiding fish populations) and helping to address flood risk.

Emerging post-Brexit payment mechanisms for the agriculture sector mean that agro-forestry is likely to play an important role in expanding tree cover (see Strategic Initiative 14). However, working with other major landowners will also be key. Both Greater Cambridge local authorities can consider rethinking their land portfolio, to allow them to accommodate extra woodland creation. They could also work in partnership with other landowners in the area to create woodlands on their land.

While the national agenda for woodland planting is an important driver for change, this must not overshadow the need for improved management and stewardship of existing woodlands as part of this Initiative. A recent report from the Woodland Trust (The State of the UK's Wood and Trees 2021) found that only 7% of Britain's native woodlands are currently in good ecological condition.

Relationship with existing projects and initiatives in Greater Cambridge

- West Cambridgeshire Hundreds Living Landscape habitat enhancement project (Wildlife Trust).

- Two priority areas with a focus on woodland planting - 'Boulder Clay and Woodland' priority area and 'Gog Magog Hills' priority area (Cambridge Nature Network).
- Expansion and buffering of Balsham Wood SSSI; and, woodland expansion around Madingley Wood SSSI (Cambridge Nature Network).
- Farmland near Balsham Wood (call for green sites).
- Riparian woodland in Great Ouse Valley (Great Ouse Valley Trust).

Relationship with development strategy

Given this is a dispersed Strategic Initiative, all areas of significant and small scale proposed development across Greater Cambridge are applicable. Woodland expansion associated with new and extended development could support achieving BNG and carbon sequestration targets.

Potential delivery partners

- Forestry Commission
- Woodland Trust
- National Trust
- Water companies
- Farming community
- Major landowners – including the Church of England, the National Trust, the Ministry of Defence, utility companies, Highways England, Network Rail, the university colleges, and large estates (such as the Grantchester, Madingley, Dry Drayton, Hinxton, Duxton and Trumpington Estates).
- Schools
- Cambridge City Council and South Cambridgeshire District Council (by planting on Council-owned land)
- Managers of the Cambridgeshire County Farm estate.

Potential delivery mechanisms / funding

- S106 and BNG funding streams.
- Agro-forestry schemes through E.L.M..
- Sustainable Farming Incentive, Local Nature Recovery and Landscape Recovery Schemes – supporting farmers to manage their land in an environmentally sustainable way. Defra Nature for Climate fund.
- Woodland Carbon Code - encouraging a consistent approach to woodland carbon projects.
- Woodland Carbon Guarantee (WCaG) – allowing woodland creation projects to sell WCUs to the government up to 2055/56.
- England Woodland Creation Offer (EWCO).
- Water company tree planting programs (see Case Study).
- Woodland Trust grants (e.g. MOREwoods and MOREhedges grants).
- Potential for income from wood fuel in areas of woodland planted on the County Farm estate.
- Environment Agency grant schemes.

Time scale

Medium term (5-10 years)

Indicative costs

Above £1 million (see Woodland Trust report 'Trees or Turf' for an overview of the costs of maintaining areas of woodland compared with areas of grassland).

Priority

Critical importance

Case Study: Water company tree planting

Figure 3.34: Area of woodland

Credit: Olena Sergienko on Unsplash

In 2019, English water companies committed to planting 11 million trees by 2030, part of a wider commitment to improve the natural environment and achieve a net zero carbon water industry by 2030. The proposal includes tree planting, but also work to restore original woodland and improve natural habitats. Additional land will be provided by partners including local authorities, the National Trust, the Wildlife Trusts and the RSPB.

This provides a good example of the importance of working with a number of major landowners for a multi-stakeholder approach to achieving woodland cover targets.

Strategic Initiative 12: Urban greening and 'de-paving'

Objectives of Strategic Initiative

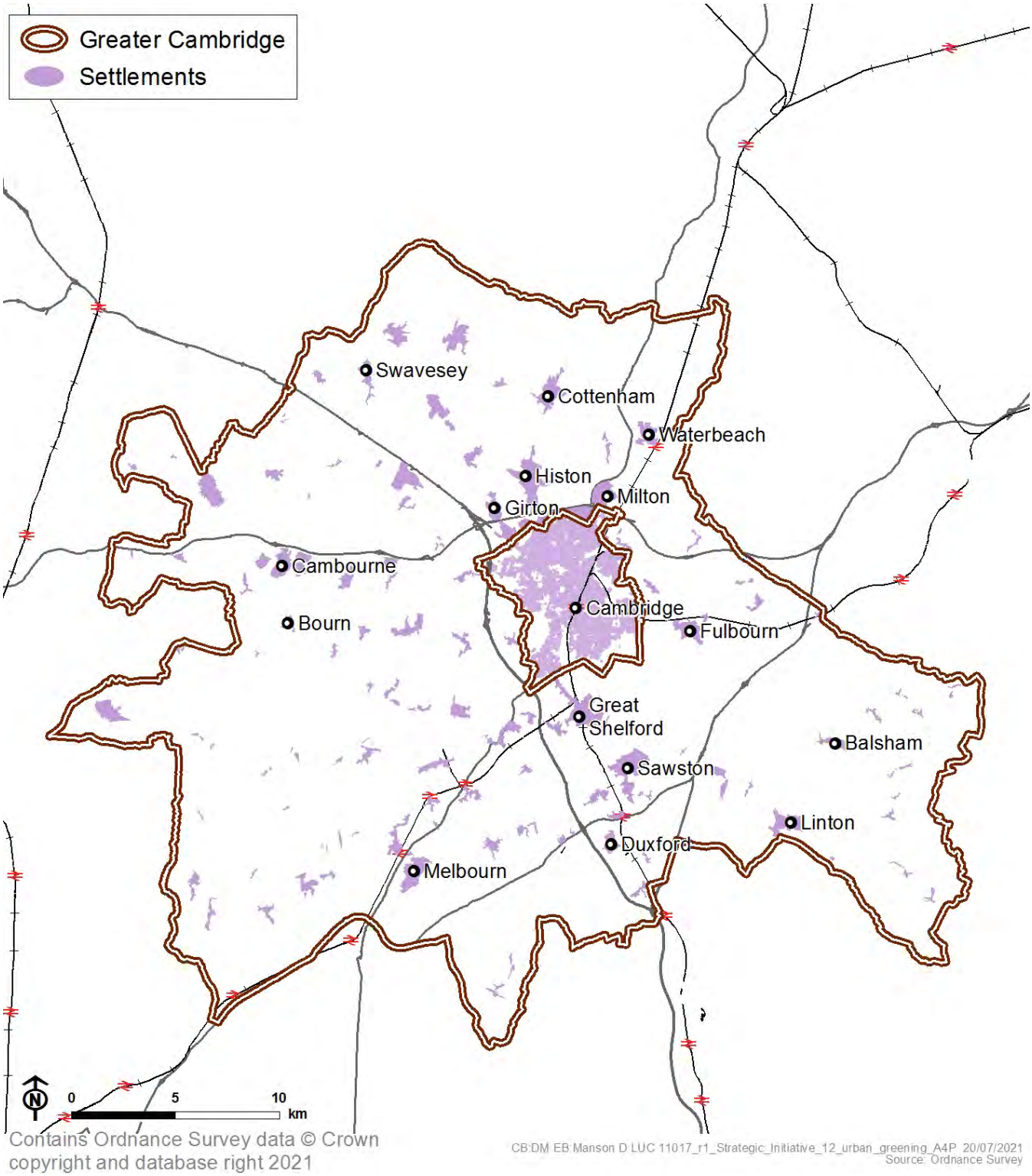
- Introduce urban greening interventions (e.g. green roofs, SuDS, street trees and pocket parks) within existing, regenerating and newly proposed urban areas across Greater Cambridge to deliver multiple benefits for people, wildlife and the environment.

GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; access and connectivity; recreation and play; and, carbon sequestration.

The cross-cutting themes this Initiative supports are: climate change; wellbeing and social inclusion; and, environmental factors.

Figure 3.35: Urban greening and 'de-paving'



Overview of Initiative

The 'greening' of existing settlements will play an important role in strengthening the GI network, creating greater resilience to climate change, and delivering placemaking and health and wellbeing benefits. This Initiative will be applicable across established, regenerating and newly proposed urban areas, and is compatible with the delivery of Strategic Initatives 10 and 11. The introduction of BNG requirements together with supporting design policy will be a key driver of urban greening. 'De-paving' (replacing sections of hard paving, such as concrete and tarmac, with a more permeable surface, such as gravel or soil) will be a key area of focus, to help to combat flood risk by creating more permeable settlements (sometimes referred to as 'sponge' settlements).

Whilst undoubtedly adding to the urban aesthetic, urban greening significantly enhances how places function, for people, for wildlife and for the wider environment. Green roofs, street trees, pocket parks and Sustainable Drainage Systems (SuDS) are some of the many urban greening interventions, all of which effectively create healthier places to live, work and invest. Tiny Forests are an additional mechanism by which to deliver greening in smaller, urban environments for the benefit of people and wildlife (see Case Study 1). Ecosystem service benefits of urban greening include mitigation of poor air quality, increase in resilience to flooding and moderation of high temperatures.

Settlements across Greater Cambridge can be 'greened' in two ways – either through the retrofitting of existing public realm, or the provision of GI through new development. As the population increases in Greater Cambridge, the GI network will have to make the most of all spaces – small, vertical and elevated – within urban areas. This encompasses the need to expand urban tree cover (Strategic Initiative 10) as well as increasing the diversity of greening features that respond to local issues and townscape features, including: pocket parks, SuDS (such as naturalised 'swales'), green roofs, wildflower meadows (see also Strategic Initiative 9) and rain gardens.

As GI assets, urban greening features should serve multiple functions. They should enhance the historic character of streets and public spaces, boost local economies through better placemaking, slow the flow of stormwater, provide biodiversity benefits and resources for pollinators, cool urban spaces, enhance the health and wellbeing of local communities, and

support the visitor economy. Given that some areas of Greater Cambridge, particularly in the north, are at some risk of flooding, creating greater permeability through urban greening and de-paving will be an important focus. Likewise, in those areas identified as surface water flooding wet spots.

Given the shortfall in accessible green space, smaller-scale green spaces (such as pocket parks and amenity green spaces) will play an important role in joining larger flagship green spaces. As connecting features, they also deliver important ecosystem services and should be prioritised – both for retrofitting existing spaces and delivering new places. This will help to address the severe recreational pressure on existing green space in Greater Cambridge, by tackling the deficit of accessible green space at all scales.

The integration of urban greening into all public realm projects and community-led greening schemes are both important routes for retrofitting existing areas. It is also important that GI principles are integrated into transport planning in Greater Cambridge - the delivery of new transport or traffic-calming projects present an opportunity where the layout of streets is being altered, for the provision of linear features such as rain gardens incorporated into cycle lanes, or wildflower meadows incorporated into built-out kerbs (see Case Study 2). Flood risk in particular can be addressed by setting out a program of cumulative 'de-paving' in order to create more permeable townscapes for flood resilience (see Case Study 3).

New development will also play a central role in delivering new GI assets – development proposals should contribute to the greening of Greater Cambridge by including urban greening as a fundamental element of site and building design. Led by the evidence outlined in this study and the Integrated Water Management Study, it is important that all flood management and SuDS schemes delivered as part of the public realm within all new development within Greater Cambridge are multi-functional. As well as biodiversity-rich habitat mosaics, the integration of rainwater harvesting systems and grey/green water recycling will be important in Greater Cambridge (see Case Study 4).

Urban greening features must be designed in at the earliest phase of masterplanning new sites. Future maintenance and stewardship of the assets must be considered also at the outset of design, particularly when it comes to SuDS features.

Relationship with existing projects and initiatives in Greater Cambridge

- In Cambridge City, the emerging 'Making Space for People' SPD will be used to prioritise the delivery of improvements to key public spaces in the city. It is important that the drivers and priorities of this GI study are incorporated into this SPD and the public realm projects delivered under it.
- In 2021 train operator Greater Anglia joined the 'WildEast' movement, pledging over 6,400 square metres of rail station (the equivalent of five Olympic-sized swimming pools) land to help the region's wildlife. WildEast has a target of giving 20% of land in East Anglia back to nature by 2050.
- In Cambridge, the Sustainable Drainage Design and Adoption Guide provides developers with all the information needed to meet the city's adoption standards and ensures we treat 'water as a friend and not an enemy'. It won a Landscape Insititute award in 2010.
- Greater Cambridge Sustainable Design and Construction SPD which sets out the role of GI (adaptation, trees, green/brown roofs) in adapting to climate change (see paragraphs 3.4.16 – 3.4.36).
- Parker's Piece and Meldreth Country Park (call for green sites).

Relationship with development strategy

Proposed significant development in Greater Cambridge provides opportunity to implement urban greening interventions from the outset, including Waterbeach New Town, Northstowe, North East Cambridge, North West Cambridge, Cambridge Airport and Western Cluster (extension to Cambourne and East West rail). Small scale development likewise should seek to enhance urban greening interventions where possible, particularly for development on other small sites, dispersal within existing villages and in the Southern Cluster of Greater Cambridge.

Potential delivery partners

- Greater Cambridge partnership
- Community and 'Friends' groups
- Town/local centre regeneration schemes
- Masterplanners of new development
- Environment Agency
- Highways England
- Cambridgeshire County Council
- Business Improvement Districts (BIDs)
- Rail companies (as landowner at rail stations)
- Earthwatch Europe, for Tiny Forest

Potential delivery mechanisms / funding

- Integration of greening features into the masterplanning of new development, using BNG policies as a lever and design codes to ensure high quality interventions.
- Section 106 and offset BNG funding streams from new development.
- Small-scale community-level funding to retrofit urban areas with green features e.g. neighbourhood grants or lottery funding.
- Cambridge City Council Environmental Improvement Program (principles from this GI study should be incorporated into future eligibility criteria)
- Town/local centre regeneration efforts or public realm enhancement schemes. May benefit from some national government grants e.g. Future High Streets fund.
- Funding associated with Business Improvement Districts (BIDs).

Time scale

Medium term (5-10 years) as a Strategic Initiative, however individual projects may be 'quick wins' (next 5 years).

Indicative costs

£0-100k for individual projects

Priority

Critical importance

Case Study 1: Tiny Forest, Oxfordshire

Tiny Forest is an Earthwatch Europe project aimed to bring the benefits of a forest – reconnecting people with nature and raising awareness, helping to mitigate the impacts of climate change, as well as providing nature-rich habitat patches to support urban wildlife – right into the heart of our cities and urban spaces.

Oxfordshire is one of the first places to plant Tiny Forests in the UK, planting Tiny Forests to create wildlife havens and help city-goers connect with nature. There is one in Witney which was planted in March 2020 and there are two new forests currently being planted at Meadow Lane Nature Reserve and Foxwell Drive. There have been delays due to Covid-19, which has also meant landscape contractors are planting the forests instead of planting with the help of schoolchildren as originally planned.

Figure 3.36: Tiny Forest in Witney, Oxford

Credit: Witney Town Council

Case Study 2 (Urban greening as placemaking): Sheffield Grey to Green

Sheffield 'Grey to Green' is the UK's largest retro-fit SuDS project, implemented along a length of dual carriage-way on the edge of Sheffield city centre. Design work started in 2014 and Phase 1 included a 1.6km 'green street'. The scheme includes rain gardens and bioswales separating cycle lanes, pedestrian routes, and vehicles. One of its main functions is to reduce and slow down surface water runoff, as the nearby River Don is prone to flooding.

As Cambridge city expands, this scheme offers best practice for transforming urban edge areas through green infrastructure. It also offers a way of addressing identified areas of severance within the plan area, as a result of legacy transport infrastructure. However, in Sheffield the scheme was also designed as a catalyst for further investment in the area, providing significant economic benefits.

Figure 3.37: SuDS features alongside active travel corridors in Sheffield

Credit: Nigel Dunnett

Case Study 3 (small-scale retrofit): De-paving London

Figure 3.38: Lowden Road rain garden (Herne Hill) from the Mayor of London's 'Grey to Green' guide. Credit: Groundwork/Mayor of London

‘De-paving’ is the process of removing impermeable surfaces such as concrete and tarmac and replacing them with materials such as soil, gravel and permeable paving which allow water to move through them. The de-paved areas can be planted with a wide variety of suitable plants.

The Mayor of London's 'Grey to Green' guide provides guidance for community groups wishing to get involved in de-paving their area along with case studies – recognising that small changes can add up to a big impact. Small-scale community grants (such as the 'Build Back Greener' grant) can be used to fund materials. Schools and other institutions may be suitable and motivated partners for a de-paving program. A similar program in Greater Cambridge could have significant impact – particularly if paired with a percentage target and a successful social media campaign.

Case Study 4 (urban greening on new sites): Rainwater harvesting at Eddington

Figure 3.39: Rainwater harvesting at Eddington

Credit: Eddington Cambridge

The new development at Eddington (a new district to the north west of Cambridge city centre) includes the UK's largest site-wide water recycling system. The SuDS system channels rainwater through blue and green roofs and swales, which is then collected in lakes. This rainwater is then treated and reused in buildings for things like washing machines and toilet flushing. This aims to both reduce water usage and reduce the risk of localised flooding.

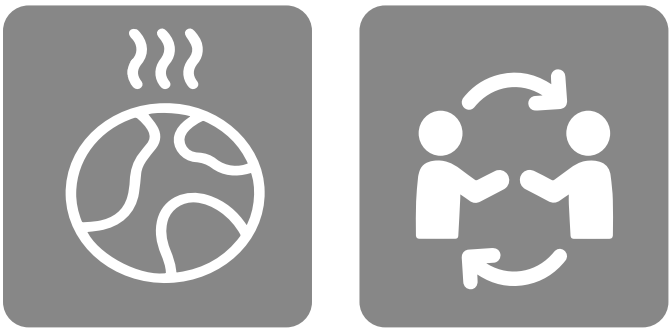
Strategic Initiative 13: Allotments and community gardening

Objectives of Strategic Initiative

- Create a patchwork of allotments and community growing sites across Greater Cambridge, delivered through expansion and upgrading of existing sites and providing new sites in areas of deficiency and new development.

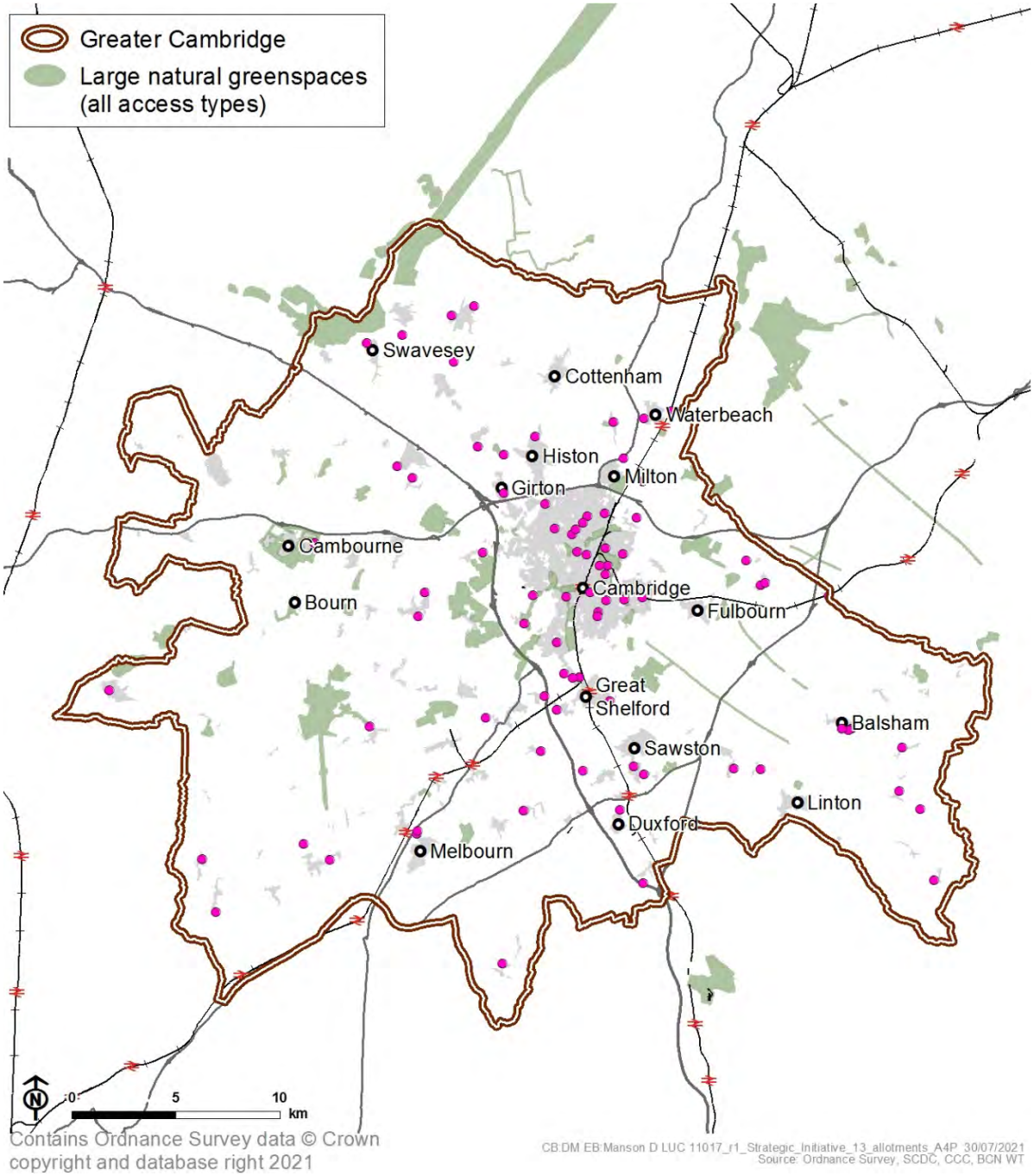
GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; recreation and play; carbon sequestration; and, agriculture and community food growing.



The cross-cutting themes this Initiative supports are: climate change and, wellbeing and social inclusion.

Figure 3.40: Allotments and community gardening



Overview of Initiative

Allotments and community growing sites not only provide a source of locally grown produce, but also deliver benefits for health and wellbeing, community cohesion, education, biodiversity, climate change, food waste and the local economy. An enhanced patchwork of allotments and community growing sites across Greater Cambridge will be delivered through expansion and upgrading of existing sites and providing new sites in areas of deficiency and new development. This will enable current and future residents to enjoy the benefits to their health and wellbeing, and by integrating sites into the wider GI network, will help to address the biodiversity crisis and climate emergency.

The Covid-19 pandemic has brought the value of allotments and community gardens for health and wellbeing into the spotlight. They enable people to access nature, to address loneliness and create connections within their local community whilst also providing a source of local produce. Sites additionally provide a valuable habitat for wildlife and for pollinators, use sustainable horticultural practices beneficial for soil structure and carbon sequestration, and they provide an opportunity for education.

The demand for allotments has increased dramatically in many cities, increasing the pressure on existing sites which already had long waiting lists. Coupled with development pressures and population growth, an increase in supply is paramount. This Initiative will extend the existing patchwork of allotments and community growing sites across Greater Cambridge to keep up with demand.

Allotment standards are in place to ensure there is adequate provision for local residents. Target areas should be those with an existing deficiency in allotment provision (e.g. many South Cambridgeshire villages) and areas undergoing significant growth. Allotments are most commonly delivered through new developments but, where possible, opportunities for conversion of underutilised community spaces and low production agricultural land bordering settlements should be explored.

In a similar way, community gardening should be supported and expanded to encourage communities to work together to promote local food growing and use locally grown produce. Greater Cambridge already has a strong network of community groups leading the way in various community gardening and farming projects. It is vital to work in partnership to support

delivery of a more extensive network of community gardening and farming sites which connect into the wider GI network. The precedent has already been set with Cambridge Sustainable Food – an innovative and growing partnership of public, private and community organisations in Cambridge and the surrounding villages. Advice and guidance available from these groups will support other communities wishing to follow suit. Partnerships with local schools, colleges, community groups and residents associations are also fundamental to effective delivery and, by providing an educational element, will ensure future stewardship of community growing sites and an interest in healthy food choices.

It is important to ensure the benefits of community gardens and allotments are maximised by integrating existing and new sites with the wider GI network where possible. Green links should be made with other Strategic Initiatives (and projects), including habitat restoration and enhancement, urban greening (Strategic Initative 12) and pollinator corridors (Strategic Initative 11).

Figure 3.41: Empty Common community allotments

Credit: Geograph

Relationship with existing projects and initiatives in Greater Cambridge

- Cambridge Growing Spaces and Sustainable Food Tour (Cambridge Sustainable Food).
- Cambridge City Council Climate Change Strategy 2021-2026. Objective 5 promotes sustainable food and the accompanying action plan specifies how Local Plan policies can promote food growing in new developments.
- Grow, Share, Eat (Headway Cambridgeshire).
- Several existing community gardens or orchards (e.g. Hanover/Princess Court Community Garden, Nightingale Garden, Rock Road Library Community Garden, Trumpington Community Orchard).
- Orchard Park Wildlife Project (Cambridge Community Growing Group).
- Allotment project (Make, Do and Mend).
- Community Supported Agriculture (e.g. Cambridge CropShare which is run as a partnership between Transition Cambridge and Waterland Organics).
- CoFarm Cambridge - Cambridge City's first community farm on a 7 acre site in Barnwell (CoFarm).
- Sites with potential identified in call for green sites (e.g. woodland area directly opposite 70, 72, 74, 76 Cambridge Road; former orchard above Haslingfield).

Relationship with development strategy

In areas of significant proposed development within Greater Cambridge, including Waterbeach New Town, Northstowe, North East Cambridge, North West Cambridge, Cambridge Airport and Western Cluster (extension to Cambourne and East West rail), provision of allotments and community farming sites should be delivered to support the multitude of benefits which they provide. There may also be a need in areas of small scale development where development may increase existing areas of deficiency, notably development in small sites, dispersal within existing villages and in the Southern Cluster of Greater Cambridge.

Potential delivery partners

- Cambridge Sustainable Food
- Cambridge City Council and South Cambridgeshire District Council
- Cambridge Community Growing Group – The Cambridge Community Growing Group is a network of community gardens and growing projects across Cambridge interested in growing food, sustainability, and community development. It was set up in 2018 and has members of all key stakeholder groups: Cambridge Community Tree Nursery; Cambridge Cropshare; Cambridge Cyrenians Allotment Project; Clay Farm Garden; CoFarm; Empty Common Community Garden; and Grow-Share-Eat.
- Transition Cambridge
- Local Allotment Societies
- Developers
- Local nature conservation organisations and groups to ensure projects are linked to the wider GI / habitat network.

Potential delivery mechanisms / funding

- Cambridge City Council growth sites (e.g. Clay Farm, Glebe Farm, Trumpington Meadows).
- Section 106 / CIL from developments across Greater Cambridge. A number of green sites were identified alongside proposed development where new allotments could be provided, including 'farmland on the east side of Cottenham Road to north of Histon', 'land between Foxton Wood and south of Foxton village' and 'north of the A14 and south of Milton Road'.
- Community-led fundraising
- Grant funding available to charities and other community groups

Time scale

Quick win

Indicative costs

£10,000 - £100,000 depending on type and scale of project and volunteer involvement.

Priority

Higher importance

Case Study: Cambridge Growing Spaces

A Transition Cambridge project in collaboration with Cambridge City Council, Abbey People, and the Cambridge Sustainable Food network, and affiliated with the Incredible Edible network.

The project aims to reclaim unloved and underused public spaces around the city and transform them using edible landscaping. Each space is different, but the spaces are usually planted with herbs, fruit, vegetables and flowers which can be used by the local community.

Figure 3.42: An edible planter growing mint

Credit: Growing Spaces

Case Study: Cultivate London – Growing Together

The aim of Cultivate London is to ‘green’ London; whether that’s working with local councils to develop and maintain public and amenity spaces, or with housing developers to make the best use of ‘meanwhile’ spaces, or with schools and other commercial organisations maximise the amount of sustainable green space in the urban environment.

There is a track record of working in public and community spaces across several London boroughs where there have been many successful projects through engaging with multiple stakeholders in a considered way to achieve maximum impact. Work has also been completed within developments and private gardens, as well as for 'meanwhile spaces'.

Figure 3.43: Local people tending to their community garden

Credit: Cultivate London

Meanwhile spaces are helping to create vibrant communities by bringing temporarily redundant space, often in areas which lack high-quality GI, into productive use. The process involves finding wasted space, transforming this unloved visible, interesting, dilapidated and difficult land into something green, productive and useful to local communities. There are a number of uses beyond community food growing, including green corridors, wildflower meadows, community

planting and bee keeping. These uses help to visually enhance an area, increase community appreciation and cohesion, increase use of local green spaces and helps counterbalance environmental impact caused by urbanisation.

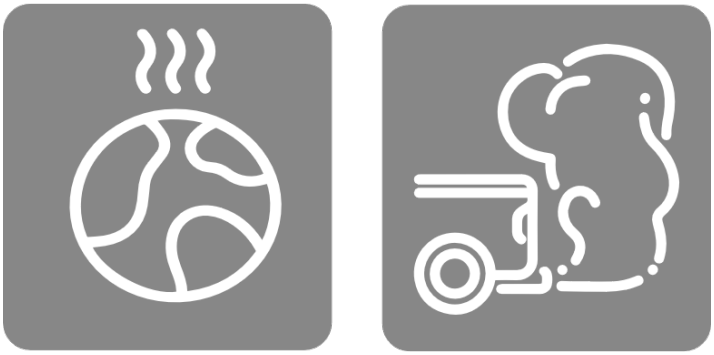
Strategic Initiative 14: Environmentally friendly farming

Objectives of Strategic Initiative

- Ensure that farming and food production across Greater Cambridge's predominantly rural landscape is undertaken in a way that maximises the delivery of ecosystem services (e.g. biodiversity, carbon sequestration, water quality, soil quality, health and wellbeing) by promoting partnership working and uptake of agri-environment schemes.

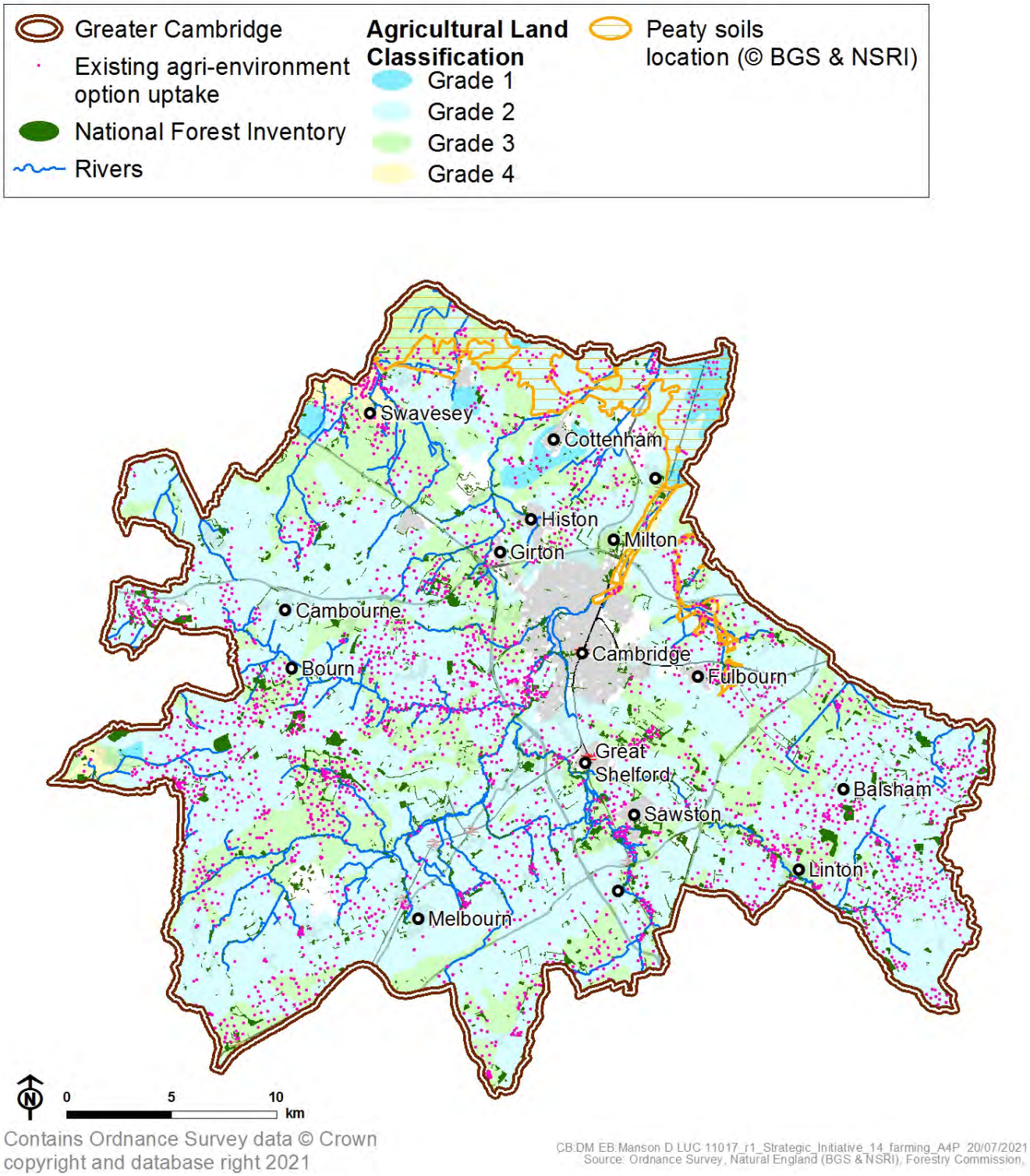
GI themes this Initiative supports

The GI themes this Initiative supports include: landscape, cultural heritage and sense of place; biodiversity and geodiversity; the water environment; carbon sequestration; and, agriculture and community food growing.



The cross-cutting themes this Initiative supports are: climate change and environmental factors.

Figure 3.44: Environmentally friendly farming



Overview of Initiative

Given the large extent of agricultural land in Greater Cambridge and with the need to address both the climate and biodiversity crises, this Initiative promotes farming and food production to be undertaken in a way that maximises the delivery of a range of ecosystem services (e.g. biodiversity, carbon sequestration, water quality and soil quality). This is delivered by promoting partnership working and uptake of agri-environment schemes.

South Cambridgeshire is characterised by a rural agricultural landscape with many large arable farms. The move towards sustainable, environmentally friendly farming - farming practices which work with nature and help to deliver a range of environmental services beyond food production - is vital. There is growing evidence that conventional, intensive farming practises have led to environmental decline and in part contributed to the biodiversity and climate crises. Farmland managed sustainably can help to address these issues whilst delivering a number of other ecosystem services (e.g. food production, access to nature, quality water, sufficient water).

The agricultural land-owning community can play a significant role in mitigating and adapting to climate change, including impacts such as increased risk of flooding and drought. This will be delivered through effective long-term management of carbon-rich soils and wetland habitats (e.g. the fens), implementing landscape scale natural flood management and reconnecting floodplains, as well as promoting woodland creation, natural regeneration and hedgerow planting and management. On the latter point, there is opportunitiy for carefully planned and managed tree and hedgerow planting and uptake of agroforestry across Greater Cambridge, where historically intensive agriculture has lead to the removal of hedgerows and trees.

Now is a time of great change in the agriculture sector, but one which provides huge opportunity to enhance the environment. The new Environmental Land Management (E.L.M.) scheme is being rolled out in England over the next few years. The scheme is based upon a public money for public goods model which provides an opportunity to move away from an intensive production-only model - and a subsidy system that rewards farmers based on the size of their landholding - to one which recosnises and rewards farmers for maximising the range of public goods delivered by farmland, including clean water, sequestering carbon and providing access for people to enjoy the countryside. There are three tiers in E.L.M:

1. Sustainable Farming Incentive – intended to be accessible by all land holders to ensure good environmental practices are carried out as a baseline standard.
2. Local Nature Recovery – encouraging land managers to work collaboratively for local nature recovery and deliver local environmental benefits.
3. Landscape Recovery – long-term, land use change projects (e.g. woodland, peatland and wetland restoration).

Access to funding through Tier 2 and 3 will be more selective so it is vital to engage the agricultural community and support farmer-led cluster groups and wider catchment partnerships. These groups promote sharing of best practice and provide the foundation for collaborating at a larger scale to deliver maximum benefit.

Supporting collaborative partnerships and scheme uptake in the most sensitive areas of Greater Cambridge is required to ensure these areas are protected, restored and enhanced. This includes designated sites for nature and heritage, highly sensitive chalk catchments to the south, source protection zones, peatlands, high carbon capacity soils and areas with high woodland creation and natural regeneration potential.

Whilst the local plan cannot require an agricultural unit to be managed in a more environmentally sustainable manner unless this is specifically related to mitigating the impacts of planned development, future schemes may provide opportunities for more collaborative land use management between Local Planning Authorities, the development industry and the farming community.

Private investment will also supplement public money to deliver environmental enhancements through the voluntary carbon market, water quality, nitrate neutrality and habitat provision (e.g. through off-site BNG). It is important to explore and promote these opportunities to enable Greater Cambridge's farming community to tap into available markets, alongside public money from the emerging E.L.M. scheme.

Most of the Strategic Initiatives require engagement with the farming community to co-deliver habitat restoration and connectivity, implement natural flood management, increase the carbon storing capacity of soils and deliver improved access to green space.

Figure 3.45: Typical open arable landscape within South Cambridge

Credit: Geograph

Relationship with existing projects and initiatives in Greater Cambridge

- Countryside Stewardship Agreements
- Lowland Agricutlural Peat Task Force / Peatland Committee
- Catchment Sensitive Farming (Natural England)
- Wildlife projects including Turtle Dove recovery (RSPB)
- East Anglian Agroforestry
- Emerging Water Resources East Natural Capital Plan – land owners will be able to use the plan to incorporate and target natural capital action into agri-environment applications.

Relationship with development strategy

Given this is a dispersed Strategic Initiative, all areas of significant and small scale proposed development across Greater Cambridge which fall in proximity to agricultural land are relevant.

Potential delivery partners

- Farming community – private landowners and managers, NGO-owned (e.g. National Trust), Cambridgeshire County Farms Rural Estate
- NFU
- Farming Wildlife Advisory Group (FWAG) East – lead the Countryside Stewardship Facilitation Fund cluster group West Cambs 100s/Bourn Brook
- Conservation NGOs (e.g. Wildlife Trust, RSPB)
- Linking Environment and Farming (LEAF)
- Natural England – through agri-environment schemes, Catchment Sensitive Farming, support for farm cluster groups
- Nature Friendly Farming Network (NFFN) – the NFFN Chair is a farmer in South Cambridgeshire

Potential delivery mechanisms / funding

- Woodland Carbon Code and Guarantee - available now.
- Agri-environment schemes: existing Countryside Stewardship (CS) scheme facilitated by Natural England advisers for higher-tier and emerging E.L.M scheme
- Government grants for nature restoration (e.g. Natural Environment Investment Readiness Fund) - emerging.
- Private sector investment - markets created through nature restoration which delivers wider ecosystem services (carbon, biodiversity, nitrogen, water quality) - emerging.

- Natural England may provide small donations through Seedcorn to support establishment of farm cluster groups in Nature Recovery Network areas.

Time scale

Ongoing

Indicative costs

Variable

Priority

Critical importance

Spotlight: Nature Friendly Farming at Wimpole Home Farm

The National Trust's Wimpole Home Farm is an organic farm which has successfully shown how environmentally friendly farming and a profitable business can go 'hand in hand'.

Mark Harold, Director of Land and Nature at the National Trust said, "With a focus on sustainable land management, wildlife and soil health can recover quicker than we might think."

The farm has recoreded a £117,588 profit, which includes financial support through higher level stewardship payments (worth £80,000 per year) and subsidies (CAP).

Sustainable farming methods have included planting around 1,000 trees and using rare breed livestock to graze traditional hay meadows and the Grade I listed parkland. The benefits to wildlife and for carbon sequestration are notable: a survey indicated the following key findings:

- 1,145 invertebrate species found (e.g. bees, ants and butterflies), 95 species of which were rare. This equates to a 38% increase in species numbers between 2003 to 2019;
- the farm provides winter feeding habitat for at least nine rare bird species: grey partridge, lapwing, linnet, skylark, starling, yellowhammer, woodcock, hen harrier and fieldfare;

- skylarks increased by 75% from 12 pairs in 2013 to 21 pairs;
- between five and eight pairs of corn buntings breeding each year;
- between three and seven pairs of rare breeding linnets;
- measures to manage soil, woods and hedges have contributed to the farm being a sink of carbon, storing 2,260 tonnes of CO_2 per year.

The National Trust has also engaged the agricultural sector through being the FABulous Farmers project lead in the East of England. FABulous Farmers is an EU Interreg project which aims to promote the principle of a circular economy in agriculture. In the first year, the National Trust engaged over 30 farmers about adopting more climate-smart, nature-friendly farming practices, using the 1,000 acre organic arable farm at Wimpole to demonstrate how this type of farming can deliver public goods and maintain a profitable enterprise.

Figure 3.46: Field margins with plants for pollinators at Wimpole Home Farm

Credit: Phil Morley/National Trust

Case Study: Upper Wensum Cluster Farm Group

The Wensum Farmers are a group of 27 farmers covering 10,000 hectares of combinable crops, roots, fruit and produce beef and lamb in the Upper Wensum Catchment, Norfolk. The group began in 2015 with an original group of 15 farmers who shared a common purpose to improve farm biodiversity.

Since 2015, the group have worked together to improve water quality and enhance biodiversity through a number of projects: water testing, cover crops, supporting Turtle Doves, habitat enhancement, pond restoration, farmland bird surveying and an E.L.M. Test and Trial.

The farmers self-fund their own adviser to bring them closer together and provide motivation and traction for project delivery.

Figure 3.47: The Wensum Farmers inspecting cover crops on farm

Credit: Wensum Farmers

Chapter 4 - Policy Recommendations

4.1 This chapter sets out local plan policy options and recommendations for helping to identify and facilitate the delivery of green infrastructure. In order to achieve this, this chapter includes:

- an appraisal of the role that local plan policy can fulfil and the potential influence of this;
- a review of the key GI challenges in relation to planning in Greater Cambridge; and
- a series of local plan policy recommendations to help address the key challenges.

4.2 The content of this chapter is intended to provide guidance to the Councils on what policies they may wish to consider including within the Local Plan and how the policies could be structured. This chapter does not prescribe policy wording and is intended to form guidance for discussion with Greater Cambridge Shared Planning and through the wider process of plan making.

Local Plan Policies – what can be achieved and how influential can they be?

The role of local plans

4.3 Local plans are prepared to identify what land use changes are likely to be needed within an area, and to set out a strategy as to how this can be delivered in accordance with international and national requirements (such as the Habitats Regulations and the National Planning Policy Framework). To achieve this, local plan policies relate to how change within a given area should take place. For example, policies can identify areas for land use changes, such as a new areas of development. Local plan policy can also set out the primary purpose of specific areas of land, such as publicly accessible open space and locations for new infrastructure (for example public transport routes). Local plans are required to minimise environmental impacts and provide biodiversity net gain including establishing coherent ecological networks that are more resilient to current and future pressure.

4.4 The local plan can have significant influence over how land in a given area is used and developed, and so its content needs to carefully balance the needs of communities, business and the natural environment. Local plans can also influence funding opportunities and decisions, by directing how developer contributions should be spent to reasonably mitigate development impacts. For example requiring the provision of green infrastructure as part of developments, or where it cannot be provided on site, providing this off site. In addition, an allocation in a local plan can contribute towards a business case for a certain use, or be a relevant factor in support of a funding bid. This also provides scope for the local plan to support projects and strategies promoted by organisations other than the councils, for example a new nature reserve promoted by a wildlife organisation. By enshrining specific projects in policy the local plan can provide support for projects and focus resources towards them, such as funding bids, which may increase the likelihood of delivery. However, there are limitations to what a local plan can do. Its purpose broadly relates to new development and therefore it can sometimes have little influence over current uses of land unless these are required to change under the planning system. For example the local plan cannot require an agricultural unit to be managed in a more environmentally sustainable manner, nor for improved management of existing woodland to improve biodiversity, unless this is specifically related to mitigating the impacts of planned development.

4.5 The different approaches that planning policy can take to deliver change are summarised below:

- Identifying areas for environmental protection or improvement.
- Identifying standards for new development to comply with, for example, setting a requirement for biodiversity net gain (BNG);
- Providing policy support for projects that are widely dispersed, for example setting out policy support for increasing canopy cover throughout Cambridge City, or named infrastructure projects required to support growth.

The Key Challenges

4.6 A summary of the key challenges relating to green infrastructure which the Greater Cambridge Local Plan Review is facing is set out below. These are based on the ‘big themes’ identified in the Greater Cambridge Local Plan Review ‘The First Consultation’, published in

January 2020. The ‘big themes’ about creating great places, jobs, houses and infrastructure have been merged as these all relate to facilitating well designed growth. Two additional challenges have been added including ‘Reducing flood risk and resilience and combating drought’ as this is a key issue in relation to green infrastructure (acknowledging this is related to climate change) and ‘Facilitating other organisations to deliver local plan objectives’, which is an important mechanism in the delivery of wider planning objectives. Beneath each key challenge is a summary of how these relate to the themes of the GI Opportunities Mapping project (see the Part 1 Report). The key challenges are:

- **Addressing climate change**
  - Undertaking land management in a way that prevents release of carbon from over-reliance on fossil fuel use or poorly considered land management practices and where possible sequesters carbon from the atmosphere. Creating urban and rural environments which are more resilient to the impacts of climate change such as increased rainfall and higher temperatures. Providing for local food growing opportunities to reduce emissions associated with the transportation of food.

- **Improving and creating biodiversity and green spaces**
  - Providing adequate space to allow nature to thrive, and for people to undertake leisure, recreation and learning about the natural world.

- **Improving wellbeing and social inclusion**
  - Facilitating access to open spaces and linear routes, to enable engagement with people and nature and opportunity for play, sport, recreation, local food production and personal reflection.

- **Creating great places and supporting growth**
  - Providing landscape restoration responsive to local character, protecting and enhancing cultural heritage assets and their settings, providing attractive places and sensitively harnessing natural products.

- **Reducing flood risk and resilience and combating drought**
  - Managing water resources in order to provide biodiversity, social and wellbeing benefits whilst reducing risk to people and property, and managing water resources to help maintain river levels and water availability for the general public.

- **Facilitating other organisations to deliver local plan objectives**

– Encouraging and facilitating involvement from other organisations to deliver local plan objectives.

4.7 The way in which different policy approaches could help to address these key challenges is considered below.

Policy recommendations

4.8 This section sets out recommended policy approaches. For each approach this includes:

- overview of the approach;
- review of related evidence, examples, justification for the policy approach and how the approach can address the key challenges set out above; and
- recommendation for local plan policy.

4.9 It is important to note that international and national legislation / policy requires the protection of designated areas for nature, for example, the protection of Special Areas of Conservation, Sites of Special Scientific Interest (SSSIs), nature reserves as well as county and local wildlife sites, open spaces and trees of amenity value. The recommendations set out below are made in the context that the protection of existing designated assets, open spaces and trees continues to be applied at least as strongly as it is currently, and this will be addressed by other policies in the local plan.

Identifying areas for environmental protection and improvement

Overview

4.10 This section considers whether the local plan policy should identify areas on the adopted policies map, supported by policy wording that designates land for specific environmental protection or improvement. The areas that could be designated are those that help to deliver the strategic initiatives set out in Chapter 3 of this report. Some areas may be the focus of several environmental improvements, reflecting the multifunctionality of green infrastructure.

Key evidence and justification

4.11 The justification for the Strategic Initiatives is provided in the Part 1 Baseline Report and Chapter 3 of this report. The detail of this is not repeated here for succinctness. However the key evidence in support of each of these initiatives is the 25 Year Environment Plan, which sets out the ambition to develop a nature recovery network across the UK in accordance with the principles of the Lawton Review (Making Space for Nature). This asserts that reversing biodiversity losses will require more habitat in better condition, in larger areas that are more closely connected. The designation of areas where environmental initiatives are supported will lead to significant enhancement of the areas identified. These areas have been specifically identified for having high environmental potential. The benefits are therefore likely to be greater here than they would be elsewhere. There may also be opportunities to provide for public access within these areas where this does not negatively affect the environment (for example due to recreational pressure).

4.12 The Strategic Initiatives have been identified in cognisance of the nature recovery network ambitions developed at sub-regional and local level and there is some significant overlap with these. These include: ‘Living Landscapes’ - strategic scale nature recovery network areas identified by the Wildlife Trust Bedfordshire, Cambridgeshire and Northamptonshire (BCN) ; and, 'Cambridge Nature Network' - work to define more local priority areas within 10km of Cambridge City by Cambridge Past, Present, Future (CPPF) and Wildlife Trust BCN. These areas are shown in conjunction with the spatially-specific Strategic Initiatives in Figure 4.1. These will help to deliver the nature recovery network, consistent with national objectives and make ‘more space for nature’ in accordance with the principles of the Lawton Review.

4.13 The National Planning Policy Framework (NPPF) sets out a requirement for developments to achieve biodiversity net gain and the emerging Environment Bill is anticipated to provide more detail and increase the requirement for this to 10%. These areas could provide a focus for investment resulting from biodiversity net gain payments. Designation of these areas could also influence decisions made under legislation and mechanisms which fall outside the planning system, such as environmental land management schemes.

4.14 Inclusion of these areas and policy could also assist with the monitoring of the biodiversity crisis declarations of both local authorities, by supplementing this with the local plan monitoring. Monitoring of progress could be fairly straightforward, for example, area of habitat

improvement delivered or area of land made publicly accessible within each defined area per year, or other survey-based monitoring to record changes in biodiversity over time.

Greater Cambridge Green Infrastructure Opportunity Mapping
for South Cambridgeshire District Council

LUC

Figure 4.1: Layering environmental opportunity areas

Swavesey
Cottenham
Waterbeach
Histon
Milton
Girton
Cambourne
Bourn
Cambridge
Fulbourn
Great Shelford
Balsham
Sawston
Linton
Duxford
Melbourn

0 5 10 km

Map scale 1:160,000 @ A3

CB:DM EB:Manson D:LUC FIG4_1_11017_r2_Policy_A3L 23/07/2021
Source: BCN WT, Natural Cambridgeshire, LUC, NE (BGS & NSRI), OS

- Greater Cambridge
- Peaty soils location (© BGS & NSRI)

Natural Cambridgeshire GI Areas

- Gog Magog Hills
- Ouse Valley/Great Ouse Wetland
- West Cambridgeshire Hundreds
- Wicken Fen

Cambridge Nature Network Priority Areas

- Boulder Clay and Woodlands
- Cambridge Fens
- Fen-edge Orchards and Droves (Opportunity Area)
- Gog Magog Hills
- River Cam Corridor
- Wicken Fen Vision South

Strategic Initiatives identified in GI Study

1. Revitalising the chalk stream network
2. River Cam Corridor
3. Gog Magog Hills and chalkland fringe
4. Enhancement of the eastern fens
5. The Great Ouse fenland arc
6. North Cambridge green space
7. West Cambridge GI buffer - Coton Corridor
8. Western gateway multifunctional GI corridors
9. Pollinator corridors

South Cambridgeshire District Council

CAMBRIDGE CITY COUNCIL

Approaches in other Local Plans

4.15 A review of approaches in other local plans has been undertaken to assess whether there is precedent for the recommended approach and to understand any key lessons learnt.

4.16 The Huntingdonshire Local Plan was adopted in 2019. It includes green infrastructure opportunity areas in the policies map and includes policy LP3 ‘green infrastructure’ which sets out the expectations of development within these areas. These differ for each area but generally require development in these locations to make a positive contribution towards the environmental improvement of these areas. This local example provides a clear indication that identifying environmental improvement areas has been found to be acceptable in principle.

4.17 The emerging Greater Manchester Spatial Framework (October 2020) sets includes Draft Policy GM Strat-13 ‘Strategic green infrastructure’ which identifies key assets and features which are to be protected and enhanced. These are each subject to their own policies. In addition, Draft Policy GM-G 2 ‘Green infrastructure network’ identifies green infrastructure opportunity areas and requires development within and around the green infrastructure network to deliver green infrastructure improvements. This illustrates the acceptability, in principle, of the recommended approach in areas where joint planning is being undertaken.

4.18 The East Devon Local Plan includes strategy 10, which specifically allocates a new area of green infrastructure, the Clyst Valley Regional Park. The strategy sets out the requirements of the park, how it is intended to be provided and why it is necessary. The Clyst Valley Regional Park has developed further from its original objectives, which have been broadened to take account of more funding opportunities. The policy has resulted in the delivery of new open space and environmental improvements beyond what could have been achieved without its allocation in the local plan.

Addressing the key challenges

4.19 An assessment of how this policy approach addresses the key challenges set out in para 4.6 is provided in Table 4.1:

Table 3.1: Identification of environmental improvement areas

Key challenge	Degree to which this approach can help to address the key challenges (high, medium or low)	Commentary
Addressing climate change	High	This approach has the potential to help address climate change through providing habitats that sequester carbon optimally, providing opportunities for species dispersal and migration, addressing predicted sea level rise, and reducing the potential for flood risk. The protection and management of areas of peaty soils could also help to protect these carbon stores.
Improving and creating biodiversity, geodiversity and green spaces	High	This approach has significant potential to increase biodiversity in abundance, diversity and distribution, by setting out expectations that biodiversity improvements are locally-appropriate in the specific locations where these can have greatest effect.
Improving wellbeing and social inclusion	High	This approach should result in the creation of new, large scale open spaces which will provide opportunities for improving health and wellbeing, particularly meeting existing deficiencies such as at north of Cambridge.
Creating great places and supporting growth	Medium	These areas could provide clear opportunities for biodiversity net gain off site payments, which could simplify cases where this is

Key challenge	Degree to which this approach can help to address the key challenges (high, medium or low)	Commentary
		required and could also provide environmental jobs.
Reducing flood risk and resilience and combating drought	High	Some environmental projects could specifically reduce flood risk to residential and commercial property.
Facilitating other organisations to deliver local plan objectives	High	Identification of environmental improvement areas can facilitate environmental delivery organisations by demonstrating that specific areas are suitable for such schemes.

Feasibility / Deliverability

4.20 The identification of specific areas of land for a specific purpose is common in policy making and the principles of the approach are established. This approach has the potential to lead to significant environmental improvements in these areas, so long as the policy is suitably supportive, and that funding is made available and delivery partners identified. It should be recognised however that some improvements may take some time to deliver.

4.21 Where land is released from Green Belt for development it is a requirement of the NPPF that compensatory improvements to the environmental quality and accessibility of surrounding Green Belt land must be made. This could be a mechanism for delivering some of the environmental improvement areas.

4.22 Funding could be made available through developer contributions towards open space and biodiversity net gain (where these cannot be provided on site), from environmental land management scheme funds, nature / health and wellbeing grants (for example from the Heritage Lottery), Natural Cambridgeshire funding and / or nature-based organisations own budgets.

4.23 It is important to secure the improvements made in the long term, through mechanisms such as land purchase or conservation covenants (should these be legislated for). Maintenance funding is also key, and contributions should provide for this, for example through bonds or other mechanisms. Uses which generate ongoing maintenance funding and which align with the policy ambitions in each area should also be promoted.

4.24 In order to help deliver these recommendations, specific resource should be identified within local government or local nature focussed organisations to review and comment on planning applications, it is recommended that this is a funded staff post.

4.25 In addition, in order to help ensure political support, it is recommended that a senior elected member is given a specific remit for green infrastructure delivery, including the environmental improvement areas.

Recommendation

4.26 The local plan should identify areas within Greater Cambridge on the adopted policies map. Local plan policy should set out the requirements for development within these areas, specifically that development should help to achieve specific environmental improvements, that are tailored to each area. This support could be through direct delivery in relation to a development site (on or off site) or contribution to a project.

4.27 The specific areas which are recommended for identification on the proposals map and policy support are the areas identified for the Strategic Initiatives within Chapter 3 of this report. These are shown in Chapter 3 (Figure 3.1) and include:

1. Revitalising the chalk stream network
2. River Cam Corridor
3. Gog Magog Hills and chalkland fringe
4. Enhancement of the eastern fens
5. The Great Ouse fenland arc
6. North Cambridge green space
7. West Cambridge GI buffer - Coton corridor
8. Western gateway multifunctional GI corridors

9. Pollinator corridors

4.28 The policy support should reflect the objectives set out for each of these strategic initiatives, as outlined in Chapter 3 of this report.

4.29 The key benefits of this approach are that this would deliver environmental improvements in areas that have the greatest potential for benefit. This will help the local plan to deliver the objectives of the 25 Year Environment Plan and the principles of the Lawton Review 'Making Space for Nature'. Furthermore, the identification and support of these areas within the local plan could open up opportunities for other funding sources (beyond the planning system) and embolden delivery organisations.

Setting a requirement for minimum biodiversity net gain at 20%

Overview

4.30 This section considers whether a requirement for a minimum of 20% biodiversity net gain (BNG) should be included in the Greater Cambridge Local Plan, compared to the minimum 10% which is anticipated to be required by the emerging Environment Bill. Biodiversity Net Gain is an outcome that results in increasing the amount of biodiversity on a development site from that present, prior to development taking place. Where this cannot be achieved on-site, off-site compensation could be required in order to meet the minimum of 20% gain.

Key evidence and justification

4.31 The 25 Year environment Plan sets out the negative effects that development can have on biodiversity and includes the ambition that biodiversity net gain is a feature of all new developments. In accordance with this, measurable biodiversity net gain is already a requirement of planning policy and decision making, as set out in NPPF paragraph 170.

4.32 The Environment Bill is anticipated to be enacted as Legislation in 2021. At present the draft Bill contains provisions seeking minimum of 10% biodiversity net gain from all development sites in order to offset loses to biodiversity as a result of development activity and to help create

nature permeability within urban areas. The UK Government consultation in relation to biodiversity net gain explored whether other levels would be appropriate but determined that minimum of 10% "*strikes the right balance between ambition, certainty in achieving environmental outcomes, and deliverability and costs for developers*". As such the Environment Bill is currently drafted to require a minimum of 10% net gain. The Defra impact assessment set out that 10% biodiversity net gain is the minimum amount that could be required that would ensure that in reality, net gain is achieved. In addition, the UK State of Nature Report 2019 identifies urbanisation as a key driver resulting in biodiversity loss across the UK. As such, the emerging minimum 10% biodiversity net gain requirement will help to reduce biodiversity losses that result from new development, with the intention of beginning to reverse this trend. A minimum 20% net gain requirement would provide even greater benefits for biodiversity. In addition, a minimum 20% biodiversity net gain might increase access to nature by delivering naturalised areas closer to where people live.

4.33 A number of other key reports have also set out ambitions for 20% biodiversity net gain. These include:

- The Doubling Nature Strategy prepared by South Cambridgeshire Council sets out an ambition to achieve 20% biodiversity net gain on all developments. The Environment Working Group for the Ox-Cam Arc Spatial Framework has set out its intention to achieve 20% biodiversity net gain on all developments where possible. This follows recommendations from local nature-based organisations.
- The Doubling Nature Ambitions Report from Natural Cambridgeshire sets out that designated sites in greater Cambridgeshire are at risk due to environmental and recreational pressures. The Report seeks to double the amount of rich wildlife habitats across the area from 8.5% of land coverage to 17% over 30 years.

4.34 Due to the way biodiversity net gain is calculated, there are anecdotal concerns that there may sometimes be a margin of error that falls within the 10% threshold for BNG. As such, a key concern is that a 10% biodiversity net gain may not deliver net gain, but possibly result in meeting an older metric of 'no net loss' for biodiversity onsite. As such a biodiversity net gain requirement of 20% safeguards against that margin of error to deliver more credible outcomes for BNG.

4.35 Much of Cambridgeshire is planned countryside, with narrow hedges, few trees and large fields of arable monoculture. As set out in the Doubling Nature Report, the area of land within Greater Cambridge that is protected and managed for nature is relatively small compared to other areas of the country, which results in less protection for habitats and wildlife and fewer opportunities for communities to interact with nature. It also means there is a greater need to repair that loss and restore biodiversity across the area, where possible, through the planning and development process. A higher biodiversity net gain requirement will help to address this relative shortfall.

Approaches in other Local Plans

4.36 A review of approaches in other local plans has been undertaken to identify whether there is precedent establishing a minimum of 20% BNG target and if there are any key points of learning.

4.37 Lichfield District Council adopted a principle of biodiversity net gain in 2015 within their Local Plan Strategy document. Specifically, Core Policy 13 requires an overall net gain to be achieved district wide, and Policy NR3 requires individual development sites to achieve net gain, otherwise they will be refused. The Biodiversity & Development supplementary planning document (SPD) sets out the 20% requirement, which was defined following consultation with the local community and stakeholders. The requirement for 20% net gain was established due to the threat that new development poses to biodiversity through habitat loss. The Biodiversity & Development SPD includes a process diagram as to how development should provide for biodiversity, including design-led recommendations. The SPD also includes a biodiversity opportunity map, setting out the opportunities that off-site provision could provide for. All biodiversity net gains are secured for a period of at least 25 years through legal agreements. This example demonstrates that a biodiversity net gain target of 20% can be delivered through the planning system.

4.38 20% biodiversity net gain has also been considered elsewhere. For example, Surrey Nature Partnership published a report in 2020 setting out that 20% biodiversity net gain is appropriate because:

- There is a need to reduce the pressures on the environment in Surrey, which result in part from fragmentation and destruction due to new development.

- there is a need to help reverse recent declines in habitat condition. In Surrey, species extinction has been assessed at 12% compared to an annual average of 2%, and it was considered that urgent action was required to address this.
- The natural environment plays a significant role in contributing to Surrey's economy.

4.39 20% Biodiversity net gain is also recommended by the Oxfordshire Biodiversity Advisory Group. The evidence for this stems from the State of Nature in Oxfordshire 2017 Report which sets out that fragmentation and direct loss of habitat resulting from development is a key challenge facing wildlife, thereby justifying a higher net gain requirement. The work by others demonstrates that other nature organisations and plan-making authorities are considering increasing biodiversity net gain requirements to 20%.

4.40 Warwickshire County Council prepared a Green Infrastructure Strategy which requires an assessment of development sites to ascertain their biodiversity 'distinctiveness'. This is a metric based assessment system, similar to the Defra biodiversity metric. Losses which occur due to development are offset through direct provision on site or off-site, by the developers, or by paying a tariff to the County Council or Environment Bank Ltd. The funding from this funds biodiversity offset schemes. It is important to note that this methodology predates the biodiversity net gain requirements recently put in place by the UK Government and therefore there will need to be a greater focus on providing on-site gains. However, this demonstrates precedent for off-site mitigation of biodiversity losses due to development.

Addressing the key challenges

4.41 An assessment of how this policy approach addresses the key challenges set out in para 4.6 is provided in Table 4.2:

Table 1.2: Identification of how a 20% biodiversity net gain requirement would address the key challenges

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
Addressing climate change	Medium	20% biodiversity net gain on site is likely to result in greening of development which may help to reduce urban heating effects, alleviation of flood risk, etc.
Improving and creating biodiversity, geodiversity and green spaces	Medium - High	Improving biodiversity on every development site will result in an overall increase in biodiversity.
Improving wellbeing and social inclusion	Medium	20% biodiversity net gain will result in more green areas being accessible to development occupants, thereby helping to create equality in relation to access nature. However the standard does not specifically provide for accessible spaces which would further improve equality.
Creating great places and supporting growth	High	20% biodiversity net gain is likely to result in attractive developments, strong in placemaking and meeting the ‘health and wellbeing’ agenda.
Reducing flood risk and resilience and combating drought	Low	Whilst 20% biodiversity net gain on sites may result in more naturalised SUDs, this is unlikely to result in significant changes to flood risk given

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
		existing planning requirements which cover this and which will not change.
Facilitating other organisations to deliver local plan objectives	Medium	If the 20% biodiversity net gain can be provided on site then it is likely that green infrastructure stakeholders are likely to have little involvement with this. However, where payments are made for off-site compensation where the full 20% cannot be delivered on site, this could feasibly support green infrastructure delivery stakeholder projects.

Feasibility / Deliverability

4.42 Methodologies for calculating biodiversity net gain have emerged following Natural England's Biodiversity Offsetting Pilots which ran between 2012-2014. The method that is most widely used is the Defra biodiversity metric. The Defra biodiversity metric provides a mechanism by which net gain requirements can be assessed and implemented. It is used to assess the number of biodiversity units on a site, which is then compared against what is proposed to identify the percentage change that will be delivered following the development. Biodiversity Net Gain is an outcome that results in increasing the amount of biodiversity on a development site from that present, prior to development taking place. The Defra biodiversity metric requires opportunities for on-site provision to be delivered in preference to off-site provision. However off-site provision is considered appropriate to ensure that net gain is achieved overall, even if it cannot be on the site.

4.43 As a requirement of development sites, the delivery of 20% biodiversity net gain requirement would be achieved as individual development sites come forward, through the development management process. The cost will therefore be borne by developers and landowners as a development requirement. The impact assessment published by the

Government in relation to biodiversity net gain sets out that the cost of delivering 20% net gain is only 19% higher than delivering 10% (see para 6.11.2). Assuming a cost of £1,018 per unit for a greenfield site, this would increase to £1,200 per unit to achieve 20% BNG. For brownfield sites these costs could potentially be lower. This suggests that the proposed approach would not result in significant additional costs to development, resulting in fewer viability concerns. It should be recognised that the costs of biodiversity net gain will vary on a site by site basis and further viability testing will be required and undertaken as more proposals are prepared taking into account biodiversity net gain targets. It is understood that the 20% requirement for biodiversity net gain in Lichfield is working well and has been delivered by the majority of developments in recent years.

4.44 It may be the case that for some development sites, achieving 20% on site may not be feasible, resulting in more off-site compensation being required. This could be targeted to the environmental improvement areas recommended above.

Recommendation

4.45 Setting a requirement for 20% biodiversity net gain in the Greater Cambridge Local Plan is recommended in order to increase the provision for nature, to help address biodiversity losses due to development and to create additional opportunities for people to interact with nature. The 20% target is considered to be reasonable and deliverable in the context of the same target being successfully delivered elsewhere, for example in Lichfield.

Requiring a green infrastructure-led design approach to new development

Overview

4.46 In order to ‘mainstream’ green infrastructure into the design of planning proposals, this section considers whether requiring a green infrastructure-led design approach for new development is appropriate.

Key evidence and justification

4.47 Whilst biodiversity net gain is likely to result in benefits to biodiversity, complementing it with a strong design-led process will help to ensure that the best outcomes can be achieved for the environment as a whole, including biodiversity. For example, the amalgamation of surface water drainage and new habitat is not required by biodiversity net gain, but opportunities for this are more likely to be identified and implemented through the use of a robust, green infrastructure led design approach. In addition, a mandated requirement to undertake a green infrastructure-led design approach to new development is likely to result in improved green infrastructure provision, and other improvements in relation to a wide range of environmental issues within new developments. It could also ensure consistency of development design which is likely to improve design in general for all developments to which it applies.

4.48 There are (at least) two good examples of green infrastructure-led design processes / tools, which include 'Developing with Nature Toolkit' published by Natural Cambridgeshire, and the 'Building with Nature Standards'. These are discussed below.

4.49 The Developing with Nature toolkit has been specifically prepared in relation to the ambition to double nature in the Greater Cambridgeshire and Peterborough area. The toolkit refers to numerous evidence bases including ‘Biodiversity Net Gain: Good Practice Principles for Development’ (2016) and ‘Planning for a Healthy Environment – Good Practical Guidance for Green Infrastructure and Biodiversity (2012), as well as the green infrastructure strategies of Cambridgeshire and Peterborough and a host of other documents. The purpose of the toolkit is to achieve good practice in terms of planning and designing large scale development sites to achieve benefits for green infrastructure.

4.50 The Biodiversity Emergency Declaration of Cambridge City Council refers to the promotion of the Developing with Nature toolkit and therefore the evidence relating to the declaration can also be used to justify this policy approach.

4.51 The Building with Nature standards were created from a collaboration between Gloucestershire Wildlife Trust and the University of the West of England. They provide a framework for designers to ensure they consider a wide range of green infrastructure aspects. The approach is similar to the Developing with Nature Toolkit but there are some variations, for example Building with Nature offers accreditation by trained persons and the Developing with Nature Toolkit includes a scoring matrix which is reviewed by the Local Nature Partnership.

4.52 Regardless of the specific tool or process used, the use of a green infrastructure-led design approach is likely to complement other policy recommendations, specifically biodiversity net gain, by providing a framework by which to appraise a site and identify opportunities, that may otherwise be overlooked.

Approaches in other Local Plans

4.53 Guidance and toolkits in relation to how to undertake development in a manner which supports green infrastructure are relatively common.

4.54 A number of local councils have used the Building with Nature standards to structure or inform supplementary planning documents, including Falkirk, South Gloucestershire and Cheltenham.

Addressing the key challenges

4.55 An assessment of how this policy approach addresses the key challenges set out in para 4.6 is provided in Table 4.3:

Table 1.3: Requirement for developments to utilise a green infrastructure-led design process

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
Addressing climate change	High	A green infrastructure-led design approach is likely to improve the design of new developments in relation to green infrastructure provision, which will help to address climate change, for example through carbon sequestration and increasing vegetation cover

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
Improving and creating biodiversity, geodiversity and green spaces	High	The approach would result in significant benefits for biodiversity, understanding geodiversity and the provision of green spaces.
Improving wellbeing and social inclusion	High	The Developing with Nature Toolkit and Building with Nature Standards both include provisions relating to accessible open space being within a suitable distance of new developments, and will help to ensure a more consistent approach amongst a range of development types regardless of local deprivation or the population groups who will occupy the developments.
Creating great places and supporting growth	High	The Developing with Nature Toolkit or Building with Nature Standards are likely to enhance the quality of design of new development.
Reducing flood risk and resilience and combating drought	Medium	The Developing with Nature Toolkit and Building with Nature Standards both include provisions in relation to water management.
Facilitating other organisations to deliver local plan objectives	Medium	The use of the Developing with Nature Toolkit or Building with Nature Standards is likely to result in greater engagement with nature delivery stakeholders.

Feasibility / Deliverability

4.56 As standards already exist it will be relatively straightforward to signpost them in policy although it may be desirable to prepare a Greater Cambridge specific approach. The successful implementation of this approach will be dependent on developers and planning teams at the councils. Training and publicity about the approach is therefore recommended. A supplementary planning document on the subject of design would be an appropriate way to signpost and elaborate on the use of a green infrastructure-led design process.

4.57 The Developing with Nature Toolkit is written for those preparing large scale developments, which are likely to have relatively large design teams with suitable knowledge and experience to use the toolkit. Given that national requirements for biodiversity net gain are anticipated to apply to most development scales (other than very small scale proposals such as householder applications), it would be appropriate to provide a design approach that could be used by those bringing forward smaller scale developments.

4.58 It is possible to implement a green infrastructure design led approach to all development sites, including brownfield sites which may not presently offer significant green infrastructure provision, the approach would result in consideration of potential benefits and possible improvement of green infrastructure on site, which would contribute to creating more space for nature within previously developed areas.

4.59 It will be important to recognise that in some scenarios there will be other design priorities which may need to take precedence, for example those relating to site security or counter-terrorism (although these are not mutually exclusive from green infrastructure provision). In addition, other similar green infrastructure standards or tools may also be developed. If these are considered suitable, they could also be referred to under this policy approach.

Recommendation

4.60 A mandated requirement to use a green infrastructure-led design process would improve design quality, and result in better provision for green infrastructure. As such it is recommended that the local plan policies and supplementary documents (where appropriate) should promote a 'green infrastructure-led' design process. This could involve using the Developing with Nature Toolkit, or Building with Nature Standards or alternative approaches.

Strengthening open space requirements to alleviate recreational pressure

Overview

4.61 This section considers retaining the need for development to provide open space (as required by extant local plans) but with stronger requirements to specifically seek to reduce pressure on designated nature sites which are facing pressure from recreational disturbance.

Key evidence and justification

4.62 The requirement for open space provision within new developments is standard practice across all local plans, and is a substantial component of developer contributions collected in Greater Cambridge at present. These are justified in relation to the need for occupants of new development to be able to access open space for leisure and recreation.

4.63 The benefits of providing open space for communities to use are widely reported and are well summarised by CABE. The arguments for the provision of high quality open space which is readily accessible by the community have strengthened during the Covid-19 pandemic, as people have become more familiar with their local open spaces and the benefits of visiting these.

4.64 It is understood that the open space evidence for the Greater Cambridge area is currently being updated. However, the existing assessments identify four wards in Cambridge where there is a relative under-provision of open space (Arbury, Petersfield, Romsey, West Chesterton) and that there is generally an under provision of play space in villages in South Cambridgeshire.

4.65 Work by Natural England has also identified that the ecological quality of a number of the SSSIs within and near to Greater Cambridge are under threat from recreational pressure – i.e. there is not enough space for people and nature at the current sites. These sites are shown on Figure 2.3. This issue has also been identified at Wicken Fen SAC and Ramsar Site. These issues will be exacerbated by new development, and Natural England have identified impact risk zones which identify where development may result in harm to designated sites as a result of recreational pressure.

4.66 Increasing the provision of open space within Greater Cambridge, to provide new or improved publicly accessible areas would help to alleviate pressure on existing sites and would also benefit the community by providing greater opportunities for recreation and leisure in the natural environment. These new spaces could seek to replicate what makes the existing sites popular, and should also be developed in a manner that provides environmental benefits such as biodiversity improvements. This approach could provide a key funding mechanism for the implementation of the environmental improvement areas (recommended above);

Approaches in other Local Plans

4.67 A review of approaches in other local plans has been undertaken to identify whether there is precedent for the recommended approach and to understand any key points of learning.

4.68 Nearly all local plans require development to contribute towards open space provision, including the current local plans of Cambridge and South Cambridgeshire. In some areas where recreational pressure is understood to be affecting the ability of natural areas to provide for biodiversity and other environmental benefits, 'suitable alternative natural greenspaces' have been proposed as a solution to address these. These are generally large areas of open space that include a mixture of accessible and non-accessible space. These provide additional space for biodiversity and for people, thereby providing an alternative area for people to visit, reducing the pressure of people on existing spaces.

4.69 Examples of this approach can be found in the Thames Basin Heaths, Exeter and surrounding area and around the Solent. In each of these areas, large scale areas of new open space are being planned.

Addressing the key challenges

4.70 An assessment of how this policy approach addresses the key challenges set out in para 4.6 is provided in Table 4.4:

Table 1.4: Requirement for developments to strengthen open space requirements to alleviate recreational pressure

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
Addressing climate change	Medium	The provision of more open space could provide additional habitats which could achieve carbon sequestration and connect to wider habitat corridors. However as the primary purpose would be to provide space for humans, the climate change benefits are lower than they would if the space was to be provided solely for environmental improvement.
Improving and creating biodiversity, geodiversity and green spaces	High	The open space provided as a result of a strengthened standard could result in new habitat being provided, creating significant benefits for biodiversity, understanding geodiversity and the provision of green spaces.
Improving wellbeing and social inclusion	High	There is significant evidence which identifies the linkages between accessible open space and health and wellbeing.
Creating great places and supporting growth	High	There is significant evidence about the economic benefits of open spaces as these help to create attractive neighbourhoods.
Reducing flood risk and resilience and combating drought	Medium	Open space provided as a result of a strengthened standard could result in additional

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
		space for flood water to go in times of flood, helping to reduce flood risk.
Facilitating other organisations to deliver local plan objectives	Medium	The provision of open spaces under a strengthened open space standard would reduce recreational pressure on existing designations, and could provide a funding mechanism for delivery of open space by nature-based organisations.

Feasibility / Deliverability

4.71 As open space standards already exist, there is a need to demonstrate that additional provision is required to offset the pressure from existing recreational use, and to ascertain where specific requirements are needed due to the use of open space by a significant number of people (i.e. more than can be accommodated) – particularly in the four Cambridge wards where there deficiency has been identified (Arbury, Petersfield, Romsey, West Chesterton), and also in relation to the nature designations which Natural England have identified as being under threat from recreational pressure (as identified through the impact risk zones).

4.72 It is likely that primary research in relation to how many people are using the spaces under pressure will be required, in order to understand where they are travelling from to access the space and what activities they are seeking to undertake in that space (e.g. dog walking, jogging, family outing). Natural England has recommended a comprehensive access study and mitigation and enhancement strategy should be undertaken. Policies should also address ongoing maintenance matters such as who is responsible for undertaking this and ensuring funding is provided for when new spaces are made.

4.73 A strategy for providing the additional open space will need to be formulated, to demonstrate that the increased standards would realistically result in more open space.

4.74 A staff post and political remit could be provided within the councils to oversee the management of any offsetting contributions collected and delivery of open space. This would significantly increase the likelihood of such an approach being successful.

Recommendation

4.75 It is recommended that the need for development to provide open space is retained, however the current standards should be strengthened in order to specifically seek to reduce pressure on existing open spaces which are understood to be under significant pressure (due to recreational pressure on protected sites or caused by a low level of open space being accessible to the local population). These new open spaces would also be expected to deliver other environmental improvements. A strengthened open space policy could result in collecting contributions for new, large scale open space which could contribute to the delivery of the strategic initiatives set out in Chapter 3.

Supporting dispersed green infrastructure projects

Overview

4.76 This section considers the role of policy in supporting green infrastructure projects that are more dispersed in nature via the use of developer contributions. Specifically, it considers support for the Strategic Initiatives set out in Chapter 3 that cannot be designated on the policies map due to their dispersed geography.

Key evidence and justification

4.77 A local plan can provide support for named projects and initiatives by specifically naming them as projects that are due to be delivered within the local plan area, within the plan period. As set out above, it is recommended that the Strategic Initiatives that can be defined on a plan are identified on the adopted policies map. However there are some of these Initiatives that cannot be delineated on the policies map, due to their dispersed or flexible location. These include:

- 10: Expanding Greater Cambridge's 'urban forest'
- 11: Woodland expansion and resilience
- 12: Urban greening and 'de-paving'
- 13: Allotments and community gardening
- 14: Environmentally friendly farming

4.78 The justification for these Strategic Initiatives is provided in the Part 1 report and Chapter 3 of this Part 2 report. The detail of this is not repeated here for succinctness, however each of these initiatives will help to address biodiversity declines and increase the opportunity for people to interact with nature, in line with national objectives set out in the 25 Year Environment Plan and NPPF.

4.79 Providing support within the Greater Cambridge Local Plan for these projects will significantly increase the likelihood of their delivery. For example, naming these specific projects will help to increase public awareness. Furthermore, requiring development to support these projects in order to mitigate development impacts will help to provide an additional source of funding. Such support could help to provide increased habitat provision across the Greater Cambridge area and not only on new development sites.

Approaches in other Local Plans

4.80 Whilst the Strategic Initiatives relate to a number of different projects, several of them relate to increasing the amount of vegetation in urban areas and within developments. For example urban greening and increasing woodland expansion. Probably the most well-known UK based policy approach to urban greening is the 'All London Green Grid' project. This resulted in a significant amount of urban greening in London, and is due to be refreshed (as set out in paragraph 8.1.3 of The Spatial Development Strategy for Greater London 2021). The Green Grid project has been successfully implemented since its introduction and clearly demonstrates that increasing the provision of vegetation in urban areas is possible through planning support.

Addressing the key challenges

4.81 An assessment of how this policy approach addresses the key challenges set out in para 4.6 is provided in Table 4.5:

Table 1.5: Assessment of how supporting specific green infrastructure projects in Greater Cambridge could help to address the key challenges

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
Addressing climate change	High	The large scale of increased vegetation which would be delivered by these projects is likely to form a significant carbon sink and in addition, provide a number of benefits such as solar shading, reduced water runoff rates and reduced urban heat effects.
Improving biodiversity and green spaces	High	Significant increase in the amount of vegetation will provide more habitat for a range of species.
Improving wellbeing and social inclusion	Medium	The provision of more vegetation will make it easier for all population groups to interact with nature.
Creating great places and supporting growth	High	Street trees and urban greening can help to provide attractive neighbourhoods.
Flooding	Medium	Street trees and urban greening have the potential to slow water runoff and reduce water in soils through evapotranspiration.

Key challenge	Degree to which this approach can help to address the issue (high, medium or low)	Commentary
Facilitation of other organisations	High	Supporting urban greening projects would provide significant facilitation of environmental and community organisations seeking to improve the urban areas of Greater Cambridge.

Feasibility / Deliverability

4.82 In order for a policy to be sound it has to be capable of implementation (effective). The Strategic Initiatives have been defined following detailed assessment and consultation with the councils and other stakeholders to ascertain the projects that can be delivered. It will however be important to continue to publicise these projects to attract attention and potential funding opportunities. For example, numerous business improvement districts and environmental charities (such as the Woodland Trust and Trees for Cities) across the UK are undertaking urban greening projects. Setting out support for these strategic Initiatives in the Greater Cambridge local plan is likely to increase their deliverability.

Recommendation

4.83 It is recommended that the Greater Cambridge Local Plan includes policy wording that specifically supports the Strategic Initiatives that are spatially dispersed or flexible in their location. This will increase the likelihood of these projects being delivered by demonstrating to the development industry that they are acceptable projects that will help to address biodiversity loss and increase the potential for people to interact with nature.

Combinations of different approaches

4.84 This section considers the possible interaction of the policy approaches proposed. In summary, all of the recommended policy approaches are considered to complement each other and in some cases, the delivery of some may rely on others.

4.85 The identification of environmental improvement areas and providing policy to help ensure their delivery is likely to result in the most significant benefit for the wider environment, as this will create new and enhanced areas of habitat in accordance with the principles of the Lawton Review – more, bigger, better and joined up. The areas identified have been identified based on a significant amount of analysis and are the areas that offer the greatest potential for nature. Securing public access at these locations will also create opportunities to improve health and wellbeing and communities interaction with nature.

4.86 Whilst there are funding sources for environmental improvements, it is clear that developer contributions could also help to achieve these ambitions. These could be provided through off-site provision for biodiversity net gain and open space provision, where these cannot be provided on site.

4.87 Biodiversity net gain is a valuable tool in decision making, however it has a disadvantage that it is numerically based and may not, therefore produce the best possible design on a site, for either green infrastructure or its inhabitants. Biodiversity net gain should therefore be delivered in combination with design policies to ensure that development sites are properly planned, to take into account possible opportunities that a site can deliver, rather than simply including additional habitat to reach a specific numeric score. As such, policies that ensure that sites are brought forward using an established design process are important. In order to ensure that green infrastructure is given priority, design policies should recommend green infrastructure focussed design processes.

4.88 Policy support to facilitate green infrastructure projects that have a flexible location will help these to be delivered. This could help environmentally focussed projects such as the Cambridge Canopy project and these could complement the environmental improvement areas around Cambridge by helping to increase habitat connectivity between them.

4.89 In addition to the policy recommendations in this report, the Councils' emerging Net Zero Carbon study includes several land-use recommendations on how to achieve carbon net zero. One of these includes a policy to ensure that developments over a certain scale demonstrate

that the land on which they are situated is not a significant carbon sink, and that if it is, steps are taken to ensure that there is, overall, no significant loss of carbon. This approach is also endorsed and there are no conflicts between this and the recommendations of this report.

Policy approaches considered but not recommended

4.90 In addition to the policies recommended above, a number of other approaches were considered. These are set out below, with the reasons why they were not recommended briefly summarised.

Urban greening factor

4.91 An urban greening factor sets out a points based system for measuring how 'green' a site is. The objective is to measure this before and after development and require an increase in the amount of points (i.e. provide an increase in greening). This approach is used in the London Plan. This policy approach would involve the development of an Urban Greening Factor for Greater Cambridge and requirement for all developments to achieve a specific greening factor.

4.92 An Urban Greening Factor is not recommended for Greater Cambridge due to the potential overlap with requirements for biodiversity net gain which is recommended. Both of these utilise a metric-based assessment system and it is considered likely to be overly complex to run the two of these concurrently. Whilst a single metric could be developed for Greater Cambridge to incorporate biodiversity net gain and urban greening, this would be a departure from the standard net gain metric produced by Defra and if biodiversity net gain is adopted in combination with other projects such as increasing canopy cover in general, it is unlikely that an urban greening factor would create a significant additional benefit.

Setting a community infrastructure levy to fund environmental improvement

4.93 This policy approach would involve setting a community infrastructure levy (CIL) charge on development which would be used to fund green infrastructure provision off-site. This approach could be used in combination with on site development requirements such as open

space requirements and biodiversity net gain, however it would provide a direct source of funding to deliver environmental improvements in areas where this can have the greatest impact (for example the environmental improvement areas). An example of this exists in Exeter, where 8% of Community Infrastructure Levy receipts are used to fund off-site open space. Where developments are not liable to pay CIL, s106 agreements are used to collect payments.

4.94 Setting a CIL for development for off-site environmental improvement is not recommended in Greater Cambridge. The main reason for this is the uncertainty in relation to developer contribution tariffs that arise as a result of the Planning White Paper 'Planning for the Future', published in August 2020. This proposes reform to both the s106 and CIL mechanisms and as such, the development of a CIL may lead to wasted expenditure. In addition, the main impacts of development on the environment arise from fragmentation and loss of habitat, environmental pollution, resource demands and recreational pressure. These issues can be dealt with respectively by biodiversity net gain, appropriate waste and water treatment infrastructure, sustainable design principles and ensuring appropriate infrastructure is provided including the provision of open space relating to new developments. As such it is not considered that a development charge would offer additional benefits over the recommended approaches.

Chapter 5 - Conclusions and next steps

5.1 This Part 2 Report has drawn together all of the baseline evidence developed in earlier stages, updating it where necessary. The 14 Strategic Initiatives present a range of interventions that collectively seek to address the key challenges in relation to GI that were highlighted by stakeholders and the evidence review.

5.2 The Strategic Initiatives have the potential to make an important contribution towards the targets for Net Zero Carbon and Doubling Nature. It is however recognised that additional mechanisms will be required to ensure these targets are achieved in full, informed by ongoing and future evidence, and partnership working across Greater Cambridge. For each Strategic Initiative, potential delivery partners, mechanisms and funding sources are presented in order to start this process.

5.3 Through this study, a wide range of stakeholders have been identified and consulted. A significant amount of foundational work has been undertaken across the stakeholder network and the Strategic Initiatives should be shared with all those who have an interest in enhancing and further developing the GI network. Wherever possible, the Strategic Initiatives have been directly linked to 'delivery projects' that are in concept or in progress to ensure that stakeholders are all working towards a common vision.

5.4 The emerging Local Plan provides an opportunity to embed these Initiatives in policy and the overall spatial plan for Greater Cambridge. The policy recommendations set out in this report provide an assessment of the role the local plan can play in helping to identify and facilitate the delivery of GI.

5.5 In relation to policy, the key recommendations from this study include:

- Identifying areas for environmental improvement within Greater Cambridge on the adopted policies map. The recommended areas are shown on Figure 3.1.
- Setting a requirement for a minimum of 20% biodiversity net gain.
- Requiring a 'green infrastructure-led' design approach for new development.
- Strengthening open space standards to reduce pressure on existing spaces.
- Providing specific support for the Strategic Initiatives that are spatially dispersed or flexible in their location.

5.6 In addition to the recommendations set out above, the following are non-policy specific recommendations in relation to the preparation of the Local Plan and advocacy for green infrastructure:

- Securing political leadership: In order to ensure green infrastructure is considered at a high level of decision making it is recommended that it should form part of the political remit i.e. as part of a cabinet committee portfolio at both Cambridge City and South Cambridgeshire Councils. This will ensure that green infrastructure is taken account in key strategy and funding decisions and in the Councils' role as local planning authorities.
- Using a GI policy assessment tool: It is recommended that a policy assessment tool is used to ensure that all policies within the Greater Cambridge Local Plan support green infrastructure planning and provision. The policy assessment toolkit from the 'Mainstreaming GI' website is well respected and Building with Nature Standards have also been used to inform a number of planning documents, specifically green infrastructure strategies and SPDs.
- Funding of a GI Officer post to maintain momentum and provide additional support in delivering the ambitions for GI in Greater Cambridge.
- Ensuring that development planners and the planning enforcement system are given adequate resources to robustly police and fine non-compliance of policy.
- Maintaining the report and list of initiatives as a live resource so that it can updated with new evidence and opportunities as these emerge over time. This will also include keeping an eye on the emerging GI Standards that are due to be published in the future by Defra.

5.7 Throughout the development of this evidence base, the stakeholders in Greater Cambridge have remained engaged and have continually demonstrated a willingness to contribute to the Doubling Nature vision for the region. The following recommendations aim to harness this potential and secure continued buy-in and engagement:

- It is recommended that an interactive, online resource is developed to demonstrate successes in delivering on Strategic Initiatives and constituent delivery projects. An online portal can bring stakeholders together and continue to make connections between projects and partners.
- It is recommended that ongoing dialogue is maintained with neighbouring authorities and organisations who are also involved in preparing GI Strategies. GI doesn't stop at local

authority boundaries and partnership working is critical to ensure that the GI network within Greater Cambridge is well connected to wider networks.

5.8 Finally, the success of the delivery of GI within Greater Cambridge is going to require careful monitoring through the Local Plan annual monitoring process. Clear indicators will need to be identified to ensure that the Local Plan policies and proposed initiatives are delivering on the vision to enhance and the expand GI to create a coherent, thriving and resilient network.

Appendix A – Long List and Green Sites

Table A.1: GI opportunity zone long list

Theme	Opportunity name	Brief Description
Landscape, cultural heritage and sense of place	1a – Ouse Valley gateway	Explore the opportunity to enhance the Ouse Valley as a gateway to the countryside, providing access and connectivity improvements. Expansion work to Ouse Fen offers the potential to create wider habitat linkages including riparian woodland planting.
Landscape, cultural heritage and sense of place	1b – North east fen arc	Enhance the key north east arc within the GI network which forms a wider connection linking Wicken Fen and Ouse Fen.
Landscape, cultural heritage and sense of place	1c – Wicken Fen vision	Key opportunity to combine fen restoration and active travel improvements in order to tackle development pressures in Cambridge East.
Landscape, cultural heritage and sense of place	1d – Eastern Fen restoration and expansion	Fenland extension and restoration to the east offers landscape and biodiversity benefits, as well as the opportunity for the expansion of grassland habitat at Great Wilbraham Fen and Fulbourn Fen.
Landscape, cultural heritage and sense of place	1e – Gog Magog Hills and South Cambridge urban fringe	Key opportunity to expand high-quality GI to help accommodate growth and absorb recreational pressure, enhancing existing landscape features within the fringes of south Cambridge towards the Gog Magog Hills.
Landscape, cultural heritage and sense of place	1f – Cherry Hinton corridor	Introduce landscape enhancements and habitat restoration to help alleviate recreational and development pressures along the Cherry Hinton corridor.
Landscape, cultural heritage and sense of place	1g – North Cambridge urban fringe	Improve the urban fringe to provide recreation opportunities and promote landscape character whilst improving access to the countryside for local communities.
Landscape, cultural heritage and sense of place	1h – Coton corridor	Key opportunity for expansion / enhancement for both landscape and recreational benefits given the development pressures in the west of Cambridge.
Landscape, cultural heritage and sense of place	1i – West Cambridgeshire Hundreds woodland expansion	Enhance the landscape value of the West Cambridgeshire Hundreds, linking and enhancing the existing semi-natural habitat to create new opportunities for biodiversity and recreation.

Theme	Opportunity name	Brief Description
Landscape, cultural heritage and sense of place	1j – West Cambridgeshire recreational buffer	Utilise GI to promote west Cambridgeshire as a recreational buffer, creating linkages to recreational assets from the settlement edge of local villages. The opportunity exists to increase soil and water quality whilst enhancing landscape character.
Landscape, cultural heritage and sense of place	1k – North east Cambridge to Waterbeach corridor	Key opportunity for landscape and recreational functions along the section of the River Cam linking north east Cambridge and Waterbeach due to adjacent development pressures.
Landscape, cultural heritage and sense of place	1l – Chalk rivers corridor	Enhancement of the Hobson's and Vicar's Brook forming the chalk river corridor and the creation of a link from the city's southern fringes into the Gog Magog Hills.
Landscape, cultural heritage and sense of place	1m - Cambridge city urban greening and public realm improvements	Develop a public realm strategy to include urban greening interventions e.g. street trees, SuDS and green roofs, ensuring it enhances the historic character of streets, public spaces and GI assets. Also, seek to protect existing significant trees and tree-lined ways in the urban environment and list important views out of the city where feasible.
Biodiversity and geodiversity	2a - North Eastern Fen-Peatland Complex.	Capturing the Wicken Fen Vision and the 'heartlands' of the proposed Biosphere that overlap the study area. Importantly this provides connectivity between the Ouse, Cam and Wicken wetlands. Connectivity also to the 2b South East Fen Complex and 2c River Cam Corridors.
Biodiversity and geodiversity	2b - South Eastern Fen Complex.	Capturing Wilbraham Fen SSSI, Great Wilbraham Common SSSI, Fulbourn Fen SSSI and associated water courses, distinct to the fenland and peatland habitats farther north east. An extension to the Wicken Fen Vision, capturing the south eastern portion of the proposed biosphere. This large area of fenland lies close to the city and within the main A-roads which circumnavigate Cambridge.
Biodiversity and geodiversity	2c - River Cam Corridors.	Reaching through the study area, ensuring connectivity through and extending from the city. This captures Hobson's Brook and Vicar's Brook, as well as the more far-reaching Coldhams Common-Cherry Hinton Urban Country Park. Capturing the WWNP floodplain reconnection potential as well as woodland, grassland and wetland habitat opportunities. Of particular local importance include opportunities for chalk streams and floodplain grazing marsh. To be considered in conjunction with the other river corridor opportunity areas.
Biodiversity and geodiversity	2d - Fleam Dyke & Chalklands Gateway.	Capturing Fleam Dyke SSSI, surrounding grassland and woodlands, opening to the wider chalklands that fan out to the south east.

Theme	Opportunity name	Brief Description
Biodiversity and geodiversity	2e - Gog Magog Hills.	Capturing the grassland, woodland and elements of parkland habitat to span from the urban edge out to the surrounding rural countryside, and spanning key transport corridors.
Biodiversity and geodiversity	2f - River Granta Corridor - Stapleford to Linton	Capturing the WWNP floodplain reconnection potential as well as woodland, grassland and wetland habitat opportunities. To be considered in conjunction with the other river corridor opportunity areas.
Biodiversity and geodiversity	2g - South West Lowland Chalklands - centred, approximately, at Melbourn	Extending along key transport corridor to offer cross-boundary opportunities. Connecting to Area 2c River Cam Corridors and the lowland claylands of the Rhee Valley.
Biodiversity and geodiversity	2h - West Cambridge Woodland-Hedgerow-Wetland Network	West Cambridge Woodland-Hedgerow-Wetland Network - foci spanning Barrington-Wimpole-Gamlingay. Capturing the central swathe of the 6km radius CSZ around Wimpole and Eversden SAC within which woodland, hedgerow and wetland creation favourable to barbastelle is recommended as part of the current HRA.
Biodiversity and geodiversity	2i - Bourn Brook Corridor	Capturing the WWNP floodplain reconnection potential as well as woodland, grassland and wetland habitat opportunities. To be considered in conjunction with the other river corridor opportunity areas.
Biodiversity and geodiversity	2j - West Cambridge Woodlands	West Cambridge Woodlands - foci capturing Madingley and Coton, extending south around the urban edge to connect with the Area 2i Bourn Brook, hugging the M11 corridor.
Biodiversity and geodiversity	2k - Northern Washes and Wetland: Gateway to the Ouse	Northern Washes and Wetland: Gateway to the Ouse. Capturing the principal open water and wetland habitats, such as floodplain grazing marsh. Capturing the north western distribution of peatland soils.
Biodiversity and geodiversity	2l – Orchards and fenland fringe	Captures focus of traditional orchard habitats connecting to the urban areas/villages north of Cambridge. Falls within the Fens Biosphere.
Biodiversity and geodiversity	2m – Urban greening	Established urban centres within which urban greening measures could optimise habitat connectivity whilst also serving to sequester carbon and maximise health and wellbeing benefits.

Theme	Opportunity name	Brief Description
The water environment	3a – River Cam and tributaries restoration	Restore natural floodplains and incorporate GI to protect communities at risk of flooding, as well as restore and improve the function of green corridors to provide natural flood management, improve water quality and recharge to groundwater.
The water environment	3b – Chalk river catchment protection and recharge area	Protect the East Anglian chalk groundwater resource through GI features within landscape-scale management, and the quality of the resource by reducing pollution and contamination. Develop a chalk streams strategy to deliver necessary actions. Promote groundwater recharge, mapping these areas to ensure they become a material consideration for planning zones.
The water environment	3c – Southeast source protection and recharge area	Protect the East Anglian chalk groundwater resource through GI features within landscape-scale management, and the quality of the resource by reducing pollution and contamination. Promote groundwater recharge, mapping these areas to ensure they become a material consideration for planning zones.
The water environment	3d – South source protection and recharge area	Protect the East Anglian chalk groundwater resource through GI features within landscape-scale management, and the quality of the resource by reducing pollution and contamination. Promote groundwater recharge, mapping these areas to ensure they become a material consideration for planning zones.
The water environment	3e – Clay catchment natural flood management	Promote natural flood management and incorporate GI to protect communities at risk of flooding, as well as restore and improve the function of green corridors to provide natural flood management, improve water quality and recharge to groundwater.
The water environment	3f – Lowland fen flood mitigation	Incorporate GI to protect communities at greatest risk of flooding, as well as restore and improve the function of green corridors to provide natural flood management and improve water quality. Note that t*his includes two separate opp zones: 1) the Ouse Valley fen to the north; 2) Fulbourn /Wilbraham Fen to east of the city.*
The water environment	3g – SuDS (not spatially specific)	Protect communities at greatest risk of flooding e.g. through creation of SuDS as part of development proposals and within existing streets. SuDS should transport water to ground to facilitate groundwater recharge.

Theme	Opportunity name	Brief Description
The water environment	3h – Water recycling and efficiency (not spatially specific)	Make it mandatory for new developments to incorporate grey / green water recycling and rainwater harvesting systems.
The water environment	3i – Wet woodland planting (not spatially specific)	Plant wet woodland along water corridors.
The water environment	3j – Improve accessibility to waterways (not spatially specific)	Carefully balance improvements to the accessibility of lakes, watercourses and floodplains for walking and cycling and as amenity space, with nature conservation and enhancement objectives. (See Theme 4: Access and Connectivity for further detail).
The water environment	3k – Public education on water use (not spatially specific)	Ensure GI projects make provisions to educate the public on the detrimental impacts of excessive water use to the sensitive chalk streams and aquifers that are integral to the environment they enjoy for recreation and leisure.
The water environment	3l – Catchment scale partnership working (not spatially specific)	Promote partnership working between various stakeholders involved in the water environment at the catchment scale.
Access and connectivity	4a – East West rail link corridor	Key opportunity to improve accessibility between rural villages and open spaces, incorporating GI enhancements at arrival gateways along the route.
Access and connectivity	4b – Access improvements - Dispersed villages in the west	Address deficiencies in access to green space using GI to enhance connectivity between open spaces and dispersed villages in the west.
Access and connectivity	4c – Address severance - A1198 corridor	Enhance GI along the existing infrastructure corridor of the A1198 to address severance issues and introduce improvements for the movement of people and wildlife.
Access and connectivity	4d – Bourn Brook corridor	Utilise GI enhancements to create links along the corridor of the Bourn Brook to provide wider connections to the PRoW network and increase accessibility.

Theme	Opportunity name	Brief Description
Access and connectivity	4e – Access improvements - Dispersed villages in the east	Address deficiencies in access to green space through the use of GI to enhance connectivity between open spaces and dispersed villages in the east.
Access and connectivity	4f – River Rhee corridor	Promote the River Rhee as a navigable waterway and river crossing with improved access to the PRoW network.
Access and connectivity	4g – Address severance - A14/M11 corridor	Utilise GI to address issues of inaccessibility due to the severance features of the A14 and M11.
Access and connectivity	4h – Gaps in PRoW provision - South Cambridge	Enhance the existing PRoW network to address gaps and provide multi-user connections between green spaces and necklace villages in South Cambridgeshire.
Access and connectivity	4i – Address severance - A11 corridor	Enhance the network of active travel routes east-west along the corridor of the A11, providing multifunctional linkages to key settlements and villages.
Recreation and play	5a - Pocket park / village green creation and enhancement (not spatially specific)	Adopt an overarching vision for green spaces within Greater Cambridge to tackle the deficiency in open space provision and community access to natural greenspace. The opportunity exists to enhance and create pocket parks and village greens within the settlement edge of Cambridge and South Cambridgeshire villages.
Recreation and play	5b - Alleviation of recreational pressure in the east and west (not spatially specific)	Key opportunity exists to create or enhance existing sites to alleviate recreational pressures on sensitive locations which exhibit heritage, landscape and biodiversity value or those at visitor capacity within the east and west of South Cambridgeshire. These sites include terrestrial and water-based recreation sites which are often at visitor capacity.
Recreation and play	5c - Local green space quality and quantity improvement (not spatially specific)	Improve the quality, quantity and accessibility of local open space and sports facilities. The opportunity exists to create new greenspaces at a range of scales by exploring various alternative funding mechanisms.
Recreation and play	5d - Access improvements between natural green spaces in South	Introduce access improvements from local settlements to recreational sites, providing a renewed focus on sustainable modes of transport and a reduced reliance on car travel.

Theme	Opportunity name	Brief Description
	Cambridgeshire (not spatially specific)	
Carbon sequestration	6a - Carbon-rich habitats: Madingly-Caldercote-Knapwell	Opportunity area centred around the foci of peak estimated carbon density in existing habitats and reflects the opportunity to expand and connect these features.
Carbon sequestration	6b - Carbon-rich soils: City-Barrington-Wimpole	Opportunity area centred around the foci of peak estimated carbon density in soils and reflects the opportunity to manage these to maximise retention and overlay with sequestration interventions such as planting or sowing ‘high carbon capacity’ habitats.
Carbon sequestration	6c - Carbon-rich habitats: West to south east swathe	Opportunity area centred around the foci of peak estimated carbon density in existing habitats and reflects the opportunity to expand and connect these features. Note this area captures a range of soil types and underlying geologies and accordingly, may support a range of target surface habitat types, cross-compatible with other themes (most notably Theme 2).
Carbon sequestration	6d - Carbon-rich soils: Principal north east to south west swathe	Opportunity area centred around the foci of peak estimated carbon density in soils and reflects the opportunity to manage these to maximise retention and overlay with sequestration interventions such as planting or sowing ‘high carbon capacity’ habitats.
Carbon sequestration	6e - Carbon sequestration around wetlands: Southern Cam Corridors	Opportunity area capturing the WWNP foci for riparian woodland, for wider catchment woodland and for floodplain connectivity i.e. offering potential benefit both in terms of tree planting and long-term management to optimise carbon sequestration and storage.
Carbon sequestration	6f - Carbon sequestration around wetlands: Northern Cam Corridors, Fenland and Peatland	Opportunity area capturing the WWNP foci for floodplain connectivity, for riparian woodland and for wider catchment woodland i.e. offering potential benefit both in terms of tree planting and long-term management to optimise carbon sequestration and storage. Area 6f also captures the north east area of peat soils within the study area and a significant proportion of the proposed Biosphere.

Theme	Opportunity name	Brief Description
Carbon sequestration	6g - Carbon-rich soils: north from Longstanton	Captures the north western distribution of peatland soils and wider foci of ‘peak estimated carbon density in soils’. This area reflects the opportunity to manage these to maximise retention and overlay with sequestration interventions such as planting or sowing ‘high carbon capacity’ habitats.
Agriculture and community food growing	7a – Grade 1 agricultural soil conservation	Safeguard the best and most versatile agricultural land, directing development away from these areas.
Agriculture and community food growing	7b – Network of community farming sites	Introduce a range of community food growing schemes stretching across a patchwork of sites extending across South Cambridgeshire villages to sites at the settlement edge of Cambridge. Implementation of these schemes to be facilitated through partnership working with the council, farmers, residents and NGOs.
Agriculture and community food growing	7c – Chalk stream pollution mitigation	Agri-environment targeting on agricultural land in the sensitive chalk catchment to minimise water quality issues from diffuse rural pollution. (See Theme 3: Water Environment for further detail).
Agriculture and community food growing	7d – Chalkland semi-natural grasslands (not spatially specific)	Expand and connect the chalkland assemblage of semi-natural grasslands. Manage road verges and extend buffer strips along field margins.
Agriculture and community food growing	7e – Ancient woodlands and hedgerows (not spatially specific)	Maintain and manage a sustainable and productive arable landscape, including woodlands, hedgerows and other semi-natural habitats. Replicate / partner with the West Cambridgeshire Hundreds project which aims to link up ancient woodlands and hedgerows.
Agriculture and community food growing	7f – Sustainable land management including agri-environment schemes (not spatially specific)	Increase the proportion of productive farmland benefiting the environment, promoting the uptake of agri-environment schemes and innovative ways of sustainable land management
Agriculture and community food growing	7g – Public access to the countryside (not spatially specific)	Increase connectivity of GI assets and access to the countryside by expanding the PRoW network through agricultural land. Improving public access could be more reasonably targeted on the County Farms Estate, or delivered through agri-environment targeting.

Theme	Opportunity name	Brief Description
Agriculture and community food growing	7h – Allotment provision (not spatially specific)	Increase allotment provision particularly in South Cambridgeshire's villages (x50) where there is no provision, through new developments, purchase of private land offered for sale, conversion of existing land use or identification of small parcels of agricultural land that could be better utilised.
Agriculture and community food growing	7i – Natural regeneration (not spatially specific)	Determine agricultural areas that would benefit from 'natural regeneration'. Natural regeneration seeks to reinstate natural processes but is not a replacement for farming. Needs to be delivered at scale and therefore requires collaborative partnerships.
Agriculture and community food growing	7j – Tree planting and agroforestry (not spatially specific)	Enhance carbon sequestration on agricultural land through carefully planned and managed tree planting and agroforestry. The main opportunity comes through river route tree and copse link ups.

Table A.2: Local Plan call for green sites

Green site / opportunity name	Brief Description
G001 Logan's Meadow	Opportunity to take a field that is never used by footballers and allow the Local Nature Reserve (Logan's Meadow) to expand into the margins, or absorb the full space. Replanting of native trees will break up the space and make it more inviting for families and dog-walkers. Better paths to the connected space will allow less able / prams to move underneath the bridge between the two spaces (currently impossible in winter). A great location for creating a new city park that is attractive to people at the weekend.
G002 Field on northeast corner of Sainsbury's roundabout	Opportunity for this area to be added to the existing Coldham's Common and to join off-road walking routes from east central Cambridge down to south Cambridge, including to the Sainsburys superstore.

Green site / opportunity name	Brief Description
G003 Church End, Arrington, Royston SG8 0BH	2.5 ha area of permanent pasture which should be preserved from any possibility of future development as it is a valuable public amenity with an extremely rural character and provides natural habitat (also opportunity for woodland planting and carbon offsetting). As previous and current planning applications show, it has been and continues to be under threat from development.
G004 Cambridge Green Belt	Protect the whole of the Green Belt.
G005 Parker's Piece (CB1)	Opportunity for tree planting but without interfering with existing use as a sports field.
G006 Land on the East side of the Cottenham Road on the North side of Histon	Comprises some of the County Council land at Buxhall Farm. Opportunity to provide a public open space with trees and amenity grassland. Particularly needed for the children coming out of the new school needing to run around after school and for mothers with pre-school children with siblings at the school who need a space to socialise and exercise their toddlers. Details depend on the outcomes of public consultation and the requirements of the park managers, possibly the Histon and Impington Parish Council, if not the County Council. Possible details include areas of woodland, a pond and children's play facilities.
G007 Airport	Area of around 230ha with opportunity for large-scale rewilding, and could be linked to Coldham's Common by a green bridge. It would provide a safe haven for wildlife and remain closed to the public (and dogs).
G008 Woodland area directly opposite 70, 72, 74, 76 Cambridge Road, Impington, Cambridgeshire CB24 9NU	Small site (0.17ha) with opportunity for community gardening / planting. Lies right on J32 of the A14 main road.
G009 Lower Valley Farm, Balsham Rd, Cambridge CB21 5DA	150ha - Beacon Forest is a proposal being developed in collaboration with Cambridge County Council, currently under Forestry Commission guidance (Woodland Creation Planning Grant Phase 2). It will offer 150 hectares of woodland planting plus chalkland amenity space, accessed from Balsham Road and via the Roman Road. It is intended to be the anchor site for a larger wood developed in conjunction with local landowners and to form part of the ambition for a landscape corridor through the Gogs. Working closely with CPPF and the Wildlife Trust on this.
G010 Former orchard above Haslingfield	5ha site with potential for a community orchard (or allotments).
G011 Cambridge Road, Impington	Wildlife opportunity site / woodland planting that is currently used as a paddock. Being located beneath J32 of the A14 means it could provide benefits for air quality.

Green site / opportunity name	Brief Description
G012 Coton Countryside Reserve, Coton, Cambridge CB23 7PZ	110ha area of farmland with potential to convert into other uses to benefit nature and the local community, providing that sufficient funding is available to offset the loss in rental income currently received. There are no detailed proposals currently as no development is planned nearby. However, there is feasibility work being undertaken for an integrated wetland (funded by the Environment Agency). Scheme estimated to cost approximately £500k to deliver and operate for 20 years.
G013 Farmland, down track off West Wickham Road, Balsham CB21 4DZ	3.5ha area of farmland with potential to convert into other uses to benefit nature and the local community, providing that sufficient funding is available to offset the loss in rental income currently received. There are no detailed proposals currently as no development is planned nearby.
G014 Land to the north of the A14	90ha - Cambridge Science Park North. The proposals are at an early stage, and further consultation is being held with both the Parish Council and Cambridge Regional College to ensure the recreational and sporting facilities will best serve future users.
G015 Land West of Dubbs Knoll Road, Guilden Morden, South Cambridgeshire, SG8 0LB	1.2ha area of land with potential to provide public open space as a central feature of a wider residential development. There is opportunity to create a meaningful extension of open space in the village and ensure visual connection between the village and the open space.
G016 Cambridge Great Park	Vision for a 2000ha Cambridge Great Park within the confines of the existing triangular shaped road network created by the present M11, A11, and A14.
G017 Skaters Meadow Footpath - South Newnham Neighbourhood Forum	Presumed site for protection - no further detail provided in call for green sites submission.
G018 Secondary Woodland at Pembroke College Allotments - South Newnham Neighbourhood Forum	Presumed site for protection - no further detail provided in call for green sites submission.
G019 Mature Woodland at The Back of Croft Gardens (Newnham Ward)	Presumed site for protection - no further detail provided in call for green sites submission.
G020 Newnham Croft School Wilderness Area - South Newnham Neighbourhood Forum	Wilderness area alongside River Cam by Coe Fen. Presumed site for protection - no further detail provided in call for green sites submission.

Green site / opportunity name	Brief Description
G021 Wide Green Verges on North Side of Barton Road - South Newnham Neighbourhood Forum	Presumed site for protection - no further detail provided in call for green sites submission.
G022 Meldreth Country Park, Kneesworth Road, Meldreth SG8 6LL	Proposals for Meldreth Country and Leisure Park, delivering major benefits including a woodland area for access and events, incorporating upgrades to the existing Kneesworth Road area, public open space for informal and formal sport, and other benefits (such as increasing woodland cover and providing space for wildlife). Site is currently part derelict (brownfield and retained as traveller status) and part agriculture.
G023 Land between Foxton Woods and the southern edge of Foxton village	A wildlife opportunity site on land (16.43ha) currently under arable production (tenanted county farmland). It is included in the submission Foxton Neighbourhood Plan as a potential future biodiversity enhancement area. Consideration may be made of its potential as a small local country park, but the prime focus is on biodiversity and landscape enhancement.
G024 Woodland land strip between Cheddars Lane estate, rear of gardens in Stanley Road (Abbey Ward)	Currently an unused, wooded area which links rear gardens of private Stanley Road residences, and is managed by Cambridge City Council. Proposed use as a woodland / wildlife opportunity site. The site already provides a semi-natural habitat for many species of native nesting birds, and a green thoroughfare for native species to/from Riverside and Stourbridge Common via Regatta Court.
G025 Land extending north from CB24 6AZ (Milton, Waterbeach)	A current green site of approx. 120ha which variously extends from Milton Country Park northwards towards Waterbeach and includes land currently used for arable production. The site is proposed as Cambridge Country Park and Sport Lakes - with purpose-built sports facilities and competition venues for rowing, triathlon, BMX, cycling, canoeing, long-distance swimming, equestrian and angling. Joining Milton Country Park to create over 300 acres of accessible recreational space, facilities would be suitable for international competition while at the same time providing a landscaped public park free to people on foot and bicycle.

Table A.3: Additional green site proposals shared outside of the core call for green sites

Green site proposal name	Brief Description
Area by Marleigh	The site lies to the north of the airport site boundary and just outside the Cambridge Green Belt. It includes ditches, balancing ponds and wooded areas next to the Park and Ride/High Ditch Road/along the old railway line and its fringes. It is currently unprotected but provides a biodiversity opportunity area to extend out from the Cam corridor / Ditton Meadows to connect with GI assets in the east of the study area.