

## **Planning and Transport Scrutiny Committee**



Date: Tuesday, 14 January 2020

**Time:** 5.30 pm

Venue: Committee Room 1 & 2, The Guildhall, Market Square, Cambridge,

CB2 3QJ

Contact: democratic.services@cambridge.gov.uk, tel:01223 457000

To Note Record of Urgent Decision Taken by the

## **Agenda**

5

	Executive Councillor for Planning Policy and Open Spaces	
5c	ROD Amendments to SA and HRA Dec 2019	(Pages 3 - 108)
5d	ROD Mins and Waste Dec 2019	(Pages 109 - 116)

Planning and Transport Scrutiny Committee Members: Smart (Chair), Baigent, Bick, Chadwick, Collis, Davies, Green, Hipkin and McGerty

Alternates: Bird, Lord and McQueen

**Executive Councillors:** Massey (Executive Councillor for Transport and Community Safety) and Thornburrow (Executive Councillor for Planning

Policy and Open Spaces)

## Information for the public

The public may record (e.g. film, audio, tweet, blog) meetings which are open to the public. For details go to:

www.cambridge.gov.uk/have-your-say-at-committee-meetings

For full information about committee meetings, committee reports, councillors and the democratic process:

• Website: <a href="http://democracy.cambridge.gov.uk">http://democracy.cambridge.gov.uk</a>

• Email: democratic.services@cambridge.gov.uk

• Phone: 01223 457000

## **CAMBRIDGE CITY COUNCIL**

## Record of Executive Decision

# GREATER CAMBRIDGE LOCAL PLAN ISSUES & OPTIONS CONSULTATION – MINOR AMENDMENTS TO SUPPORTING DOCUMENTS FOLLOWING CONSULTATION WITH STATUTORY CONSULTEES

Decision of: Councillor Katie Thornburrow, Executive Councillor for

Planning Policy and Open Spaces

**Reference:** 19/URGENCY/P&T/14

Date of decision: 03/01/20 Recorded on: 03/01/20

**Decision Type:** Non Key

Matter for Decision:

Minor changes to documents supporting the Greater Cambridge Local Plan Issues and Options consultation following consultation with Statutory Consultees - the Sustainability Appraisal Scoping Report, Sustainability Appraisal Issues and Options Report and Habitats Regulations Assessment Scoping Report.

This decision relates to specific delegations to the Executive Member for Planning Policy & Open Spaces endorsed by Planning & Transport Scrutiny Committee on 7 November 2019.

The Executive Member for Planning Policy & Open Spaces resolved, as endorsed by Planning & Transport Scrutiny Committee, on 7 November: 'To approve the Local Plan Issues & Options report text (at Appendix E) and supporting documents (at Appendices F, G and H) and consultation process (at Section VIII and Appendix B, chapter 6).

The Executive Councillor also resolved:

To approve consultation with the Chair and Spokes for the Planning & Transport Scrutiny Committee, in liaison with the South Cambridgeshire Lead Cabinet Member for Planning and in consultation with members of the Joint Local Planning Advisory Group, to consider and agree, as is consistent with this Council's Corporate Objectives, any material changes to the Local Plan Issues & Options report text (at Appendix E) and supporting documents (at Appendices A, B (chapter 6), F, G and H) prior to the commencement of the consultation period, including any proposed by South Cambridgeshire District Council.

A copy of the report considered by the Planning and Transport Committee on 7 November and all associated documents can be viewed at the link below:

https://democracy.cambridge.gov.uk/ieListDocuments.aspx?Cld=475&Mld=3769&Ver=4

### Sustainability Appraisal (SA) Scoping Report

The supporting documents referred to above include the Sustainability Appraisal Scoping Report and Non-Technical Summary (NTS) (Appendix F). The SA Scoping Report was sent to the Statutory Consultees Natural England, Historic England and the Environment Agency for their comments. Comments were received from all three bodies and the Scoping Report has been updated in line with these comments by consultants Land Use Consultants who are carrying out the SA for the Councils.

Many of the changes are additional information and details about relevant studies. Comments from the Environment Agency lead to a small change to SA Objective 10 (changed as follows: To achieve sustainable water resource management and promote enhance the quality of Greater Cambridge's waters). Also an additional appraisal question was added about ensuring there is sufficient water to serve new growth without negatively impacting on the environment and the appraisal question relating to waste water treatment was strengthened to refer to environmental capacity and climate change.

A new table has been added to the SA Scoping Report (Appendix 2 of that document) which sets out a summary of the comments from statutory consultees and how they have been addressed in the Scoping Report. The revised Scoping Report is appended to this decision as Appendix 1. Appendix 2 of that document should be referred to and it may be necessary to look back at the previous version of the report to see the changes by going to this link

https://democracy.cambridge.gov.uk/documents/s48097/Appendix%20F%20part%202%20-%20SA%20Scoping%20Full%20Report-red.pdf

The purpose of this decision is to approve these amendments.

### SA of the Issues and Options Report

The supporting documents referred to above also include the Sustainability Appraisal of the Issues and Options Report and Non-Technical Summary (Appendix G).

As a result of the amendments to the Scoping Report, particularly in relation to SA Objective 10 and other comments made by the Environment Agency, some minor changes were made to the SA of the Issues and Options Report. These mainly relate to the issue of water resources and the fact that the Councils are going to commission an Integrated Water Management Study as evidence base for the Greater Cambridge Local Plan, which will also inform the future SA.

These amendments are shown in a tracked changes version of the document which is appended to this decision as Appendix 2. In particular see page 14, paragraphs 3.9, 3.27 3.79 and 3.91. The purpose of this decision is to approve these amendments.

Habitats Regulations Assessment (HRA) Scoping Report

The supporting documents referred to above also include the HRA Scoping Report (Appendix H).

Natural England provided comments on the HRA Scoping Report which have been used by Land Use Consultants to update this document and will be taken into account in the subsequent formal HRA stages for the Local Plan. This information has resulted in some changes to the issues that may be of relevance to some of the designated sites.

Natural England's comments are set out in Appendix 1 of the HRA Scoping Report in Appendix 1. The amendments to the HRA Scoping Report itself are shown in a tracked changes version of the document which is appended to this decision as Appendix 3.

The purpose of this decision is to approve these amendments.

Note:

To ensure an aligned agreement on these documents between Cambridge City Council and South Cambridgeshire District Council, the Lead Cabinet Member for Planning is also taking an out of cycle decision on them at the same time.

Why the decision had to be made (and any alternative options):

Consultation with the Statutory Consultees is part of the SA and HRA process and the additional information they have provided is useful to feed into these baseline documents and will inform the subsequent stages of plan making and SA / HRA appraisal.

The Executive Councillor's decision(s):

To confirm the proposed content of the supporting documents for the Issues and Options consultation including the SA Scoping Report and NTS, SA of the Issues and Options Report and NTS, and Scoping Report of the HRA as set out in the documents appended to this decision.

Reasons for the decision:

The documents have been amended following comments received from the Statutory Consultees, Natural England, Historic England and the Environment Agency.

Scrutiny consideration:

The Chair and Spokesperson of Planning and Transport Scrutiny Committee were consulted prior to the action being authorised.

Report:

The proposed changes are attached as set out above.

Conflicts of interest:

None known

Comments:



## SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL RECORD OF EXECUTIVE / CHIEF OFFICER DECISION

This form should be used to record key decisions made by Chief Officers and both key and other decisions made by individual Portfolio Holders. The contact officer will ensure that the signed and completed form is given to Democratic Services as soon as reasonably practicable after the decision has been taken.

Unless permission has been obtained from the Chairman of Council and the Chairman of the Scrutiny and Overview Committee that this decision be treated as a matter of urgency under Rule 12.19 of the Scrutiny and Overview Committee Procedure Rules, this decision will come into force, and may then be implemented, on the expiry of five working days after the publication of the decision, unless called in under Rule 7 of the Budget and Policy Framework Procedure Rules or Rule 12 of the Scrutiny and Overview Committee Procedure Rules.

Portfolio	Planning
·	Minor changes to documents supporting the Greater Cambridge Issues & Options consultation following consultation with Statutory Consultees - the Sustainability Appraisal Scoping Report, Sustainability Appraisal Issues and Options Report and Habitats Regulations Assessment Scoping Report
Ward(s) Affected	AII
Date Taken	xx/xx/xx
	Nancy Kimberley, Principal Planning Policy Officer, 01223 457233, nancy.kimberley@greatercambridgeplanning.org
	Yes – the Local Plan will have a significant effect on communities living or working in an area of the District comprising two or more wards.
In Forward Plan?	Yes
Urgent?	No

## Purpose / Background

This decision relates to specific delegations to the Cabinet Member for Planning agreed by Cabinet at its meeting held on 6 November 2019.

The Local Plan is being prepared jointly for the Cambridge City Council and South Cambridgeshire District Council authority areas, the proposed content of, and the participation and communication strategy for the Issues & Options consultation was considered by the following meetings:

- Joint Local Plan Advisory Group 1 October 2019
- South Cambridgeshire District Council Cabinet, 6 November 2019
- South Cambridgeshire District Council Scrutiny & Overview, 17 October 2019

Cambridge Planning & Transport Scrutiny Committee, 7 November 2019

Cabinet on 6 November- 'Approved the Local Plan Issues & Options report text (at Appendix E), supporting documents (at Appendices F, G and H) and consultation process (at Section VIII and Appendix B, chapter 6)'.

Cabinet also: 'Delegated authority to the Lead Cabinet Member for Planning, in liaison with Cambridge City Council Executive Councillor for Planning Policy and Open Spaces, and in consultation with members of the Joint Local Planning Advisory Group, to consider and agree, as is consistent with this Council's corporate objectives, any material changes to the Local Plan Issues & Options report text (at Appendix E) and supporting documents (at Appendices A, B (chapter 6), F, G and H) prior to the commencement of the consultation period, including any proposed by Cambridge City Council'.

## Sustainability Appraisal (SA) Scoping Report

The supporting documents referred to above include the Sustainability Appraisal Scoping Report and Non-Technical Summary (NTS) (Appendix F). The SA Scoping Report was sent to the Statutory Consultees Natural England, Historic England and the Environment Agency for their comments. Comments were received from all three bodies and the Scoping Report has been updated in line with these comments by consultants Land Use Consultants who are carrying out the SA for the Councils.

Many of the changes are additional information and details about relevant studies. Comments from the Environment Agency lead to a small change to SA Objective 10 (changed as follows: To achieve sustainable water resource management and promote enhance the quality of Greater Cambridge's waters). Also an additional appraisal question was added about ensuring there is sufficient water to serve new growth without negatively impacting on the environment and the appraisal question relating to waste water treatment was strengthened to refer to environmental capacity and climate change.

A new table has been added to the SA Scoping Report (Appendix 2 of that document) which sets out a summary of the comments from statutory consultees and how they have been addressed in the Scoping Report. The revised Scoping Report is appended to this decision as Appendix 1. Appendix 2 of that document should be referred to and it may be necessary to look back at the previous version of the report to see the changes by going to this link

https://democracy.cambridge.gov.uk/documents/s48097/Appendix%20F%20part%202%20-%20SA%20Scoping%20Full%20Report-red.pdf

The purpose of this decision is to approve these amendments.

#### SA of the Issues and Options Report

The supporting documents referred to above also include the Sustainability Appraisal of the Issues and Options Report and Non-Technical Summary (Appendix G).

As a result of the amendments to the Scoping Report, particularly in relation to SA

Objective 10 and other comments made by the Environment Agency, some minor changes were made to the SA of the Issues and Options Report. These mainly relate to the issue of water resources and the fact that the Councils are going to commission an Integrated Water Management Study as evidence base for the Greater Cambridge Local Plan, which will also inform the future SA.

These amendments are shown in a tracked changes version of the document which is appended to this decision as Appendix 2. In particular see page 14, paragraphs 3.9, 3.27 3.79 and 3.91.

The purpose of this decision is to approve these amendments.

## Habitats Regulations Assessment (HRA) Scoping Report

The supporting documents referred to above also include the HRA Scoping Report (Appendix H).

Natural England provided comments on the HRA Scoping Report which have been used by Land Use Consultants to update this document and will be taken into account in the subsequent formal HRA stages for the Local Plan. This information has resulted in some changes to the issues that may be of relevance to some of the designated sites.

Natural England's comments are set out in Appendix 1 of the HRA Scoping Report in Appendix 1. The amendments to the HRA Scoping Report itself are shown in a tracked changes version of the document which is appended to this decision as Appendix 3.

The purpose of this decision is to approve these amendments.

#### Note:

To ensure an aligned agreement on these documents between Cambridge City Council and South Cambridgeshire District Council, the Cambridge City Council Executive Councillor for Planning Policy & Open Spaces is also taking an out of cycle decision on them at the same time.

### Declaration(s) of Interest

Record below any relevant interest declared by any executive Member consulted or by an officer present in relation to the decision.

None

### Dispensation(s)

In respect of any conflict(s) of interest declared above, record below any dispensation(s) granted by the Council's Monitoring officer or Civic Affairs Committee.

None

#### Consultation

### Record below all parties consulted in relation to the decision.

Lead Cabinet Member for Planning at South Cambridgeshire District Council and Executive Councillor for Planning Policy & Open Spaces at Cambridge City Council (following consultation with Chair and Spokesperson of Cambridge Planning & Transport Scrutiny Committee).

## Other Options Considered and Reasons for Rejection

Option 1: To not include the information provided by the Statutory Consultees at this stage of the plan making process.

Reason for rejection: consulting with the Statutory Consultees is part of the SA and HRA process and the additional information they have provided is useful to feed into these baseline documents and will inform the subsequent stages of plan making and SA / HRA appraisal.

Final decision	Reason(s)
To confirm the proposed content of the supporting documents for the Issues and Options consultation including the SA Scoping Report and NTS, SA of the Issues and Options Report and NTS, and Scoping Report of the HRA as set out in the documents appended to this	The documents have been amended following comments received from the Statutory Consultees, Natural England, Historic England and the Environment
Scoping Report of the HRA as set out in	rigorioy.

<u> </u>	Name (CAPITALS)	Signature	Date
Portfolio	CLLR TUMI		
Holder	HAWKINS		
Chief Officer	STEPHEN KELLY		

#### Further Information

Cambridge Planning & Transport Scrutiny Committee meeting papers, 7th November

https://democracy.cambridge.gov.uk/ieListDocuments.aspx?Cld=475&Mld=3769&Ver=4

South Cambridgeshire Cabinet meeting papers, 6th November 2019 <a href="https://scambs.moderngov.co.uk/ieListDocuments.aspx?Cld=293&Mld=7536&Ver=4">https://scambs.moderngov.co.uk/ieListDocuments.aspx?Cld=293&Mld=7536&Ver=4</a>

South Cambridgeshire Scrutiny & Overview meeting papers, 17th October 2019 https://scambs.moderngov.co.uk/ieListDocuments.aspx?Cld=417&Mld=7655&Ver=4

Joint Local Planning Advisory Group meeting papers, 1st October 2019 <a href="https://democracy.cambridge.gov.uk/ieListMeetings.aspx?Cld=492&Year=0">https://democracy.cambridge.gov.uk/ieListMeetings.aspx?Cld=492&Year=0</a>





www.landuse.co.ul

## **Greater Cambridge Local Plan**

**Sustainability Appraisal of Issues and Options** 

Prepared by LUC
December 2019

Project Title: Greater Cambridge Local Plan SA

Client: South Cambridgeshire District Council and Cambridge City Council

Version	Date	Version Details	Prepared by	Checked by	Approved by
1.0	17/09/19	Draft for client comment	Olivia Dunham Sarah Temple Sarah Smith	Sarah Smith	Jeremy Owen
2.0	20/09/19	Updated draft for committee	Olivia Dunham Sarah Temple Sarah Smith	Sarah Smith	Jeremy Owen
3.0	28/10/19	Updated to reflect changes in the Issues & Options document	Sarah Smith Sarah Temple Jeremy Owen	Jeremy Owen	Jeremy Owen
4.0	22/11/19	Updated to reflect comments provided by statutory consultees	Sarah Smith	Jeremy Owen	Jeremy Owen
5.0	10/12/19	Final	Sarah Smith	Jeremy Owen	Jeremy Owen



www.landuse.co.uk

## **Greater Cambridge Local Plan**

Sustainability Appraisal of Issues and Options

Prepared by LUC December 2019

Planning & EIA
Design
Landscape Planning
Landscape
Management
Ecology
GIS & Visualisation

LUC LONDON 250 Waterloo Road London SE1 8RD T +44 (0)20 7383 5784 london@landuse.co.uk

Offices also in: Bristol Edinburgh Glasgow Lancaster Manchester



FS 566056 EMS 566057 Land Use Consultants Ltd Registered in England Registered number: 2549296 Registered Office: 250 Waterloo Road London SE1 8RD LUC uses 100% recycled paper

## **Contents**

1	Introduction	1
	Context for the Greater Cambridge Local Plan	1
	The new Local Plan	2
	Sustainability Appraisal and Strategic Environmental Assessment	2
	Habitats Regulations Assessment	6
2	Methodology	7
	SA Stage A: Scoping	8
	SA Stage B: Developing and refining options and assessing effects	16
	SA Stage C: Preparing the Sustainability Appraisal report	16
	SA Stage D: Consultation on the Greater Cambridge Local Plan	
	and this SA Report	17
	SA Stage E: Monitoring implementation of the Local Plan	17
	Appraisal methodology	17
	Difficulties Encountered	18
3	Sustainability Appraisal Findings	20
	Commentary on 'big themes'	20
	Spatial distribution options	24
4	Conclusions	48
	Next steps	50

A Non-Technical Summary has been produced and is available as a separate document.

## 1 Introduction

- 1.1 This Sustainability Appraisal Report has been prepared by LUC on behalf of South Cambridgeshire District Council and Cambridge City Council (the Councils) as part of the Sustainability Appraisal (SA) (incorporating Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA) and Equalities Impact Assessment (EqIA)) of their Local Plan.
- 1.2 This report relates to the Greater Cambridge Local Plan Issues and Options document, and it should be read in conjunction with that document. The Issues and Options consultation is the first stage in the plan-making process, which seeks the opinions of stakeholders and local people as to what the key issues are that the Local Plan should seek to address. Given the broad nature of this consultation, this SA Report contains a high level commentary on the sustainability considerations for the Local Plan, in relation to the themes discussed in the Issues and Options document. SA of the more detailed options for the Local Plan will be undertaken as they are developed.

## Context for the Greater Cambridge Local Plan

- 1.3 Comprising Cambridge City and South Cambridgeshire District, Greater Cambridge covers approximately 360 square miles, with a total population of 290,000 people across the city. Cambridge City and South Cambridgeshire have a unique relationship, in that South Cambridgeshire entirely surrounds Cambridge City. Greater Cambridge borders Huntingdonshire and East Cambridgeshire to the north; Central Bedfordshire to the west; North Hertfordshire, Uttlesford and Braintree to the south, and to the east, it borders St Edmundsbury in Suffolk.
- 1.4 Whilst Cambridge City is distinctly urban, South Cambridgeshire is a mainly rural district. With Cambourne in the west, Histon to the north and Sawston in the south being the most populated settlements in Greater Cambridge, after Cambridge City.
- 1.5 Cambridge is a city of international importance in terms of its world-class university, research, heritage, culture and science. Cambridge also plays a key functional role in planning terms as the dominant centre in Cambridgeshire and as a main nodal point of the Oxford-Milton Keynes-Cambridge Arc and M11 corridor.
- 1.6 As a prominent hub for research and the dominant centre of Cambridgeshire, Cambridge has strong north-south transport links to London and north Cambridgeshire via train and the M11 corridor. Approximately 23,367 people commute daily from South Cambridgeshire to the city. Whilst South Cambridgeshire currently has limited access to bus services and other more sustainable modes of transport, particularly in the more remote west and eastern parts of Greater Cambridge, the emerging Cambridgeshire and Peterborough Local Transport Plan sets out a number of measures to improve transport links in the area.
- 1.7 Greater Cambridge contains a wealth of historic assets, with over 4,000 listed buildings, 32 conservation areas and 24 registered parks and gardens across Cambridge and South Cambridgeshire. A variety of mineral resources are also

found in the Greater Cambridge Local Plan area, including sand, gravel and chalk. These extensive deposits often occur under high quality agricultural land or in areas valued for their biodiversity and landscapes, such as river valleys.

### The new Local Plan

- 1.8 Cambridge City Council and South Cambridgeshire District Council have committed to preparing a joint Local Plan for their combined area, referred to as Greater Cambridge, a strand of work which originated as part of the City Deal agreement with central government established in 2014. The individual Councils both adopted separate Local Plans in September and October respectively in 2018 which set out the development needs of the local authority areas up to 2031.
- 1.9 The adopted Local Plans acknowledged the commitment to an early review of their Local Plans beginning in 2019. This decision to take forward the early review of the Local Plans was made in order to establish what impact the anticipated changed infrastructure and economic growth in the area might have on housing need and other aspects of spatial and transport planning. Further, during Examination of the individual Local Plans, a number of issues were highlighted for specific attention. These related to the assessment of housing needs, progress in delivering the development strategy and in particular the proposed new settlements and provision to meet the requirements of caravan dwellers.
- 1.10 The plan period for the Greater Cambridge Local Plan is yet to be determined, but is likely to cover the period to either 2040 or 2050. It will replace the Cambridge Local Plan (2018) and the South Cambridgeshire Local Plan (2018). The Joint Local Development Scheme 2018 sets out the timetable for plan making, with public consultation on the Issues and Options for the plan in late 2019 and submission to the Secretary of State for examination proposed to be around the end of summer 2022.

## Sustainability Appraisal and Strategic Environmental Assessment

- 1.11 Sustainability Appraisal is a statutory requirement of the Planning and Compulsory Purchase Act 2004. It is designed to ensure that the plan preparation process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process involves appraising the likely social, environmental and economic effects of the policies and proposals within a plan from the outset of its development.
- 1.12 Strategic Environmental Assessment (SEA) is also a statutory assessment process, required under the SEA Directive<sup>1</sup>, transposed in the UK by the SEA Regulations (Statutory Instrument 2004, No 1633). The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment and which set the framework for future consent of projects requiring Environmental Impact Assessment (EIA)<sup>2</sup>. The purpose of SEA, as defined in Article 1 of the SEA Directive is "to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into

SEA DIFECTIVE 2001/42/EC

<sup>&</sup>lt;sup>1</sup> SEA Directive 2001/42/EC

<sup>&</sup>lt;sup>2</sup> Under EU Directives 85/337/EEC and 97/11/EC concerning EIA.

- the preparation and adoption of plans....with a view to promoting sustainable development".
- 1.13 SEA and SA are separate processes but have similar aims and objectives. Simply put, SEA focuses on the likely environmental effects of a plan whilst SA includes a wider range of considerations, extending to social and economic impacts. National Planning Practice Guidance<sup>3</sup> shows how it is possible to satisfy both requirements by undertaking a joint SA/SEA process, and to present an SA Report that incorporates the requirements of the SEA Regulations. The SA/SEA of the Greater Cambridge Local Plan is being undertaken using this integrated approach and throughout this report the abbreviation 'SA' should therefore be taken to refer to 'SA incorporating the requirements of SEA'.
- 1.14 **Table 1.1** below signposts how the requirements of the SEA Regulations have been met within this report.

Table 1.1: Requirements of the SEA Regulations and where these have been addressed in this SA Report

SEA Regulations Requirements	Where covered in this SA Report	
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated (Reg. 12). The information to be given is (Schedule 2):		
<ul> <li>a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes</li> </ul>	See Scoping Report.	
<ul> <li>b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme</li> </ul>	See Scoping Report.	
<ul> <li>c) The environmental characteristics of areas likely to be significantly affected</li> </ul>	See Scoping Report.	
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	See Scoping Report.	
e) The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation	See Scoping Report.	

\_

<sup>&</sup>lt;sup>3</sup> http://planningguidance.planningportal.gov.uk/

SEA Regulations Requirements	Where covered in this
·	SA Report
f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects)	Chapter 3
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	This will be addressed in later iterations of the SA when preferred options have been identified.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Chapter 2 explains how the Councils identified the themes and spatial strategies considered. No decisions have yet been made with regards to which options are to be taken forward.
<ul> <li>i) a description of measures envisaged concerning monitoring in accordance with Reg. 17;</li> </ul>	This will be addressed in later iterations of the SA when preferred options have been identified.
j) a non-technical summary of the information provided under the above headings	A separate non-technical summary document is available alongside this document.
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Reg. 12(3))	Addressed throughout this SA Report.
<ul> <li>Consultation:</li> <li>authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Reg. 12(5))</li> </ul>	The SA Scoping Report will be published for consultation alongside this document.

SEA Regulations Requirements	Where covered in this SA Report
<ul> <li>authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Reg. 13)</li> </ul>	This SA Report is being published for consultation alongside the Issues and Options document and the SA Scoping Report.
other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Reg. 14).	N/A
Taking the environmental report and the results of account in decision-making (Reg. 16)	the consultations into
<ul> <li>Provision of information on the decision:</li> <li>When the plan or programme is adopted, the public and any countries consulted under Reg. 14 must be informed and the following made available to those so informed:</li> <li>the plan or programme as adopted</li> <li>a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report, the opinions expressed and the results of consultations entered into have been taken into account, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and</li> <li>the measures decided concerning monitoring</li> </ul>	To be addressed after the Local Plan is adopted.
<b>Monitoring</b> of the significant environmental effects of the plan's or programme's implementation (Reg. 17)	To be addressed after the Local Plan is adopted.
<b>Quality assurance:</b> environmental reports should be of a sufficient standard to meet the requirements of the SEA Directive.	This report has been produced in line with current guidance and good practice for SEA/SA and this table demonstrates where the requirements of the SEA Directive have been met.

1.15 As well as incorporating SEA, the SA also incorporates Health Impact Assessment (HIA) and Equalities Impact Assessment (EqIA) as set out below.

## Health Impact Assessment

1.16 Health Impact Assessment (HIA) aims to ensure that health-related issues are integrated into the plan-making process. HIA of the Greater Cambridge Local Plan

will be carried out and integrated into the SA and will make recommendations for how the health-related impacts of the Local Plan can be optimised as the options are developed into detailed policies.

## **Equalities Impact Assessment**

1.17 The requirement to undertake formal Equalities Impact Assessment (EqIA) of plans was introduced in the Equality Act 2010, but was abolished in 2012. Despite this, authorities are still required to have regard to the provisions of the Equality Act, namely the Public Sector Duty which requires public authorities to have due regard for equalities considerations when exercising their functions. The SA will consider whether the Local Plan is likely to disproportionately affect any groups with particular 'protected characteristics' under the Equality Act, as well as whether the Local Plan may disproportionately affect any other groups, such as different socioeconomic groups.

## Habitats Regulations Assessment

- 1.18 The requirement to undertake Habitats Regulations Assessment (HRA) of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010 and again in 2012 and 2017<sup>4</sup>. The Regulations translate Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) and 79/409/EEC (Birds Directive) into UK law. The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site.
- 1.19 The HRA will be undertaken separately but the findings will be taken into account in the SA where relevant (for example to inform judgements about the likely effects of potential development locations on biodiversity).

## Structure of this report

- 1.20 This section has introduced the SA process for the Greater Cambridge Local Plan. The remainder of the report is structured into the following sections:
  - Chapter 2: Methodology describes the approach that is being taken to the SA of the Greater Cambridge Local Plan.
  - Chapter 3: Sustainability Appraisal Findings presents the SA findings for the options set out in the Issues and Options document.
  - **Chapter 1: Conclusions** summarises the key findings from the SA of the Issues and Options document and describes the next steps to be undertaken.

-

 $<sup>^4</sup>$  The Conservation of Habitats and Species Regulations 2017 (Statutory Instrument 2017 No. 1012) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments.

## 2 Methodology

2.1 In addition to complying with legal requirements, the approach being taken to the SA of the Greater Cambridge Local Plan is based on current best practice and the guidance on SA/SEA set out in the national Planning Practice Guidance, which involves carrying out SA as an integral part of the plan-making process. **Figure 2.1** below sets out the main stages of the plan-making process and shows how these correspond to the SA process.

Figure 2.1: Corresponding stages in plan making and SA

## **Local Plan Step 1: Evidence Gathering and engagement**

#### SA stages and tasks

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope

- 1: Identifying other relevant policies, plans and programmes, and sustainability objectives
- 2: Collecting baseline information
- 3: Identifying sustainability issues and problems
- 4: Developing the SA framework
- 5: Consulting on the scope of the SA

## **Local Plan Step 2: Production**

### SA stages and tasks

Stage B: Developing and refining options and assessing effects

- 1: Testing the Local Plan objectives against the SA framework
- 2: Developing the Local Plan options
- 3: Evaluating the effects of the Local Plan
- 4: Considering ways of mitigating adverse effects and maximising beneficial effects
- 5: Proposing measures to monitor the significant effects of implementing the Local Plan

Stage C: Preparing the Sustainability Appraisal Report

• 1: Preparing the SA Report

Stage D: Seek representations on the Local Plan and the Sustainability Appraisal Report

- 1: Public participation on Local Plan and the SA Report
- 2(i): Appraising significant changes

## **Local Plan Step 3: Examination**

#### SA stages and tasks

• 2(ii): Appraising significant changes resulting from representations

## Local Plan Step 4 & 5: Adoption and Monitoring

## SA stages and tasks

• 3: Making decisions and providing information

Stage E: Monitoring the significant effects of implementing the Local Plan

- 1: Finalising aims and methods for monitoring
- 2: Responding to adverse effects
- 2.2 The sections below describe the approach that has been taken to the SA of the Greater Cambridge Local Plan to date and provide information on the subsequent stages of the process.

## SA Stage A: Scoping

- 2.3 The SA process began in September 2019 with the production of a Scoping Report for the Greater Cambridge Local Plan.
- 2.4 The Scoping stage of the SA involves understanding the social, economic and environmental baseline for the plan area as well as the sustainability policy context and key sustainability issues. The Scoping Report presented the outputs of the following tasks:
  - Policies, plans and programmes of relevance to the Local Plan were identified and the relationships between them and the Local Plan and the SA were considered, enabling any potential synergies to be exploited and any potential inconsistencies and incompatibilities to be identified and addressed.
  - Baseline information was collected on environmental, social and economic issues in Greater Cambridge. This baseline information provides the basis for predicting and monitoring the likely effects of options for policies and site allocations and helps to identify alternative ways of dealing with any adverse effects identified.
  - Key sustainability issues for Greater Cambridge were identified.
  - A Sustainability Appraisal framework was presented, setting out the SA objectives against which options and subsequently policies will be appraised. The SA framework provides a way in which the sustainability impacts of implementing a plan can be described, analysed and compared. It comprises a series of sustainability objectives and associated sub-questions that can be used to 'interrogate' options and draft policies during the plan-making process. During the SA, the performances of the plan options (and later, policies) are assessed against these SA objectives and sub-questions.
- 2.5 The SA Scoping Report also sets out information about the methodology for this and later stages of the SA, including proposed criteria for the appraisal of site options. **Table 2.1** presents the SA framework for the Greater Cambridge Local Plan, which includes 15 SA objectives along with their associated appraisal questions. The table also shows how all of the 'SEA topics' (as listed in Schedule 2 of the SEA Regulations) have been covered by the SA objectives, reflecting the fact that an integrated approach is being taken to the SA and SEA of the Local Plan.
- 2.6 Public and stakeholder participation is an important part of the SA and wider planmaking processes. It helps to ensure that the SA Report is robust and has due regard for all appropriate information that will support the plan in making a contribution to sustainable development. The Scoping Report will be consulted upon alongside the Issues and Options document and this SA Report and comments received will be addressed at the next stage of SA.

Table 2.1: SA Framework for the Greater Cambridge Local Plan

SA Objective	Appraisal questions	Relevant SEA Topics	
SA 1: Housing  To ensure that everyone has the opportunity to live in a decent, well-designed,	SA 1.1: Does the Plan provide for the local housing need of Greater Cambridge?	Population, Human Health and Material Assets	
	SA 1.2: Does the Plan deliver the range of types, tenures that Greater Cambridge needs over the plan period?		
sustainably constructed and affordable home.	SA 1.3: Does the Plan increase the supply of affordable homes in both urban and rural areas?		
	SA 1.4: Does the Plan provide for the housing needs of both an ageing and young population based on locational needs?		
	SA 1.5: Does the Plan provide for specialist housing needs, including that of the student population and Gypsies and Travellers?		
SA 2: Access to services and facilities	SA 2.1: Does the Plan support the existing city, district, local, neighbourhood, rural and minor rural centres?	Population, Human Health and Material	
To maintain and improve access to centres of services and facilities including health centres and education.	SA 2.2: Does the Plan provide for sufficient local services and facilities to support new and growing communities (e.g. schools, employment training and lifetime learning facilities, health facilities, sport and recreation, accessible green space and services in local centres)?	Assets	
	SA 2.3: Does the Plan provide for development within proximity to existing or new services and facilities that are accessible for all?		
SA 3: Social Inclusion and Equalities	SA 3.1: Does the Plan facilitate the integration of new neighbourhoods with existing neighbourhoods?	Population, Human Health and Material	
To encourage social inclusion, strengthen community cohesion, and advance equality	SA 3.2: Does the Plan promote developments that benefit and are used by existing and new residents in Greater Cambridge, particularly for Greater Cambridge's most deprived areas?	Assets	
between those who share a	SA 3.3: Does the Plan meet the needs of specific groups in Greater		

SA Objective	Appraisal questions	Relevant SEA Topics
protected characteristic (Equality Act 2010) and those	Cambridge, including those with protected characteristics and the needs of a growing and ageing population?	
who do not.	SA 3.4: Does the Plan promote the vitality and viability of Greater Cambridge's city, district, local, neighbourhood, rural and minor rural centres through social and cultural initiatives?	
	SA 3.5: Does the Plan help to support high levels of pedestrian activity/ outdoor interaction, where people mix?	
	SA 3.6: Does the Plan remove or reduce disadvantages suffered by people due to their protected characteristics?	
SA 4: Health  To improve public health, safety and wellbeing and reduce health inequalities.	SA 4.1: Does the Plan promote health and wellbeing and encourage healthy lifestyles by maintaining, connecting, creating and enhancing multifunctional open spaces, green infrastructure, and recreation and sports facilities and by providing access to recreational opportunities in the countryside?	Population, Human Health and Climatic Factors
	SA 4.2 Does the Plan promote healthy lifestyle choices by encouraging and facilitating walking and cycling, including provision of dedicated cycleways, as well as permeable and legible streets?	
	SA 4.3: Does the Plan safeguard human health and well-being by promoting climate change resilience through sustainable siting, design, landscaping and infrastructure, particularly green infrastructure?	
	SA 4.4: Does the Plan provide sufficient access to local health services and facilities (e.g. health centres and hospitals)?	
	SA 4.5: Does the Plan encourage local food growing?	
	SA 4.6: Does the Plan promote mental wellbeing through the design of attractive places and opportunities for social interaction?	
	SA 4.7: Does the Plan promote principles of good urban design to limit the	

SA Objective	Appraisal questions	Relevant SEA Topics
	potential for crime in Greater Cambridge?	
	SA 4.8: Does the Plan contribute to a reduction in the fear of crime?	
SA 5: Biodiversity and geodiversity	SA 5.1: Does the Plan avoid adverse effects on internationally and nationally designated biodiversity and geodiversity assets within and outside Greater Cambridge?	Biodiversity, Flora, Fauna and Human Health
To conserve, enhance, restore and connect wildlife, habitats, species and/or sites of biodiversity or geological	SA 5.2: Does the Plan avoid adverse effects on locally designated biodiversity and geodiversity assets within and outside Greater Cambridge, including ancient woodland?	
interest.	SA 5.3: Does the Plan seek to protect and enhance ecological networks, including opportunity areas (buffer and stepping stone opportunities) identified through biodiversity opportunity mapping, promoting the achievement of biodiversity net gain, whilst taking into account the impacts of climate change?	
	SA 5.4: Does the Plan provide and manage opportunities for people to come into contact with wildlife whilst encouraging respect for and raising awareness of the sensitivity of biodiversity?	
SA 6: Landscape and townscape	SA 6.1: Does the Plan protect and enhance Greater Cambridge's sensitive, special landscapes, such as fens, and historic settlements?	Landscape, Biodiversity, Flora,
To conserve and enhance the character and distinctiveness of Greater Cambridge's	SA 6.2: Does the Plan protect and enhance Greater Cambridge's natural environment assets (including parks and green spaces, common land, woodland and forest reserves) and public realm?	Fauna and Cultural Heritage
landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place.	SA 6.3: Does the Plan protect the setting of the city of Cambridge, including key views into and out of the city?	
SA 7: Historic environment	SA 7.1: Does the Plan conserve and enhance Greater Cambridge's designated heritage assets, including their setting and their contribution to	Cultural Heritage, Architectural and

SA Objective	Appraisal questions	Relevant SEA Topics
To conserve and/or enhance the qualities, fabric, setting and accessibility of Greater Cambridge's historic environment.	wider local character and distinctiveness?	Archaeological Heritage
	SA 7.2: Does the Plan conserve and enhance Greater Cambridge's non- designated heritage assets, including their setting and their contribution to wider local character and distinctiveness?	
	SA 7.3: Does the Plan safeguard, and where possible enhance, the historic fabric of the city of Cambridge?	
	SA 7.4: Does the Plan provide opportunities for improvements to the conservation, management and enhancement of Greater Cambridge's heritage assets, particularly heritage at risk?	
	SA 7.5: Does the Plan promote access to, as well as enjoyment and understanding of, the local historic environment for Greater Cambridge's residents and visitors?	
SA 8: Efficient use of land To make efficient use of Greater Cambridge's land resources through the re-use of previously developed land and conserve its soils.	SA 8.1: Does the Plan maximise the provision of housing and employment development on previously developed land?	Soil and Material Assets
	SA 8.2: Does the Plan ensure contaminated land is remediated where appropriate?	
	SA 8.3: Does the Plan minimise the loss of best and most versatile agricultural land to development?	
SA 9: Minerals	SA 9.1 Does the Plan ensure that unnecessary or unjustified sterilisation of mineral resources is prevented?	Material Assets
To conserve mineral resources in Greater Cambridge.		
SA 10: Water	SA 10.1: Does the Plan ensure there is sufficient water to serve new	Water, Biodiversity,
To achieve sustainable water resource management and	growth for the lifetime of the development in a changing climate without negatively impacting on the environment?	Fauna and Flora
enhance the quality of Greater	SA 10.2: Does the Plan seek to improve the water quality of Greater	

SA Objective	Appraisal questions	Relevant SEA Topics
Cambridge's waters.	Cambridge's rivers and water bodies?	
	SA 10.3: Does the Plan minimise inappropriate development in Source Protection Zones?	
	SA 10.4: Does the Plan ensure there is sufficient waste water treatment infrastructure and environmental capacity to accommodate the new development in a changing climate?	
	SA 10.5: Does the Plan promote development which would avoid water pollution due to contaminated runoff from development?	
	SA 10.6: Does the Plan support efficient use of water in new developments, including the recycling of water resources, promoting water stewardship and water sensitive design where appropriate?	
SA 11: Adaptation to climate change To adapt to climate change, including minimising flood risk.	SA 11.1: Does the Plan minimise inappropriate development in areas prone to flood risk and areas prone to increasing flood risk elsewhere, taking into account the impacts of climate change?	Water, Material Assets, Climatic Factors and Human Health
	SA11.2: Does the Plan promote the use of Natural Flood Management schemes, SuDS and flood resilient design?	
	SA11.3: Does the Plan promote design measures in new development and the public realm to respond to weather events arising from climate change, such as heatwaves and intense rainfall?	
	SA 11.4: Does the Plan provide, enhance and retrofit green infrastructure?	
SA 12: Climate change mitigation  To minimise Greater Cambridge's contribution to climate change	SA 12.1: Does the Plan promote energy efficient design?	Air, Human health, air and Climatic factors
	SA 12.2: Does the Plan encourage the provision of energy from renewable sources?	
	SA 12.3: Does the Plan promote the use of locally and sustainably sourced, and recycling of, materials in construction and renovation?	

SA Objective	Appraisal questions	Relevant SEA Topics
	SA 12.4: Does the Plan support access to public transport provision?	
	SA 12.5: Does the Plan create, maintain and enhance attractive and well-connected networks of public transport and active travel, including walking and cycling?	
	SA 12.6: Does the Plan support development which is in close proximity to city, district and rural centres, services and facilities, key employment areas and/or public transport nodes, thus reducing the need to travel by car?	
	SA12.7: Does the Plan address congestion hotspots in the road network?	
SA 13: Air quality To limit air pollution in Greater Cambridge and ensure lasting improvements in air quality.	SA 13.1: Does the Plan avoid, minimise and mitigate the effects of poor air quality?	Air and Human Health
	SA 13.2: Does the Plan promote more sustainable transport and reduce the need to travel?	
	SA 13.3: Does the Plan contain measures which will help to reduce congestion?	
	SA 13.4: Does the Plan minimise increases in traffic, particularly non- electric vehicles, in Air Quality Management Areas?	
	SA 13.5: Does the Plan facilitate the take up of low / zero emission vehicles?	
SA 14: Economy	SA 14.1: Does the Plan provide for an adequate supply of land and the	Population and Material Assets
To facilitate a sustainable and growing economy.	delivery of infrastructure to meet Greater Cambridge's economic and employment needs?	
	SA 14.2: Does the Plan support opportunities for the expansion and diversification of businesses?	
	SA 14.3: Does the Plan provide for start-up businesses and flexible working practices?	

SA Objective	Appraisal questions	Relevant SEA Topics
	SA 14.4: Does the Plan support the prosperity and diversification of Greater Cambridge's rural economy?	
	SA 14.5: Does the Plan support stronger links to the wider economy of the Oxford-Cambridge Arc?	
SA 14.6: Does the Plan support the growth of the knowledge, science, research and high tech sectors?		
SA 15: Employment  To deliver, maintain and enhance access to diverse employment opportunities, to meet both current and future needs in Greater Cambridge.	SA 15.1: Does the Plan provide for employment opportunities that are easily accessible, preferably via sustainable modes of transport?	Population and Material Assets
	SA 15.2: Does the Plan support equality of opportunity for young people and job seekers?	

## SA Stage B: Developing and refining options and assessing effects

- 2.7 Developing options for a plan is an iterative process, usually involving a number of consultations with the public and stakeholders. Consultation responses and the SA can help to identify where there may be other 'reasonable alternatives' to the options being considered for a plan.
- 2.8 Regulation 12 (2) of the SEA Regulations requires that:
  - "The (environmental or SA) report must identify, describe and evaluate the likely significant effects on the environment of—
  - (a) implementing the plan or programme; and
  - (b) reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme."
- 2.9 Any alternatives considered for the plan need to be 'reasonable'. This implies that alternatives that are not reasonable do not need to be subject to appraisal. Examples of unreasonable alternatives could include policy options that do not meet the objectives of the plan or national policy (e.g. the National Planning Policy Framework) or site options that are unavailable or undeliverable.
- 2.10 The SA findings are not the only factors taken into account when determining a preferred option to take forward in a plan. Indeed, there will often be an equal number of positive or negative effects identified for each option, such that it is not possible to 'rank' them based on sustainability performance in order to select a preferred option. Factors such as public opinion, deliverability and conformity with national policy will also be taken into account by plan-makers when selecting preferred options for their plan.
- 2.11 The big themes set out in the Issues and Options document, and considered in Chapter 3 of this document, were identified by drawing on views shared in a number of workshops held with community representatives and local organisations in summer 2019, the Councils' priorities set out in the Cambridge City and South Cambridgeshire District corporate plans, and by taking into account national and local planning priorities and requirements.
- 2.12 The spatial strategy options assessed in **Chapter 3** were identified by the Councils as reasonable options drawing upon the development strategy options considered for the Councils' current Local Plans, as well as considering spatial options identified in the recent Cambridgeshire & Peterborough Independent Economic Review and other approaches taken nationally. In the Issues and Options document the Councils recognise that it is likely that the best scenario will involve some growth in all of these locations but in different proportions depending upon the prioritisation of the themes in the plan.

## SA Stage C: Preparing the Sustainability Appraisal report

2.13 This SA Report describes the process that has been undertaken to date in carrying out the SA of the Greater Cambridge Local Plan. It sets out the findings of the appraisal of options set out in the Issues and Options document. As set out previously, the nature of this SA Report reflects the high-level nature of the Issues and Options document as an early stage in the development of the Local Plan.

Once more detailed options have been worked up, these will be subject to SA and the results of this will be published in future SA Reports.

SA Stage D: Consultation on the Greater Cambridge Local Plan and this SA Report

2.14 This document is subject to consultation alongside the Issues and Options document to which it relates and the SA Scoping Report. Comments received will be taken on board and addressed at the next stage of the SA process.

SA Stage E: Monitoring implementation of the Local Plan

2.15 At this early stage in the plan making process, the Councils are seeking views on what issues should be addressed through the Local Plan. Recommendations for monitoring the likely significant social, environmental and economic effects of implementing the Greater Cambridge Local Plan will be included in later stages of the SA, once the Local Plan has been drafted.

## Appraisal methodology

2.16 The findings of the SA are presented as colour coded symbols showing a score for each option against each of the SA objectives along with a concise justification for the score given, where appropriate. The use of colour coding and symbols allows for likely significant effects (both positive and negative) to be easily identified, as shown in Figure 2.2 below.

Figure 2.2: Key to symbols and colour coding used in the SA of the Greater Cambridge Local Plan

++	Significant positive effect likely
++/-	Mixed significant positive and minor negative effects likely
+	Minor positive effect
+/-	Mixed minor effects likely
-	Minor negative effect likely
/+	Mixed significant negative and minor positive effects likely
	Significant negative effect likely
0	Negligible effect likely
?	Likely effect uncertain

- 2.17 Due to the high level nature of options assessed at this stage, all potential effects identified are uncertain. Where this uncertainty is considered to be particularly significant, a question mark is added to the relevant score (e.g. +? or -?) and the score has been colour coded as per the potential positive, negligible or negative effect (e.g. green, blue, orange, etc.).
- 2.18 The likely effects of options and policies need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. The appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown above. The dividing line in making a decision about the significance of an effect is often quite small. Where either (++) or (--) has been used to distinguish significant effects from more minor effects (+ or -) this is because the effect of an option or policy on the SA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, scores are relative to the scale of proposals under consideration.

## Difficulties Encountered

- 2.19 It is a requirement of the SEA Regulations that consideration is given to any data limitations or other difficulties that are encountered during the SA process. The majority of the Issues and Options document sets out open-ended questions regarding what the Local Plan should include and allows respondents to rate how important they consider various issues to be, in relation to a number of themes. It is not possible to carry out full SA assessments of such questions, due to the lack of detail and defined options; therefore this document provides an overview of the sustainability considerations for the themes discussed.
- 2.20 The Issues and Options document sets out options for the spatial distribution of development (in the 'Towards a Spatial Plan' section), which allow for some more detailed appraisal. However, these are fairly broad options regarding the spatial distribution of development and do not relate to specific sites or quanta of development. As such, this document has sought to flag up where these options have potential to result in significant effects, but the actual effects will depend on the exact location, layout and design of developments. Once the Councils have identified more detailed site and policy options it will be possible to draw more certain conclusions about their likely sustainability effects.
- 2.21 Because many effects of development are dependent on the exact location, layout and design of development, it may be possible to mitigate some of the effects highlighted in this SA. However, given the inherent uncertainties about these details at this strategic stage of planning and assessment, the SA focuses on identifying potential significant effects of the options considered, whilst making no assumptions about detailed design or mitigation matters.
- 2.22 The SA of the options has been undertaken using available evidence. There may be gaps in this evidence base that, where possible, will be filled as information and data to inform the Local Plan preparation process continues. For example:
  - The need for further investment in infrastructure (e.g. transport, water), services and facilities are likely to be identified once options for development are firmed

- up, which may address some of the issues identified in the SA at this early stage of the process.
- There could be undiscovered archaeological features at any location within Greater Cambridge. For the purposes of this SA, we have focused on assessing the likely effects of development on known heritage assets, but further archaeological work may be necessary prior to any development in order to avoid loss of archaeological resources.
- The rate at which emissions from private vehicles will change over the course of the plan period as a result of technological improvements cannot be predicted or realistically factored into judgements about air quality.

## 3 Sustainability Appraisal Findings

- 3.1 This chapter presents the SA findings for the Issues and Options document. Commentary is given on the sustainability considerations for the 'big themes' set out in the document, with consideration of the questions asked in relation to these.
- 3.2 This chapter also sets out the assessment of the spatial distribution options set out in the 'Where to build?' section of the Issues and Options document.

## Commentary on 'big themes'

### Climate change

- 3.3 The Issues and Options document identifies the following issues under this theme:
  - Mitigating our climate impacts.
  - Adapting to climate change.
- 3.4 Reducing the Greater Cambridge area's contribution to climate change, through mitigating impacts on climate change, including promoting energy efficiency, renewable and low carbon energy generation and encouraging use of sustainable transport, directly addresses SA objective 12: climate change mitigation.
- 3.5 Reducing the need to travel by car and reducing carbon emissions from vehicles is a key way in which carbon emissions can be reduced. This is likely to have knock-on effects in terms of improving air quality, as transport is a key source of air pollutants, having positive effects for SA objective 13: air quality. This is likely to involve planning around sustainable transport links and encouraging walking and cycling, including through ensuring residents can access key services and facilities by walking, cycling or public transport. This will have positive effects for SA objectives 2: access to services and facilities and 4: health. Encouraging travel by sustainable transport could help foster community interaction and ensure less mobile groups, such as the elderly, can access the services and facilities they need. This could have positive implications for SA objective 3: social inclusion and equalities.
- 3.6 This theme also covers adapting to the effects of climate change, such as considering cooling buildings, using water resources efficiently and being prepared for increased flood risk and extreme weather events. These factors contribute positively to SA objectives 10: water and 11: adaptation to climate change. Whilst not mentioned explicitly against this theme, green infrastructure is also a key tool in adapting to climate change (e.g. by reducing the risk of flooding from run-off during extreme rainfall events; the cooling and shading effect of trees during heatwaves).

### Biodiversity and green spaces

- 3.7 The Issues and Options document identifies the following issues under this theme:
  - Improving the green space network.
  - Achieving biodiversity net gains on future development.

- Tree Cover.
- 3.8 Improving GI and delivering biodiversity net gain will directly contribute to SA objective 5: biodiversity and geodiversity. A key aspect of GI is that it is multifunctional and can deliver a number of benefits alongside biodiversity benefits. Provision of green space can also provide meeting places and encourage social interactions, benefitting SA objective 3: social inclusion and equalities. The benefits of GI include providing space and encouraging residents to be active, as well as improving mental health and wellbeing of residents, workers and visitors, which will result in positive effects for SA objective 4: health. GI is also a key tool in adapting to climate change, through providing habitat corridors, local cooling and helping to minimise flood risk, thus contributing to SA objective 11: adaptation to climate change. GI can encourage walking and cycling, therefore contributing to SA objectives 12: climate change mitigation and 13: air quality. GI has also been shown to encourage inward investment and attract visitors and a workforce to the area, and improve the health and productivity of the working population, resulting in positive effects against SA objective 14: economy.
- 3.9 The plan should consider how to protect and enhance blue space (i.e. waterbodies and water courses) as well as green space.

Wellbeing and social inclusion

- 3.10 The Issues and Options document identifies the following issues under this theme:
  - Involving communities in planning for their future.
  - Creating safe and inclusive communities.
  - · Encouraging healthy lifestyles.
  - Air quality.
- This theme directly addresses SA Objective 3: social inclusion and equalities and 3.11 SA objective 4: health, through considering physical health, inclusivity and community and reducing crime. This theme discusses the need to create a range of homes for all parts of the community, including affordable and specialist housing, which could positively affect SA1: housing. The issues also discuss the importance of inclusiveness, including in terms of being able to access local services and amenities, which could contribute positively to SA objective 2: access to services and facilities. The document suggests that air quality could be tackled by encouraging travel by sustainable modes of transport, including walking, cycling, public transport and electric vehicles, which would also encourage active lifestyles and reduce carbon emissions, leading to positive effects on SA objectives 4: health and 12: climate change mitigation. Access to a diverse range of jobs and training is discussed under this theme, which could support individuals and the economy as a whole, leading to positive effects on SA objectives 14: economy and 15: employment.

### Great places

- 3.12 The Issues and Options document identifies the following issues under this theme:
  - Protecting the best of what already exists.
  - Creating beautiful new buildings and places.

- 3.13 Addressing these issues will have positive effects for the environmental SA objectives, particularly in terms of conserving and enhancing the landscape, townscape, and historic environment, leading to positive effects on SA objectives 6: landscape and townscape and 7: historic environment. The document also recognises the need to promote biodiversity and adapt to climate change, leading to positive effects on 5: biodiversity and geodiversity and SA objective 11: adaptation to climate change.
- 3.14 Whilst not explicitly mentioned under this issue, efficient use of land could minimise development that would sterilise mineral resources, leading to positive effects on SA objective 9: minerals, as well as minimise the loss of best and most versatile agricultural land. Improving environmental quality through good design could also be linked to sustainable water management and encouraging walking and cycling, leading to positive effects on SA objective 4: health, SA objective 10: water, SA objective 12: climate change mitigation and SA objective 13: air quality.

#### Jobs

- 3.15 The Issues and Options document identifies the following issues under this theme:
  - Space for businesses to grow.
  - Protecting existing employment land
  - Creating a range of jobs.
  - Where jobs are created.
  - How our city, town and village centres evolve and adapt.
  - Managing the visitor economy.
- 3.16 This theme directly addresses SA objectives 14: economy and 15: employment. Supporting a range of business types and sizes, and therefore an associated range of employment opportunities, across a range of sectors, and supporting more flexible working, would have positive implications for SA objective 3: social inclusion. Flexible working could make it easier for less mobile people or those with other specialist requirements, such as those with disabilities, expectant mothers and parents, to access work. Supporting a range of businesses and employment opportunities could help to minimise in- and out-commuting, as residents may be more likely to find a suitable job in the local area. This could support SA objectives 12: climate change mitigation and 13: air quality, although this depends on the location of homes and jobs in relation to each other and sustainable transport links.
- 3.17 Supporting city, town and village centres would not only help to boost the economy but could help to ensure people can access services and facilities, therefore contributing towards SA objective 2: access to services and facilities. More flexibility may also allow people to meet more of their needs in these centres, therefore reducing the number of trips they need to make to fulfil such needs. This, and a focus on public realm, could also encourage more social interaction (SA objective 3: social inclusion). The Issues and Options document also discusses the possibility of providing more workspace in smaller centres, thereby reducing the need to travel, which would help to reduce emissions of greenhouse gases and air pollutants, contributing positively to SA objectives 12: climate change mitigation and 13: air quality. The location of new employment opportunities and their relationship to sustainable transport links will be an important consideration for SA objectives 12: climate change mitigation, and 13: air quality.

3.18 With regards to managing the visitor economy, the plan needs to balance the economic and employment benefits of tourism (SA objectives 14: economy, and 15: employment); whilst ensuring development of visitor facilities, such as hotels, does not harm the landscape, townscape and historic environment (SA objectives 6: landscape and townscape, and 7: historic environment) and that a sense of community can be retained (SA objective 3: social inclusion). It is also important to encourage sustainable tourism and try to manage emissions of greenhouse gases and air pollutants that may result from people travelling to the plan area for tourism (SA objectives 12: climate change mitigation, and 13: air quality). Many effects will depend on the location of employment land. In general, allocating higher levels of employment land is more likely to have negative effects on environmental objectives where this leads to increased travel and land take, but positive impacts on social and economic factors.

### Homes

- 3.19 The Issues and Options document identifies the following issues under this theme:
  - The need for new homes.
  - Affordable homes.
  - Diverse housing for diverse communities.
  - The needs of Gypsies and Travellers and caravan dwellers.
  - Housing quality.
- 3.20 This theme directly addresses SA objective 1: housing, including taking account of the range of housing types and tenures, including specialist housing, required. Delivering the right numbers of homes and in the right locations can support the economy both by housing the workforce and by boosting spending in the local area, as well as supporting the vibrancy and vitality of centres and neighbourhoods, therefore having positive implications for SA objective 14: economy. Providing homes in central, well-connected areas can also help to ensure residents can access key services and facilities, as well as encouraging access to these by waking and cycling. Co-ordinating economic and housing growth, including considering the needs of people who work from home, could result in people working more locally and reducing in- and out-commuting, leading to reductions in emissions of greenhouse gases and air pollutants. As such, positive effects would be expected for SA objectives 2: access to services and facilities, 4: health, 12: climate change mitigation and 13: air quality. However, this is dependent on the location of housing and employment in relation to each other and in relation to sustainable transport links.
- 3.21 Providing a diverse range of housing for all parts of the community would contribute positively to SA objective 3: social inclusion. Furthermore, provision of diverse, specialist housing and self-build plots could help to reduce inequalities by ensuring everyone has access to suitable housing, including the elderly, disabled and Gypsies and Travellers.
- 3.22 Ensuring that houses are safe and well designed, as well as promoting accessibility and adaptability is expected to contribute to both physical health and mental wellbeing in making sure people feel secure in their homes, leading to further positive effects on SA objective 4: health.

3.23 Many effects will depend on the location of new housing. In general, allocating higher levels of housing is more likely to have negative effects on environmental objectives, where this leads to increased travel and land take, but positive impacts on social and economic factors.

### Infrastructure

- 3.24 The Issues and Options document identifies the following issues under this theme:
  - Reducing the need to travel and delivering sustainable transport opportunities.
  - Securing new infrastructure to accompany new homes and jobs.
- 3.25 Ensuring sufficient infrastructure is provided to support growth could contribute positively towards SA objective 2: access to services. Providing sufficient transport infrastructure, community facilities and allowing people to connect via superfast broadband and mobile phone coverage could help to promote social inclusion and improve equalities, particularly for the less mobile, such as elderly and disabled people. This could have a positive effect on SA objective 3: social inclusion.
- 3.26 Promoting sustainable transport networks, including walking and cycling, could encourage people in the area to be more active and would also help to reduce emissions of greenhouse gases and air pollutants from transport, having positive effects on SA objective 4: health, 12: climate change mitigation and 13: air quality. In addition, improved communications infrastructure could enable more efficient and flexible working, including working from home, which could contribute to a reduction in traffic, as well as encouraging new businesses into the area, resulting in positive effects with regards to SA objectives 14: economy and 15: employment.
- 3.27 When planning for utilities infrastructure, the Local Plan should consider how to address additional demand for water resources and increased loads on waste water treatment capacity arising from growth. There is already considerable pressure on the water environment in the Greater Cambridge area, which is likely to become more acute as a result of climate change. Therefore, this will require working closely with utilities companies and the Environment Agency to ensure water resources are sustainably managed in an integrated way (SA objective 10: water).

## Spatial distribution options

- 3.28 The Issues and Options document presents the following spatial distribution options:
  - Option 1: Densification.
  - Option 2: Edge of Cambridge Outside the Green Belt.
  - Option 3: Edge of Cambridge Green Belt.
  - Option 4: Dispersal new settlements.
  - Option 5: Dispersal villages.
  - Option 6: Public transport corridors.
- 3.29 The Issues and Options document suggests that more than one of these options could be taken forward. However, as this is uncertain, each has been appraised on its own merits, against each SA objective.

- 3.30 The assessments below consider both the principle of focusing growth at each particular option and, where appropriate the implication of possible locations coming forward under that option. In order to be precautionary, any potential effects that could arise at particular locations where development could come forward under an option have influenced the overall likely effect recorded.
- 3.31 It should be noted that, for Option 2, the only large site on the edge of Cambridge not in the Green Belt is Cambridge Airport, which was identified as safeguarded land for longer term development in the 2018 Local Plans. The appraisal for Option 2 therefore provides a high level appraisal of this location in order to provide consistency as far as possible with the level of detail in the SA of the other options.
- 3.32 The SA does not, at this stage, identify or evaluate the potential effects of relocating Cambridge Airport. It is possible that that the current airport activity could be transferred to another operational airport elsewhere, possibly outside the Greater Cambridge area.

SA Objective 1: To ensure that everyone has the opportunity to live in a decent, well-designed, sustainably constructed and affordable home

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
++/-?	++/-?	++?	++?	++/-?	++?	

- 3.33 Option 1 would result in an increase in the density of development, particularly within Cambridge, where demand is high especially from young professionals. This could involve the development of taller buildings, as well as the development of underused land or possibly open space. However, this may result in a high proportion of flats and therefore may not provide as large a range of housing types. In isolation, this option may not be able to provide sufficient housing, due to the limited amount of space available within Cambridge; therefore for a mixed significant positive and minor negative effect is recognised but uncertain.
- 3.34 The remaining options would also result in an increase in housing provision but, with the exception of Option 2, would be less constrained than Option 1 by the amount of space available. Option 2 would involve development at Cambridge Airport, which would therefore be constrained to that site boundary. This single location may not be able to meet all of Greater Cambridge's housing need. Options 3 and 4 could result in a lower level of affordable housing provision due to the costs required to deliver upfront infrastructure. In addition, Option 4 proposes the development of new settlements, which are likely to have a long lead-in time. Option 5 may be less likely to deliver affordable housing because of the smaller scale of the schemes involved affecting viability, although this depends on the size of any developments coming forward under this option, as mid-sized schemes are often more able to provide affordable housing.
- 3.35 Overall, all options are likely to have an uncertain significant positive effect on this objective. However, the likely effect for Options 1, 2 and 5 are accompanied by a

ninor negative effect, because they may be less well placed to meet all of Greater cambridge's housing need on their own.	

SA Objective 2: To maintain and improve access to centres of services and facilities including health centres and education

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
++/-	++	++/-?	++/-?	+/	+/-	

- 3.36 Option 1 would result in an increase in the density of development, particularly within Cambridge. There are already a large number of services and facilities in Cambridge; therefore new development is more likely to be in close proximity to these. However, an increase in the density of the city could place increased strain and pressure on these services and facilities, as they may not have capacity to accommodate the additional growth, reducing people's overall accessibility to them. Option 1 is therefore expected to have a mixed significant positive and minor negative effect against this objective.
- 3.37 Option 2 is of sufficient scale to be able to provide a mixed development incorporating a good range of services and facilities. It also has good accessibility to the city and nearby suburbs (e.g. Cherry Hinton), where additional services and facilities are located. Therefore, Option 2 is expected to have a significant positive effect against this objective.
- 3.38 Option 3 would see the creation of new homes and jobs in extensions on the edge of Cambridge, which is likely to result in provision of new services and facilities, although the range of services and facilities provided at particular development locations will likely depend on the size of the extension. Smaller extensions may provide a more limited range of services and would benefit from existing services and facilities in the city, but, as with Option 1, could lead to existing facilities becoming over-capacity, or may not be well located to existing services and facilities. As such, Option 3 is expected to have a mixed significant positive and minor negative effect with uncertainty.
- 3.39 The creation of new settlements as set out in Option 4 provides an opportunity for significant new infrastructure to be delivered, such as schools, health facilities, local centres and green spaces, but it would be starting from scratch. The creation of new settlements would also likely require supporting transport infrastructure that connected it to Cambridge, which would require large-scale investment and time to implement. Phasing of the delivery of services and facilities would require significant up-front investment if they are to meet the needs of residents in the early years of development, which could lead to challenges in terms of deliverability. Overall, Option 4 is likely to have a significant positive and minor negative effect but with uncertainty.
- 3.40 Option 5 would result in an increase in development at villages across Greater Cambridge. This increase would support existing services and facilities at these villages, but could also place increased pressure on them, as they may not have capacity to accommodate the additional growth, reducing people's overall

- accessibility to them in the long-run. Indeed, villages are likely to have a more limited range of facilities than the city centre or new settlements. Therefore, Option 5 is expected to have a mixed minor positive and significant negative effect against this objective.
- 3.41 Option 6 would result in development along key public transport corridors. This development could have good access to services and facilities elsewhere, due to their proximity to public transport hubs. There is a risk that this option could lead to dispersed services and facilities along the public transport corridors, or services and facilities that are not within easy walking distance. Therefore, Option 6 is expected to have a mixed minor positive and minor negative effect against this objective.

SA Objective 3: To encourage social inclusion, strengthen community cohesion, and advance equality between those who share a protected characteristic (Equality Act 2010) and those who do not

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
+	++?	++/-?	++/-?	+/-	+/-	

- 3.42 Option 1 would result in an increase in the density of development in Cambridge, and therefore an increase in population. Residents would have good access to services and facilities, which would improve equalities by benefitting those with protected characteristics (Equality Act 2010), particularly those who are less mobile, such as the elderly or disabled, and could strengthen inclusivity and community cohesion. Therefore, Option 1 is expected to have a minor positive effect against this objective.
- 3.43 Option 2 is likely to be of sufficient scale to create a new cohesive community with its own identity, as well as deliver a range of homes, jobs, services and facilities to meet different needs. It is also well located to the existing urban area, and therefore creates opportunities to be integrated with, and also serve, existing communities, although there could be disruption whilst it is developed. It is therefore considered likely to have significant positive effects against this objective, albeit with uncertainty.
- 3.44 Options 3 and 4 could see the creation of new infrastructure, such as schools, local centres and green spaces, which could act as a focal point of community life. With regard to Option 3, the range of services and facilities provided at particular development locations will likely depend on the size of the extension. Although an urban extension can achieve its own sense of place, integration with the existing urban areas and communities will be important if negative effects on existing communities are to be avoided. With respect to new settlements under Option 4, it can take many years for their delivery and to achieve a scale and critical mass that generate a strong sense of community. They involve building new communities from scratch which can prove challenging and cohesiveness can depend upon both the quality and design of development, and its delivery to schedule. Overall, both

- options are likely to have a mixed significant positive effect with uncertain minor negative effects.
- 3.45 Option 5 would result in an increase in development at villages across Greater Cambridge, which could help support the vitality and viability of these villages and help to support community cohesion. However, more dispersed development could place increasing pressure on existing services and facilities within these villages if sufficient investment to maintain and improve them is not forthcoming. Therefore, Option 5 is likely to have a mixed minor positive and minor negative effect against this objective.
- 3.46 An increase in development along key public transport corridors with good access to Cambridge as set out in Option 6 may benefit those who are less mobile, with a positive effect on inclusivity. However, it may be more challenging for development along public transport corridors to achieve a coherent sense of community and place, depending upon where particular developments come forward under this option and their relationship to existing communities. Therefore, Option 6 is considered to have mixed minor positive and minor negative effects.

SA Objective 4: To improve public health, safety and wellbeing and reduce health inequalities

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
++/-	++?	++?	++?		+/-	

- 3.47 Option 1 would result in an increase in the density of development in Cambridge, and therefore an increase in population. As such, it is likely that a large number of people would be living within close proximity to their workplace, as well as a range of local amenities. This would encourage active travel through walking and cycling. It is also likely that a greater number of people would be located within close proximity to primary health care facilities but with an increase in population, it is possible that these services could be over-capacity and would therefore require further investment. Furthermore, large parts of Cambridge City Centre are an AQMA and therefore poor air quality could have an adverse effect on people's health. Focusing growth in the city may help minimise further deterioration in air quality by facilitating sustainable travel. If this option led to the loss of any open space to development or a lack of both private and public space more generally, it could affect people's mental well-being if not carefully designed. Therefore, Option 1 is expected to have a mixed significant positive and minor negative effect against this objective.
- 3.48 Because of its scale, Option 2 offers opportunity to incorporate a GP surgery, plus a range of open space, recreational and sporting facilities, and walking and cycling can be designed in from the outset of design. This option is expected to have a significant positive effect on this objective but with uncertainty.

- 3.49 Both Options 3 and 4 could see the creation of new on-site infrastructure, such as open space and a GP surgery, with positive effects on public health. However, with regard to Option 3, the range of services and facilities provided at particular development locations will likely depend on the size of the extension. In addition, larger developments have more scope to be designed in a way that encourages walking and cycling. However, new healthcare facilities may only be provided when the population reaches a certain size, which could in particular be a challenge for new settlements that are some distance from existing healthcare provision. Overall, both options are expected to have a significant positive effect on this objective but with uncertainty.
- 3.50 Option 5 would result in an increase in development at villages across Greater Cambridge, which would place increasing pressure on existing services, such as primary health care. Furthermore, villages are likely to have a more limited range of amenities. It is likely that residents would need to drive to most places meaning less active travel. A minor negative effect is therefore expected.
- 3.51 Option 6 would result in an increase in development along and around key public transport corridors and hubs. It's therefore likely that people would have good access to primary health care facilities, depending upon their location, but these may not be within walking and cycling distance and therefore would not encourage active travel. Depending on the scale of development, it may be more challenging to design in healthy behaviours, such as integrated open space and green infrastructure. Under this option, development would be in close proximity to public transport links, which could help to reduce emissions of air pollutants from private vehicles. Option 6 is expected to have a mixed minor positive and minor negative effect on this objective.

SA Objective 5: To conserve, enhance, restore and connect wildlife, habitats, species and/or sites of biodiversity or geological interest

Likely effect						
Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	
Densification	Edge of Cambridge – Outside Green Belt	Edge of Cambridge – Green Belt	Dispersal – new settlements	Dispersal – villages	Public transport corridors	
-?	+/-?	+/?	+/?	?	?	

- 3.52 Option 1 would result in an increase in the density of development in Cambridge, a large proportion of which would be located on brownfield land or redevelopment of existing built-up sites. Cambridge contains a large number of designated biodiversity sites, and whilst it is unlikely that development would be permitted on these sites, focusing development in the city could affect the network of green spaces important for wildlife, habitats and species, particularly if multiple sites come forward in proximity to areas of biodiversity value. In addition brownfield land can sometimes contain ecological interest. Therefore, Option 1 is expected to have a minor negative but uncertain effect against this objective.
- 3.53 Option 2 would result in development at the Cambridge Airport site, which comprises largely brownfield land, although much of this is in the form of open grass

- areas which can act as a habitat for protected species. The site itself does not contain any designated biodiversity habitats, but the western boundary of the airport abuts Barnwell East Local Nature Reserve, and the airport could be considered to form part of the wider ecological network. There are Biodiversity Opportunity Areas present around the edge of the site, which could be used as a way to enhance the ecological networks present in the area, whilst also providing an opportunity to design in green infrastructure. Option 2 is expected to have a mixed minor positive and minor negative but uncertain effect.
- 3.54 Option 3 would result in development around the edge of Cambridge. The edge of Cambridge contains a small number of Sites of Special Scientific Interest and Local Nature Reserves, as well as many Priority Habitats and Biodiversity Opportunity Areas. It is therefore possible that individual developments would take place at or within close proximity to these biodiversity assets. However, there may be opportunities to design in green infrastructure, incorporating ecological networks, particularly at larger extensions. Therefore, Option 3 is expected to have a mixed minor positive and significant negative but uncertain effect.
- The location of any new settlements that could come through Option 4 is uncertain. However, it is very likely that this option will lead to development on greenfield land. Greater Cambridge contains a large number of designated and non-designated habitats and it is therefore possible that a new settlement could take place at or within close proximity to these biodiversity assets. However, greenfield sites are not always of particular ecological value, and the more sensitive ecological locations could be avoided. However, designing a new settlement from scratch means that and green infrastructure incorporating ecological networks can be designed into the development. Therefore, Option 4 is expected to have a mixed significant negative and minor positive effect but with uncertainty.
- 3.56 Option 5 would result in an increase in development at villages across Greater Cambridge, whilst Option 6 focuses development along key public transport corridors and hubs. As the villages and transport corridors across Greater Cambridge contain or are located within close proximity to designated and non-designated biodiversity assets, and contain greenfield land, particular developments coming forward under this option could lead to loss of biodiversity. It may also be more challenging to deliver integrated ecological networks as part of individual development proposals. Options 5 and 6 are expected to have a significant negative but uncertain effect.

SA Objective 6: To conserve and enhance the character and distinctiveness of Greater Cambridge's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
+/-?	+/-?	?	+/?	?	?	

- 3.57 Option 1 would result in an increase in the density of development in Cambridge, which could have an adverse effect on the townscape. However, it is highly unlikely that development would take place on landscape features present within the city (e.g. valued parks and green spaces). Option 1 could involve the development of taller buildings within Cambridge, which could be out of character with the historic core of the city and affect views and vistas within the urban area, although it is recognised that not all individual developments within Cambridge would necessarily have a negative impact. For example, renewal of some locations, away from the city centre itself, may lead to townscape improvements. Focusing development within Cambridge could protect sensitive landscapes located on its outskirts. A mixed minor positive and minor negative but uncertain effect is expected against this objective. However, the effect is recorded as uncertain because the actual effect will depend on the final location, design, scale and layout of development.
- 3.58 Although Option 2 would result in significant amount of development on the edge of Cambridge on a site that is predominantly open. It includes airport buildings and structures, some of which are quite prominent. Although the airport and its associated buildings have formed part of the character and distinctiveness of this location for many years, they do not reflect the wider character of Cambridge. It also currently has aircraft movements. Overall, development on an open site could have minor negative effects, but conversely a well designed development replacing airport related uses could have a minor positive effect.
- 3.59 Option 3 would result in development around the edge of Cambridge, which could have an adverse effect on views into and out of the city. Whilst such development would extend an already established urban area rather than introducing new urban development into a predominantly rural location, urban extensions could have significant impacts on the setting of Cambridge, therefore a significant negative effect is expected. However, this effect is recorded as uncertain because the actual effect will depend on the final location, design, scale and layout of the proposed development.
- 3.60 The location of any new settlements that could come forward through Option 4 is uncertain. However, a new settlement has the potential to have a major impact on the landscape due to its size, wherever it is located as it would be introducing urban development into a predominantly rural location. As any new settlement would be located outside of Cambridge, this could help to protect the setting of Cambridge by directing development away from its edge, and the effect on the location will depend upon how sensitively the new settlement is designed. Option 4 is expected to have a mixed significant negative and minor positive effect with uncertainty on this objective.
- 3.61 Option 5 would result in an increase in development at villages across Greater Cambridge. The expansion of these villages could therefore have an adverse effect on the open countryside and landscape surrounding these villages, as well as village character, particularly in a large amount of dispersed development is required. A significant negative but uncertain effect is expected because the actual effect will depend on the final design, scale and layout of the proposed development.
- 3.62 Option 6 focuses development along key public transport corridors and hubs through the expansion or intensification of existing settlements, or through more new settlements. This could also have an adverse effect on the landscape surrounding these areas. If this option led to a string of development along key

public transport corridors, which was not done in a sensitive way, it could significantly extend a sense of urbanisation into the more rural parts of Greater Cambridge as these routes are the ones that people would travel through most often. A significant negative but uncertain effect is expected because the actual effect will depend on the final location, design, scale and layout of the proposed development.

SA Objective 7: To conserve and/or enhance the qualities, fabric, setting and accessibility of Greater Cambridge's historic environment

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
?	-?	?	?	?	-?	

- 3.63 Option 1 would result in an increase in the density of development in Cambridge, which could have an adverse effect on the historic environment. Cambridge contains a high number of listed buildings, as well as a number of scheduled monuments and registered parks and gardens, particularly associated with the University. Much of the city is designated as a conservation area. Therefore, Option 1 as a focus for development is expected to have a significant negative effect, although this is uncertain as it depends on the individual site. The effect is recorded as uncertain because the actual effect will depend on the final location, design, scale and layout of the proposed development.
- 3.64 Under Option 2, although the airport control tower is grade II listed, there are no other designated historic assets within the boundaries of Cambridge Airport. There are some listed buildings in nearby villages that could potentially be affected in terms of their setting, and therefore an uncertain minor negative effect is recorded.
- 3.65 Option 3 would result in development around the edge of Cambridge, which could have an adverse effect on the setting of the historic city of Cambridge. Many of Cambridge's designated historic assets are located within the city centre, although development on the edge of the city could affect views in and out of the city and would also be likely to affect the setting of the historic city. Overall, a significant negative effect is expected. The effect is recorded as uncertain because the actual effect will depend on the location of development, as well as its final design, scale and layout.
- 3.66 The location of any new settlements that could come through Option 4 is uncertain. However, there are a number of listed buildings, scheduled monuments, registered parks and gardens and conservation areas across Greater Cambridge. Due to the large number of heritage assets across Greater Cambridge, it is likely that a new settlement may be developed within an area that contains or is located within close proximity to various historic assets, which are currently in predominantly more rural locations with more extensive settings. Therefore, Option 4 is expected to have a significant negative effect. The effect is recorded as uncertain because the actual

- effect will depend on the location of development, as well as its final design, scale and layout, which may provide opportunities to avoid significant impacts.
- 3.67 Option 5 would result in an increase in development at villages across Greater Cambridge, many of which are conservation areas, contain listed buildings or are located within close proximity to listed buildings, scheduled monuments and registered parks and gardens. Option 5 is therefore expected to have a significant negative effect. The effect is recorded as uncertain because the actual effect will depend on which villages development is located, as well as the final design, scale and layout of development.
- 3.68 Option 6 focuses development along key public transport corridors and hubs through the expansion or intensification of existing settlements, or through more new settlements. Due to the fact there are a number of listed buildings, scheduled monuments and registered parks and gardens across Greater Cambridge, it is possible that development could be located within close proximity to one or more such assets, although these may already be affected by existing public transport infrastructure and development. Option 6 is therefore expected to have a minor negative effect. The effect is recorded as uncertain because the actual effect will depend on the location of development, as well as its final design, scale and layout.

SA Objective 8: To make efficient use of Greater Cambridge's land resources through the re-use of previously developed land and conserve its soils

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
++	++	-?	-?	-?	-?	

- 3.69 Option 1 would result in an increase in the density of development in Cambridge, almost all of which would be located on brownfield land or the redevelopment of existing urban uses. Therefore, Option 1 is expected to have a significant positive effect against this objective.
- 3.70 Option 2 would be primarily on previously developed land of Cambridge Airport, and therefore would not have impact upon agricultural land. Therefore, Option 2 is also expected to have a significant positive effect against this objective.
- 3.71 Options 3, 4, 5 and 6 would be likely to result in substantial development of greenfield land. Lastly, a large part of South Cambridgeshire consists of Grades 1, 2 and 3 agricultural land; therefore Options 3, 4, 5 and 6 are likely to lead to at least some loss of this.
- 3.72 Overall, Options 3, 4, 5 and 6 are expected to have a minor negative but uncertain effect.

SA Objective 9: To conserve mineral resources in Greater Cambridge

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
-?	0	-?	-?	-?	-?	

- 3.73 Cambridge contains a small number of Minerals Safeguarding Areas, outside of the city centre. It's therefore possible that particular developments coming forward under Option 1 could take place within these Minerals Safeguarding Areas. No Minerals Consultation Areas are located within Cambridge. Therefore, Option 1 is expected to have a minor negative, but uncertain, effect.
- 3.74 The Cambridge Airport site is not within a Minerals Safeguarding Area. Therefore, Option 2 is expected to have a negligible effect on this objective.
- 3.75 There are a small number of Minerals Safeguarding Areas and Minerals Consultation Areas around Cambridge. It is therefore possible that particular development locations coming forward through Option 3 could take place within these Minerals Safeguarding Areas and Minerals Consultation Areas. Option 3 is therefore expected to have a minor negative but uncertain effect.
- 3.76 A small number of Minerals Safeguarding Areas and Minerals Consultation Areas are located outside of Cambridge. Due to the large proportion of the plan area that is not designated as a Minerals Safeguarding Area or Minerals Consultation Area, it is possible that a new settlement could avoid any effects on these, although this depends on the location of any particular developments that come forward. Therefore, a minor negative but uncertain effect is expected for this objective.
- 3.77 Option 5 proposes an increase in development at villages across Greater Cambridge. There are also some Minerals Safeguarding Areas and Minerals Consultation Areas located across the area, which could be affected by development under this option, although this depends on the location of any particular developments that come forward. Option 5 is expected to have a minor negative but uncertain effect.
- 3.78 Option 6 proposes development along or around key public transport corridors and hubs through the expansion or intensification of existing settlements, or through more new settlements. There are a small number of Minerals Safeguarding Areas and Minerals Consultation Areas located along existing and proposed key transport corridors), which could be affected by development under this option, although this depends on the location of any particular developments that come forward; a minor negative but uncertain effect is likely.

SA Objective 10: To achieve sustainable water resource management and promote the quality of Greater Cambridge's waters

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
0?	0	-?	-?	-?	-?	

- 3.79 At this stage of the SA process, and given the high level of the options, it is not possible to distinguish between the options with respect to water resources and waste water treatment capacity. Water resources is a key issue in Greater Cambridge, given that it is in the drier Eastern part of the country and that climate change may lead to even more limited water availability in the future, particularly in summer. Low rainfall and over-abstraction have caused problems of low flows in the River Cam and its tributaries, which are important chalk river habitats. The Council will need to ensure that there are sufficient water resources to serve development proposed in the plan, without negatively impacting the environment. In addition, there is a close relationship between water resources and water quality. If there is less dilution in the watercourses, wastewater may need treating to a higher standard. The Council is commissioning evidence with regards to water resource management to ensure this is considered when preparing the plan. This will be taken into consideration in future stages of the SA, when available.
- 3.80 Until the additional evidence is available, the SA is only able to focus on the potential effects on Source Protection Zones at this stage of the SA process. Cambridge contains two Source Protection Zones (SPZs 1 and 2) by The Leys School. However, since built development is already present at these SPZs; it's unlikely that any development coming forward under Option 1 would take place here. Option 1 is expected to have a negligible but uncertain effect against this objective.
- 3.81 The Cambridge Airport site does not contain an SPZ. Therefore, Option 2 is expected to have a negligible effect on this objective.
- 3.82 Although there are many areas around the edge of the city that do not fall within an SPZ, there are some SPZs located on the edge of Cambridge, particularly to the south east, which could be affected if development comes forward in this area. Therefore, Option 3 is expected to have a minor negative, but uncertain, effect against this objective.
- 3.83 The location of any new settlement that could come through under Option 4 is uncertain. However, there are several SPZs located across Greater Cambridge, especially in the south east. It's therefore possible that, depending on where any new settlement is located, it could fall within an SPZ. Option 4 is expected to have a minor negative but uncertain effect against this objective.
- 3.84 Option 5 proposes an increase in development at villages across Greater Cambridge. However, it is unknown which villages will receive this additional development. Due to the fact there are several SPZs located across Greater

- Cambridge, it's possible that developments coming forward under Option 5 could fall within one. Option 5 is expected to have a minor negative but uncertain effect against this objective.
- 3.85 Option 6 proposes development along key public transport corridors and hubs through the expansion or intensification of existing settlements, or through more new settlements. Due to the fact there are number of SPZs located across Greater Cambridge, it's possible that developments coming forward under Option 6 could fall within one. Option 6 is expected to have a minor negative but uncertain effect against this objective.

SA Objective 11: To adapt to climate change, including minimising flood risk

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
-?	-?	-?	-?	-?	-?	

- 3.86 Cambridge contains several areas that fall within Flood Zones 2 and 3. This is due to the fact the River Cam runs through the city. Therefore, development in Cambridge could fall within Flood Zones 2 or 3, which are at a higher risk of flooding, although Cambridge has high levels of surface water flood risk. Furthermore, an increase in housing development in Cambridge could reduce the amount of permeable surfaces available to absorb rainwater, if it leads to an increase in impermeable surfaces, therefore contributing towards flood risk. It should be noted that the NPPF discourages the development of housing within areas at the highest risk of flooding. Therefore overall, Option 1 is expected to have a minor negative uncertain effect for this objective.
- 3.87 The Cambridge Airport site does not fall within Flood Zones 2 or 3. However, development of an area that contains significant amount of grassland would result in an increase in impermeable surfaces. Therefore, Option 2 is expected to have a minor negative but uncertain effect against this objective.
- 3.88 The edge of Cambridge does not contain many areas that fall within Flood Zones 2 or 3, although there are areas identified as being at risk of surface water flooding. However, there is still a possibility that the development proposed by Option 3 could fall within Flood Zones 2 and 3. Option 3 is expected to have a minor negative, but uncertain, effect against this objective.
- 3.89 The location of any new settlements coming forward through Option 4 is uncertain. It is therefore possible that it could fall within an area of high flood risk. As with Option 3, a minor negative but uncertain effect is expected against this objective.
- 3.90 Option 5 proposes an increase in development at villages across Greater Cambridge, whilst Option 6 focuses development along key public transport corridors and hubs. It is therefore possible that developments coming forward under these two options could fall within an area of high flood risk. Options 5 and 6 are expected to a minor negative but uncertain effect against this objective.

3.91 All effects are recorded as uncertain, as development may be able to incorporate surface water management measures, such as sustainable drainage systems (SuDS), to address existing flood risk as well as that generated by development. The Councils are commissioning a Strategic Flood Risk Assessment for Greater Cambridge which will form part of the Integrated Water Management Study. This will provide the most up to date flood zones which also take into account climate change. It will be used in the plan making process in order to allocate sites in the areas least likely to flood and will inform future stages of the SA.

SA Objective 12: To minimise Greater Cambridge's contribution to climate change

Likely effect							
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors		
++	++/-?	++/-?	+/-		++/-?		

- 3.92 Option 1 would result in an increase in the density of development within Cambridge, and therefore an increase in population. As such, it's likely that a large number of people would be living within close proximity to their workplace, as a high proportion of people living in Cambridge also work there<sup>5</sup>, as well as a range of local amenities. This would encourage walking and cycling, whilst also reducing everyday reliance on the private car. This would reduce the amount of CO<sub>2</sub> emissions from transport, therefore reducing the area's overall contribution to climate change. Therefore, Option 1 is expected to have a significant positive effect.
- 3.93 Option 2 is of sufficient scale to deliver a range of homes, jobs, services and facilities, which could reduce the need for people to travel elsewhere to find these amenities. Furthermore, the Cambridge Airport site has access to existing sustainable transport links into the city, and is also within cycling distance of the city centre. It is notable that commuting patterns for edge of Cambridge locations tend to be focused on destinations within the city and have relatively high proportions travelling by more sustainable modes of transport, although it is likely that an edge of city location would still generate car use. Therefore, Option 2 is expected to have a significant positive effect and minor negative effect with uncertainty on this SA objective.
- 3.94 Option 3 could see the creation of new on-site infrastructure, such as schools and local centres, which could reduce the need for people to travel elsewhere to find these amenities. However, the range of services and facilities provided at particular development locations will likely depend on the size of the extension. Larger urban extensions would likely provide a greater range of new services and could have greater potential to incorporate low-carbon and energy efficient design, such as district heating networks. Smaller extensions are less likely to have these benefits. Edge of Cambridge locations are likely to have access to existing sustainable transport links into the city, or be within cycling distance, although the need to travel could be reduced if extensions provide services and employment opportunities. Commuting patterns for edge of Cambridge locations tend to be focused on destinations within the city and have relatively high proportions travelling by more sustainable modes of transport. However, development at edge of city locations is still likely to generate car use. Therefore, Option 3 is expected to have a mixed significant positive and minor negative effect with uncertainty on this SA objective.
- 3.95 Option 4 could also see the creation of new on-site infrastructure, such as schools and local centres, which could reduce the need for people to travel elsewhere to find

.

UCL, DataShine Commute, 2011: DataShine Commute, UCL, 2011: https://commute.datashine.org.uk/#mode=allflows&direction=from&msoa=E02003727&zoom=13&lon=0.0934&lat=52.2001

these amenities, depending upon the size of development – new settlements would have to be large scale to incorporate a full range. Larger new settlements could have greater potential to incorporate low-carbon and energy efficient design, such as district heating networks. A number of people from Greater Cambridge and beyond commute into Cambridge for work. The extent of employment provision in new settlements under Option 4 is unknown, which may lead to longer journeys to work. It is notable that Cambourne, for example, has a more dispersed pattern of commuting that is also more car dependent than locations on the edge of Cambridge. Cycling to Cambridge may be less attractive, increasing reliance on the private car, however public transport choices may be made available. It is also noted that South Cambridgeshire, where any new settlements would be located, has high rates of cycling for a rural district, including for long-distance commuting. Whilst there is potential for policy to require provision of public transport links to be provided up front as a prerequisite to new development, the nature and quality of these links (i.e. whether they align with commuting patterns and are regular/fast enough to be an attractive option) will be key in determining their level of use. Overall, Option 4 is expected to have a mixed minor positive and minor negative effect against this objective.

- 3.96 Option 5 would result in an increase in development at villages across Greater Cambridge. However, due to the fact there is likely to be a more limited number and range of services and facilities available in these villages, it is likely that people would need to travel to get elsewhere and many of these journeys are likely to be by car. Furthermore, a large proportion of people living in these villages commute by car to Cambridge or elsewhere for work. This has the potential to increase CO<sub>2</sub> emissions through use of the private car. Therefore, Option 5 is expected to have a significant negative effect against this objective.
- 3.97 Option 6 would result in an increase in development along and around public transport corridors and hubs. As such, people would have good access to a number of services and facilities via public transport, which is associated with lower CO<sub>2</sub> emissions, when compared to car travel. However, development outside the city centre is still likely to generate car use. Therefore, Option 6 is expected to have a mixed significant positive and minor negative effect with uncertainty.

SA Objective 13: To limit air pollution in Greater Cambridge and ensure lasting improvements in air quality

Likely effect							
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors		
++	++/-?	++/-?	+/-		++/-?		

3.98 Option 1 would result in an increase in the density of development within Cambridge, and therefore an increase in population. As such, it's likely that a large number of people would be living within close proximity to their workplace, as well as a range of local amenities. This would encourage walking and cycling, whilst also

- reducing everyday reliance on the private car. This would reduce the amount of air pollution generated from private vehicles, therefore reducing the area's overall contribution to climate change. Option 1 is therefore expected to have a significant positive effect.
- 3.99 Option 2 is of sufficient scale to deliver a range of homes, jobs, services and facilities, which could reduce the need for people to travel elsewhere to find these amenities. The Cambridge Airport site has access to existing sustainable transport links into the city, and is also within cycling distance of the city centre. It is notable that commuting patterns for edge of Cambridge locations tend to be focused on destinations within the city and have relatively high proportions travelling by more sustainable modes of transport, although it is likely that an edge of city location would still generate car use, which could contribute to pollution within the AQMA. Therefore, Option 2 is expected to have a significant positive effect and minor negative effect with uncertainty on this SA objective.
- 3.100 Option 3 could see the creation of new on-site infrastructure, such as schools and local centres, which could reduce the need for people to travel elsewhere to find these amenities. However, the range of services and facilities provided at particular development locations will likely depend on the size of the extension. Edge of Cambridge locations are likely to have access to existing sustainable transport links into the city, or be within cycling distance. It is notable that commuting patterns for edge of Cambridge locations tend to be focused on destinations within the city and have relatively high proportions travelling by more sustainable modes of transport. However, development at edge of city locations is still likely to generate car use. In addition, people may still travel by car within Cambridge contributing pollution within the AQMA. As such, commuting into Cambridge has the potential to increase air pollution. Therefore, Option 3 is expected to have a mixed significant positive and minor negative effect with uncertainty on this SA objective.
- 3.101 Option 4 could also see the creation of new on-site infrastructure, such as schools and local centres, which could reduce the need for people to travel elsewhere to find these amenities, depending upon the size of development – new settlements would have to be large scale to incorporate a full range. The extent of employment provision in new settlements under Option 4 is unknown, and, at least in the earlier years of the development, there are unlikely to be good, established public transport links into Cambridge, and cycling to Cambridge may be less attractive, increasing reliance on the private car. However, it is noted that South Cambridgeshire, where any new settlements would be located, has high rates of cycling for a rural district, including for long-distance commuting. It is notable that Cambourne, for example, has a more dispersed pattern of commuting that is also more car dependent than locations on the edge of Cambridge. As a result, there could be fewer journeys into Cambridge where an AQMA is located, than development in and around Cambridge. Alternatively, depending on the location of developments coming forward under this option, there could be an increase in traffic on the A14, part of which is designated as an AQMA. Whilst there is potential for policy to require provision of public transport links to be provided up front as a prerequisite to new development, the nature and quality of these links (i.e. whether they align with commuting patterns and are regular/fast enough to be an attractive option) will be key in determining their level of use. It is noted that the Cambourne to Cambridge public transport scheme is in the planning phase and there are proposals for improved public transport corridors elsewhere connecting into Cambridge, which

- could connect into new settlements. Overall, Option 4 is expected to have a mixed minor positive and minor negative effect against this objective.
- 3.102 Option 5 would result in an increase in the spread of development at villages across Greater Cambridge. However, due to the fact there are only a small number of services and facilities available in these villages, it is likely that people would need to travel via private car to get elsewhere. This has the potential to increase air pollution, for example if travelling into Cambridge or along the A14, where AQMAs are located. Therefore, Option 5 is expected to have a minor negative effect against this objective.
- 3.103 Option 6 would result in an increase in development along and around public transport corridors hubs. As such, people would have good access to a number of services and facilities via more sustainable modes of transport, which would help reduce their contribution towards air pollution through use of the private car. It is noted that the Cambourne to Cambridge public transport scheme is in the planning phase and there are proposals for improved public transport corridors elsewhere connecting into Cambridge. However, development outside of the city is likely to generate car use. Therefore, Option 6 is expected to have a mixed significant positive and minor negative effect with uncertainty.

SA Objective 14: To facilitate a sustainable and growing economy

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors	
+/?	++/-?	++/-?	+/-?	+/?	++/-?	

- 3.104 Option 1 seeks to focus new homes and jobs within Cambridge. Concentrating homes and jobs in Cambridge could help boost the economy through increasing its workforce and attracting investment. For example, living in a central, well-connected and vibrant area is likely to bring young professionals into the area. However, there is limited land availability within the city itself, and the constraints deriving from the city's sensitive environment suggests that its full economic potential may not be met. Similarly, this approach will do little to support the local economies outside of the city in the wider Greater Cambridge area. Therefore, it will have a mixed minor positive and significant negative effect on the local economy with uncertainty.
- 3.105 Option 2 is likely to result in a mixed development incorporating employment uses as well as homes. Its location relatively close to the city centre and the universities would be of economic benefit. However, it would result in the loss of existing employment on the site, as well as the airport itself. Therefore, this option is considered to have a mixed significant positive and minor negative effect on the local economy with uncertainty.
- 3.106 Option 3 seeks to create new homes and jobs on the edge of Cambridge. Concentrating homes and jobs in close proximity to Cambridge could help boost the economy through increasing its workforce and attracting investment. It would offer

both perceived and actual benefits of being close to the University and other foci of economic activity, and would provide for greater space to attract larger employers and clusters of businesses. However, in isolation, it would not provide for economic needs within the Greater Cambridge beyond the city itself and would further concentrate economic activity in one location. Therefore, this option is considered to have a mixed significant positive and minor negative effect on the local economy with uncertainty.

- 3.107 Option 4 would provide an opportunity for significant new infrastructure to be delivered, which has the potential to generate new jobs. However, the greater the distance from the main centre of economic activity, being the city of Cambridge, the longer the lead-in times to deliver homes and a critical mass in terms of community, the less attractive it may be to potential investors. Therefore, a mixed minor positive and minor negative but uncertain effect is expected for this objective.
- 3.108 Option 5 seeks to spread new homes and jobs out to the villages, which would contribute positively towards the local economy, by supporting local businesses. However, it is unlikely that development would provide many new, long-term jobs in the villages, as particular developments coming forward under this option are likely to be of a smaller scale. Although this option has the potential to support the prosperity and diversification of Greater Cambridge's rural economy, it is unlikely to be able to provide the scale of economic development required at the Greater Cambridge level. It would also be less attractive to businesses wishing to expand or locate within or close to Cambridge itself. Option 5 is expected to have a mixed minor positive and significant negative but uncertain effect.
- 3.109 Option 6 seeks to focus new homes and jobs along and around key public transport corridors and hubs, which would be likely to make access to employment easier for larger numbers of people and support growth in the Oxford-Cambridge Arc. It could also prove attractive to potential investors, but could also require investment to upgrade existing transport corridors to address any capacity issues. Therefore, Option 6 is expected to have a mixed significant positive and minor negative but uncertain effect.

SA Objective 15: To deliver, maintain and enhance access to diverse employment opportunities, to meet both current and future needs in Greater Cambridge

Likely effect						
Option 1 Densification	Option 2  Edge of Cambridge  Outside Green Belt	Option 3  Edge of Cambridge  - Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal villages	Option 6 Public transport corridors	
++/-	++/-	++/-	+/-?	+/?	++/-	

- 3.110 This SA objective relates specifically to access to employment opportunities.
- 3.111 Option 1 seeks to focus new homes and jobs within Cambridge; therefore it is likely that new development would be closer to employment opportunities in Cambridge allowing for increased access to a range of employment opportunities. Option 1 is expected to have a significant positive effect on this objective. However, opportunities to deliver employment development may be restricted and it would do

- little to meet the needs of the wider Greater Cambridge area. In particular, those living in more rural areas may struggle to find work locally and may therefore need to commute into Cambridge or elsewhere for work, which results in a minor negative effect also being recorded.
- 3.112 Options 2 and 3 seek to create new homes and jobs on the edge of Cambridge, therefore, residents would be likely to be able to easily access the employment opportunities within Cambridge city, although, as with Option 1, this option would not meet the wider employment needs of Greater Cambridge. In particular, those living in more rural areas may struggle to find work locally and may therefore need to commute into Cambridge or elsewhere for work. Options 2 and 3 are expected to have a mixed significant positive and minor negative effect on this objective.
- 3.113 Option 4 would provide an opportunity for significant new infrastructure to be delivered, which has the potential to generate new jobs, particularly for those living in the new settlement itself. However, the extent of employment uses that would be delivered as part of this option is uncertain. If employment in new settlements is limited, residents could be some distance from the main economic hub of Cambridge. Therefore, a mixed minor positive and minor negative but uncertain effect is expected for this objective.
- 3.114 Option 5 seeks to locate new homes and jobs in the villages. However, compared to Options 1 and 3, it is unlikely that as many new, long-term jobs would be delivered in the villages and access to employment hubs may be more difficult for residents. Large scale employment development would in many instances be inappropriate in village locations and difficult to access by sustainable transport modes. However, it could help to provide a greater range of employment in rural villages. Option 5 is expected to have a mixed significant negative and minor positive but uncertain effect.
- 3.115 Option 6 seeks to focus new homes and jobs along and around key public transport corridors and hubs, which would make access to employment easier for larger numbers of people. This would have a positive effect on access to employment for these corridors, but may encourage commuting into Cambridge, without meeting the employment needs of wider Greater Cambridge. Option 6 is expected to have a mixed significant positive and minor negative effect.

### Summary of SA scores

- 3.116 **Table 3.1** summarises how each of the spatial distribution options compare to each other against each SA objective.
- 3.117 The summary table suggests that Option 1 and Option 2 perform comparatively well against most of the SA objectives. Option 5 is likely to be the least sustainable option, as it consistently scores poorly against a number of SA objectives compared with the alternatives.
- 3.118 Option 3 generally performs better than Options 4 and 6. It performs better than Option 4 for the SA objectives relating to climate change mitigation, air quality, economy and employment, and only performs worse against SA objective 6: landscape and townscape. It performs better than Option 6 for the SA objectives relating to access to services, social inclusion, health and biodiversity and only performs worse against SA objective 7: landscape and townscape. Although the scores against individual SA objectives differ, Options 4 and 6 overall perform fairly similarly.

3.119	9 In practice, the actual effects are heavily dependent up scale of development, the quality of design and the de- infrastructure. Therefore, these high level results need considerable degree of caution.	ivery of supporting

Table 3.1: Summary SA scores for spatial distribution options

SA Objective	Option 1 Densification	Option 2 Edge of Cambridge – Outside Green Belt	Option 3 Edge of Cambridge – Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors
SA 1: Housing	++/-?	++/-?	++?	++?	++/-?	++?
SA 2: Access to services	++/-	++	++/-?	++/-?	+/	+/-
SA 3: Social inclusion	+	++?	++/-?	++/-?	+/-	+/-
SA 4: Health	++/-	++?	++?	++?	-	+/-
SA 5: Biodiversity and geodiversity	-?	+/-?	+/?	+/?	?	?
SA 6: Landscape and townscape	+/-?	+/-?	?	+/?	?	?
SA 7: Historic environment	?	-?	?	?	?	-?
SA 8: Land	++	++	-?	-?	-?	-?
SA 9: Minerals	-?	0	-?	-?	-?	-?
SA 10: Water	0?	0	-?	-?	-?	-?

SA Objective	Option 1 Densification	Option 2 Edge of Cambridge – Outside Green Belt	Option 3 Edge of Cambridge – Green Belt	Option 4 Dispersal – new settlements	Option 5 Dispersal – villages	Option 6 Public transport corridors
SA 11: Climate change adaptation	-?	++/-?	-?	-?	-?	-?
SA 12: Climate change mitigation	++	++/-?	++/-?	+/-		++/-?
SA 13: Air quality	++	++/-?	++/-?	+/-	-	++/-?
SA 14: Economy	+/?	++/-?	++/-?	+/-?	+/?	++/-?
SA 15: Employment	++/-	++/-	++/-	+/-?	+/?	++/-

### 4 Conclusions

- 4.1 This document has considered the sustainability implications of the information and options presented in the Issues and Options document for the Greater Cambridge Local Plan.
- 4.2 The themes set out in the Issues and Options document discuss a number of ideas that would have positive effects regarding sustainability. However, whether such effects come forward and the significance of these effects depend on the exact policies that come forward in the Local Plan.
- 4.3 The spatial distribution options have been assessed at a high level against each SA objective. However, many of the potential effects identified are dependent on the exact location, layout and design of development.
- 4.4 Option 1 performs well compared to most of the other options, as development would be able to take advantage of the existing infrastructure in the city and would facilitate travel by sustainable modes of transport. However, it is unlikely that this option would be able to meet all of Greater Cambridge's development needs and could still lead to likely significant negative effects, particularly with regards to the historic environment of Cambridge. It would also restrict meeting the economic potential of the Greater Cambridge, particularly if it were unable to meet identified growth needs, and would bring limited opportunities for provision of new infrastructure, and therefore may result in capacity issues at existing services and facilities.
- 4.5 Option 2 is considered to perform very well, because it is a brownfield site, and it is relatively well located to the jobs, services and amenities of the city compared to most of the other options. It is of a scale that would allow for a good range of homes, employment, services and facilities to be delivered to create a cohesive community. It is also not particularly affected by biodiversity or heritage designations, although negative effects on these assets cannot be ruled out. It would, however, lead to the permanent loss of the airport itself and its economic and educational activity at this location.
- 4.6 Option 3 also performs reasonably well, as new homes on the edge of Cambridge would benefit from the existing services, facilities, transport links and employment in Cambridge and is likely to provide some new services and facilities. However, the range of facilities provided would likely depend on the size of the extension, and smaller extensions could lead to capacity issues at existing services and facilities. Extensions to Cambridge are likely to have significant impacts on the landscape and the historic environment setting of Cambridge, although this depends to some extent on the location and design of development. High quality design will be crucial. Of critical importance in achieving the sustainability objectives is how new development on the edge of Cambridge integrates with the existing city and with neighbouring communities, in order to become part of the city rather than separate districts. Genuinely mixed development with clear access by public transport, cycling and walking linked into neighbouring areas would help to achieve this, with green infrastructure and networks playing a key role.

- 4.7 Option 4 performs well against social and economic objectives, as a new settlement is expected to provide new services and facilities. In addition, new settlements provide a greater opportunity to incorporate sustainable design, such as creating walkable neighbourhoods and including district heating systems. Although there is no guarantee best practice would be delivered, the Local Plan could require sustainable design to be incorporated. The new settlements will have to be of sufficient scale to become coherent new communities, with a good range of services and facilities, such as healthcare and a secondary school, as well as to become attractive to business investors in order to provide a range of jobs. New settlements have a longer lead-in time and therefore would be unable to provide new housing and employment earlier on in the plan period. New settlements are also likely to have environmental impacts, particularly in terms of landscape, as they are necessarily large developments that may be less able to avoid sensitive features. They may also be some distance from the main centre of economic activity, Cambridge, leading to longer journeys for commuters and a temptation to travel by car. However, there is potential for public transport links to be provided as a perquisite to new development.
- 4.8 Whilst Option 5 could help to support local services, the lack of access to services, facilities and jobs in larger settlements is likely to be an issue. It is likely to lead to high levels of car dependency, increasing carbon emissions, and significant expansion of smaller settlements could harm their character and historic assets. As such, it is likely to be the least sustainable option, although it could form a smaller part of the overall strategy.
- 4.9 Option 6 would enable residents and businesses to have good access to services and facilities, whilst providing more opportunity to protect the historic environment of Cambridge. However, there is potential for adverse effects on environmental objectives, depending on where development is located, and it may prove challenging to create distinctive new communities with a sense of place, depending on where particular developments come forward under this option and their relationship to existing communities.
- 4.10 In practice, there are pros and cons with all of the options, and so the challenge for those preparing the Greater Cambridge Local Plan will be to take those aspects from each of the options that perform well against the SA objectives to create a coherent spatial strategy that performs well in sustainability terms. The options will need to be developed in more detail, including identification of potential specific locations for development, with a greater understanding of the scale, type and mix of development that can be delivered on site, the identification of the infrastructure requirements required for delivery, and the relationship with existing settlements and networks. The SA will be able to assess these options in more detail and with greater certainty helping to lead to the most sustainable strategy overall.

# Next steps

4.11 This SA Report will be available for consultation alongside the Issues and Options document. Following this consultation, the responses received and the findings of the SA will be considered and incorporated into the next iteration of the Greater Cambridge Local Plan.

LUC

December 2019



www.landuse.co.uk

# **Greater Cambridge Local Plan**

**HRA Scoping Report** 

Prepared by LUC December 2019



Project Title: Greater Cambridge Local Plan HRA

Client: South Cambridgeshire District Council.

Version	Date	Version Details	Prepared by	Checked by	Approved by
1.1	20/09/19	Draft for client comment	David Green	David Green	David Green
1.2	23/09/19	Issue following client comments	David Green	David Green & Jeremy Owen	David Green
1.3	12/12/19	Issue following Natural England comments	Rebecca Turner	David Green	David Green

# **Contents**

Conte	nts	1
1	Introduction Context for the Greater Cambridge Local Plan The New Local Plan The requirement to undertake Habitats Regulations Assessment of Development Plans Stages of HRA Stages of HRA Recent case law changes Structure of this report	1 1 2 2 3 4 5
2	<b>European Sites</b> Identification of European sites which may be affected by the Strategic Plan Ecological attributes of the European sites	<b>7</b> 7 8
3	Approach to HRA Scoping Summary of Scoping Stage 1: Screening Methodology Stage 2: Appropriate Assessment Methodology Stage 3: Assessment where no alternatives exist	9 13 14 16 18
4	Consultation and Next Steps	19
Appe	ndix 1 Natural England: Consultation Response	<b>20</b> 20
Appe	ndix 2 Map of European Sites within 15km of Greater Cambridge	<b>21</b> 21
Appe	ndix 3 Attributes of European Sites	<b>22</b> 22
Appe	ndix 4  Map of Strategic Roads within Greater Cambridge	<b>38</b> 38
Table	es	
Table	1.1 Stages of HRA	4
Table	2.1 European sites within 15km of the Greater Cambridge	7
Table	3.1 Cambridgeshire Recreational Pressure IRZ Component SSSIs	12
Table	3.2 Summary of Scoping Assumptions	14

# 1 Introduction

- 1.1 LUC has been commissioned by South Cambridgeshire District Council and Cambridge City Council (the Councils) to carry out a Habitats Regulations Assessment (HRA) of the Greater Cambridge Local Plan (GCLP).
- 1.2 This HRA Scoping relates to the 'Greater Cambridge Local Plan: The first conversation' document, also referred to as the Issues and Options document, and it should be read in conjunction with that document. The Issues and Options consultation is the first stage in the plan-making process, which seeks the opinions of stakeholders and local people as to what the key issues are that the Local Plan should seek to address. Given the broad nature of this consultation, this HRA Scoping contains a high-level commentary on the HRA considerations for the Local Plan. HRA of the more detailed options for the Local Plan will be undertaken as they are developed.
- 1.3 The main purpose of this report is to identify which European sites have potential to be affected by the GCLP, evidence key information on these sites and outline the pathways by which they could be affected, and to set out the scope of the subsequent HRA Screening and Appropriate Assessment stages in agreement with Natural England, who will be consulted on this report.

### Context for the Greater Cambridge Local Plan

- 1.4 Comprising Cambridge City and South Cambridgeshire District, Greater Cambridge covers approximately 360 square miles, with a total population of 285,000 people across the city. Cambridge City and South Cambridgeshire have a unique relationship, in that South Cambridgeshire entirely surrounds Cambridge City. Greater Cambridge borders Huntingdonshire and East Cambridgeshire to the north; Central Bedfordshire to the west; North Hertfordshire, Uttlesford and Braintree to the south, and to the east, it borders St Edmundsbury in Suffolk.
- 1.5 Whilst Cambridge City is distinctly urban, South Cambridgeshire is a mainly rural district with Cambourne in the west, Histon to the north and Sawston in the south being the most populated settlements in Greater Cambridge, after Cambridge City.
- 1.6 Cambridge is a city of international importance in terms of its world-class university, research, heritage, culture and science. Cambridge also plays a key functional role in planning terms as the dominant centre in Cambridgeshire and as a main nodal point of the Oxford-Milton Keynes-Cambridge Arc and M11 corridor.
- 1.7 As a prominent hub for research and the dominant centre of Cambridgeshire, Cambridge has strong north-south transport links to London and north Cambridgeshire via train and the M11 corridor. Approximately 23,367 people commute daily from South Cambridgeshire to the city. Whilst South Cambridgeshire currently has limited access to bus services and other more sustainable modes of transport, particularly in the more remote west and eastern parts of Greater Cambridge, the emerging Cambridgeshire and Peterborough Local Transport Plan sets out a number of measures to improve transport links in the area.
- 1.8 Greater Cambridge contains a wealth of historic assets, with over 4,000 listed buildings, 32 conservation areas and 24 registered parks and gardens across Cambridge and South Cambridgeshire. A variety of mineral resources are also found in the Greater Cambridge Local Plan area, including sand, gravel and chalk. These extensive deposits often occur under high quality agricultural land or in areas valued for their biodiversity and landscapes, such as river valleys.

### The New Local Plan

- 1.9 Cambridge City Council and South Cambridgeshire District Council have committed to preparing a joint Local Plan for their combined area, referred to as Greater Cambridge, a strand of work which originated as part of the City Deal agreement with central government established in 2014. The individual Councils both adopted separate Local Plans in October 2018 which set out the development needs of the local authority areas up to 2031.
- 1.10 The adopted Local Plans acknowledged the commitment to an early review of their Local Plans beginning in 2019. This decision to take forward the early review of the Local Plans was made in order to establish what impact the anticipated changed infrastructure and economic growth in the area might have on housing need and other aspects of spatial and transport planning. Further, during Examination of the individual Local Plans, a number of issues were highlighted for specific attention. These related to the assessment of housing needs, progress in delivering the development strategy and in particular the proposed new settlements and provision to meet the requirements of caravan dwellers.
- 1.11 The plan period for the Greater Cambridge Local Plan is yet to be determined, but is likely to cover the period to either 2040 or 2050. It will replace policies contained within the Cambridge Local Plan (2018) and the South Cambridgeshire Local Plan (2018). The Joint Local Development Scheme 2018 identified that the Plan will be submitted to the Secretary of State for examination at the end of summer 2022. Public consultation on the Issues and Options for the plan is proposed for late 2019

# The requirement to undertake Habitats Regulations Assessment of Development Plans

- 1.12 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007<sup>1;</sup> the currently applicable version is the Conservation of Habitats and Species Regulations 2017<sup>2</sup> (as amended). When preparing the Greater Cambridge Local Plan, the Councils are required by law to carry out an HRA. The Councils can commission consultants to undertake HRA work on its behalf and this (the work documented in this report) is then reported to and considered by the Councils as the 'competent authority'. The Councils will consider this work and may only progress the GCLP if it considers that the Plan will not adversely affect the integrity of any European site. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is also noted in the Government's online planning practice guidance.
- 1.13 HRA refers to the assessment of the potential effects of a development plan on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs):
  - SACs are designated under the European Habitats Directive and target particular habitat types (Annex 1) and species (Annex II). The listed habitat types and species (excluding birds) are those considered to be most in need of conservation at a European level.
  - SPAs are classified in accordance with Article 4(1) of the European Union Birds Directive<sup>3</sup> for rare and vulnerable birds (as listed in Annex I of the Directive), and under Article 4(2) for regularly occurring migratory species not listed in Annex I.
  - Potential SPAs (pSPAs)<sup>4</sup>, candidate SACs (cSACs)<sup>5</sup>, Sites of Community Importance (SCIs)<sup>6</sup> and Ramsar sites should also be included in the assessment.

Greater Cambridge Local Plan Page 71 November 2019

<sup>&</sup>lt;sup>1</sup> The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (2007) SI No. 2007/1843. TSO (The Stationery Office),

<sup>&</sup>lt;sup>2</sup> The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, TSO (The Stationery Office), London.

<sup>&</sup>lt;sup>3</sup> Council Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (the codified version of Council Directive 79/409/EEC, as amended).

<sup>&</sup>lt;sup>4</sup> Potential SPAs are sites that have been approved by the Minister for formal consultation but not yet proposed to the European Commission, as listed on the <u>GOV.UK website</u>.

- Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 1.14 For ease of reference during HRA, these designations can be collectively referred to as European sites<sup>7</sup> despite Ramsar designations being at the international level.
- 1.15 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or the whole development plan, would adversely affect the integrity of the European site in question either alone or in combination with other plans and projects. This is judged in terms of the implications of the plan for the 'qualifying features' for which the European site was designated, i.e.:
  - SACs Annex I habitat types and Annex II species<sup>8</sup>;
  - SPAs Annex I birds and regularly occurring migratory species not listed in Annex I<sup>9</sup>;
  - Ramsar sites the reasons for listing the site under the Convention<sup>10</sup>.
- 1.16 Significantly, HRA is based on the precautionary principle meaning that where uncertainty or doubt remains, an adverse impact should be assumed.

### Stages of HRA

- 1.17 The HRA of development plans is undertaken in stages (as described below) and should conclude whether or not a proposal would adversely affect the integrity of the European site in question.
- 1.18 The HRA should be undertaken by the 'competent authority', in this case South Cambridgeshire District Council and Cambridge City Council, and LUC has been commissioned to do this on the Council's behalf. The HRA also requires close working with Natural England as the statutory nature conservation body<sup>11</sup> in order to obtain the necessary information, agree the process, outcomes and mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

# **Requirements of the Habitats Regulations**

- 1.19 In assessing the effects of a Plan in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which would inform the 'Integrity Test'. The relevant sequence of questions is as follows:
  - Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not, as is the case for the Greater Cambridge, proceed to Step 2.
  - Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or projects (the 'Significance Test'). If yes, proceed to Step 3.
  - Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the European site in view of its current conservation objectives (the 'Integrity Test'). In so doing,

<sup>&</sup>lt;sup>5</sup> Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted, as listed on the INCC's SAC list.

<sup>&</sup>lt;sup>6</sup> SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the UK Government.

<sup>&</sup>lt;sup>7</sup> The term 'Natura 2000 sites' can also be used interchangeably with 'European sites' in the context of HRA, although the latter term is used throughout this report.

<sup>&</sup>lt;sup>8</sup> As listed in the site's citation on the JNCC website (all features of European importance, both primary and non-primary, need to be considered).

<sup>&</sup>lt;sup>9</sup> As identified in sections 3.1, 3.2 and 4.2 of the SPA's standard data form on the JNCC website; at sites where there remain differences between species listed in the <u>2001 SPA Review</u> and the extant site citation in the standard data form, the relevant country agency (Natural England or Natural Resources Wales) should be contacted for further guidance.

 $<sup>^{10}</sup>$  As set out in section 14 of the relevant 'Information Sheet on Ramsar Wetlands' available on the JNCC website.

<sup>&</sup>lt;sup>11</sup> Regulation 5 of the Habitats Regulations 2017.

- it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public.
- Step 4: In accordance with Reg. 105(4), but subject to Reg. 107, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of a European site.
- Step 5: Under Reg. 107, if Step 4 is unable to rule out adverse effects on the integrity of a European site and no alternative solutions exist then the competent authority may nevertheless agree to the plan or project if it must be carried out for 'imperative reasons of overriding public interest' (IROPI).

## Stages of HRA

1.20 **Table 1.1** summarises the stages and associated tasks and outcomes typically involved in carrying out a full HRA, based on various guidance documents<sup>12</sup> <sup>13</sup> <sup>14</sup>. The Scoping detailed within this report precedes the formal stages described below but nevertheless it provides a useful exercise in identifying and agreeing which European sites have potential to be affected by the GCLP, and to set out the scope of the subsequent HRA Screening and Appropriate Assessment stages.

Table 1.1 Stages of HRA

Stage	Task	Outcome
Stage 1: HRA Screening	Description of the development plan.  Identification of potentially affected European sites and factors contributing to their integrity.  Review of other plans and projects.  Assessment of likely significant effects of the development plan alone or in combination	Where effects are unlikely, prepare a 'finding of no significant effect report'.  Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.
Stage 2: Appropriate Assessment (where Stage 1 does not rule out likely significant effects)	with other plans and projects.  Information gathering (development plan and European Sites).  Impact prediction.  Evaluation of development plan impacts in view of conservation objectives.  Where impacts are considered to affect qualifying features, identify how these effects will be avoided or reduced.	Appropriate assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided or reduced, including the mechanisms and timescale for these mitigation measures.  If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse	Identify 'imperative reasons of overriding public interest' (IROPI).	This stage should be avoided if at all possible. The test of IROPI and the requirements

 $<sup>^{12}</sup>$  European Commission (2001) Assessment of plans and projects significantly affecting European Sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

<sup>&</sup>lt;sup>13</sup> DCLG (2006) Planning for the Protection of European Sites: Appropriate Assessment

 $<sup>^{14}</sup>$  RSPB (2007) The Appropriate Assessment of Spatial Plans in England. A guide to why, when and how to do it.

Stage	Task	Outcome
impacts remain taking into account mitigation	Demonstrate no alternatives exist.	for compensation are extremely onerous.
	Identify potential compensatory measures.	

1.21 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with both the Government and European Commission.

## Recent case law changes

- 1.22 This HRA will be prepared in accordance with recent case law, including most notably the 'People over Wind' and 'Holohan' rulings from the Court of Justice for the European Union (CJEU).
- 1.23 The *People over Wind, Peter Sweetman v Coillte Teoranta* (April 2018) judgment ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment, and should not be taken into account at the screening stage. The precise wording of the ruling is as follows:
  - "Article 6(3) ......must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site."
- 1.24 In light of the above, the HRA screening stage will not rely upon avoidance or mitigation measures to draw conclusions as to whether the Strategic Plan could result in likely significant effects on European sites, with any such measures being considered at the Appropriate Assessment stage as relevant.
- 1.25 The HRA will also fully consider the recent *Holohan v An Bord Pleanala* (November 2018) judgement which stated that:
  - "Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.
  - Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the construction compound and haul routes, only if that authority is certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.
  - Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the 'appropriate assessment' must include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned".
- 1.26 LUC will fully consider the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European

sites, including the potential for complex interactions and dependencies. In addition, the potential for offsite impacts, such as through impacts to functionally linked land, and or species and habitats located beyond the boundaries of European site, but which may be important in supporting the ecological processes of the qualifying features, has also been fully considered in this HRA.

- 1.27 This Scoping report has been informed by initial consultation with Natural England as detailed in **Appendix 1**. In summary, Natural England advised the following:
  - The HRA Scoping Report provides sufficient evidence to demonstrate that there is no potential risk of air pollution beyond the 200m threshold that could potentially result in an adverse effect to Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC.
  - Reference should be made to the recently updated Cambridgeshire Recreational Pressure
     Impact Risk Zones (IRZ), bespoke visitor surveys, including survey data commissioned by the
     National Trust for Wicken Fen Ramsar and relevant information relating to the SSSIs, which
     underpin the European sites.
  - The HRA Scoping Report provides evidence to demonstrate no likely significant effect to Chippenham Fen Ramsar, which was scoped out of the screening assessment that will be completed in relation to water quantity and quality.
- 1.28 The comments provided by Natural England will be used to inform the HRA report that will be undertaken for the Local Plan.

## Structure of this report

- This chapter (**Chapter 1**) has described the background to the production of the GCLP and the requirement to undertake HRA. The remainder of the report is structured into the following sections:
  - **Chapter 2** describes the European sites in Greater Cambridge and within a 15km buffer that could be affected by the GCLP and summaries the key issues that will need to be considered during the HRA.
  - **Chapter 3** sets out the assumptions that will underpin the HRA judgements made and also identifies which sites and impacts can be scoped in or out of the subsequent HRA screening.
  - Chapter 4 describes the next steps that will be carried out in the HRA of the GCLP.
- $\frac{1.281.30}{1.281.30}$  The information in the main body of the report is supported by the following appendices:
  - **Appendix 1** provides consultation response from Natural England.
  - Appendix 2 provides a map of European Sites within 15km of Greater Cambridge.
  - **Appendix 3** details the attributes of European Sites including detailed information about key vulnerabilities, conservation objectives and dependencies on certain habitats and species.
  - **Appendix 4** provides a map of strategic roads within Greater Cambridge.

# 2 European Sites

2.1 This chapter identifies European sites located in Greater Cambridge or within a 15km buffer, which have potential to be affected by proposed development within the GCLP and will be considered as part of the HRA process.

# Identification of European sites which may be affected by the Strategic Plan

- 2.2 In order to initiate the search of European sites that could potentially be affected by the GCLP, it is established practice in HRAs to consider European sites within the local planning authority areas covered by a Plan, and also within a buffer distance from the boundary of the Plan area.
- 2.3 A distance of 15km was used to identify European sites likely to be affected by impacts relating to development in Greater Cambridge. In addition to this, consideration was also given to European sites connected to the plan area beyond this distance, for example through hydrological pathways or recreational visits by residents of Greater Cambridge.
- 2.4 European sites identified for inclusion in the HRA are listed below in **Table 2.1** below and **Figure 2.1** in **Appendix 2**. Detailed information about each site is provided in **Appendix 3**:

**Table 2.1** <u>European sites within Greater Cambridge and within 15km of the Greater Cambridge boundary</u>

European Site	Closest Distance / Location from GCLP Area
SACs	
Eversden and Wimpole Woods SAC	Within – in west of Greater Cambridge
Ouse Washes SAC	Adjacent to north
Portholme SAC	4km / North West
Devils Dyke SAC	5.8km / North East
Fenland SAC	1km / North East
SPAs	
Ouse Washes SPA	Adjacent to north
Ramsar Sites	
Ouse Washes Ramsar	Adjacent to north
Wicken Fen Ramsar	1km / North East
Chippenham Fen Ramsar	10.3km to North East

# Ecological attributes of the European sites

- 2.5 The designated features and conservation objectives of the European sites, together with current pressures on and potential threats, was established using the Standard Data Forms for SACs and SPAs and the Information Sheets for Ramsar Wetlands published on the JNCC website<sup>15</sup> as well as Natural England's Site Improvement Plans<sup>16</sup> and the most recent conservation objectives published on the Natural England website (most were published in 2014)<sup>17</sup>.
- 2.6 An understanding of the designated features of each European site and the factors contributing to its integrity will inform the assessment of the potential likely significant effects of the JSP. This approach will be useful for informing the inter-dependencies of non-qualifying species and habitats which the qualifying species depend, as recently highlighted as a requirement by the 'Holohan' ruling.

<sup>&</sup>lt;sup>15</sup> www.jncc.defra.gov.uk

 $<sup>^{16}\ \</sup>underline{\text{http://publications.naturalengland.org.uk/category/5458594975711232}}$ 

<sup>&</sup>lt;sup>17</sup> http://publications.naturalengland.org.uk/category/6490068894089216

# 3 Approach to HRA

3.1 This chapter describes the approach that will be taken to the HRA of the GCLP throughout its development including the specific tasks that will be undertaken and the assumptions that will underpin the HRA judgements made.

## Scoping

3.2 For many of the types of impacts, screening for likely significant effects will be determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, the following section applies a number of precautionary assumptions to enable specific impacts on European Sites to be either scoped in or out of the subsequent HRA screening.

## Physical Damage and Loss

- 3.3 Any development resulting from the GCLP would take place within Greater Cambridge; therefore only European sites within the boundary could be affected direct by physical damage or loss of habitat within the site boundaries. Eversden and Wimpole Woods SAC is the only site located within Greater Cambridge and therefore with the potential to be directly affected by physical damage and/or loss from development.
- 3.4 Habitat loss from development in areas outside of the European site boundaries may also result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the European site is designated. This includes land which may provide offsite movement corridors or feeding and sheltering habitat for mobile species such as bats, birds and fish.
- 3.5 With regards to bird, Natural England has advised that their recognised distance for the consideration of offsite functionally linked land is generally 2km, but for certain species, including most notably golden plover and lapwing, a greater distance of 15km may be appropriate. The Ouse Washes SPA and Ramsar sites are located immediately adjacent to the north of Greater Cambridge and support wetland bird species with potential to be affected by indirect physical damage and/or loss to offsite habitat, and therefore the potential for physical damage and loss of habitat to affect functionally linked land will require assessment within the HRA.
- 3.6 The Ouse Washes SAC is designated for supporting populations of spined loach. This species occur patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches. Whilst it appears to have limited means of dispersal, potentially suitable waterbodies within Greater Cambridge share direct hydrological connectivity with the Ouse Washes SAC, and therefore the potential for physical damage and loss of habitat to affect functionally linked land upon which this species may depend will require assessment within the HRA
- 3.7 Important foraging areas for the barbastelle bat, which is the qualifying feature of the Eversden and Wimpole Woods SAC, are likely to be focused within 8km of their core breeding zones. Development as a result of the GCLP will include areas located within 8km of Eversden and Wimpole Woods SAC, and therefore the potential for physical damage and loss of habitat to affect functionally linked land upon which the SAC qualifying feature depends will require assessment within the HRA.

- 3.8 Other sites have been scoped out from further assessment on the basis of distance from Greater Cambridge and/or because their qualifying features are unlikely to be dependent upon habitats occurring within the Greater Cambridge area.
- 3.9 Therefore, the potential for likely significant effects as a result of physical damage and loss needs to be considered in relation to Ouse Washes SAC, SPA and Ramsar sites, and Eversden and Wimpole Woods SAC.

## Non-physical disturbance

- 3.10 Noise and vibration effects, e.g. during the construction of new housing or employment development, are most likely to disturb bird and bat species and are thus a key consideration with respect to European sites where these species are the qualifying features. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) has the potential to affect species where it occurs in close proximity to key habitat areas, such as key roosting sites of SPA birds and movement or feeding areas of bats.
- 3.11 It has been assumed that the effects of noise, vibration and light are most likely to be significant within a distance of 500 metres. There is also evidence of 300 metres being used as a distance up to which certain bird species can be disturbed by the effects of noise<sup>18</sup>; however, it has been assumed (on a precautionary basis) that the effects of noise, vibration and light pollution are capable of causing an adverse effect if development takes place within 500 metres of a European site with qualifying features sensitive to these disturbances. Scoped in European sites that support qualifying species which are therefore vulnerable to non-physical disturbance are Ouse Washes SPA and Ramsar sites, and Eversden and Wimpole Woods SAC.
- 3.12 All other European sites were scoped out of the assessment because they occur over 500 metres from the Greater Cambridge boundary.
- 3.13 Therefore, the potential for likely significant effects as a result of non-physical disturbance needs to be considered in relation to Ouse Washes SPA and Ramsar sites, and Eversden and Wimpole Woods SAC.

#### Non-toxic contamination

- 3.14 Habitats can be subject to non-toxic contamination, such as nutrient enrichment, changes in salinity and smothering from dust, due to industrial action, agriculture, construction and water abstraction and discharge. European sites with potential to be affected by non-toxic contamination are likely to be those sites that lie within close proximity, or those that are hydrologically connected to areas of development provided for by the plan but potential changes to water quantity and quality are considered separately below.
- 3.15 Ouse Washes SAC, SPA and Ramsar sites, and Eversden and Wimpole Woods SAC lie within or adjacent to Greater Cambridge and have potential to be susceptible to impacts from non-toxic contamination. Due to the distance, all other European sites have been scoped out of the assessment.
- 3.16 Therefore, the potential for likely significant effects of non-toxic contamination needs to be considered in relation to Ouse Washes SAC, SPA and Ramsar sites, and Eversden and Wimpole Woods SAC.

#### Air pollution

3.17 Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen levels, which can then affect plant health, productivity and species composition.

<sup>&</sup>lt;sup>18</sup> British Wildlife Magazine. October 2007

- 3.18 In terms of vehicle traffic, nitrogen oxides (NOx, i.e. NO and  $NO_2$ ) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NOx can cause eutrophication of soils and water.
- 3.19 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 114 (which was produced to provide advice regarding the design, assessment and operation of trunk roads including motorways), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.
- 3.20 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the Screening Stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:
  - Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
  - · Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
  - Daily average speed will change by 10 km/hr or more; or
  - Peak hour speed will change by 20 km/hr or more; or
  - Road alignment will change by 5 m or more.
- 3.21 Where significant increases in traffic are possible on roads within 200m of European sites, traffic forecast data may be needed to determine if increases in vehicle traffic are likely to be significant. In line with the Wealden judgment<sup>19</sup>, the traffic growth considered by the HRA should be based on the effects of development provided for by the Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.
- 3.22 It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) are likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT). As such, where a site is within 200m of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.
- The key commuting corridor for new housing and employment development will likely include the M11, A10, A11, A14, A142, A428, A603 and A1307, which are highlighted in **Figure 3.1** in **Appendix 4**. European sites within 15km of the Greater Cambridge boundary and also within 200m of a strategic road include Devils Dyke SAC (A14), Ouse Washes SAC, SPA and Ramsar (A1123 and A142), and Portholme SAC (A14).
- 3.24 In addition to this, it was advised by Natural England that "the HRA should provide sufficient evidence to demonstrate that there is no credible risk of air pollution beyond the 200m threshold that could potentially result in an adverse effect to" Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC. In line with a precautionary approach, these European sites were considered further in relation to air pollution.
- 3.25 All other sites were situated over 200m from a strategic road and were therefore scoped out.
- 3.243.26 Therefore, likely significant effects relating to increased air pollution need to be considered in relation to Devils Dyke SAC, Ouse Washes SAC, SPA and Ramsar, Portholme SAC, Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC.

#### Recreation

3.25
3.27
Recreational activities and human presence can result in significant effects on European sites as a result of erosion and trampling, associated impacts such as fire and vandalism or disturbance to sensitive features, such as birds through both terrestrial and water-based forms of recreation.

<sup>&</sup>lt;sup>19</sup> Wealden v SSCLG [2017] EWHC 351 (Admin)

- 3.263.28 The GCLP will result in housing growth, and associated population increase within Greater Cambridge. Where increases in population are likely to result in significant increases in recreation at a European site, either alone or in-combination, the potential for likely significant effects will require assessment. At this stage, there is no definitive figure of the number and location of dwellings the GCLP will make provision for over the plan period.
- 3.273.29 European sites with qualifying bird species are likely to be particularly susceptible to recreational disturbances from walking, dog walking, angling, illegal use of off-road vehicles and motorbikes, wildfowling, and water sports. An increase in recreational pressure from development therefore has the potential to disturb bird populations of SPA and Ramsar sites as a result of both terrestrial and water-based recreation.
- 3.283.30 In addition, recreation can physically damage habitat as a result of trampling and also through erosion associated with boat wash and terrestrial activities such as use of vehicles.
- 3.31 Following advice provided by Natural England on an earlier draft of this Scoping Report, a 'zone of potential risk' for recreational pressure of 2km and 5km, which has been derived from the Impact Risk Zones (IRZ), has been applied to inform initial impacts to recreation on European sites. IRZs have been developed by Natural England as a tool to define zones of key sensitivities, including recreational pressure to SSSIs from proposed development. Given the overlap between SSSI and European sites, this zone of potential influence can therefore be used to appropriately identify the potential risks to European sites from the Local Plan in this assessment. Table 3.1 below outlines the zones of potential of risk for each European site, which are considered to be at a significant risk from recreational pressure.

<u>Table 3.1 Cambridgeshire Recreational Pressure IRZ Component SSSIs</u>

<u>SSSI</u>	Zone of Potential Risk: Higher (H) or Lower (L)
Eversden and Wimpole Woods SAC	<u>H – 5km</u>
Ouse Washes SAC, SPA and Ramsar	<u>L – 2km</u>
Portholme SAC	<u>H – 5km</u>
Devil's Dyke SAC	<u>H – 5km</u>

- 3.32 All other SSSIs (including overlapping European sites) within Cambridgeshire were not considered be at significant risk from recreational pressure and therefore have not been given a zone of potential risk. However, to ensure that a precautionary approach is taken, this assessment has applied a 5km zone of potential risk to all remaining European sites within 15km of Greater Cambridge.
- 3.33 More specific Zones of Influence (ZOI) may be defined following targeted visitor surveys and discussions with land managers, such as National Trust at Wicken Fen Ramsar, as it is not always appropriate to apply a generic ZOI. It may also for example be possible to extrapolate appropriate ZOIs from studies and approaches used for similarly comparable sites elsewhere in the UK.
- 3.34 This approach is precautionary and broadly consistent with the approach that was established for the Thames Basin Heath Delivery Framework, which identified a ZOI of 7km from the European site.
- 3.35 A review of the European sites in Greater Cambridge and within 15km from the boundary identified the following European sites within 5km of the district boundary:
  - Eversden and Wimpole Woods SAC
  - Ouse Washes SAC
  - Portholme SAC
  - Fenland SAC

- Ouse Washes SPA
- Ouse Washes Ramsar
- Wicken Fen Ramsar
- 3.36 On the basis of the above, Devils Dyke SAC and Chippenham Fen Ramsar have been scoped out of the assessment from significant recreational effects because they are located over 5km from Greater Cambridge.
- 3.37 Therefore, the potential for likely significant effects needs to be assessed in relation to Eversden and Wimpole Woods SAC, Ouse Washes SAC, Portholme SAC, Fenland SAC, Ouse Washes SPA, Ouse Washes Ramsar, and Wicken Fen Ramsar.

## Water quantity and quality

- An increase in demand for water abstraction and treatment resulting from the growth proposed in the Strategic Plan could result in changes in hydrology at European sites. Depending on the qualifying features and particular vulnerabilities of the European sites, this could result in likely significant effects; for example, due to changes in environmental or biotic conditions, water chemistry and the extent and distribution of preferred habitat conditions. To fully understand the potential impacts of proposed development on European sites a review of relevant Water Cycle Studies (WCS) and liaison with the Environment Agency and relevant water companies will be required.
- 3.30 Portholme SAC, Ouse Washes SAC, SPA and Ramsar, Fenland SAC, Devils Dyke SAC and Wicken Fen Ramsar are hydrologically linked to waterbodies in Greater Cambridge, so at this stage hydrological connectivity or a reliance on water resources connected with the European sites cannot be ruled out. Changes in water quantity and quality through increased demand for water supply and increased wastewater discharges is therefore considered likely to be a key issue for these sites.
- 3.40 In addition to this, it was advised that the HRA 'demonstrate the lack of hydrological connectivity between water resources which could be affected as a result of the GCLP and Chippenham Fen."

  In line with a precautionary approach, this European site was considered further in relation to air pollution.
- 3.313.41 Eversden and Wimpole Woods SAC was scoped out because the qualifying features were not considered susceptible to changes in water quantity and quality and because there was a lack of hydrological connectivity to water resources which could be affected as a result of the GCLP.
- 3.42 Following consultation from the Environment Agency (EA) of the Sustainability Appraisal Scoping Report, it was highlighted that phosphates and nitrates arising from growth and development and those from agriculture "will be a significant issue in the HRA to consider the in-combination effects of development in other plan areas (duty to cooperate) and other pollutant sources including nitrates from air pollution". In-combination impacts from water quantity and quality will be considered in detail at the screening stage.
- 3.323.43 Therefore, likely significant effects relating to changes in water quality and quantity need to be considered in relation to Portholme SAC, Ouse Washes SAC, SPA and Ramsar, Devils Dyke SAC, Fenland SAC, Wicken Fen Ramsar and Chippenham Fen Ramsar.

# Summary of Scoping

3.333.44 **Table 3.1** below summarises the results of scoping and identifies those potential impacts on European sites which will require further consideration at the HRA Screening stage or can be scoped out from further assessment. Where certain types of effects are scoped out in **Table 3.1** they do not need to be considered further.

**Table 3.2 Summary of Scoping Assumptions** 

	Physical damage/ loss of habitat	Non- physical disturba nce	Non- toxic contamin ation	Air pollution	Recreati on pressure	Water quantity and quality
Eversden and Wimpole Woods SAC	Scoped in	Scoped in	Scoped in	Scoped out	Scoped in	Scoped in Scoped out
Ouse Washes SAC	Scoped in	Scoped out	Scoped in	Scoped in	Scoped in	Scoped in
Portholme SAC	Scoped out	Scoped out	Scoped out	Scoped in	Scoped in	Scoped in
Devils Dyke SAC	Scoped out	Scoped out	Scoped out	Scoped in	Scoped out Scoped out	Scoped in
Fenland SAC	Scoped out	Scoped out	Scoped out	Scoped out Scoped in	Scoped in	Scoped in
Ouse Washes SPA	Scoped in	Scoped in	Scoped in	Scoped in	Scoped in	Scoped in
Ouse Washes Ramsar	Scoped in	Scoped in	Scoped in	Scoped in	Scoped in	Scoped in
Wicken Fen Ramsar	Scoped out	Scoped out	Scoped out	Scoped out Scoped in	Scoped in	Scoped in
Chippenha m Fen Ramsar	Scoped out	Scoped out	Scoped out	Scoped out Scoped in	Scoped out	Scoped out Scoped in

# Stage 1: Screening Methodology

- 3.343.45 As required under Regulation 105 of The Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'), an assessment will be undertaken of the 'likely significant effects' of the Plan. The assessment will be prepared in order to identify which policies or site allocations would be likely to have a significant effect on European sites. The screening assessment will be conducted without taking pre-embedded mitigation into account, in accordance with the 'People over Wind' judgment.
- 3.353.46 Consideration will be given to the potential for the development proposed to result in significant effects associated with:
  - Physical loss of/damage to habitat;
  - Non-physical disturbance (noise, vibration and light);
  - Non-toxic contamination;
  - · Air pollution;

- Recreation pressure; and
- Changes to hydrology including water quality and quantity.
- 3.363.47 This approach will also allow for consideration to be given to the cumulative effects of the site allocations rather than focussing exclusively on individual developments provided for by the GCLP.
- 3.373.48 A risk-based approach involving the application of the precautionary principle will be adopted in the assessment, such that a conclusion of 'no significant effect' will only been reached where it is considered very unlikely, based on current knowledge and the information available, that a proposal in the GCLP would have a significant effect on the integrity of a European site.
- 3.383.49 The below section identifies assumptions that have been applied at this early Scoping Stage to enable specific impacts on European sites to either be scoped in or out of subsequent

### Interpretation of 'likely significant effect'

- Relevant case law helps to interpret when effects should be considered as being likely to result in a significant effect, when carrying out a HRA of a plan.
- 3.403.51 In the Waddenzee case<sup>20</sup>, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:
  - An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).
  - An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48).
- 3.413.52 Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).
- 3.423.53 An opinion delivered to the Court of Justice of the European Union<sup>21</sup> commented that:
- 3.433.54 "The requirement that an effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."
- This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or de minimis; referring to such cases as those "which have no appreciable effect on the site". In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

#### In-combination effects

- 3.453.56 Regulation 102 of the Amended Habitats Regulations 2017 requires an Appropriate Assessment where "a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, it will be necessary to consider whether any impacts identified from the GCLP may combine with other plans or projects to give rise to significant effects in combination.
- 3.463.57 This exercise will be carried out as part of the screening stage of the HRA. The potential for in-combination effects will only be considered for those Plan components identified as unlikely to have a significant effect alone, but which could act in combination with other plans and projects to produce a significant effect. This approach accords with recent guidance on HRA.

\_

 $<sup>^{20}</sup>$  European Court of Justice in Case C-127/02 Landelijke Vereniging tot Behoud van de Waddenzee

<sup>&</sup>lt;sup>21</sup> Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

- 3.473.58 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the GCLP may affect the European sites that will be the focus of this assessment. This exercise will seek to identify those components of nearby plans that could have an impact on the European sites considered as part of this HRA, e.g. areas or towns where additional housing or employment development is proposed near to the same European sites (as there could be effects from the transport, water use, infrastructure and recreation pressures associated with the new developments).
- 3.483.59 There are a large number of potentially relevant plans; therefore the review will focus on planned spatial growth within authorities adjacent to Greater Cambridge. The findings of any associated HRA work for those plans will be reviewed where available. With help from the Councils, any strategic projects in the area that could have in-combination effects with the GCLP will also be identified and reviewed, if applicable.
- 3.493.60 Should any other plans or projects be identified throughout the HRA process that could lead to in-combination effects on European sites with the GCLP, they will be included in the review.
- 3.503.61 The HRA Screening will identify and review other plans and projects for consideration of in-combination effects, and will outline the components of each plan or project that could have an impact on nearby European sites and considering the findings of the accompanying HRA work (where available). This information will be updated as the HRA work for the GCLP progresses. The local plans and associated HRAs of the following authorities will been included as a minimum:
  - Huntingdonshire
  - Fenland
  - East Cambridgeshire
  - Forest Heath
  - St Edmundsbury
  - Braintree
  - Uttlesford
  - East Hertfordshire
  - North Hertfordshire
  - Central Bedfordshire
  - Bedford
  - Stevenage
- 3.513.62 In addition, the following key plans will be included as they are developed further:
  - The Oxford-Cambridge Arc
  - Cambridgeshire and Peterborough Minerals and Waste Local Plan
  - Cambridgeshire and Peterborough Strategic Spatial Framework
  - Cambridgeshire Local Transport Plan
- 3.523.63 The Government's National Infrastructure Planning website<sup>22</sup> will also be reviewed for major projects that could have significant effects in combination with those of the GCLP.

#### Stage 2: Appropriate Assessment Methodology

3.533.64 Should it not be possible at the screening stage to conclude that there will be no significant effects on European sites as a result of the GCLP, it will be necessary to undertake an Appropriate Assessment.

<sup>&</sup>lt;sup>22</sup> https://infrastructure.planninginspectorate.gov.uk/projects/south-east/

- The Appropriate Assessment stage of the HRA focuses on those impacts judged likely at the screening stage to have a significant effect, and seeks to conclude whether they would result in an adverse effect on the on the integrity of the qualifying features of a European site(s), or where insufficient certainty regarding this remains. The integrity of a site depends on the site being able to sustain its 'qualifying features' across the whole of the site and ensure their continued viability.
- 3.553.66 An Appropriate Assessment will be prepared for each of those European sites where significant effects from the GCLP could not be ruled out. The Appropriate Assessment would set out each European site's qualifying features and conservation objectives, standards and factors which are needed to maintain the site's integrity, existing trends and pressures at the site including the use of areas of off-site functional land (where data are available), as well as the conservation objectives, and the site vulnerabilities identified during the screening stage. For each European site and likely significant effect identified we would aim to distinguish between direct and indirect effects, short or long term effects, construction, operational or decommissioning effects, isolated, interactive or cumulative effects and permanent, intermittent or temporary effects. The impacts will vary, depending on the habitat or species in question for each site.
- 3.563.67 As stated in HRA Guidance<sup>23</sup>, assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the plan policies and site allocations (either alone or in combination) have the potential to:
  - Cause delays to achieving the conservation objectives of the site.
  - Interrupt progress towards achieving the conservation objectives of the site.
  - Disrupt those factors that help to maintain favourable condition of the site.
  - Interfere with the balance, distribution and density of key species that are the indicators of favourable condition of the site.
  - Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem.
  - Change the dynamics of relationships that define the structure or function of the site (e.g. Relationships between soil and water, or animals and plants).
  - Interfere with anticipated natural changes to the site.
  - Reduce the extent of key habitats or the population of key species.
  - Reduce the diversity of the site.
  - Result in disturbance that could affect the population, density or balance between key species.
  - Result in fragmentation.
  - Result in the loss of key features
- The latest available data sources will be drawn on to inform the Appropriate Assessment. The results of this analysis should enable a conclusion to be reached regarding whether the integrity of any European site would be affected. If this were the case, an assessment of alternative solutions or the provision of avoidance and mitigation measures which would avoid adverse effects on integrity would be undertaken. In the context of the GCLP, such measures may include the clarification of policies to remove areas of uncertainty leading to predicted impacts or to include avoidance and mitigation measures such as conditions or restrictions relating to their implementation, the modification of policies to include alternative solutions or locations for particular developments or the omission of policies where no alternatives exist.

<sup>&</sup>lt;sup>23</sup> Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

# Stage 3: Assessment where no alternatives exist

3.583.69 If adverse effects on the integrity of a European site cannot be ruled out the plan would not be able to proceed in its current form unless IROPI could be demonstrated. At this stage, we consider it unlikely that the GCLP would need to demonstrate IROPI because the plan should, as part of the iterative process of HRA, seek to avoid or mitigate potential adverse effects in the first instance, and therefore this has not been discussed in this document.

# 4 Consultation and Next Steps

- 4.1 This Scoping document has been produced to provide guidance and parameters for developing the GCLP in the context of European sites and as a reference point for stakeholders wishing to comment on the document. This document will be subject to consultation with Natural England to confirm that the proposed scope of the assessment is considered appropriate.
- 4.2 Once the GCLP preferred options are confirmed, the Draft Local Plan will be subject to HRA in line with the methodology described in **Section 3** of this report.
- 4.3 The HRA report will be updated at the Draft Local Plan and the Proposed Submission Local Plan, and iterations will be published during the corresponding consultation periods. Specific consultation will be undertaken with Natural England throughout as the statutory consultation body for HRA.

Natural England: Consultation Response

Map of European Sites within 15km of Greater Cambridge

Attributes of European Sites

This appendix contains information about the European sites scoped into the HRA. Information about each site's area, the site descriptions, qualifying features and pressures and threats are drawn from Natural England's Site Improvement Plans (SIPs)<sup>24</sup> and the Standard Data Forms or Ramsar Information Sheets available from the JNCC website<sup>25</sup>. Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs<sup>26</sup>.

<sup>&</sup>lt;sup>24</sup> Site Improvement Plans: East of England, Natural England, http://publications.naturalengland.org.uk/category/4873023563759616

<sup>&</sup>lt;sup>25</sup> JNCC Data Forms <a href="http://jncc.defra.gov.uk/default.aspx?page=4">http://jncc.defra.gov.uk/default.aspx?page=4</a>

<sup>26</sup> European Site Conservation Objectives, Natural England, <a href="http://www.naturalengland.org.uk/ourwork/conservation/designations/sac/conservationobjectives.aspx">http://www.naturalengland.org.uk/ourwork/conservation/designations/sac/conservationobjectives.aspx</a>

Site	Summary of reasons for designation	European site pressures and threats	Conservation objectives	Non-qualifying habitats and species on which the qualifying habitats and/or species depend	Other comment s
Eversden and Wimpole Woods SAC	Qualifying species:  S1308 Barbastelle Barbastellus which is a medium sized species of bat and is one of the UK's rarest mammals. Breading season for Barbastelle bat is between April and September <sup>27</sup> .  The site is ancient woodland of ash- maple type which is now localised and in lowland England as a whole. Eversden and Wimpole Woods is one of the largest remaining woods of its type on the chalky boulder clay in Cambridge and contains a rich assemblage of woodland plants including some	Feature Location/ Extent/ Condition Unknown.  Two transects within the site are monitored each year as part of the National Bat Monitoring Programme (NBMP) however, there is some evidence that there could be other important foraging sites and other Barbastelle roosts close but not within the site.  Offsite Habitat Availability  The bats have a limited area to roost and forage within the site and it is unclear which habitats they use in the wider countryside. Additional suitable habitat should be identified and managed long-term to improve and maintain it, in order to maintain a sustainable population. Local landowners should be given advice on how to	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;  • The extent and distribution of the habitats of qualifying species;  • The structure and function of the habitats of qualifying species;  • The supporting processes on which the habitats of qualifying species rely;  • The populations of qualifying species; and	Depends upon the maintenance of the extent, connectivity and quality of key habitat types for movement and foraging within the landscape including woodlands, treelines, linear ecological corridors such as rivers and species rich open habitats such grasslands, heathlands and wetlands.	

<sup>&</sup>lt;sup>27</sup> European Site Conservation Objectives: supplementary advice on conserving and restoring site features. Available at: <a href="http://publications.naturalengland.org.uk/publication/6736081810620416">http://publications.naturalengland.org.uk/publication/6736081810620416</a> Accessed 17/09/2019

	uncommon species such as the Barbastelle bat Barbastella barbastellus. The bats use the trees as a summer maternity roost where female bats gather to give birth to their young. The woodland is also used as a foraging area by the bats and it is also a flight path when they are foraging outside the site <sup>28</sup> .	Forestry and Woodland Management  The woodland the bats depends on must be maintained in medium to longer term by ensuring that tall trees, especially oak, grow up to replace those currently in place.  Air Pollution: Impact of Atmospheric Nitrogen Deposition  Nitrogen deposition exceeds siterelevant critical loads in the ancient woodland used by Barbastelle bats as a summer maternity roost where female bats given birth and for foraging therefore, there is a risk of harmful effects on the bats¹.	The distribution of qualifying species within the site <sup>29</sup> .      The distribution of qualifying species within the site <sup>29</sup> .	
Portholme SAC	Qualifying features:  H6510 Lowland hay meadows (Alopecurus pratensis,	Non-woody and woody vascular plants species may require active management to avert unwanted succession to a different and less	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the	Dependent on seasonal unundation by flood waters and therefore dependent upon the maintenance of historic conditions without

<sup>&</sup>lt;sup>28</sup> Improvement Programme for England's Natura 2000 Sites (IPENS). Site Improvement Plan Eversden and Wimpole Wood. Available at: file:///C:/Users/Buck\_J/Downloads/SIP150512FINALv1.0%20Eversden%20&%20Wimpole%20Woods.pdf Accessed 18/09/2019

<sup>29</sup> European Site Conservation Objectives for Eversden and Wimpole Woods Special Area of Conservation. Available at: file:///C:/Users/Buck\_J/Downloads/UK0030331%20EversdenandWimpoleWoods%20SACV2018.pdf Accessed 18/09/2019

Sanguisorba officinalis)

The site is located in Bedford and Cambridge Claylands National Character Area (88) adjacent to the River Great Ouse south of Huntington and north-west of Godmanchester. Portholme Meadow lies over a bed of calcareous Oxford Clay deposited during the Jurassic Period 160 million years ago and can be up 70m thick in places. When the Anglian Glaciation melted, the sand and gravel washed into the river valley so under the meadow is a deep bed of gravel and mixed deposits. In winter and early spring it may become inundated

desirable state. A species may be indicative of another negative trend relating to the sites structure or function. These species will vary depending on the nature of the particular feature, and in some cases these species may be natural/acceptable components or even dominants. This feature is sensitive to prolonged waterlogging.

# Soils, Substrate and Nutrient Recycling

Changes in the soils natural properties may affect the ecological structure, function and processes associated with the qualifying habitat, Lowland hay meadows. Flooding for prolonged periods can cause the soil P index to increase in parts of the meadow which in turn may have a detrimental effect on the plant community.

#### **Water Quality**

The Lowland hay meadows experiences the deposition of nutrients particularly phosphate

site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by

maintaining or restoring;

- The extent and distribution of qualifying natural habitats;
- The structure and function (including typical species) of qualifying natural habitats; and

The supporting processes on which qualifying natural habitats rely<sup>31</sup>.

notable changes in levels of pollutants, nutrients or silt

<sup>&</sup>lt;sup>31</sup> European Site Conservation Objectives for Portholme Special Area of Conservation. Available at: file:///C:/Users/Buck\_J/Downloads/UK0030054%20Portholme%20SACV2018.pdf Accessed 18/09/2019

with flood water and the site supports grassland communities of alluvial flood meadow type<sup>30</sup>. and sediment in floodwaters have the potential to impact the site.

#### Hydrology

Serve prolonged flooding during winter at the site has previously caused a shift away from Lowland hay meadows plant community and the main issued caused is nutrients enrichment. An appropriate hydrological regime is a key step in sustaining the features and conserving objectives for this site. Changes in

source, depth, duration, frequency, magnitude and timing of

water supply can have significant implications for the

assemblage of characteristic plants and animals present. Prolonged flooding can result in an increase in other vegetation types (such as inundation grassland, swamps). There is no control over the water levels but a ditch has been reinstated to remove flood water faster.

<sup>&</sup>lt;sup>30</sup> European Site Conservation Objectives: Supplementary advice on conserving and restoring site features. Available at: <u>file:///C:/Users/Buck\_J/Downloads/UK0030054\_PortholmeSAC\_Formal%20Published%2011%20Jan%2019.pdf</u> Accessed 18/09/2019

#### Adaption and Resilience to Environmental Change

Environmental change may include changes in sea levels, precipitation and temperature which are likely to affect the extent, distribution and functioning of a feature within a site. The overall vulnerability of this site to climate change has been assessed as high by Natural England (2015) which considered sensitivity, fragmentation, topography and management of the habitats and supporting habitats. Therefore, this site is likely to require the most adaptation action and a site based assessment should be carried out as a priority. Action required may include reducing habitat fragmentation and minimising damage/degradation through the effects of recreational pressure. Furthermore, creating more habitat to buffer the site or expand the habitat into more varied landscapes whilst addressing specific management and condition issues will increase the sites resilience.

#### **Air Quality**

This site is sensitive to changes in air quality and air pollutants

Devil's Dyke SAC  (on FH boundary, part in FH and part in East Cambridgeshire DC)  Devil's Dyke consists of a mosaic of CG3 Bromus erectus and CG5 Bromus erectus are clear each podium pinnatum calcareous grasslands. It is the only known UK seminatural dry grassland site for lizard orchid Himantoglossum	Annex I habitats: Semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites)	may modify the chemical status of its substrate, accelerate or damage plant growth, alter vegetation structure and composition or cause the loss of sensitive species. Critical Loads and Levels are recognized thresholds above which harmful effects on sensitive UK habitats will occur at a significant level. Achieving this target may be subject to the development, effectiveness and availability of abatement technology and measures to tackle diffuse air pollution in realistic timescales.  Current pressures  Inappropriate scrub control  Potential future threats  Air pollution: impact of atmospheric nitrogen deposition.  Natural England: supplementary advice on conserving and restoring site features  In addition to the above, the supplementary advice expands on the European site's vulnerabilities as follows:	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:  The extent and distribution of qualifying natural habitats;	The SAC's qualifying habitat relies on:  Thin, well-drained, limerich soils associated with chalk and limestone in low moderate altitudes.  Key structural, influential and/or distinctive species, such as grazers, surface borers, predators or to maintain the structure, function and quality of habitat.  Habitat connectivity to	None.
only known UK semi- natural dry grassland site for lizard orchid		supplementary advice expands on the European site's	distribution of qualifying natural	function and quality of habitat.	

		environmental changes.		hircinum.	
		<ul> <li>Increases in undesirable species may result in an adverse effect on the habitats structure and function.</li> </ul>		<ul> <li>Active and ongoing conservation management is needed to protect, maintain or restore this habitat.</li> </ul>	
		<ul> <li>Changes to natural soil properties may therefore affect the ecological structure, function and processes associated with this habitat.</li> </ul>			
		Air quality - exceeding critical values for air pollutants may result in changes to habitat by modifying chemical substrates, damaging plant growth, changing vegetation composition and loss of species present in these habitats.			
Fenland SAC  The Fenland SAC is comprised of three fenland Sites of Special Scientific Interest: Woodwalton Fen, Wicken Fen and Chippenham Fen.  Each site generally consists of standing water bodies, ditch systems, bogs, marshes and broadleaved woodland carr.	Annex I habitats: Molinia meadows on calcareous, peaty or clayey- silt-laden soils (Molinion caeruleae)  Annex II species: Spined Loach (Cobitis taenia), Great Crested Newt (Triturus cristatus)	Current pressures  Water pollution – nutrient enrichment of Chippenham Fen component, fed from a mixture of groundwater, rainfall and surface runoff.  Hydrological changes related to public water supply abstraction.  Air pollution: impact of atmospheric nitrogen deposition  Potential future threats  None identified.  Natural England:	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;  The extent and distribution of qualifying natural habitats and habitats of	<ul> <li>In general, qualifying habitats of the SAC rely on:</li> <li>Key structural, influential and/or distinctive species, such as grazers, surface borers, predators or to maintain the structure, function and quality of habitat.</li> <li>Habitat connectivity to the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat.</li> </ul>	National Trust undertakin g remedial land manageme nt work.
		supplementary advice on conserving and restoring	<ul><li>qualifying species;</li><li>The structure and</li></ul>	Active and ongoing conservation	

#### site features

In addition to the above, the supplementary advice expands on the European site's vulnerabilities as follows:

- A change in the range and geographic distribution across the site will reduce its overall area, the local diversity and variations in its structure and composition, and may undermine its resilience to adapt to future environmental changes.
- Increases in undesirable species may result in an adverse effect on the habitats structure and function.
- Changes to natural soil properties may therefore affect the ecological structure, function and processes associated with this habitat.
- Poor water quality, as a result of agricultural process and inadequate quantities of water can adversely affect the structure and function of this habitat type.
- Air quality exceeding critical values for air pollutants may result in changes to habitat by modifying chemical substrates, damaging plant growth, changing vegetation composition and loss of

function (including typical species) of qualifying natural habitats;

- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and.

The distribution of qualifying species within the site.

management is needed to protect, maintain or restore this habitat.

For each habitat, more specific examples have been provided.

Molinia meadows on calcareous, peaty or clayeysilt-laden soils (Molinion caeruleae); Purple moorgrass meadows

- Upwellings and springs from the aquifer provide water to the site.
- Natural hydrological processes to provide the conditions necessary to sustain this habitat.

Calcareous fens with *Cladium* mariscus and species of the *Caricion davallianae*; Calciumrich fen dominated by great fen sedge (saw sedge)

- Upwellings and springs from the aquifer provide water to the site.
- Natural hydrological processes to provide the conditions necessary to sustain this habitat.

In general, the qualifying species of the SAC rely on:

- The sites ecosystem as a whole (see list of habitats below).
- Maintenance of populations of species

		<ul> <li>species present in these habitats.</li> <li>Increased cover of trees and shrubs can result in desiccation of these habitats.</li> <li>Changes in land use on offsite habitat can result in deterioration of habitat within the SAC.</li> <li>Changes in sediment may lead to sub-optimal conditions for spined loach.</li> <li>Inadequate quantities of water can adversely affect the structure and function of this habitat type.</li> </ul>		<ul> <li>that they feed on (see list of diets below).</li> <li>Habitat connectivity is important for the viability of these species populations.</li> <li>Spined loach</li> <li>Habitat preferences – small streams, large rivers and both large and small drainage ditches with patchy cover of submerged (and possibly emergent) macrophytes.</li> <li>Diet – food particles extracted from fine sediment.</li> <li>Great Crested Newts Habitat preferences – requires aquatic habitat, such as ponds for breeding in areas such as pastoral and arable farmland, woodland and grassland.</li> <li>Diet – aquatic invertebrates.</li> </ul>	
Ouse Washes SAC, SPA and Ramsar site  An extensive area of seasonally flooding wet grassland ('washland') with a diverse and rich ditch fauna and flora located on a major tributary of The Wash.	SAC qualifying species  Annex II: Spined loach Cobitis taenia  SPA qualifying species  Article 4.1, Annex	Current pressures  Inappropriate water levels – interest features are being adversely affected by increased flooding.  Potential future threats Water pollution.	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving  - the Favourable Conservation Status of	<ul> <li>In general, the qualifying species of the SAC, SPA and Ramsar rely on:</li> <li>The sites ecosystem as a whole (see list of habitats below).</li> <li>Maintenance of populations of species that they feed on (see list</li> </ul>	Long term tidal strategy - regular problems summer flooding- severe siltation of Great Ouse

The washlands support both breeding and wintering waterbirds.

1 species (breeding season):

Ruff *Philomachus* pugnax; Spotted Crake *Porzana* porzana

Annex I species (over winter):
Bewick's Swan Cygnus columbianus bewickii; Hen Harrier Circus cyaneus; Ruff Philomachus pugnax; Whooper Swan Cygnus cygnus,

Article 4.2 (migratory species – breeding season):

Black-tailed Godwit Limosa limosa limosa; Gadwall Anas strepera; Shoveler Anas clypeata

Article 4.2 (migratory species – over winter):

Black-tailed Godwit Limosa limosa islandica; Gadwall Anas strepera; Pintail Anas acuta; Pochard Aythya farina; Shoveler Anas clypeata;

33

its Qualifying Features (SAC), or

- the aims of the Wild Birds Directive (SPA)

...by maintaining or restoring:

- The extent and distribution of the habitats of qualifying species/features
- The structure and function of the habitats of the qualifying species/features
- The supporting processes on which the habitats of qualifying species/features rely
- The populations of qualifying species/features, and,
- The distribution of qualifying species/features within the site.

of diets below).

 Habitat connectivity is important for the viability of this species population.

#### Spined loach

- Habitat preferences small streams, large rivers and both large and small drainage ditches with patchy cover of submerged (and possibly emergent) macrophytes.
- Diet food particles extracted from fine sediment.

In general, the qualifying bird species of the SAC, SPA and Ramsar rely on:

- The sites ecosystem as a whole (see list of habitats below).
- Maintenance of populations of species that they feed on (see list of diets below).
- Off-site habitat, which provide foraging habitat for these species.
- Open landscape with unobstructed line of sight within nesting, foraging or roosting habitat.

#### Ruff

 Habitat preferences – grassy tundra, lakes, farmland, on migration

River. Smaller watercours es could drain into Great Ouse River and to Ouse Washes SPA/SAC. Large land holdings by RSPB, Cambridges hire Wildlife Trust and Wetlands and Wildfowl Trust.

Wigeon *Anas Penelope* 

Article 4.2 Assemblage qualification: regularly supports at least 20,000 waterfowl

#### Ramsar criteria

- 1. Extensive area of seasonally-flooding washland
- 2. Nationally scarce aquatic plants, relict invertebrates, assemblage of nationally rare breeding waterfowl.
- 5. Bird assemblages of international importance.
- 6. Water birds for potential future consideration

mudflat.

 Diet – invertebrates, especially insects, some plant material

#### Spotted Crake

- Habitat preferences swamps and marsh.
- Diet small aquatic invertebrates, parts of aquatic plants.

#### Bewick's Swan

- Habitat preferences lakes, ponds and rivers, also estuaries on migration.
- Diet plant material in water and flooded pasture.

#### Hen Harrier

- Habitat preferences moor, marsh, steppe and fields.
- Diet mostly, small birds, nestlings and small rodents.

#### Whooper Swan

- Habitat preferences lakes, marshes & rivers.
- Diet aquatic vegetation also grazes on land.

#### Black-tailed Godwit

 Habitat preferences – marshy grassland and steppe, on migration

	mudflats.
	Diet – invertebrates, some plant material.
	Gadwall
	Habitat preferences –     marshes, lakes, on     migration also rivers,     estuaries.
	Diet – Leaves, shoots.
	Pintail
	Habitat preferences – lakes, rivers and marsh.
	Diet – omnivorous, feeds on mud bottom at depths of 10-30cm.
	Pochard
	Habitat preferences – lakes and slow rivers on migration also estuaries.
	Diet – mostly plant material, also small animals.
	Shoveler
	Habitat preferences –     shallow lakes, marsh,     reedbed and wet     meadow.
	Diet – omnivorous, especially small insects, crustaceans, molluscs and seeds.
	Wigeon
	Habitat preferences –     marsh, lakes, open moor,

				on migration also estuaries.  • Diet – mostly leaves, shoots, rhizomes and some seeds.	
Chippenham Fen Ramsar	Criterion 1: Spring- fed calcareous basin mire with a long history of management, which is partly reflected in the diversity of present-day vegetation. Criterion 2: The invertebrate fauna is very rich, partly due to its transitional position between Fenland and Breckland. The species list is very long, including many rare and scarce invertebrates characteristic of ancient fenland sites in Britain. Criterion 3: The site supports diverse vegetation types, rare and scarce plants. The site is the stronghold of Cambridge milk parsley (Selinum	Pressures and threats documented in the Fenland SAC Site Improvement Plan relate to the designated features of the SAC (see above) but are also likely to be relevant to the designated Ramsar features, particularly hydrological changes which are cited in the Ramsar Information Sheet.	Not applicable.	<ul> <li>In general, the qualifying habitats of the Ramsar rely on:         <ul> <li>Key structural, influential and/or distinctive species, such as grazers, surface borers, predators to maintain the structure, function and quality of habitat.</li> <li>Insect, such as bees and flies for pollination of flowering plants.</li> </ul> </li> <li>Habitat connectivity to the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat.</li> <li>Management of habitats to protect, maintain and restore it.</li> <li>In general, the qualifying species of the Ramsar rely on:         <ul> <li>Invertebrates</li> <li>Diets – flowering plants, organic matter and other invertebrate species for food resources.</li> </ul> </li> </ul>	Inappropria te scrub control, cutting and mowing in several units contributin g to unfavourabl e no change status.

	carvifolia).				
Wicken Fen Ramsar	Criterion 1: One of the most outstanding remnants of the East Anglian peat fens. The area is one of the few which has not been drained.  Traditional management has created a mosaic of habitats from open water to sedge and litter fields.  Criterion 2: The site supports one species of British Red Data Book plant, fen violet (Viola persicifolia), which survives at only two other sites in Britain. It also contains eight nationally scarce plants and 121 British Red Data Book invertebrates.	Pressures and threats documented in the Fenland Site Improvement Plan relate to the designated features of the SAC (see above) but are also likely to be relevant to the designated Ramsar features, particularly hydrological changes which are cited in the Ramsar Information Sheet.	Not applicable.	<ul> <li>In general, the qualifying habitats of the Ramsar rely on:         <ul> <li>Key structural, influential and/or distinctive species, such as grazers, surface borers, predators to maintain the structure, function and quality of habitat.</li> <li>Insect, such as bees and flies for pollination of flowering plants.</li> </ul> </li> <li>Habitat connectivity to the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat.</li> <li>Management of habitats to protect, maintain and restore it.</li> <li>In general, the qualifying habitats of the Ramsar rely on:         <ul> <li>Invertebrates</li> <li>Diets – flowering plants, organic matter and other invertebrate species for food resources.</li> </ul> </li> </ul>	Issues caused by inappropria te water levels and scrub control in some areas. WLMP in place to address these issues.

Greater Cambridge Local Plan 37 November 2019

Map of Strategic Roads within Greater Cambridge



## **CAMBRIDGE CITY COUNCIL**

#### Record of Executive Decision

# CONSULTATION RESPONSE TO CAMBRIDGESHIRE AND PETERBOROUGH MINERALS AND WASTE LOCAL PLAN PROPOSED SUBMISSION (PUBLICATION) DRAFT

Decision of: Councillor Katie Thornburrow, Executive Councillor for

Planning Policy and Open Spaces

**Reference:** 19/URGENCY/P&T/15

Date of decision: 03/01/20 Recorded on: 03/01/20

**Decision Type:** Non Key

Matter for Decision:

Cambridgeshire County Council and Peterborough District Council (the Minerals and Waste Authorities) are reviewing their joint Minerals and Waste Development Plan. The Proposed Submission Draft of the Minerals and Waste Local Plan is subject to consultation until 9<sup>th</sup> January 2020. This is the third round of consultation on the emerging plan and following the consultation the minerals and waste authorities will submit the Proposed Submission Plan and background documents and the representations received to the Secretary of State for Examination.

Appendix 1 to this decision sets out a report which looks at the representations previously made by Greater Cambridge Shared Planning on behalf of Cambridge City Council and South Cambridgeshire District Council and whether these have been taken forward into the Proposed Submission Draft. It recommends that a small number of further representations are

made. These are all in support, but one also asks for further clarity on the uncertainty around the household waste recycling centre at Northstowe. The proposed representations are set out in Appendix 2 attached to this decision.

The purpose of this decision is to agree the representations set out in Appendix 2 appended, so that they can be submitted before the deadline of 9<sup>th</sup> January 2020.

Note:

To ensure an aligned agreement between Cambridge City Council and South Cambridgeshire District Council, the Lead Cabinet Member for Planning at South Cambridgeshire District Council is also taking an out of cycle decision at the same time. Why the decision had to be made (and any alternative options):

The consultation provides an opportunity for Cambridge City Council and South Cambridgeshire District Council to make further representations on the content of the Minerals and Waste Local Plan.

The Executive Councillor's decision(s):

To confirm that the representations set out in Appendix 2 of this decision should be made to the Cambridgeshire and Peterborough Minerals and Waste Local Plan Proposed Submission (Publication) Draft.

Reasons for the decision:

To provide the views of Cambridge City Council and South Cambridgeshire District Council on the Cambridgeshire and Peterborough Minerals and Waste Local Plan Proposed Submission (Publication) Draft.

Scrutiny consideration:

The Chair and Spokesperson of Planning and Transport Scrutiny Committee were consulted prior to the action being authorised.

Report:

The background report and proposed representations are

attached as Appendix 1 and 2 as set out above.

Conflicts of interest:

None known

**Comments:** 

# Appendix 1: Assessment of the need to make representations to the Cambridgeshire and Peterborough Minerals and Waste Local Plan Proposed Submission (Publication) Draft, November 2019

#### Background

Cambridgeshire County Council and Peterborough District Council (the Minerals and Waste Authorities) are reviewing their joint Minerals and Waste Development Plan. They have previously consulted on a Preliminary Draft Local Plan in 2018 and more recently a Further Draft Local Plan between March and May 2019. The Greater Cambridge Shared Planning Service has previously provided representations to these consultations on behalf of Cambridge City Council and South Cambridgeshire District Council (the Councils).

The Minerals and Waste Authorities considered the comments made to these previous consultations and have now produced the Proposed Submission Plan, which they are consulting upon between 15<sup>th</sup> November and 9<sup>th</sup> January 2020. At this stage of consultation representations are restricted to matters of 'soundness' and legal compliance of the Plan and will be considered by the independent Planning Inspector at examination. The Councils have considered the Proposed Submission Plan and how the previous representations made in objection or support have been taken forward into the Submission Plan in order to decide whether we should make any further representations, as set out below.

#### **Assessment of Previous Representations and Proposed Submission Plan**

This section provides a summary of the main areas of concern that the Councils had in the previous consultation on the Preliminary Draft Plan and how they have been addressed in the Submission Plan.

#### **Policy 2: Providing for Mineral Extraction**

In the draft plan there was some uncertainty about whether the mineral allocation at Block Fen/Langwood Fen West Mepal would come forward, and the Councils objected because of this uncertainty, because it was not clear what the implications would be should alternative allocations be necessary.

The background document to Policy 2 now confirms that this uncertainty has been removed. As a result the Block Fen/Langwood Fen allocation remains within the Plan and no alternative allocations have had to be made. Therefore, it is considered that there is no need to make a further representation on this matter.

#### Impact of traffic from minerals operations

The plan includes some extensions to existing mineral operations at Mitchell Hill Farm South and Chear Fen in Cottenham, and the allocation at Bare Fen and West Fen, Willingham/Over is broadly similar to the allocation in the existing Plan. The Councils previously supported the principle of seeking extensions to existing sites over allocation of new sites, but sought reassurance that Heavy Commercial Vehicle (HCV) traffic should avoid routes through villages where possible and be minimised or mitigated if avoidance is not possible.

The policy now includes additional detail about each site, including their access route. Mitchell Hill Farm and Chear Fen are via the existing A10 roundabout, and Bare Fen and West Fen are through the existing Needingworth Quarry and through the agreed HCV routing.

Policy 23: Traffic, Highways and Rights of Way sets out that mineral and waste management development will only be permitted if (at criteria d) 'any associated increase in traffic or highway improvements would not cause unacceptable harm to the environment, road safety or residential amenity, and would not cause severe residential cumulative impacts on the road network'. This policy also states that proposals for the movement of mineral and/or waste must demonstrate that the latest identified HCV network should be utilised, where reasonable and practical to do so. There is a link to the HCV network in a footnote in the Plan <a href="http://www.cambridgeshire.gov.uk/freight-map">http://www.cambridgeshire.gov.uk/freight-map</a>.

In the background document to Policy 23, the minerals and waste authorities state that 'various comments relating to HCVs, and their impact off-site, are noted and understood, and the Councils, in principle, share the concerns raised. However, the Councils have a duty to provide suitable opportunities for the extraction of minerals and the processing of waste, and inevitably such operations generate HCV movements. The Councils are committed to making decisions (both via policy and subsequent planning applications) which minimise the harm of HCV movements, and where harm arises, mitigating for that harm. The Councils believe that the Policy strikes the right balance, by placing firm policy in respect of traffic related matters, but not so onerous as to make the delivery of mineral sites unviable or impossible to be achieved. The Councils also have to prepare such a policy in conformity with national policy, which limits what the Councils can reasonably seek developers to conform to.'

Policy 23 and in particular criterion b will be used in any future planning applications for extensions to minerals sites and the HCV routes set out aim to direct this traffic to the larger roads. Therefore, it is considered that there is no need to make a further representation on this matter.

#### **Policy 4: Providing for Waste Management**

The plan is not proposing any allocations for waste management development and instead Policy 4 sets out the strategy for any new waste management development. The justification for this given by the minerals and waste authorities is that there is a limited need for further capacity over the plan period and past experience has shown that allocated sites don't always come forward, and proposals have been approved on non-allocated sites.

Instead the strategy is to leave it to the market to bring forward suitable and viable sites based upon the direction and criteria set out in Policy 4. Policy 4 directs waste proposals to urban areas (within Greater Cambridge these are Cambridge, Cambourne, Northstowe and the Waterbeach New Town), with first consideration to be employment areas (B2 and/or B8) within these settlements and any 'strategic' employment areas over 10ha which might not necessarily be located in these urban areas. Where such sites are not available or suitable support may be given to facilities on other suitable sites in urban areas or on the edge of them (subject to certain factors which are set out). Priority will be given to the use of brownfield land within the urban areas.

The Councils previous comments on this policy showed some support to the flexibility of this approach, as land will not be unnecessarily sterilised from other uses by an allocation for waste management. However, there were concerns about whether this approach will deliver the facilities required as it relies on the market bringing forward proposals and for the minerals and waste authorities to engage at an early stage in the preparation of Local Plans. Other concerns previously raised were whether the use of employment sites could have an impact on the overall employment strategy for Greater Cambridge. Also, the draft plan did not make it clear whether the existing allocation for a waste management site at Northstowe is still required, either at all, or within its current location, as the uncertainty is hampering delivery of the Enterprise Zone and further clarification was sought.

The Proposed Submission Plan policy remains unchanged and the minerals and waste authority state that the justification for this approach is set out in the evidence reports 'Waste Needs Assessment'

https://drive.google.com/drive/folders/16Ex6yhTEoNwKsNVWasVVyi-HXIDKfU7e and 'Developing a Spatial Strategy for Waste Management Provision 2019' <a href="https://drive.google.com/drive/folders/16Ex6yhTEoNwKsNVWasVVyi-HXIDKfU7e">https://drive.google.com/drive/folders/16Ex6yhTEoNwKsNVWasVVyi-HXIDKfU7e</a>. Officers have given further consideration to the priority for industrial areas as first priority for such uses. Although within Greater Cambridge it is unlikely that there will be many suitable sites, waste management uses are quite similar to industrial B2 and B8 uses, and can be housed within a building to reduce impact. Therefore there is no objection to this in principle.

The document which relates to Policy 4, does not however address the situation with regards to whether the site at Northstowe is required for waste management. Therefore it is proposed to submit a representation to ask for further clarity on this. This will not be an objection to the soundness of the plan and so will submitted as a support with a comment seeking clarification. The proposed representation can be found in Appendix 2.

#### **North East Cambridge**

The North East Cambridge Area Action plan will be looking comprehensively at this part of Cambridge to be developed for housing, employment and other supporting uses and facilities as a new city district of Cambridge. Currently there is a waste management area (Veolia on Cowley Road), a transport infrastructure area (North East Cambridge Aggregates Rail Head and access road) and a water recycling area (which covers the water recycling centre) within this area. At the draft Plan stage, the Councils sought reassurance that these uses could be potentially relocated in order that they would not hamper development of the AAP.

In the Proposed Submission Plan the minerals and waste authorities have added additional text to Policy 10: Waste Management Areas which would allow for the relocation of the waste management facility, which may be incompatible with the other proposed uses in the AAP. Policy 11: Water Recycling Areas supports the relocation of water recycling centres, and Policy 15 Transport Infrastructure Areas (TIAs) permits relocation to a suitable alternative elsewhere. It is therefore proposed that all of these policies are supported, and the proposed representations are in Appendix 2.

# Appendix 2: Proposed Representations to Cambridgeshire and Peterborough Minerals and Waste Local Plan, Proposed Submission (Publication) Draft

#### **Policy 4: Providing for Waste Management**

**SUPPORT** 

Cambridge City Council and South Cambridgeshire District Council do not object to the overall approach to providing sites for waste management as set out in Policy 4, however this needs to be implemented effectively and efficiently. The approach taken at Northstowe with regards to a site for a household waste recycling facility has led to uncertainty, which has impacted upon the development of employment within the Enterprise Zone in the new town.

#### **Policy 10: Waste Management Areas**

#### **SUPPORT**

Cambridge City Council and South Cambridgeshire District Council support Policy 10 and in particular the inclusion of criterion c, which would allow flexibility for development within a Waste Management Area for proposals which demonstrate clear wider regeneration benefits provided that the waste stream can be accommodated elsewhere. This would be the case in North East Cambridge where the Councils are producing an Area Action Plan for a new city district, with housing, employment and supporting uses and where a WMA may not be compatible with these uses and may need to be relocated elsewhere.

#### **Policy 11: Water Recycling Areas**

#### **SUPPORT**

Cambridge City Council and South Cambridgeshire District Council support Policy 11, which is supportive of the relocation of water recycling centres (WRC). The relocation of the WRC in North East Cambridge will allow the development of this area as a new city district in line with the Area Action Plan which the Councils are producing.

#### **Policy 15: Transport Infrastructure Areas (TIAs)**

#### **SUPPORT**

Cambridge City Council and South Cambridgeshire District Council support Policy 15, which allows for the relocation of TIAs such as the Cambridge North East Aggregates Railhead if a suitable alternative can be found. This will allow flexibility for development in North East Cambridge where the Councils are producing an Area Action Plan for a new city district, with housing, employment and supporting uses. The location of this facility will be important during the construction of the

development as a sustainable way in which to transport construction materials to the site, but the TIA may not be compatible with these uses once development is at an advanced stage.