Greater Cambridge Local Plan: First Proposals 2021

HRA Report

South Cambridgeshire District Council and Cambridge City Council

Final report

Prepared by LUC

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Chapter 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) as described in Chapter 2.

1.2 This iteration of the HRA assesses the impacts of the Greater Cambridge Local Plan: First Proposals 2021 and should be read in conjunction with that document.

Previous HRA Work

1.3 To inform the plan-making process, an HRA has been prepared to inform each stage of the process. This has included the provision of an HRA Scoping Report to accompany the Local Plan Issues and Options, which sought the opinions of stakeholders and local people as to what the key issues are that the Local Plan should seek to address. This report was subject to consultation from Natural England in 2020 and the advice provided has been taken into account in this iteration of the HRA.

1.4 In addition, a review of spatial options in relation to HRA was undertaken in Autumn 2020. This included a review of possible growth levels and strategic spatial options for the plan.

The requirement to undertake Habitats Regulations Assessment of Development Plans

1.5 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007 **[See reference 1]**; the currently applicable version is the Habitats Regulations 2017 **[See reference 2]**, as amended. When preparing the GCLP, the Councils are therefore 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 would usually **[See reference 3]** only progress a plan if it considers that the plan will not adversely affect the integrity **[See reference 4]** of any 'European site', as defined below. The requirement for authorities to comply with the Habitats Regulations when preparing a plan is also noted in the Government's online Planning Practice Guidance **[See reference 5]** (PPG).

1.6 HRA refers to the assessment of the potential effects of a development plan on one or more sites afforded the highest level of protection in the UK: Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). These were classified under European Union (EU) legislation but, since 1 January 2021, are protected in the UK by the Habitats Regulations 20172 (as amended). Although the EU Directives from which the UK's Habitats Regulations originally derived are no longer binding, the Regulations still make reference to the lists of habitats and species that the sites were designated for, which are listed in annexes to the EU Directives:

- SACs are designated for particular habitat types (specified in Annex 1 of the EU Habitats Directive **[See reference 6]**) and species (Annex II).
- SPAs are classified for rare and vulnerable birds (Annex I of the EU Birds Directive **[See reference 7]**), and for regularly occurring migratory species not listed in Annex I.

1.7 The term 'European sites' was previously commonly used in HRA to refer to 'Natura 2000' sites **[See reference** 8**]** and Ramsar sites (international designated under the Ramsar Convention). However, a Government Policy Paper **[See reference** 9**]** on changes to the Habitats Regulations 2017 post-Brexit states that:

- Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new 'national site network'.
- The national site network includes existing SACs and SPAs; and new SACs and SPAs designated under these Regulations.
- Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats.

1.8 Although Ramsar sites do not form part of the new national site network, the Government Policy Paper **[See reference** 10**]** confirms that all Ramsar sites remain protected in the same way as SACs and SPAs. In LUC's view and unless the Government provides any guidance to the contrary, potential effects on Ramsar sites should continue to form part of the HRA of plans and projects since the requirement for HRA of plans and projects that might adversely affect Ramsar sites forms an essential part of the protection confirmed by the Government Policy Paper. Furthermore, the NPPF **[See reference** 11**]** and practice guidance **[See reference** 12**]** currently still state that competent authorities responsible for carrying out HRA should treat Ramsar sites in the same way as SACs and SPAs.

1.9 The requirement for HRA does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves; therefore, for clarity, this report uses the term 'European sites' rather than 'national site network'.

1.10 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or whole development plan would adversely affect the integrity of the European site in question. This is judged in terms of the implications of the plan

for a site's 'qualifying features' (i.e. those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle. Where uncertainty or doubt remains, an adverse effect should be assumed.

Stages of Habitats Regulations Assessment

1.11 The section below summarises the stages involved in carrying out an HRA, based on various guidance documents **[See reference** 13**]**, **[See reference** 14**]**. This HRA presents the methodology and findings of Stage 1: Screening and Stage 2: Appropriate Assessment.

Stage 1: Screening (the 'Significance Test')

Tasks

- Description of the development plan and confirmation that it is not directly connected with or necessary to the management of European sites.
- Identification of potentially affected European sites and their conservation objectives **[See reference** 15**]**.
- Review of other plans and projects.
- Assessment of likely significant effects of the development plan alone or in combination with other plans and projects, prior to consideration of avoidance or reduction ('mitigation') measures **[See reference** 16**]**.

Outcome

1.12 Where effects are unlikely, prepare a 'finding of no significant effect report'.

1.13 Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.

Stage 2: Appropriate Assessment (the 'Integrity Test')

Task

- Information gathering (development plan and data on European sites **[See reference** 17**]**).
- Impact prediction.
- Evaluation of development plan impacts in view of conservation objectives of European sites.
- Where impacts are considered to directly or indirectly affect qualifying features of European sites, identify how these effects will be avoided or reduced ('mitigation').

Outcome

1.14 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 through, firstly, avoidance, and secondly, mitigation, including the mechanisms and timescale for these mitigation measures.

1.15 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 impacts remain taking into account mitigation

Task

- Identify and demonstrate ‘imperative reasons of overriding public interest’ (IROPI).
- Demonstrate no alternatives exist.
- Identify potential compensatory measures.

Outcome

1.16 This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

1.17 In assessing the effects of the Local Plan in accordance with Regulation 105 of the Habitats Regulations (as amended), there are potentially two tests to be applied by the competent authority: a ‘Significance Test’, followed, if necessary, by an Appropriate Assessment which will 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:
- Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on the site, either alone or in combination with other plans or projects (the ‘Significance Test’). [These two steps are undertaken as part of Stage 1: Screening shown above.] If so:
- Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the site in view of its current conservation objectives (the ‘Integrity Test’). In so doing, 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. [This step is undertaken during Stage 2: Appropriate Assessment shown above.]

- 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 will not adversely affect the integrity of the European site.

1.18 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 avoidance of likely significant effects at Stage 1, and through Appropriate Assessment at Stage 2 by the inclusion of mitigation measures designed to avoid or reduce 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 the Government.

1.19 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 their behalf. The HRA also requires close working with Natural England as the statutory nature conservation body in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals.

Case law changes

1.20 This HRA has been prepared in accordance with relevant case law findings, including most notably the 'People over Wind' and 'Holohan' rulings from the Court of Justice for the European Union (CJEU).

1.21 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."

1.22 In light of the above, the HRA screening stage does not rely upon avoidance or mitigation measures to draw conclusions as to whether the Local Plan could result in likely significant effects on European sites. Instead, any such measures are considered at the Appropriate Assessment stage as relevant.

1.23 The approach to this HRA is also consistent with the Holohan v An Bord Pleanala (November 2018) CJEU 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.

1.24 In undertaking this HRA, LUC 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 that may be important in supporting the ecological processes of the qualifying features, has also been fully considered in this HRA.

1.25 The approach to the HRA also takes into consideration the 'Wealden' judgement and the 'Dutch Nitrogen Case' judgements from the Court of Justice for the European Union.

1.26 Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority (2017) ruled that it was not appropriate to scope out the need for a detailed assessment for an individual plan or project based on the annual average daily traffic (AADT) figures detailed in the Design Manual for Roads and Bridges or

the critical loads used by Defra or Environmental Agency without considering the in-combination impacts with other plans and projects.

1.27 In light of this judgement, the HRA therefore considers traffic growth based on the effects of development from the Local Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

1.28 The 2018 ‘Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu (Dutch Nitrogen)’ judgement stated that:

> “...the positive effects of the autonomous decrease in the nitrogen deposition…be taken into account in the appropriate assessment…, it is important that the autonomous decrease in the nitrogen deposition be monitored and, if it transpires that the decrease is less favourable than had been assumed in the appropriate assessment, that adjustments, if required, be made.”

1.29 The Dutch Nitrogen judgement also states that according to previous case law:

> “…it is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm to the integrity of the site concerned, by guaranteeing beyond all reasonable doubt that the plan or project at issue will not adversely affect the integrity of that site, that such a measure may be taken into consideration in the ‘appropriate assessment’ within the meaning of Article 6(3) of the Habitats Directive.“

1.30 The HRA of the Greater Cambridge Local Plan: First Proposals 2021 therefore only considers the existence of conservation and/or preventative

measures if the expected benefits of those measures are certain at the time of the assessment.

Structure of this report

1.31 This chapter (Chapter 1) described the background to the production of the GCLP and the requirement to undertake HRA. The remainder of the report is structured as follows:

- Chapter 2: Greater Cambridge Local Plan: First Proposals 2021 summarises the content of the plan, which is the subject of this report
- Chapter 3: Method sets out the approach used, and the specific tasks undertaken during the screening and Appropriate Assessment stages of the HRA.
- Chapter 4: Screening assessment describes the findings of the screening stage of the HRA.
- Chapter 5: Appropriate Assessment describes the findings of the Appropriate Assessment stage of the HRA.
- Chapter 6: Conclusions and next Steps summarises the HRA conclusions for the Greater Cambridge Local Plan: First Proposals 2021 and describes the next steps to be undertaken.

Chapter 2

Greater Cambridge Local Plan First Proposals (Preferred Options) 2021

2.1 Cambridge City Council and South Cambridgeshire District Council (referred to as 'the Councils' in this consultation) are working together to create a joint Local Plan for the two areas – which are referred to as 'Greater Cambridge'. This will ensure that there is a consistent approach to planning, and the same planning policies, where appropriate, across both areas. In the past the Councils have produced separate Local Plans, but with a shared development strategy, including a number of development sites straddling the administrative boundary.

2.2 A Local Plan is a legal document that the Councils are required to prepare, which sets out the future land use and planning policies for the area over a set time frame. It identifies the need for new homes and jobs, and the services and infrastructure to support them, and guides where this development should happen.

2.3 Both Councils adopted their current Local Plans in 2018. These included a commitment to an early review, in particular to update the assessment of housing needs, to review the progress of delivering planned developments including new settlements, and to consider the needs of caravan dwellers and government changes to the approach to planning for Gypsies and Travellers. When adopted, the Greater Cambridge Local Plan would replace both Council's 2018 Local Plans. The adopted 2018 Local Plans remain in force until they are replaced.

2.4 The First Proposals document sets out the Councils vision for the Local Plan.

The Councils' vision is for "Greater Cambridge to be a place where a big decrease in our climate impacts comes with a big increase in the quality of everyday life for all our communities. New development must reduce carbon emissions and reliance on the private car; create thriving neighbourhoods with the variety of jobs and homes we need; increase nature, wildlife and green spaces; and safeguard our unique heritage and landscapes."

2.5 This vision is supported by a number of aims, as follows:

- Climate change: Help Greater Cambridge transition to net zero carbon by 2050, by ensuring that development is sited in places that help to limit carbon emissions, is designed to the highest achievable standards for energy and water use and is resilient to current and future climate risks.
- Biodiversity and green spaces: Increase and improve our network of habitats for wildlife, and green spaces for people, ensuring that development leaves the natural environment better than it was before.
- Wellbeing and social inclusion: Help people in Greater Cambridge to lead healthier and happier lives, ensuring that everyone benefits from the development of new homes and jobs.
- Great places: Sustain the unique character of Cambridge and South Cambridgeshire, and complement it with beautiful and distinctive development, creating a place where people want to live, work and play.
- Jobs: Encourage a flourishing and mixed economy in Greater Cambridge which includes a wide range of jobs, while maintaining our area's global reputation for innovation.
- Homes: Plan for enough housing to meet our needs, including significant quantities of housing that is affordable to rent and buy, and different kinds of homes to suit our diverse communities.
- Infrastructure: Plan for transport, water, energy and digital networks; and health, education and cultural facilities; in the right places and built at the right times to serve our growing communities.

2.6 These aims expand on the themes for this plan, and have informed decisions regarding the spatial strategy, and future policies. The Councils have aligned these aims with the principles in the National Planning Policy Framework, and the Greater Cambridge Local Plan Sustainability Appraisal objectives.

2.7 The Local Plan First Proposals sets out a number of strategic and development management-style policies and a number of site allocations. These are grouped into the following themes and also reflect the aims:

- How much development, and where?
- The city of Cambridge
- The edge of Cambridge
- New settlements
- The rural southern cluster
- Rest of the rural area
- Climate change
- Biodiversity and green spaces
- Wellbeing and social inclusion
- Great places
- Jobs
- Homes
- Infrastructure

2.8 The distribution of site allocations across the plan area is shown in Figure 1 in Appendix A to this HRA report.

Chapter 3

Method

3.1 The HRA of the GCLP consists of two stages:

- Screening Assessment.
- Appropriate Assessment.

3.2 The methodology undertaken for the HRA is set out in more detail below.

Screening Assessment

3.3 HRA Screening of the plan was undertaken in line with current available guidance and sought to meet the requirements of the Habitats Regulations. The tasks that were undertaken during the screening stage of the HRA and the conclusions reached are described in detail below. This section of the HRA report sets out policies and impact types for which likely significant effects are predicted or cannot be ruled out prior to mitigation and avoidance measures.

3.4 The purpose of the screening stage is to:

- Identify all aspects of the plan which would have no effect on a European site, so that that they can be eliminated from further consideration in respect of this and other plans.
- Identify all aspects of the plan which would not be likely to have a significant effect on a European site (i.e. would have some effect, because of links/connectivity, but which are not significant), either alone or in combination with other aspects of the same plan or other plans or projects, which therefore do not require ‘Appropriate Assessment’.
- Identify those aspects of the plan where it is not possible to rule out the risk of significant effects on a European site, either alone or in combination

with other plans or projects. This provides a clear scope for the parts of the plan that will require Appropriate Assessment.

Identifying European sites that may be affected and their conservation objectives

3.5 In order to initiate the search of European sites that could potentially be affected by a development, it is established practice in HRA to consider sites within the local planning authority area covered by the plan, and other sites that may be affected beyond this area.

3.6 A distance of 15km from the boundary of the plan area is typically used in the first instance to identify European sites with the potential to be affected by the proposals within a development plan. Consideration is then given to whether any more distant European sites may be connected to the plan area via effects pathways, for example through hydrological links or recreational visits by residents. The 15km distance has been agreed with Natural England for HRAs elsewhere and is considered precautionary. All European sites within 15km were assessed in this HRA.

3.7 The assessment also takes into account areas that may be functionally linked to the European sites. The term ‘functional linkage’ is used to refer to the role or ‘function’ that land beyond the boundary of a European site might fulfil in terms of supporting the species populations for which the site was designated or classified. Such an area is therefore ‘linked’ to the site in question because it provides a (potentially important) role in maintaining or restoring a protected population at favourable conservation status.

3.8 While the boundary of a European site will usually be drawn to include key supporting habitat for a qualifying species, this cannot always be the case where the population for which a site is designated or classified is particularly mobile. Individuals of the population will not necessarily remain in the site all the time. Sometimes, the mobility of qualifying species is considerable and may

extend so far from the key habitat that forms the SAC or SPA that it would be entirely impractical to attempt to designate or classify all of the land or sea that may conceivably be used by the species **[See reference** 18**]**. HRA therefore considers whether any European sites make use of functionally linked habitats, and the impacts that could affect those habitats.

3.9 European sites identified for inclusion in the HRA are listed below in Table 3.1 and Figure 2 in Appendix A. Detailed information about each European site is provided in Appendix B, described with reference to Standard Data Forms for the SPAs and SACs, and Natural England's Site Improvement Plans **[See reference** 19**]**. Natural England's conservation objectives **[See reference** 20**]** for the SPAs and SACs have also been reviewed. These state that site integrity must be maintained or restored by maintaining or restoring the habitats of qualifying features, the supporting processes on which they rely, and populations of qualifying species.

Table 3.1: European sites within 15km of Greater Cambridge District Boundary

European Site	Closest Distance / Location from GCLP Area
SACs	
Eversden and Wimpole Woods SAC	Within GCLP Area (west)
Ouse Washes SAC	Adjacent to north
Porthome 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 Site	Adjacent to north

European Site	Closest Distance / Location from GCLP Area
Wicken Fen Ramsar	1km / North East
Chippenham Fen Ramsar	10.3km to North East

Assessment of 'likely significant effects' of the GCLP

3.10 As required under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 **[See reference** 21**]** (as amended), an assessment has been undertaken of the 'likely significant effects' of the plan. The assessment has been prepared in order to identify which policies or site allocations would be likely to have a significant effect on European sites. The screening assessment has been conducted without taking mitigation into account, in accordance with the 'People over Wind' judgment.

3.11 Consideration was given to the potential for the development proposed to result in significant effects associated with:

- Physical loss or damage to habitat.
- Non-physical disturbance (noise, vibration and light pollution).
- Air pollution.
- Recreational pressure.
- Changes to hydrology, including water quantity and quality.

3.12 This thematic/ impact category approach also allowed for consideration to be given to the cumulative effects of the site allocations rather than focussing exclusively on individual developments provided for by the plan.

3.13 A risk-based approach involving the application of the precautionary principle was adopted in the assessment, such that a conclusion of 'no

significant effect' was only reached where it was considered unlikely, based on current knowledge and the information available, that a development plan policy or site allocation would have a significant effect on the integrity of a European site.

3.14 A screening matrix was prepared (Appendix C), to document consideration of the potential for likely significant effects resulting from each policy and site allocation in the plan.

3.15 For some types of impacts, the potential for likely significant effects was determined on a proximity basis. This approach and the assumptions applied are described in more detail in Chapter 4.

Interpretation of 'likely significant effects'

3.16 Relevant case law helps to interpret when effects should be considered as a likely significant effect, when carrying out HRA of a land use plan.

3.17 In the Waddenzee case **[See reference** 22**]**, 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). 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).

3.18 A relevant opinion delivered to the Court of Justice of the European Union commented that:

> "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."

3.19 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 "that 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'.

3.20 The HRA screening assessment therefore considers whether the preferred Local Plan policies could have likely significant effects either alone or in combination.

Mitigation provided by the plan

3.21 Some of the potential effects of the plan could be mitigated through the implementation of other policies in the plan itself, such as the provision of green infrastructure within new developments (which could help mitigate increased pressure from recreation activities at European sites). Nevertheless, in accordance with the 'People over Wind' judgment, avoidance and mitigation measures cannot be relied upon at the Screening Stage, and therefore, where such measures exist, they were considered at the Appropriate Assessment stage for impacts and policies where likely significant effects, either alone or in-combination, could not be ruled out.

Assessment of potential in-combination effects

3.22 Regulation 105 of the 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, where likely insignificant effects are identified for the Local Plan alone, it is necessary to consider whether these may become significant effects in combination with other plans or projects.

3.23 The HRA Report identified which other plans and projects in addition to the GCLP may affect the European sites that were the focus of this assessment. This included a review of relevant plans to identify those components of nearby plans that could have an impact on the European sites scoped in to this HRA, e.g. areas or towns where additional housing or employment development is proposed near to the European sites (as there could be effects from the transport, water use, infrastructure and recreation pressures associated with the new developments).

3.24 There are a large number of potentially relevant plans therefore the review focussed on planned spatial growth within authorities adjacent to the Isle of Wight as well as other authorities that are adjacent to the European sites included in this HRA. The findings of any associated HRA work for those plans have been reviewed where available.

3.25 Appendix D presents the review of other plans and projects, outlining the components of each plan that could have an impact on nearby European sites. Where likely significant in-combination effects could not be ruled out at the screening stage, the Appropriate Assessment gathered the information necessary to consider these, for example traffic data for air pollution, or housing provisions and major site allocations in neighbouring authorities for recreation pressure.

3.26 The HRA report identified that the following authorities' plans have the potential to contribute to in-combination effects with the GCLP:

- Huntingdonshire
- Fenland
- East Cambridgeshire
- Forest Heath
- St Edmundsbury
- Braintree
- Uttlesford
- North Hertfordshire
- Central Bedfordshire
- Bedford

3.27 In addition, major infrastructure projects were included in the in-combination review. This included:

- The Oxford-Cambridge Arc.
- Cambridgeshire and Peterborough Minerals and Waste Local Plan.
- Cambridgeshire and Peterborough Strategic Spatial Framework.
- Cambridgeshire Local Transport Plan.

Appropriate Assessment

3.28 Following the screening stage, if likely significant effects on European sites are unable to be ruled out, the plan-making authority is required under Regulation 105 of the Habitats Regulations to make an 'Appropriate Assessment' of the implications of the plan for European sites, in view of their conservation objectives. Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the

integrity of European sites with respect to their conservation objectives and to their structure and function **[See reference** 23**]**. This includes consideration of plans and projects with the potential for in-combination effects, where relevant.

Assessing the effects on site integrity

3.29 A site's integrity depends on it being able to sustain its 'qualifying features' (i.e. the habitats and species for which it has been designated) and to ensure their continued viability. The Holohan judgement also clarifies that effects on species and habitats not listed as qualifying features, but which could result in secondary effects upon the qualifying features of European sites also need to be considered. The Appropriate Assessment therefore built upon the information set out in Appendix B of this report to consider the characteristics of supporting habitats and species that could be affected by impacts identified at the screening stage.

3.30 A high degree of integrity at a site is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management support.

3.31 A conclusion needs to be reached as to whether or not a plan would adversely affect the integrity of any European site. Assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the plan policies and/or site allocations (either alone or in combination) have the potential to:

- Cause delays to the achievement of conservation objectives for the site.
- Interrupt progress towards the achievement of conservation objectives for the site.
- Disrupt those factors that help to maintain the favourable conditions of the site.

- Interfere with the balance, distribution and density of key species that are the indicators of the 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 **[See reference** 24**]**.

3.32 The conservation objectives for each SAC and SPA (as set out in Appendix B) are generally to maintain the qualifying features in favourable condition. Natural England does not define conservation objectives for Ramsar sites, but these can often be inferred from those for co-located SAC or SPA features. The Site Improvement Plans for each site provide a high-level overview of the issues (both current and predicted) affecting the condition of the designated features on the site(s) and outline the priority measures required to improve the condition of the features. An Appropriate Assessment draws on these to help to understand what is needed to maintain the integrity of the European sites.

3.33 For each European site where an uncertain or likely significant effect was identified in relation to the plan, the Appropriate Assessment sets out the potential impacts and makes a judgement (based on the information available) on whether the impact will have an adverse effect on the integrity of the European site. Consideration was given to the potential for mitigation measures to be implemented that could reduce the likelihood or severity of the potential

impacts such that there would not be an adverse effect on the integrity of the European site.

Chapter 4

Screening Assessment

4.1 As described in the Method chapter, a screening assessment was carried out in order to identify the likely significant effects of the Greater Cambridge Local Plan First Proposals on the scoped-in European sites. The full screening matrix, which sets out the decision-making process used for this assessment can be found in Appendix C and the findings are summarised below.

HRA Screening of Policies

No 'likely significant effect' predicted

4.2 The following policies are not expected to result in development and therefore will not result in significant effects on European sites:

- S/SH: Settlement hierarchy
- S/SB: Settlement boundaries
- S/RRP: Policy areas in the rest of the rural area
- CC/NZ: Net zero carbon new buildings
- CC/DC: Designing for a changing climate
- WS/CF: Community, sports, and leisure facilities
- WS/MU: Meanwhile uses during long term redevelopments
- WS/IO: Creating inclusive employment and business opportunities through new developments
- WS/HS: Pollution, health and safety
- GP/PP: People and place responsive design

- GP/LC: Protection and enhancement of landscape character
- GP/QD: Achieving high quality development
- GP/QP: Establishing high quality landscape and public realm
- GP/HA: Conservation and enhancement of heritage assets
- GP/CC: Adapting heritage assets to climate change
- GP/PH: Protection of public houses
- J/NE: New employment development proposals
- J/RE: Supporting the rural economy
- J/AL: Protecting the best agricultural land
- J/PB: Protecting existing business space
- J/RW: Enabling remote working
- J/AW: Affordable workspace and creative industries
- J/EP: Supporting a range of facilities in employment parks
- J/RC: Retail and centres
- J/VA: Visitor accommodation, attractions and facilities
- J/FD: Faculty development and specialist/language schools
- H/AH: Affordable Housing
- H/ES: Exception Sites for Affordable Housing
- H/HM: Housing Mix
- H/HD: Housing Density
- H/GL: Garden land and subdivision of existing plots
- H/SS: Residential Space Standards and accessible homes
- H/SH: Specialist Housing
- H/CB: Self and Custom Build Homes
- H/BR9: Build to Rent Homes

- H/MO: Houses in Multiple Occupation (HMO's)
- H/SA: Student Accommodation
- H/DC: Dwellings in the Countryside
- H/RM: Residential Moorings
- H/RC: Residential Caravans
- H/GT: Gypsy and Traveller and Travelling Show People sites
- H/CH: Community led housing
- I/FD: Freight and Delivery Consolidation
- I/SI: Safeguarding important infrastructure
- I/AD: Aviation Development
- I/EI: Energy Infrastructure Master planning
- II/DI: Digital Infrastructure
- /ID: Infrastructure and Delivery

4.3 The following policies will not result in development and will contribute to ensuring the safeguarding of European sites:

- CC/WE: Water efficiency in new developments
- CC/FM: Flooding and integrated water management
- CC/CE: Reducing waste and supporting the circular economy
- CC/CS: Supporting land-based carbon sequestration
- BG/BG: Biodiversity and geodiversity
- BG/GI: Green infrastructure
- BG/TC: Improving tree canopy cover and the tree population
- BG/RC: River corridors
- BG/PO: Protecting open spaces

- BG/EO: Providing and enhancing open spaces
- WS/HD: Creating healthy new developments
- GP/GB: Protection and enhancement of the Cambridge Green Belt
- I/ST: Sustainable Transport and Connectivity
- I/EV: Parking and Electric Vehicles

Likely significant effects predicted

4.4 The following policies are highlighted as having potential impact pathways to European sites and likely significant effects cannot be ruled out:

- S/JH: New jobs and homes
- S/DS: Development strategy
- S/NEC: North East Cambridge
- S/WC: West Cambridge
- S/AMC: Areas of Major Change
- S/OA: Opportunity Areas in Cambridge
- S/LAC: Land allocations in Cambridge
- S/CE: Cambridge East
- S/NWC: North West Cambridge
- S/CBC Cambridge Biomedical Campus (including Addenbrooke's Hospital)
- S/EOC Other Existing Allocations on the Edge of Cambridge
- S/CB: Cambourne
- S/NS: Existing new settlements
- S/GC: Genome Campus, Hinxton
- S/BRC: Babraham Research Campus

- S/RSC: Village allocations in the Rural Southern Cluster
- S/SCP: Policy areas in the rural southern cluster
- S/RRA: Allocations in rest of the rural area
- CC/RE: Renewable energy projects and infrastructure

HRA Screening of Impacts

4.5 For some types of impacts, screening for likely significant effects was determined on a proximity basis, using GIS data to determine the distance of potential development locations to the European sites that were 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, during the screening stage a number of assumptions were applied in relation to assessing the likely significant effects on European sites that may result from the plan, as described below.

Physical Damage and Loss (onsite)

4.6 Any development resulting from the plan would take place within the boundary of GCLP area; therefore, only European sites within the boundary could be affected 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.

4.7 No development is proposed by the GCLP within the boundaries of Eversden and Wimpole Woods SAC and therefore no likely significant effect is predicted as a result of direct physical damage and loss, either alone or in-combination with other plans and projects.

Physical Damage and Loss – Functionally Linked Land (offsite)

4.8 Habitat loss from development in areas outside of the European site boundaries may 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. European sites susceptible to the indirect effects of habitat loss are restricted to those sites with qualifying species that rely on offsite habitat. These were identified as:

- Eversden and Wimpole SAC.
- Ouse Washes SAC.
- Ouse Washes SPA and Ramsar Site.

4.9 Natural England has advised that their recognised distance for the consideration of offsite functionally linked land in relation to birds is generally 2km, but for certain species, including most notably, golden plover and lapwing, a greater distance of 15km may be appropriate. This buffer has been considered for each of the Europeans sites above, which are designated for supporting qualifying bird species.

4.10 All other European sites were screened out of the assessment as they do not support qualifying features that are reliant on offsite functionally linked habitat.

Eversden and Wimpole SAC

4.11 Eversden and Wimpole SAC supports barbastelle, which is a qualifying feature of the site. This is a mobile species, which relies on habitat within the

SAC and functionally linked habitat in the wider area, which provides important foraging habitat for this species.

4.12 A review of data sources identified that this species typically travels within a Core Sustenance Zone (CSZ) of 6km **[See reference** 25**]**. This CSZ was determined by an extensive literature review and refers to the area surrounding a bat roost for barbastelle bats within which habitat availability and quality will have a significant influence on the resilience and conservation of the bat colony using the roost. It is however understood that this species will travel up to 20km providing there are suitable commuting corridors, such as woodland edges, hedgerows and rivers, are present and that the habitats present provide sufficient foraging resources to make the longer distance worthwhile **[See reference** 26**]**. In line with a precautionary approach, a buffer of 20km was therefore applied.

4.13 A review of site allocations identified all housing and employment allocations to be located within 20km of the SAC. Further assessment was required at the Appropriate Assessment stage to determine the potential impacts of these site allocations in relation to offsite functional habitat damage and loss and whether mitigation measures were required.

4.14 There is potential for likely significant effects to occur in relation to offsite physical damage and loss and therefore this effect is considered further at the Appropriate Assessment stage.

Ouse Washes SAC

4.15 The Ouse Washes SAC is designated for supporting populations of spined loach. This species occurs patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches. There are no site allocations proposed in close proximity to the SAC with the nearest site allocation proposed 5.6km at the closest point. Due to limited dispersal of this species and the lack of hydrological connectivity between these site allocations and suitable habitat for this qualifying species, no likely significant effect is

predicted as a result of physical damage and loss either alone or in-combination with other plans and projects.

Ouse Washes SPA and Ramsar Site

4.16 The Ouse Washes SPA and Ramsar is located adjacent to the GCLP area to the north and is designated for a range of qualifying wetland bird species (excluding golden plover and lapwing), which rely on offsite functional habitat. Based on Natural England's recognised distances, a 2km buffer was applied to identify site allocations with potential to affect the SPA and Ramsar.

4.17 No development was proposed within 2km of the SPA and Ramsar site and as such no likely significant effect is predicted as a result of offsite physical damage and loss either alone or in-combination with other plans and projects.

Non-physical Disturbance

4.18 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 streetlamps, 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 SAC bats.

4.19 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; 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. European sites susceptible to non-physical disturbance from proposed development were identified as:

- Eversden and Wimpole SAC.
- Ouse Washes SPA and Ramsar Site.

4.20 All other European sites are located over 500m from the GCLP boundary at the closest point and/or do not support mobile species likely to be significantly affected as a result of non-physical disturbance.

Eversden and Wimpole SAC

4.21 Eversden and Wimpole SAC lies in the west of the GCLP area and supports barbastelle bats, which are susceptible to impacts from non-physical disturbance, particularly in relation to lighting which can cause a barrier to the dispersal of this species from their roosts to important foraging habitats.

4.22 A review of site allocations identified no proposed allocations within 500m of the SAC and therefore no likely significant effects were predicted within the SAC itself as a result of non-physical disturbance.

4.23 However, there is potential for non-physical disturbance to occur in relation to offsite functional habitat that the qualifying barbastelle bat species relies on to disperse and forage. As detailed in the section above on physical damage and loss, a buffer of 20km was applied in this assessment.

4.24 A review of site allocations identified all proposed allocations within 20km of the SAC. Further assessment was required at the Appropriate Assessment stage to determine the potential impacts of these site allocations in relation to non-physical damage and loss to offsite functional habitat and whether mitigation measures are required.

4.25 There is potential for likely significant effects to occur in relation to non-physical disturbance for offsite functional habitat and therefore this effect is considered further at the Appropriate Assessment stage.

Ouse Washes SPA and Ramsar Site

4.26 The SPA and Ramsar site designations support a range of qualifying wetland bird species that are susceptible to impacts from non-physical disturbance, such as disturbance from noise, vibration and increased lighting.

4.27 A review of site allocations identified no proposed allocations within 500m of the SPA and Ramsar site and therefore no likely significant effects were predicted within the SPA and Ramsar site itself as a result of non-physical disturbance.

4.28 In addition, there is potential for impacts to occur in relation to offsite functionally linked land, which is regularly used by qualifying bird species for foraging and roosting. As detailed above under 'Physical Damage and Loss', in accordance with advice provided by Natural England a 2km buffer has been applied in this assessment. No site allocations were identified within 500m of the SPA and Ramsar site and therefore no likely significant effects were predicted within the SPA and Ramsar site itself as a result of non-physical disturbance on offsite functional land.

Air Pollution

4.29 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.

4.30 In terms of vehicle traffic, nitrogen oxides (NOx, i.e. NO and NO2) 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.

4.31 Based on the Highways England Design Manual for Road and Bridges (DMRB) LA 105 Air quality (which sets out the requirements for assessing and reporting the effects of highway projects on air quality), 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.

4.32 For highways developments within 200m of sensitive receptors, the DMRB provides the following screening criteria to ascertain whether there are likely to be significant impacts:

- 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
- There will be a change in speed band; or
- Road carriageway alignment will change by 5m or more.

4.33 This, 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 **[See reference** 27**]**, 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.

4.34 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.

4.35 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 in Appendix A. European sites within 15km of the Greater Cambridge boundary and also within 200m of a strategic road include Devils Dyke SAC (A14 and A1304), Ouse Washes SAC, SPA and Ramsar (A1123 and A142), and Portholme SAC (A14).

4.36 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.

4.37 All other European sites were situated over 200m from a road and were not considered to be susceptible to impacts from air pollution and were therefore screened out of the assessment.

Devil's Dyke SAC

4.38 The SAC lies adjacent to two strategic roads, including the A14 to the north and the A1304 to the south of the European site. A total proportion of 2.3% of the SAC was situated within 200m of the A14 and 7.65% within 200m of the A1304.

4.39 Habitats present within 200m of the strategic roads comprised entirely of lowland calcareous grassland, which is the qualifying feature of the SAC. This habitat has been identified from the corresponding SSSI units to be in favourable condition and based on APIS data is currently exceeding critical level loads with critical level loads ranging between 15-25 kg N/ha/yr and the average critical level load being 15.6 kg N/ha/yr at the SAC. As advised by

Natural England “for the purpose of assessing air quality impacts to designated sites the lower critical load limit of the APIS range should be applied.” It can therefore be concluded that existing levels exceed critical levels. There is potential that these air pollutants will modify the chemical status of the habitat’s substrate, accelerating or damaging plant growth, altering vegetation structure and composition and causing the loss of sensitive typical species associated with it.

4.40 A review of traffic data provided by Atkins Global identified that the increase in AADT for daily traffic flows and heavy-duty vehicle flows would not exceed the threshold of 1000 AADT and 200 AADT respectively either with or without proposed transport measures **[See reference** 28**]**. Detail of this is presented in Table 4.1 and 4.2 below.

Table 4.1: AADT Figures for Daily Traffic Flows in relation to the A1304 and A14.

Road	**AADT**			**Absolute Difference**	
	Baseline	Predicted (without transport measures)	Predicted (with transport measures)	Predicted (without transport measures)	Predicted (with transport measures)
A1304 (Northbound)	9,192	9,361	9,369	169	178
A1304 (Southbound)	9,606	9,690	9,701	82	92
A14 (Northbound)	40,196	40,552	40,772	355	576
A14 (Southbound)	41,020	41,873	41,759	853	739

Table 4.2 AADT Figures for Heavy Duty Vehicle Flows in relation to the A1304 and A14.

Road	AADT			Absolute Difference	
	Baseline	Predicted (without transport measures)	Predicted (with transport measures)	Predicted (without transport measures)	Predicted (with transport measures)
A1304 (Northbound)	779	697	716	-82	-63
A1304 (Southbound)	808	654	674	-154	-134
A14 (Northbound)	5,292	5,263	5,255	-30	-37
A14 (Southbound)	5,096	5,238	5,214	141	118

4.41 Therefore, no likely significant effect is predicted in relation Devil's Dyke SAC as a result of increased traffic from proposed development in the GCLP.

Ouse Washes SAC, SPA and Ramsar Site

4.42 A small area of the Ouse Washes SAC, SPA and Ramsar site lies within 200m of the A1123. This comprised a total proportion of 0.05% of the SAC and 0.73% of the SPA and Ramsar site.

4.43 Habitats present within 200m of the A1123, included river habitat, which the qualifying species of the SAC, SPA and Ramsar are reliant on, and rough grassland and wet pasture, which the qualifying species of the SPA and Ramsar depend on.

4.44 The SAC supports the spined loach for which the European site is designated for. This qualifying is considered potentially sensitive to changes in air quality, particularly in relation to nitrogen and acidity. A review of APIS data identified this species to have a maximum nitrogen deposition of 9.2 kg N/ha/yr. However, no critical level load has been determined for meso/eutrophic systems, which include this species and will therefore require consideration of potential impacts at a site-specific level.

4.45 In relation to the SPA and Ramsar, which supports a range of qualifying bird species. A review of APIS identified all bird species to have a maximum nitrogen deposition of 19.6 kg N/ha/yr. The hen harrier was the only species found to exceed critical level loads between 10-20 kg N/ha/yr whilst all other qualifying bird species fell just below the critical level load of 20-30 kg N/ha/yr. A small increase in nitrogen deposition levels as a result of air pollution from increased vehicle traffic has the potential to cause the current levels to exceed the lower critical load threshold. This could result in a likely significant effect on the SPA.

4.46 As there are no critical level loads specifically identified in relation to the Ramsar site, the data provided for the SPA was applied the Ramsar site.

4.47 A review of traffic data provided by Atkins Global identified that the increase in AADT for daily traffic flows and heavy-duty vehicle flows would not exceed the threshold of 1000 AADT and 200 AADT respectively either with or without proposed transport measures. Detail of this is presented in Table 4.3 and 4.4 below

Table 4.3 AADT Figures for Daily Traffic Flows in relation to the A142 and A1123.

Road	AADT			Absolute Difference	
	Baseline	Predicted (without transport measures)	Predicted (with mitigation)	Predicted (without transport measures)	Predicted (with mitigation)
A142 (Northbound)	10,561	10,845	10,853	285	293
A142 (Southbound)	10,878	11,263	11,170	385	292
A1123 (Eastbound)	10,929	11,033	11,033	104	104
A1121 (Westbound)	10,849	10,932	10,918	83	69

Table 4.4 AADT Figures for Heavy Duty Vehicle Flows in relation to the A142 and A1123.

Road	AADT			Absolute Difference	
	Baseline	Predicted (without transport measures)	Predicted (with transport measures)	Predicted (without transport measures)	Predicted (with transport measures)
A142 (Northbound)	735	735	735	0	0
A142 (Southbound)	775	774	773	-1	-1
A1123	400	404	405	4	5

Road	AADT			Absolute Difference	
(Eastbound)					
A1121 (Westbound)	462	474	474	12	12

4.48 Therefore, no likely significant effect is predicted in relation Ouse Washes SAC, SPA and Ramsar as a result of increased traffic from proposed development in the GCLP.

Portholme SAC

4.49 The SAC lies in proximity of the A1307 at approximately 45m to the south. A total proportion of 4.7% of the SAC was situated within 200m of the A1307.

4.50 Habitats present within 200m of the A1307 comprised entirely of lowland neutral grassland, which is the qualifying feature of the SAC. This habitat has been identified from the corresponding SSSI units to be in unfavourable condition and based on APIS data is currently at the lower critical level load with critical level loads ranging between 20-30 kg N/ha/yr and the average critical level load being 20.00 kg N/ha/yr at the SAC. As advised by Natural England "for the purpose of assessing air quality impacts to designated sites the lower critical load limit of the APIS range should be applied." It can therefore be concluded that existing levels exceed critical levels. This habitat type is considered sensitive to changes in air quality and as such there is potential that these air pollutants will modify the chemical status of the habitat's substrate, accelerating or damaging plant growth, altering vegetation structure and composition and causing the loss of sensitive typical species associated with it.

4.51 A review of traffic data provided by Atkins Global identified that the increase in AADT for daily traffic flows and heavy-duty vehicle flows would not exceed the threshold of 1000 AADT and 200 AADT respectively either with or

without proposed transport measures. Detail of this is presented in Table 4.5 and 4.6 below.

Table 4.5 Figures for Daily Traffic Flows in relation to the A1307.

Road	AADT			Absolute Difference	
	Baseline	Predicted (without transport measures)	Predicted (with transport measures)	Predicted (without transport measures)	Predicted (with transport measures)
A1307 (Northbound)	20,928	20,946	20,974	18	46
A1307 Southbound	20,167	20,606	20,593	439	426

Table 4.6 AADT Figures for Heavy Duty Vehicle Flows in relation to the A1307.

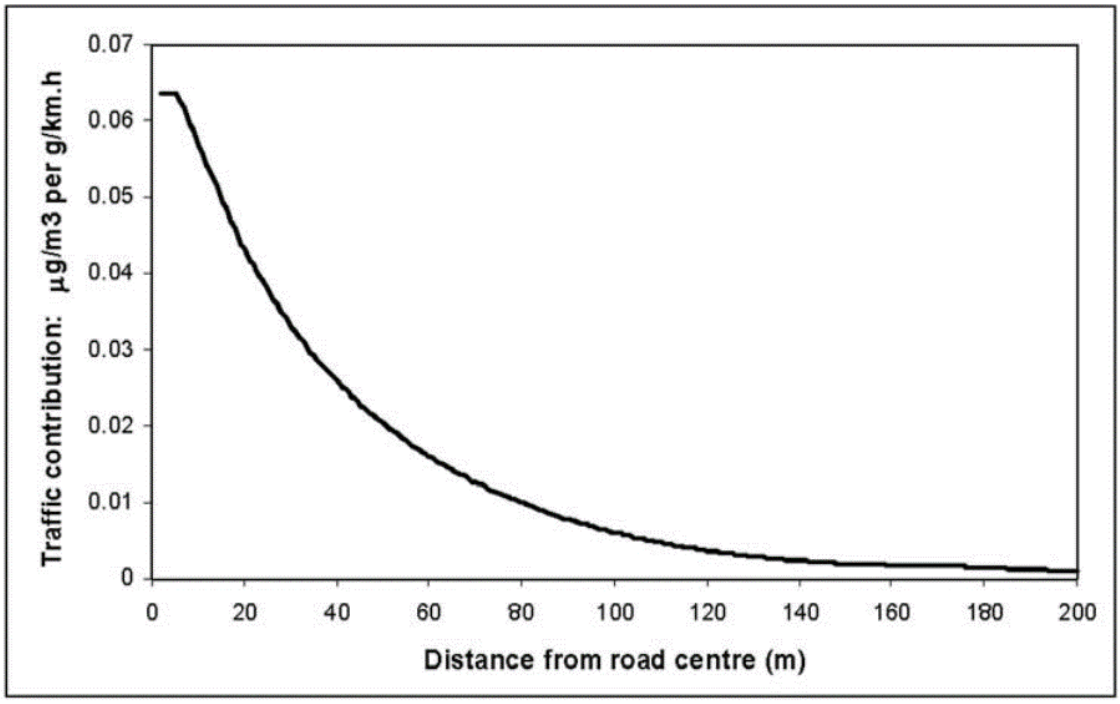
Road	AADT			Absolute Difference	
	Baseline	Predicted (without transport measures)	Predicted (with transport measures)	Predicted (without transport measures)	Predicted (with transport measures)
A1307 (Northbound)	235	233	234	-1	-1
A1307 Southbound	300	301	301	1	1

4.52 Therefore, no likely significant effect is predicted in relation Portholme SAC as a result of increased traffic from proposed development in the GCLP.

Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC

4.53 Wicken Fen Ramsar and part of Fenland SAC lie 300m from the A1123 at the nearest point and Chippenham Fen Ramsar and part of Fenland SAC lie 460m from the A142. As these European sites fall beyond the 200m threshold where significant effects might occur, no likely significant effects are predicted. This is supported by data provided within the DRMB, which shows that the effects of nitrogen deposition from traffic is reduced dramatically with distance from the road as illustrated by Figure 4.1.

Figure 4.1: Traffic Contribution to Pollutant Concentration at Different Distances from the Road Centre [See reference **29**]



4.54 No likely significant effect is predicted in relation Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC as a result of increased traffic from proposed development in the GCLP.

Recreation

4.55 Recreational activities and human presence can result in significant effects on European sites. 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. In addition, recreation can physically damage habitat as a result of trampling, fire or vandalism and also through erosion associated with terrestrial activities.

4.56 The GCLP will result in housing growth, and associated population increase with the Greater Cambridge area. 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.

Eversden and Wimpole SAC / Ouse Washes SAC, SPA and Ramsar site / Devil's Dyke SAC / Portholme SAC

4.57 Following advice provided by Natural England on the draft HRA Scoping Report for the Greater Cambridgeshire Local Plan, 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 4.7 below outlines the zones of potential of risk for each European site, which are considered to be at significant risk from recreational pressure.

Table 4.7: Cambridgeshire Recreational Pressure IRZ Component SSSIs

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

4.58 Due to the distance of Devil's Dyke SAC and Portholme SAC from the boundary of the GCLP area (>5km), no likely significant effect is predicted in relation to recreational pressure from proposed development in the GCLP for these European sites.

4.59 In addition, no development is proposed within 5km of Eversden and Wimpole SAC and 2km of Ouse Washes SAC, SPA and Ramsar, which lies within and adjacent to the GCLP area respectively. Therefore, no likely significant effect is predicted in relation to recreational pressure from proposed development in the GCLP for these European sites.

Wicken Fen Ramsar

4.60 No zone of potential risk was identified for Wicken Fen Ramsar. However, in line with a precautionary approach and following the completion of the visitor surveys within Wicken Fen Vision Area, a Zone of Influence has been applied. The survey data that was collected at the Wicken Fen Main Entrance and found

that the majority of visitors travelled between 10km and 20km to visit these sites. Based on these findings and in line with a precautionary approach a ZOI of 20km was applied in this assessment.

4.61 A review of site allocations identified 31 housing and mixed-use allocations within 20km of the Ramsar site. This included:

- S/RRA/MF: Land at Mansal Farm, Station Road Oakington.
- S/NS/SS/6: Waterbeach New Town.
- S/NS/NS/3: Northstowe.
- S/RRA/L: East of Bypass, Longstanton.
- S/C/R2: 137 and 143 Histon Road, Cambridge.
- S/NEC: North East Cambridge.
- S/CE: Cambridge East.
- S/NWC: North West Cambridge.
- S/C/SS/1: Orchard Park, Cambridge.
- S/EOC/SS/2: Land between Huntingdon and Histon Road (Darwin Green 2/3), Cambridge.
- S/RRA/H/3: Fulbourn and Ida Darwin Hospitals.
- S/C/M14: Station Road West, Cambridge.
- S/C/M4: Police Station, Parkside, Cambridge.
- S/C/MS: 82-90 Hills Road and 57-63 Bateman Street, Cambridge.
- S/C/M2: Clifton Road Area, Cambridge.
- S/C/M44: Betjeman House, Cambridge.
- S/C/R9: Travis Perkins, Devonshire, Cambridge.
- S/C/R6: 636-656 Newmarket Road, Holy Cross Church Hall, East Barnwell Community Centre and Meadowlands, Newmarket road, Cambridge.
- S/C/R5: Camfields Resource Centre and Oil Depot, Cambridge.

- S/EOC/R42d: Bell School, Babraham Road, Cambridge.
- S/EOC/R43: Land between Huntingdon Road and Histon Road (Darwin Green), Cambridge.
- S/C/R21: 315-349 Mill Road and Brookfields, Cambridge.
- S/C/U1: Old Press/Mill Lane, Cambridge.
- S/C/U2: New Museums, Downing Street, Cambridge.
- S/C/U3/ Grange Farm off Wilbeforce Road, Cambridge.
- S/EOC/GB2: Land South of Worts' Causeway, Cambridge.
- S/EOC/GB1: Land North of Worts' Causeway, Cambridge.
- S/EOC/GB3-4: Fulbourn Road West 1 & 2, Cambridge.
- S/C/SMS: Garages between 20 St Matthews Street and Blue Moon Public House, Cambridge.
- S/CE/SS/3(1b): Land North of Cherry Hinton, Cambridge.
- S/CE/SS/3(1a): Land North of Newmarket Road, Cambridge.
- S/CE/R47: Land North of Cherry Hinton, Cambridge.
- S/C/R4: Henry Giles House, 73-79 Chesterton Road, Cambridge.
- S/RSC/HW: Land between Hinton Way and Mingle Lane, Great Shelford.
- S/BRC: Babraham Research Campus.

4.62 There is potential for likely significant effects to occur in relation to impacts from recreation and this effect therefore requires further consideration at the Appropriate Assessment stage.

Chippenham Fen Ramsar

4.63 No zone of potential risk was identified for Chippenham Fen Ramsar. To ensure that a precautionary approach is taken, this assessment has a applied a 5km zone of potential risk, which is the higher zone of potential risk outlined in

Table 4.7. More specific Zone of Influence (ZOI) may be defined following targeted visitor surveys and discussions with land managers, 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. Due to the distance of this Ramsar site from the boundary of the GCLP area (>5km), no likely significant effect is predicted in relation to recreational pressure from proposed development in the GCLP for this European site.

Fenland SAC

4.64 No zone of potential risk was identified for Fenland SAC. However, as this site overlaps with both Wicken Fen Ramsar and Chippenham Fen Ramsar, the respective ZOI have been applied. Based on this, likely significant effects are predicted only in relation to the part of the SAC, which overlaps the same location as Wicken Fen Ramsar. Impacts from recreation to the area of SAC, which overlaps Chippenham Fen Ramsar, is therefore screened from the assessment.

4.65 Likely significant effects relating to recreational pressure could not be screened out in relation to Wicken Fen Ramsar and Fenland SAC and will therefore require further consideration at the Appropriate Assessment.

Water Quantity and Quality

4.66 The Greater Cambridge area is one of the driest in the UK. 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.

4.67 The following European sites have been identified to support habitats and/or qualifying species, which are susceptible to impacts from changes in water quantity and quality. This included:

- Ouse Washes SAC, SPA and Ramsar.
- Wicken Fen Ramsar.
- Chippenham Fen Ramsar.
- Fenland SAC.
- Portholme SAC.

4.68 Eversden and Wimpole Woods SAC and Devil's Dyke SAC support habitats, which are not considered susceptible to impacts from water and therefore changes in water quantity and quality as a result of proposed growth in the GLCP are not predicted to result in a likely significant effects.

Ouse Washes SAC, SPA and Ramsar

4.69 Impacts from water pollution and changes in hydrology are considered in the Standard Data Forms and Natural England SIP to be key threats to the Ouse Washes SAC, SPA and Ramsar site.

4.70 The Great River Ouse within which the SAC, SPA and Ramsar site lies to the north of the GCLP area and is hydrologically connected to the River Cam and to a number of small watercourses in the north-west of the GCLP area. In particular, there is potential for changes in the flow and volume of water entering the River Cam and Ely Ouse associated with the proposed development to result in reduced flow downstream of the Denver, which may exacerbate existing siltation problems. This is known to have a knock-on effect onto the Hundred Foot River, which has a significant effect on increased and prolonged flooding at the Ouse Washes SAC, SPA and Ramsar site.

4.71 There is potential for likely significant effect to occur in relation to Ouse Washes SAC, SPA and Ramsar from changes in demand and water treatment

and therefore this effect is considered further at the Appropriate Assessment stage.

Wicken Fen Ramsar

4.72 Wicken Fen Ramsar is one of Europe's most important wetlands supporting fen habitat and is one of the few fens that has not been drained. Although, impacts from water pollution or hydrological changes have not been highlighted as a key threat within the Ramsar Information Sheet, this habitat is known to be highly sensitive to changes in the quality and quantity of water supply.

4.73 Natural England have detailed that the hydrology of the Wicken Fen is not well understood but that there are indications that the water present within this European site is fed by groundwater. Due to the location of the site and chemistry of the water, it is expected that the designated site lies outside of the influence of the Cambridge chalk aquifer. However, given the reliance of the qualifying habitats and species on water and the continued uncertainty on the potential impacts of proposed growth from the GCLP a precautionary approach has been applied.

4.74 There is potential for likely significant effect to occur in relation to Wicken Fen Ramsar site from changes in demand and water treatment and therefore this effect is considered further at the Appropriate Assessment stage.

Chippenham Fen Ramsar

4.75 Chippenham Fen Ramsar supports fenland and grassland habitat and associated invertebrate species, which is dependent upon an adequate supply of high-quality water from the chalk aquifer that supplies GCLP area. There is potential for likely significant effect to occur in relation to Chippenham Fen Ramsar site from changes in demand and water treatment and therefore this effect is considered further at the Appropriate Assessment stage.

Fenland SAC

4.76 Fenland SAC supports qualifying habitats and species, which are reliant on water. This includes fen habitat, which is highly sensitive to changes in water quantity and quality, and spined loach, which uses the waterbodies in Wicken Lode and are connected to the River Cam. It should be noted that this species has limited dispersal so would only likely be affected by changes to water quantity and quality in areas within or near to the European site.

4.77 In addition to this, the SAC is designated for supporting great crested newts. As this species is known to use ponds, which are fed entirely by rainfall, no likely significant effects are considered in relation to this species as a result of increased demand and treatment of water from the GCLP.

4.78 The SAC overlaps Wicken Fen Ramsar and Chippenham Fen Ramsar and as such the details presented above in relation to impacts from water quantity and quality for these European sites apply to this SAC. Due to the reliance of this habitat on water that is hydrologically connected to the River Cam and reliance on groundwater from chalk aquifer that supplies GCLP area, there is potential for likely significant effect to occur in relation to Fenland SAC from changes in demand and water treatment and therefore this effect is considered further at the Appropriate Assessment stage.

Portholme SAC

4.79 Portholme SAC supports lowland hay meadows, which have been identified by Natural England Site Improvement Plan to be sensitive to prolonged flooding events and from input of nutrients from the River Great Ouse. Therefore, increased demand for water abstraction and treatment has the potential to result in impacts to the River Ouse as discussed in detail under the Ouse Washes SAC, SPA and Ramsar section above and subsequently result in a likely significant effect in relation to Portholme SAC.

4.80 There is potential for likely significant effects to occur in relation to water quantity and quality and therefore this effect is considered further at the Appropriate Assessment stage.

Summary of Screening Assessment

4.81 Table 4.8 below summarises the Screening conclusions reached in this HRA. Impact types for which a conclusion of No likely significant effect (No LSE) was reached are shown with no colour. Those potential impacts where likely significant effects (potential LSE) could not be ruled out are shown in orange and these are considered in more detail at the Appropriate Assessment stage in Section 5.

Table 4.8: Summary of Screening Assessment

European Site	Physical Damage and Loss	Non-physical Disturbance	Air Pollution	Recreation	Water Quantity and Quality
Eversden and Wimpole Woods SAC	Potential LSE (offsite)	Potential LSE (offsite only)	No LSE	No LSE	No LSE
Ouse Washes SAC	No LSE	No LSE	No LSE	No LSE	Potential LSE
Devil's Dyke SAC	No LSE	No LSE	No LSE	No LSE	No LSE
Fenland SAC	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
Ouse Washes SPA	No LSE	No LSE	No LSE	No LSE	Potential LSE

European Site	Physical Damage and Loss	Non-physical Disturbance	Air Pollution	Recreation	Water Quantity and Quality
Ouse Washes Ramsar	No LSE	No LSE	No LSE	No LSE	Potential LSE
Wicken Fen Ramsar	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
Chippenham Fen Ramsar	No LSE	No LSE	No LSE	No LSE	Potential LSE
Portholme SAC	No LSE	No LSE	No LSE	No LSE	Potential LSE

Chapter 5

Appropriate Assessment

5.1 Following the screening stage, the plan-making authority is required under Regulation 105 of the Habitats Regulations 2017 (as amended) to make an 'Appropriate Assessment' of the implications of the plan for European sites, in view of their conservation objectives.

5.2 European Commission Guidance **[See reference** 30**]** states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of European sites with respect to their conservation objectives and to their structure and function.

5.3 This stage seeks to determine whether implementation of the Local Plan will result in an adverse effect on the integrity of the whole European site in question (many European sites are made up of a number of fragments of habitat). It also considers the potential for in-combination effects from development proposed in neighbouring authorities' Local Plans or from major infrastructure projects. Consideration was given to mitigation measures that may be included in the Local Plan to reduce the likelihood and significance of effects on European sites.

5.4 A European site's integrity depends on it being able to sustain its 'qualifying features' (i.e. those Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a European site's conservation objectives is realised and where the European site is capable of self-repair and renewal with a minimum of external management support.

5.5 Likely significant effects arising from the plan, either alone or in-combination, were identified for the following sites and impact types:

- Physical damage and loss (offsite) – in relation to Eversden and Wimpole Woods SAC.
- Non-physical disturbance (offsite) – in relation to Eversden and Wimpole Woods SAC.
- Air pollution – in relation Devil's Dyke SAC, Ouse Washes SAC, SPA and Ramsar site and Portholme SAC.
- Recreation – in relation to Wicken Fen Ramsar SAC and Fenland SAC.
- Water Quantity and Quality – in relation to Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar SAC, Chippenham Fen Ramsar SAC, Fenland SAC and Portholme SAC.

5.6 Appropriate Assessment has been undertaken for these European sites to determine whether the plan will result in Adverse Effects on Integrity.

5.7 The Appropriate Assessment focuses on those impacts that are judged likely to have a significant effect on the qualifying features of a European site, or where insufficient certainty regarding this remained at the screening stage. As described in Chapter 1, a conclusion needs to be reached as to whether or not a policy or site allocation in the plan would adversely affect the integrity of a European site. To reach a conclusion, consideration was given to whether the predicted impacts of the proposals (either alone or in combination) have the potential to:

- Delay the achievement of conservation objectives for the site.
- Interrupt progress towards the achievement of conservation objectives for the site.
- Disrupt factors that help to maintain the favourable conditions of the site.
- Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.

5.8 The conservation objectives for the above European sites are to ensure that the integrity of the site is maintained or restored as appropriate, and to

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 structure and function (including typical species) of qualifying natural habitats.
- The supporting processes on which qualifying natural habitats rely.
- The structure and function of the habitats of qualifying species.
- The populations of qualifying species.
- The distribution of qualifying species within the site.

Physical Damage and Loss – functionally linked land (offsite)

Eversden and Wimpole Woods SAC

5.9 Eversden and Wimpole SAC is designated for supporting barbastelle bats, which use the woodland in the SAC as a summer maternity colony. This is a mobile species, which relies on offsite rich foraging habitats and well-connected commuting corridors between the roost site and wider landscape to sustain the SAC population.

5.10 This species primarily feeds on moth species throughout the year. During the summer months, moth species can be found in a wider range of habitats compared to the winter months. It is typically found that female barbastelles will travel to more open habitats, such as unimproved grasslands, wooded riversides, hedgerows and water meadows, as well as orchards and suburban parks, during these months to exploit the abundance of moths in these habitats.

5.11 Following a review of data sources, it was identified that this species travels within a Core Sustenance Zone (CSZ) of 6km **[See reference** 31**]**. This

CSZ was determined by an extensive literature review and refers to the area surrounding a bat roost for barbastelle bats within which habitat availability and quality will have a significant influence on the resilience and conservation of the bat colony using the roost. It is however understood that this species will travel up to 20km providing there are suitable commuting corridors, such as woodland edges, hedgerows and rivers, are present and that the habitats present provide sufficient foraging resources to make the longer distance worthwhile.

5.12 A desk-based review was undertaken to identify the potential impacts from these proposed allocations on offsite habitat used by barbastelle bats. This included the following components to inform the assessment:

- A review of aerial imagery and Magic Map Application to identify the main habitat types and land use within each site allocation and establish their potential value for this qualifying bat species.
- Recognition of factors likely to affect suitability of allocations for this species, including presence of suitable habitat and consideration of the site's location within the landscape. For example, whether there is direct functional connectivity between the site allocation and the European site.

5.13 All site allocations proposed in the GCLP were identified within 20km of the SAC and as such have been subject to further, more detailed assessment to determine the suitability of these sites for this qualifying species. The findings of this assessment are presented in the following section below.

Habitat Suitability Classifications for Barbastelle Bat

High Habitat Suitability

Description

5.14 Broadleaved woodland, wet meadow/ pasture grassland or waterbodies with good connectivity to other similar high-quality habitats in the surrounding area via hedgerows, rivers or streams.

5.15 Within 6km Core Sustenance Zone of the SAC.

Moderate Habitat Suitability

Description

5.16 Broadleaved woodland, wet meadow/ pasture grassland or waterbodies with good connectivity to other suitable poorer quality habitats in the surrounding area via hedgerows, rivers or streams.

5.17 Within 20km Sustenance Zone of the SAC.

Low Habitat Suitability

Description

5.18 Poorer quality habitat such as arable fields or amenity grassland with some connectivity to other suitable poorer quality habitat.

5.19 Within 20km Sustenance Zone of the SAC.

Negligible Habitat Suitability

Description

5.20 Unsuitable habitats such as built environments and developed land. Within 20km Sustenance Zone of the SAC.

Suitability of allocations for barbastelle bats of Eversden And Wimpole Woods SAC

Site Allocation - Cambridge Urban Area: North East Cambridge

Review of Site Parameters

- Distance from European site: 13.6km north-east
- Size: 186.54 ha
- Habitats Present: Predominantly built land on a brownfield site with existing tree lines and waterbodies including some open standing water and drainage ditches.
- Functional Connectivity: The land allocation is of moderate suitability. Drainage ditches and treelines provide good connectivity to the River Cam which provides functional connectivity to the SAC and also to the wider landscape, including wetland wet woodland north of the A14.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – Cambridge Urban Area: West Cambridge

Review of Site Parameters

- Distance from European site: 8.9km north-east
- Size: 66.9ha
- Habitats Present: The site is predominantly built land with large areas of arable and pasture grassland, some amenity grassland, treelines and some strips of broadleaved woodland. There are small standing waterbodies and ditches.
- Functional Connectivity: The land allocation is of moderate suitability. The adjacent M11 presents some severance to the wider landscape to the west which is predominately arable with some small areas of broadleaved woodland and severance to the SAC. However, there are a number of connected streams and ditches with mature riparian corridors that are likely to provide connectivity to the wider landscape.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – Cambridge Urban Area: Orchard Park

Review of Site Parameters

- Distance from European Site: 12.5km north-east
- Size: 32.4ha

- Habitats Present: Developed land adjacent including some areas of amenity grassland.
- Functional Connectivity: The land is of low suitability, however, hedgerows around the permitter of the site may provide connectivity to the surrounding landscape and there is a lake to the north of the A14 which may support foraging bats.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Cambridge Urban Area: Clifton Road Area

Review of Site Parameters

- Distance from European Site: 11.8km north-east
- Size: 9.43ha
- Habitats Present: Developed land adjacent to a railway line.
- Functional Connectivity: The land does not provide functional connectivity, however, the adjacent railway may be used as a commuting route by bats.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: Land South of Coldhams Lane

Review of Site Parameters

- Distance from European site: 13.9km north-east
- Size: 9ha
- Habitats Present: Sparse scrubland with some trees along the boundaries.
- Functional Connectivity: The land allocation is of poor suitability. The site is adjacent to a railway line which could provide commuting connectivity with the wider landscape. There are also some ex. Quarry pools to the south of the railway line which are likely to be of poor habitat quality for foraging bats.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Cambridge Urban Area: Station Road West

Review of Site Parameters

- Distance from European site: 11.6km north-east
- Size: 8.77ha
- Habitats Present: Developed land adjacent to a railway line.
- Functional Connectivity: The land does not provide functional connectivity, however, the adjacent railway may be used as a commuting route by bats.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: 315-349 Mill Road and Brookfields

Review of Site Parameters

- Distance from European site: 13.1km north-east
- Size: 2.93ha
- Habitats Present: Residential housing with a small area of amenity grassland and a few broadleaved trees.
- Functional Connectivity: The site itself is of low suitability, however, there are a series of lakes surrounded by woodland 200m to the east of the land allocation which may support Barbastelle bats.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Cambridge Urban Area: Old Press/Mill Lane

Review of Site Parameters

- Distance from European site: 10.8km north-east
- Size: 2ha

- Habitats Present: Built environment, located adjacent to the River Cam which is likely to support commuting and foraging bats.
- Functional Connectivity: The site is of negligible suitability to support Barbastelle bats, however, as it is adjacent to the River Cam, any development may have the potential to result in non-physical disturbance upon bats using the River Cam.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: New Museums, Downing Street

Review of Site Parameters

- Distance from European site: 11km north-east
- Size: 1.97ha
- Habitats Present: Built environment.
- Functional Connectivity: The site is of negligible suitability to support Barbastelle bats, and there is no functional connectivity.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: 137 and 143 Histon Road

Review of Site Parameters

- Distance from European site: 11.4km north-east
- Size: 1.36ha
- Habitats Present: Existing built land and small area of derelict land which is due to be developed with small number of trees present in the north-western corner.
- Functional Connectivity: The land allocation is of low suitability and has poor connectivity with wider landscape due to location within the urban area of Cambridge. However, there is a nearby park with mature trees which could provide low suitability foraging habitat.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: Travis Perkins, Devonshire Road

Review of Site Parameters

- Distance from European Site: 12.3km north-east
- Size: 1.23ha
- Habitats Present: Developed land adjacent to a railway line.

- Functional Connectivity: The land does not provide functional connectivity; however, the adjacent railway may be used as a commuting route by bats.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: Grange Farm

Review of Site Parameters

- Distance from European Site: 9.8km north-east
- Size: 1.21ha
- Habitats Present: The land supports scrub, pasture and broadleaved woodland.
- Functional Connectivity: The site allocation is of moderate suitability to support Barbastelle bats and is located adjacent to arable and pasture fields and a series of ditches including the Bin Brook.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – Cambridge Urban Area: Betjeman House

Review of Site Parameters

- Distance from European site: 11.6km north-east
- Size: 1.17ha
- Habitats Present: The land allocation consists of buildings and a car park.
- Functional Connectivity: The site allocation is of negligible suitability to support Barbastelle bats; however, it is located adjacent to the Cambridge University Botanic Garden which supports broadleaved woodland, parkland and a pond and may be used by Barbastelle bats.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: 636 - 656 Newmarket Road, Holy Cross Church Hall, East Barnwell Community Centre and Meadowlands, Newmarket Road

Review of Site Parameters

- Distance from European Site: 14.3km north-east
- Size: 1.01ha
- Habitats Present: Predominantly built environment with small area of amenity grassland and trees.

- Functional Connectivity: Within an urban part of Cambridge with no connectivity to the wider landscape.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: Camfields Resource Centre & Oil Depot

Review of Site Parameters

- Distance from European Site: 14.2km north-east
- Size: 0.86ha
- Habitats Present: Built land and a single hedgerow providing some connectivity to the fields to the north.
- Functional Connectivity: The habitats of the land allocation are unsuitable and are not functionally connected to the SAC.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: Henry Giles House, 73-79 Chesterton Road

Review of Site Parameters

- Distance from European Site: 11.7km north-east

- Size: 0.77ha
- Habitats Present: Built environment.
- Functional Connectivity: No functional connectivity.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: 82-90 Hills Road & 57-63 Bateman Street

Review of Site Parameters

- Distance from European Site: 11.3km north-east
- Size: 0.5ha
- Habitats Present: Built environment with some trees present.
- Functional Connectivity: No functional connectivity.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Cambridge Urban Area: Police Station, Parkside

Review of Site Parameters

- Distance from European Site: 11.8km north-east

- Size: 0.48ha
- Habitats Present: Built environment.
- Functional Connectivity: No functional connectivity.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Edge of Cambridge: Cambridge East

Review of Site Parameters

- Distance from European Site: 13.6km
- Size: 180ha
- Habitats Present: Some built land, however predominantly amenity grassland and one area of arable field. There are ditches running around the eastern perimeter and in the south-eastern parcel of land.
- Functional Connectivity: The land allocation is of low suitability and ditches provide connectivity with the wider landscape to the east of Cambridge which is predominantly arable fields.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: North West Cambridge

Review of Site Parameters

- Distance from European Site: 9.9km north-east
- Size: 90.93ha
- Habitats Present: There is an area of built land and ex-quarry which has mostly been restored to poor quality fields. There are also pasture fields and a single hedgerow. Ditches sun along the perimeter of the site and provide some connectivity with the wider landscape which is predominantly urban and agricultural.
- Functional Connectivity: The habitats of the land allocation are of low suitability and there is poor connectivity with the wider landscape which is predominantly urban and agricultural. The M11 presents severance with the land to the west, including the SAC.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Land North of Newmarket Road, Cambridge

Review of Site Parameters

- Distance from European Site: 14.7km north-east
- Size: 79ha

- Habitats Present: Habitats include an area of development with industrial buildings, in the south-western corner and the rest of the land has been used for quarrying but was previously agricultural. There are planted conifer and mixed woodland strips surrounding the site which offer low suitability for Barbastelle bats.
- Functional Connectivity: The habitats of the land allocation are of low suitability and the planted woodland strips provide some habitat connectivity; however the wider landscape is predominantly agricultural.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Addenbrooke's Hospital Site

Review of Site Parameters

- Distance from European Site: 10.9km north-east
- Size: 68.21ha
- Habitats Present: The land is predominantly built with some amenity grassland. There are small ditches but no hedgerows or other features for commuting and offering connectivity. Adjacent to the west of the site there is a parcel of land consisting of amenity grassland and four ponds of varying size. Railway lines intersect the land allocation and the adjacent site however this doesn’t present any severance and the railway is likely to provide a commuting corridor.
- Functional Connectivity: There is functional connectivity between the land adjacent to this site which supports waterbodies, and the wider landscape via the railway. The wider landscape consists of agricultural land, rivers and small woodlands.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Land between Huntingdon Road and Histon Road (Darwin Green), Cambridge

Review of Site Parameters

- Distance from European Site: 10.8km north-east
- Size: 84ha
- Habitats Present: The northern parcel of land consists of arable fields with a ditch to the north of the land allocation which provides connectivity to small parcels of broadleaved woodland. The southern parcel of land consists of ex-quarry land which was previously agricultural land. There are also a number of buildings.
- Functional Connectivity: The land is of low suitability and there is a small area of broadleaved woodland nearby, however, there is poor connectivity with the wider landscape.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Land North of Cherry Hinton, Cambridge

Review of Site Parameters

- Distance from European Site: 14.8km north-east
- Size: 64ha
- Habitats Present: Arable field and some pasture grassland with poor connectivity to the wider landscape limited to the small ditches present on site.
- Functional Connectivity: The land is of low suitability and has poor connectivity to the wider landscape.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Cambridge Biomedical Campus possible new extension

Review of Site Parameters

- Distance from European Site: 11.6km east
- Size: 19.43ha
- Habitats Present: Arable field with a hedgerow and ditch running through the centre of the land allocation.

- Functional Connectivity: The land is of low suitability. There is some connectivity with the wider landscape through the ditch network and hedgerows. However, the immediate surrounding habitats are agricultural.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Cambridge Biomedical Campus Extension

Review of Site Parameters

- Distance from European Site: 11km east
- Size: 8.94ha
- Habitats Present: The land consists of an agricultural field with a ditch and hedgerow along the southern perimeter.
- Functional Connectivity: The land is of low suitability. There is some connectivity with the wider landscape through the ditch network, hedgerows and adjacent railway. However, the immediate surrounding habitats are agricultural.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Cambridge Biomedical Campus possible further new extension

Review of Site Parameters

- Distance from European Site: 11.9km east
- Size: 8.22ha
- Habitats Present: Arable field with a hedgerow along the eastern boundary with the A1307 Road.
- Functional Connectivity:

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Land south of Worts' Causeway, Cambridge

Review of Site Parameters

- Distance from European Site: 12.29km east
- Size: 7.74ha
- Habitats Present: Arable field with hedgerow along boundary with Wort's Causeway and small farm building with south-eastern corner.
- Functional Connectivity: The land is of low suitability; however the hedgerows provide some connectivity to the wider landscape including small parcels of woodland and a nearby golf course.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Land north of Worts' Causeway, Cambridge

Review of Site Parameters

- Distance from European Site: 12.5km east
- Size: 7.84ha
- Habitats Present: The land consists of arable and some pasture fields. There are well established hedgerows within the land parcel.
- Functional Connectivity: The land is of low suitability; however the hedgerows provide some connectivity to the wider landscape including small parcels of woodland and a nearby golf course.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Bell School, Babraham Road, Cambridge

Review of Site Parameters

- Distance from European Site: 11.6km east
- Size: 7.61ha

- Habitats Present: Predominantly built environment with some amenity grassland and a small pond. There are hedgerows bounding the site which may provide connectivity and foraging opportunities.
- Functional Connectivity: The habitats are of low suitability, however the hedgerows on site are likely to provide some commuting connectivity for bats accessing the wider landscape.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Fulbourn Road East, Cambridge

Review of Site Parameters

- Distance from European Site: 14.4km north-east
- Size: 6.92ha
- Habitats Present: Arable field with narrow hedgerows bordering the site.
- Functional Connectivity: The site is of low suitability and has poor connectivity with the wider landscape.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Edge of Cambridge: Fulbourn Road West 1 & 2, Cambridge

Review of Site Parameters

- Distance from European Site: 14.4km north-east
- Size: 3.58ha
- Habitats Present: The land allocation is built land with an industrial building and car park to the east of the land parcel and open bare ground to the west of the land parcel. Adjacent to the site there is an area of broadleaved woodland which may provide functionally linked habitat for Barbastelle bats.
- Functional Connectivity: The site itself does not provide suitable habitat for Barbastelle bat, however, the adjacent woodland to the west could provide functionally linked habitat.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – New Settlement: Northstowe

Review of Site Parameters

- Distance from European Site: 12.8km north
- Size: 490.73ha
- Habitats Present: The site comprises of parkland and agricultural fields to the south containing parcels of planted broadleaved woodland. Further to the north the area has undergone quarrying and there are ponds remaining which are likely to be of poor suitability for foraging bats. There

is also a new housing development within this land allocation which supports amenity grassland, a small area of broadleaved woodland and a small pond which may be suitable to foraging bats but due to its size, it is not considered a significant feature.

- Functional Connectivity: The land allocation is of moderate suitability due to the presence of parkland, broadleaved woodland and some small waterbodies. The surrounding landscape is arable, therefore there should be no risk of non-physical disturbance upon surrounding areas.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – New Settlement: Northstowe Reserve Land

Review of Site Parameters

- Distance from European Site: 16km north
- Size: 56.99ha
- Habitats Present: The land is predominantly arable with an area of pasture to the north-east. There is a small woodland at the centre of the site and a hedgerow and ditch network that provides connectivity to the wider landscape and two lakes to the west of the land allocation.
- Functional Connectivity: The site is of moderate suitability and there is good connectivity with other suitable habitats nearby including two lakes, arable and pasture fields in the surrounding area.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – New Settlement: Waterbeach New Town

Review of Site Parameters

- Distance from European Site: 18.9km north-east
- Size: 427.49ha
- Habitats Present: The land consists of a mixture of arable fields, amenity grassland, broadleaved woodland, a lake and built land including housing and industrial building. There are ditches between the arable fields, which provide some connectivity with the wider landscape. The woodland and lake are suitable habitats to support Barbastelle bats.
- Functional Connectivity: The small areas of woodland and the lake have potential to support Barbastelle bats and there is good connectivity with the surrounding area including a series of lakes to the west of the land allocation.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – New Settlement: Bourn Airfield New Village

Review of Site Parameters

- Distance from European Site: 4.96km north
- Size: 171.81ha

- Habitats Present: The land consists of arable fields, built land of the airfield and a small strip of broadleaved woodland.
- Functional Connectivity: The site is of low suitability to support Barbastelle bats, however, there is a parcel of broadleaved woodland to the immediate south which may be suitable and there is good connectivity with the wider landscape due to the presence of hedgerows and ditches.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – New Settlement: Cambourne West (existing settlement)

Review of Site Parameters

- Distance from European Site: 7km north-west
- Size: 93.19ha
- Habitats Present: The land is predominantly arable with one pasture field. There are some narrow drainage ditches which do not support hedgerows and are unlikely to provide connectivity.
- Functional Connectivity: The site is of low suitability for Barbastelle bats, however there is a section of broadleaved woodland to the south-east of the site and a series of lakes in the surrounding area which may support roosting, or foraging Barbastelle bats.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Fulbourn and Ida Darwin Hospitals

Review of Site Parameters

- Distance from European Site: 14.7km
- Size: 27.00ha
- Habitats Present: The land is predominantly comprised of previously developed land with areas of short grassland, scattered trees and treelines.
- Functional Connectivity: The site is of low suitability for Barbastelle bats with limited connectivity between the SAC and the proposed allocation. The surrounding area is comprised of developed land and arable fields.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land to the South of the A14 Services

Review of Site Parameters

- Distance from European Site: 11.6km
- Size: 17.3 ha
- Habitats Present: The land comprises of previously developed land and bare ground.

- Functional Connectivity: There was no functional connectivity between the SAC and the site allocation.

Assessment of Suitability for Barbastelle Bats

- Negligible.

Site Allocation – Rest of Rural Area: Bayer CropScience Site, Hauxton

Review of Site Parameters

- Distance from European Site: 8.1km
- Size: 8.7 ha
- Habitats Present: Developed land.
- Functional Connectivity: The site itself was considered to have negligible suitability for Barbastelle bats. However, the adjacent woodland and river habitat was is likely to provide suitable functional habitat for this species.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Rest of Rural Area:

Land to the West of Cambridge Road, Melbourn

Review of Site Parameters

- Distance from European Site: 7.9km
- Size: 6.65 ha
- Habitats Present: The land consists of arable fields with hedgerows intersecting and surrounding the site.
- Functional Connectivity: The site is functionally connected via hedgerows and arable fields to the SAC.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land at High Fields (Phase 2), Caldecotte

Review of Site Parameters

- Distance from European Site: 5.46km
- Size: 6.04 ha
- Habitats Present: The land consisted of developed land and grassland surrounded by hedgerows and woodland.

- Functional Connectivity: The site is of negligible value for Barbastelle bats. However, the adjacent habitats were considered of moderate value given the distance from the site.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Rest of Rural Area: East of bypass, Longstanton

Review of Site Parameters

- Distance from European Site: 13.7km
- Size: 5.75 ha
- Habitats Present: The land consists of arable fields with a band of scrub through the centre.
- Functional Connectivity: In the surrounding area there is scrub, hedgerows and arable fields. These provide suitable connectivity to habitat within the SAC, which Barbastelle species rely on.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land to the north of St Neots Road, Hardwick.

Review of Site Parameters

- Distance from European Site: 6.3km
- Size: 4.62 ha
- Habitats Present: The land consists of arable field surrounded by hedgerows.
- Functional Connectivity: The site itself provides low suitability habitat for Barbastelle bats. The site lies between developed land and A14 and is therefore likely to be of limited value for this species.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land at Buckingway Business Park

Review of Site Parameters

- Distance from European Site: 11.9
- Size: 2.11 ha
- Habitats Present: The land consists of arable fields surrounded by arable fields and built development.
- Functional Connectivity: The site has low value for Barbastelle bats. There is functionally connectivity between the SAC and the proposed allocated,

however this is likely to be of reduced value given the distance and intersection of two major roads.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Norman Way, Over

Review of Site Parameters

- Distance from European Site: 16.00km
- Size: 1.76 ha
- Habitats Present: The land consists of arable field with development to the north and scrub to the south of the site.
- Functional Connectivity: The site is considered to be of low suitability for Barbastelle bats. There is functionally connectivity between the SAC and the proposed allocated, however this is likely to be of reduced value given the distance and intersection of two major roads.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land at Mansel Farm, Station Road, Oakington

Review of Site Parameters

- Distance from European Site: 13.4km
- Size: 1.43 ha
- Habitats Present: The land consists of grassland bordered by hedgerow in the west. The site lies to the north-east of Oakington.
- Functional Connectivity: The site is considered of low value for Barbastelle bats. The surrounding area supports woodland and hedgerow habitat, which provides suitable functional habitat. The site may provide low suitability habitat for foraging.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land north of Impington Lane, Hilston and Impington

Review of Site Parameters

- Distance from European Site: 14.00km
- Size: 1.19 ha
- Habitats Present: The land consists of developed land.
- Functional Connectivity: The site is not considered to provide suitable functionally linked land for the SAC.

Assessment of Suitability for Barbastelle Bats

- Negligible.

Site Allocation – Rest of Rural Area: The Moor, Moor Lane, Melbourn

Review of Site Parameters

- Distance from European Site: 7.6km
- Size: 1.08 ha
- Habitats Present: The land consists on pasture with hedgerow and treelines along the boundary.
- Functional Connectivity: The site is of low suitability for Barbastelle bats and is functionally connected to the SAC via arable fields and hedgerow.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Old Highways Depot, Twenty Pence Lane, Cottenham

Review of Site Parameters

- Distance from European Site: 18.8km
- Size: 0.61 ha

- Habitats Present: The land consists of developed land with scattered trees.
- Functional Connectivity: The site is not considered to provide suitable functionally linked land for the SAC.

Assessment of Suitability for Barbastelle Bats

- Negligible

Site Allocation – Rest of Rural Area: Genome Campus

Review of Site Parameters

- Distance from European Site: 16.00km
- Size: 127.38 ha
- Habitats Present: The land consists of a series of arable fields with large blocks of woodland-scrub
- Functional Connectivity: The site is of moderate value for Barbastelle bats and is considered to be functionally connected to the site via arable fields, woodland, hedgerows and treelines.

Assessment of Suitability for Barbastelle Bats

- Moderate

Site Allocation – Rest of Rural Area: Brabraham Research Campus

Review of Site Parameters

- Distance from European Site: 15.8km
- Size: 39.89 ha
- Habitats Present: The land consists of developed land, short grassland and scattered trees. The site is bound by woodland and lies adjacent to the River Granta.
- Functional Connectivity: The site itself supports low value habitat for barbastelle bats. However, the adjacent habitat is likely to be of moderate suitability and is considered to be functionally linked to the SAC.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land south of Babraham Road, Sawston

Review of Site Parameters

- Distance from European Site: 14.4km
- Size: 12.08 ha
- Habitats Present: The land consists of arable fields with hedgerows.

- Functional Connectivity: The site is of low suitability for Barbastelle bats. There is functional connectivity between the SAC and the proposed, site however given the value of the habitat this is likely to be of limited value.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land between Hinton Way and Mingle Lane, Great Shelford

Review of Site Parameters

- Distance from European Site: 11.8km
- Size: 6.14 ha
- Habitats Present: The land consists of arable and pasture fields that lie adjacent to residential land associated with Great Shelford.
- Functional Connectivity: The site is of low suitability for Barbastelle bats. There is functional connectivity between the SAC and the proposed site, however it is expected that there is habitat of greater suitability to the south of Great Shelford, which supports river and deciduous woodland habitat.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Land at Maarnford Farm, Hunts Road, Duxford

Review of Site Parameters

- Distance from European Site: 13.9km
- Size: 1.66 ha
- Habitats Present: The land consists of grassland field used primarily for parking vehicles that is boundary by hedgerows.
- Functional Connectivity: The site is of low suitability for Barbastelle bats. There is functional connectivity between the SAC and the proposed site, however it is expected that there is habitat of greater suitability to the north of Duxford, which supports river and deciduous woodland habitat.

Assessment of Suitability for Barbastelle Bats

- Low

Site Allocation – Rest of Rural Area: Comfort Caf, Fourwentways

Review of Site Parameters

- Distance from European Site: 17.5
- Size: 0.79 ha
- Habitats Present: The land consists of developed land that is bound by treelines and hedgerows.

- Functional Connectivity: The site is of low suitability for Barbastelle bats. Given the distance, size and limited presence of suitable habitat, this site allocation was not considered to provide habitat that contributes to offsite functional habitat for this species.

Assessment of Suitability for Barbastelle Bats

- Negligible

5.21 The desk-based review of site allocations identified the majority of the site allocations to be of low or negligible value to support barbastelle bats and were therefore discounted from further consideration in terms of offsite functional land.

5.22 A total of seven site allocations were considered to have moderate suitability to support Barbastelle bats and as such there is potential for loss of offsite habitat to adversely affect this species through severance and fragmentation of habitat.

5.23 In addition to the above site allocations, there is potential for additional development to come forward as part of the plan at broad locations, such as Cambourne, to accommodate future growth of a new town around the proposed East West Rail station, and through windfall sites. The potential impacts on offsite functional habitat in relation to the SAC should be assessed on a site by site basis as these developments come forward.

Mitigation

5.24 To provide certainty that the loss of offsite functional habitat will not adversely affect the integrity of the Eversden and Wimpole Woods SAC, it is recommended that the following safeguard measures are implemented at the project level:

- Bat surveys will be required for any development coming forward in relation to sites with moderate suitability to support barbastelle bats to determine the individual and cumulative importance of suitable habitat within each allocation for this species and inform mitigation proposals.
- A commitment to mitigation is required within the plan dependent on the findings of bat surveys. If required, mitigation will need to ensure the avoidance of key habitat features likely to be used by this species and the creation and enhancement of suitable habitat for this species.

5.25 Policies in the plan will to some degree provide a level of mitigation through protection measures outlined in Policy BG/BG: Biodiversity and geodiversity and through habitat creation and through the protection and enhance of suitable habitat for this species in Policy BG/TC: Improving tree canopy cover and the tree population.

5.26 It is however recommended that the plan incorporates additional wording, which outlines the requirement for development that will come forward as part of the plan but yet to be defined and site allocation identified in this HRA to be of moderate suitability to implement the above safeguard measures.

Conclusion

5.27 Provided that the above policy mitigation is incorporated into the plan and implemented successfully, adverse effects on the integrity of the Eversden and Wimpole SAC, as a result of impacts from physical damage and loss will be avoided.

Non-physical Disturbance

Eversden and Wimpole SAC

5.28 Eversden and Wimpole SAC supports the qualifying species, barbastelle bat. As detailed under ‘Physical Habitat and Loss’ in paragraphs 5.9-5.13 above, this is a mobile species, which relies on offsite rich foraging habitats and well-connected commuting corridors between the roost site and wider landscape to sustain the SAC population.

5.29 No development is proposed within 500m of the SAC and therefore no direct impacts are considered likely in relation to non-physical disturbance. However, there is potential for impacts to occur in relation to non-physical disturbance, particularly from increased light spill on offsite functional habitat within of adjacent to proposed site allocations.

5.30 As detailed in the Screening Assessment, this species has been identified to travel within a CSZ of 6km from a known roost. However, if there are suitable commuting corridors and sufficient foraging habitat for this species to exploit, they are known to travel up to 20km from their roost. A review of site allocations identified all proposed allocations within 20km of the SAC, which have been subject to a more detailed review as part of this assessment as detailed under 'Physical Damage and Loss' above.

5.31 The following site allocations were identified to be situated within or adjacent to suitable habitat which is functionally connected to the SAC for barbastelle bats. This included:

- Cambridge Urban Area: North East Cambridge
- Cambridge Urban Area: Orchard Park
- Cambridge Urban Area: 315-349 Mill Road and Brookfields
- Cambridge Urban Area: Old Press/Mill Lane

- Cambridge Urban Area: Grange Farm
- Cambridge Urban Area: Betjeman House
- Edge of Cambridge: Addenbrooke's Hospital Site
- Edge of Cambridge: Fulbourn Road West 1 & 2, Cambridge
- New Settlement: Northstowe Reserve Land
- New Settlement: Waterbeach New Town
- New Settlement: Bourn Airfield New Village
- New Settlement: Cambourne West
- Rest of Rural Area: Bayer CropScience Site, Hauxton
- Rest of Rural Area: Land at High Fields (Phase 2), Caldecotte
- Rest of Rural Area: Land at Mansel Farm, Station Road, Oakington
- Rest of Rural Area: Genome Campus
- Rest of Rural Area: Brabraham Research Campus

5.32 In addition to the above site allocations, there is potential for additional development to come forward as part of the plan at broad locations, such as Cambourne, to accommodate future growth of a new town around the proposed East West Rail station, as well as through windfall sites. The potential impacts on non-physical disturbance to offsite functional habitat in relation to the SAC should be assessed on a site by site basis as these developments come forward.

5.33 An increase in light spill on these habitats has the potential to result in the loss of suitable roosting features for barbastelle bats and to cause fragmentation of habitat, which this species may rely on to disperse into the wider area. Therefore, to ensure no adverse effects on the integrity of the SAC as a result of proposed development in the plan, appropriate mitigation measures will be required, as detailed below.

Mitigation

5.34 To provide certainty that impacts from non-physical disturbance will not adversely affect the integrity of the Eversden and Wimpole Woods SAC, it is recommended that the following safeguard measures are implemented at the project level:

- Bat surveys will be required for any development coming forward in relation to sites as detailed above to determine the individual and cumulative importance of suitable habitat within or adjacent to each allocation for this species and inform mitigation proposals.
- A commitment to mitigation is required within the plan dependent on the findings of bat surveys. If required, mitigation will need to ensure the avoidance of key habitat features likely to be used by this species and the creation and enhancement of suitable habitat for this species.

5.35 The First Proposals plan states the Local Plan will include wording in Policy BG/BG: Biodiversity and geodiversity as follows:

> "The policy will state that development proposals adversely affecting sites of biodiversity or geological importance will not normally be permitted. Exceptions will only be made where the public benefits significantly outweigh any adverse impacts. In such cases where development is permitted, we will require that the intrinsic natural features of particular interest are safeguarded or enhanced."

5.36 It is recommended that this wording is further strengthened to explicitly state that the level of protection provided should be appropriate to the international, national or local significance of the site. In addition, the policy should be updated to reflect the safeguard measures detailed above.

Conclusion

5.37 Provided that the above policy mitigation is incorporated into the plan and implemented successfully, adverse effects on the integrity of the Eversden and Wimpole SAC, as a result of impacts from non-physical disturbance will be avoided.

Recreation

Wicken Fen Ramsar / Fenland SAC

5.38 Wicken Fen Ramsar and a component part of Fenland SAC are located 1km to the north-east of Greater Cambridge boundary and is subject to high levels of recreation every year. The National Trust records over 65,000 visitors at their visitor centre with more people using the access network in the Wicken Fen Vision Area each year **[See reference** 32**]**. Following a recent visitor study of the Wicken Fen Vision Area, visitors to the European sites comprised of first-time visitors travelling a greater distance in the wider area and visitors from the local area who visit the site two to three times a month.

5.39 Key activities undertaken by visitors to the European site included walking and dog walking. Other activities recorded at lower levels included cycling, bird/wildlife watching and photography. These activities have the potential to adversely affect qualifying habitats of the Ramsar site and SAC, which are fragile and susceptible to damage and disturbance to vegetation from trampling and illegal activities, such as bonfires and vandalism to contamination from litter and dog fouling and disturbance of livestock from dogs, which prevents the successful management of habitats being grazed.

5.40 Although, the Information Sheet on Ramsar Wetlands for Wicken Fen Ramsar and the Standard Data Form and Natural England Site Improvement Plan for Fenland SAC do not highlight recreation as a key threat, due to the

high levels of visitors to these designated sites there is potential for impacts to the qualifying feature of the Ramsar site from recreational pressure to occur.

5.41 As detailed in the Screening Assessment, a ZOI of 20km has been applied in this assessment. This is based on visitor data that was completed in 2019 at Wicken Fen Ramsar, which identified the majority of visitors to travel between 10km and 20km to the site. A review of site allocations identified 31 site allocations proposed as part of the GCLP to lie within 20km of the Ramsar site and overlapping SAC.

5.42 In light of the above information, it is recommended that mitigation measures as detailed below and which are designed to address the cumulative impacts of increased recreation on the SAC as a result of the plan are implemented to ensure a sufficient level of certainty in concluding that the plan will not result in adverse effects on the integrity of the SAC.

Mitigation

5.43 Wicken Fen Ramsar and component Fenland SAC are managed by the National Trust. There are existing measures in place, which will to some extent provide a level of mitigation for recreation at these European sites. These measures include controlling access at certain locations in the designated site by requiring permits before entry (albeit not entirely due to the presence of open access points and public rights of way), zoning remote areas away from the central hub to protect habitats from damage and disturbance and engaging with visitors at their visitor centre. In line with recommendations provided by Natural England, further advice is being sought from the National Trust with regards to mitigation from recreational impact and any advice provided will be considered as part of future iterations of this HRA.

5.44 Policies in the plan will provide to some degree a level of mitigation, which will be provided through protection measures detailed in Policy BG/BG: Biodiversity and geodiversity and through Policy: BG/GI: Green infrastructure, BG/PO: Protecting open spaces and BG/EO: Providing and enhancing open

spaces, which outlines requirements for development to make provision and enhance green infrastructure and open spaces.

5.45 In Policy BG/BG: Biodiversity and geodiversity, there will be specific detail on the requirements for development to mitigate for impacts on designated sites. The plan states the following in relation to this policy:

> "The policy will require development to mitigate evidenced recreational impacts on designated biodiversity and geodiversity sites, including applying Natural England's Impact Risk Zones for Sites of Special Scientific importance."

5.46 It is however recommended that the policy is strengthened further by providing a commitment in the plan that any development proposed within 20km of the European site to provide alternative natural greenspace that is specifically designed and managed to alleviate visitor pressure on the European sites. In addition to this, it is recommended that that the policy outlines the quantity and quality of open space provision and how delivery and management in-perpetuity will be secured.

5.47 Following consultation with Natural England on the Issues and Options North East Cambridge Area Action Plan, it was advised "that the extent of accessible natural greenspace provision should be proportionate to the scale of development". This should include the provision of the following:

- Provision of 8ha/1000 population, which is advocated through the Suitable Alternative Green Space (SANGS) Guidance **[See reference** 33**]**.
- Provision of green infrastructure that seeks to achieve the Natural England Accessible Natural Greenspace Standards **[See reference** 34**]**, which includes for a minimum standard of 2ha informal open space within 300m of everyone's home.
- Green infrastructure provision within the GCLP should seek to contribute towards the delivery of the objectives of the Cambridgeshire Green

Infrastructure Strategy **[See reference** 35**]** for habitat enhancement and improved connectivity.

- The provision of green infrastructure should not rely on existing green spaces, such as Milton Park but should seek to provide additional open spaces that complement and connect to the Country Park.

5.48 Specific initiatives identified within the Greater Cambridge Green Infrastructure Opportunity Mapping should also be embedded into the plan to ensure that the existing network is enhanced and provides alternative opportunities from the European site for people to enjoy nature. This will be provided as part of Policy: BG/GI: Green infrastructure.

Conclusion

5.49 Provided that the above policy mitigation is incorporated into the plan and implemented successfully, adverse effects on the integrity of the Wicken Fen Ramsar site and Fenland SAC, as a result of impacts from recreation will be avoided.

Water Quantity

Ouse Washes SAC, SPA and Ramsar / Wicken Fen Ramsar Site / Chippenham Fen Ramsar Site / Fenland SAC

5.50 Greater Cambridge potable water is supplied by Cambridge Water. Water companies have a statutory duty to establish how planned development in their area can be serviced. These plans are set out in their Water Resources Management Plan (WRMP). Investments to deliver the plans are based on five-year planning cycles known as Asset Management Periods (AMP) so the water

company programme for water infrastructure upgrades may constrain the rate at which residential growth can be supported.

5.51 In 2019, Cambridge Water published its latest WRMP in December 2019 for the period 2020 to 2045. This plan outlines how they will continue to meet the demand for water in the Cambridge region. The WRMP outlines that Cambridge Water supplies public water to a network of five supply zones, which lie within a single Water Resource Zone (WRZ). The Cambridge Zone is the largest of the five supply zones and has been highlighted to have "sources which supply water direct into this zone provide more water than is needed there to meet demand". The water resources supplied to development within the WRZ is supplied by groundwater (90%), mainly abstracted from the chalk aquifer (97%) in the southern and eastern part of the supply area, with a small percentage of greensand aquifer (3%) sources. Abstraction from surface waterbodies are limited in this region due to the low flows of the chalk-fed rivers making large abstractions of water from surface water unsuitable. As such, surface water abstractions are restricted to agricultural uses, with the majority of the larger surface water abstracted located on the lower River Cam and River Great Ouse.

5.52 The Cambridge Water supply region lies adjacent to Affinity Water to the north and Anglian Water to the north, east and west. These water companies also abstract from the same underlying Chalk aquifer and as such any increase in development as a result of the GCLP has the potential to result in an adverse effect on European sites susceptible to impacts from water in-combination with development in areas outside of the GCLP area. To account for this a regional approach to water resource management planning is now being led by Water Resources East, to take into account all demands on the regional groundwater resource.

Catchment Abstraction Licencing Strategy (CALS)

5.53 The Environment Agency is responsible for managing water resources in England. The Environment Agency controls how much water is abstracted with a permitting system, regulating existing licences and granting new ones. It uses the CALS process and abstraction licensing strategies to do this. The CALS process aims to aid the meeting of the environmental objectives of the Water Framework Directive by:

- Providing a water resource assessment of rivers, lakes, reservoirs, estuaries and groundwater referred to as water bodies under the Water Framework Directive (WFD).
- Identifying water bodies that fail flow conditions expected to support good ecological status.
- Preventing deterioration of water body status due to new abstractions.
- Providing results which inform River Basin Management Plans (RBMPs).

5.54 Greater Cambridge area is located within the Cam and Ely Ouse abstraction area for which the most recent CALS was published in 2017 **[See reference** 36**]**. The CALS identify that the main water resources pressures are extensive water supply abstraction along with river support schemes and water transfers.

5.55 The CALS process has developed a classification system in order to inform the abstraction process. This classification provides an indication of:

- The relative balance between the environmental requirements for water and how much is licensed for abstraction.
- Whether water is available for further abstraction.
- Areas where abstraction may need to be reduced.

5.56 There is no water available for licencing for new surface water abstraction for most flow scenarios in Greater Cambridge. Water is restricted during high flows (Q30) and is not available during medium to low flows (Q50, 70 and 95).

5.57 In relation to groundwater abstraction, the CALS states:

> "Water not available for licensing; groundwater unit balance shows more water has been abstracted based on recent amounts than the amount available; no further consumptive licences will be granted."

5.58 As a result, there is no water available for new consumptive abstraction licences from groundwater in Greater Cambridge.

5.59 Where water abstractions cause or potentially cause environmental damage, existing licences may need to be revoked or changed in order to achieve a sustainable outcome. The CALS identify a number of designated sites (SAC/SPA/SSSI) where flows have fallen below the Environmental Flow Indicator (EFI). The relevant abstraction licences are therefore being assessed under the Environment Agency's Restoring Sustainable Abstraction (RSA) programme to assess impact and mitigation options. The CALS identify that all existing and new abstraction licences have been or are currently being assessed in order to make sure they are not impacting nationally or internationally designated sites.

Mitigation

5.60 Water Resources East (WRE) is a regional partnership working under the National Framework for Water Resources to develop a long-term integrated water management plan (IWMP) for Eastern England. The purpose of this IWMP is to understand the future demand for water in this region, available water supplies, and the options available that will be required to balance supply and demand.

5.61 WRE strategy seeks to:

- Work with all water users in Eastern England to become water efficient.
- Retain and store more water in the landscape and region.
- Move water into and around the region from areas of surplus to areas of deficit.
- Link land and water management more effectively, increasing resilience and restoring and enhancing natural systems.
- Understand where abstraction is having a detrimental impact on the environment and develop options which restore and enhance it whilst ensuring sustainable economic development.
- Explore alternative sources of water including desalinisation and water reuse.
- Contribute to low carbon strategies to meet a net zero ambition.

5.62 WRE are in the process of preparing the IWMP with a first draft to be published in August 2021. Mitigation outlined in this plan should be drawn from and used to inform strategic measures in the GCLP and will be reviewed to inform future iterations of this HRA. Options that may be identified to meet future demand for water, which have been outlined as part of the WRE Position Statement include:

- Water company leakage – water companies in the region have all committed to delivering significant reductions in leakage through to 2040.
- Reducing per capita consumption – the position statement outlined that WRE would encourage a commitment from "Local Authorities in our region to a new housing standard of 110 litres per head per day".
- Improvement of water efficiency in other sectors – the position statement details that it would welcome engagement from other sectors, such as agriculture and leisure, to improve water efficiencies.
- New supply options – the position statement details that the WRE are investigating a number of supply options, including new or optimised

options within the region and opportunities to transfer water from neighbouring regions. This will include the construction of major new potable water supply reservoirs, which will be designed to include allowance for significant reductions in abstraction rates and for increased demand due to additional growth in the Greater Cambridge area.

5.63 As detailed in the Greater Cambridge Integrated Water Management Study (IWMS): Outline Water Cycle Study, there is currently no further "capacity for future development outside of the WRMP to be supplied with water by increased abstraction from the chalk aquifer. To meet future demands, potable water supplies will need to be increased in other ways, such as through reduced usage (demand management), reduced leakage, licence trading, and the development of new supply options at the regional scale (e.g. importing water from outside of the Cambridge Water supply area)."

5.64 Any new development as part of the GCLP will need to demonstrate water neutrality to ensure no adverse effect on the integrity of European sites susceptible to impacts from water. In part this will be achieved through reduced water demand within specific proposed development. However, this will largely be reliant on the actions of Cambridge Water with support from WRE. To address this, there should be a commitment in the GCLP that new development will need to demonstrate that there will be no adverse effect on the integrity of European sites. This will need to include demonstration that water will be supplied without increasing abstraction beyond the existing agreed rates in the most recent Water Resource Management Plan or reducing the current available headroom, which could result in further detrimental impacts.

5.65 Policies in the GCLP will provide mitigation to some degree through the Policy CC/WE: Water efficiency in new developments and Policy CC/FM: Flooding and integrated water management. In particular, Policy CC/WE: Water efficiency in new developments states that:

> Developments will be required to meet high standards of high water

- Residential developments should be designed to achieve a standard of

5.66 This requirement goes further than the proposed 110 litres/person/day, which is being encouraged by the WRE and is considered within the Greater Cambridge IWMS achievable in this area.

5.67 In addition, it is recommended that exact mitigation measures are informed by the findings of the Greater Cambridge IWMS, including Outline Water Cycle Study and upcoming Detailed Water Cycle Study.

Conclusion

5.68 Subject to the findings of the Greater Cambridge IWMS and WRE IWMP being confirmed and delivered a conclusion of no adverse effect on integrity can be reached. However, in the absence of these studies and in line with a precautionary approach, a conclusion of no adverse effect on integrity cannot be reached in relation to the effect of water quantity on Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC and Portholme SAC either alone or in-combination until further detail is provided and presented in the GCLP.

Water Quality

Ouse Washes SAC, SPA and Ramsar / Wicken Fen Ramsar Site / Chippenham Fen Ramsar Site / Fenland SAC

5.69 Greater Cambridge public sewers and wastewater treatment centres are operated and maintained by Anglian Water. Whilst the Environment Agency is responsible for regulating wastewater treatment works, by issuing permits and assessing the quality of treated effluent against compliance limits.

5.70 The Greater Cambridge area is currently serviced by 26 wastewater treatment works (WwTW) with an additional three WwTW that lie outside of the GCLP area, but which service some settlements within the boundary. The Greater Cambridge IWMS has identified three treatment works are currently at or exceeding their DWF permits provided by the Environment Agency. This includes Cambridge, Bourn and Over. A further seven WwTWs have been identified as nearing DWF permits (>75% capacity). This includes Coton, Foxton, Haslingfield, Melbourn, Royston, Teversham and Uttons Drove.

5.71 An increase in demand for wastewater treatment as a result of development in the GCLP in combination with neighbouring boroughs and districts in the region has the potential to adversely affect the integrity of European sites that are susceptible to impacts from water.

5.72 New development proposed has the potential to result in the following:

- Increased volumes of treated wastewater discharges, resulting in nutrient enrichment of water and potential lowering of dissolved oxygen as well as increased water velocities and levels downstream of Water Recycling Centres (WRC) outfalls.

- Overloading of the combined sewer network during storm events with the potential for flooding and contamination of hydrologically connected European sites to the River Cam and Great River Ouse.
- Increase in the area of urban surfaces and roads could increase the potential for contaminated surface runoff and the contamination of hydrologically connected European sites to the River Cam and Great River Ouse. In particular, this has potential to affect Portholme SAC, which is currently being affected by prolonged periods of flooding. A change in water quality may affect the prevalence of species associated with lowland hay meadows.

Mitigation

5.73 To provide certainty that impacts from water quality will not adversely affect the integrity of the Ouse Washes SAC, SPA and Ramsar Site, Wicken Fen Ramsar Site, Chippenham Fen Ramsar Site and Fenland SAC in combination with other plans and projects, the following mitigation measures will be implemented:

- Upgrades to Water Recycle Centres (WRC) – to allow for an increased in demand for wastewater upgrades will be required for WRC that are currently exceeding or are at near capacity. As part of the Anglian Water Water Recycling Long Term Plan 2018 **[See reference** 37**]** planned upgrades have been identified in relation to Bourn, Cambridge, Coton, Foxton, Melbourn, Over, Royston, Uttons Drove and Waterbeach.
- Relocation of WRC – as part of upgrades to the WRC in the Greater Cambridge area, the most significant will be in relation to the relocation of the existing Cambridge Water Recycle Centre. This will increase capacity from its existing population of 213,649 to a proposed 300,000. This relocation of the WRC will allow the regeneration of the North East Cambridge site allocation. The existing Cambridge WRC is currently exceeding its DWF permit, and Anglian Water are negotiating a variation with the Environment Agency. Pending agreement, this could constrain the timings of additional development in its catchment.

5.74 Where there remains insufficient capacity, the Greater IWMS has outlined that the construction of a new WRC would be feasible. At this stage, it is unclear whether there is sufficient capacity available within existing infrastructure and as part of upgrades to WRC to support the increase in wastewater treatment as part of proposed development in the GCLP. It is recommended that exact mitigation measures are informed by the findings of the Greater Cambridge IWMS, including Outline Water Cycle Study and upcoming Detailed Water Cycle Study.

5.75 There is currently limited mitigation in the plan policies that will provide mitigation for increased demand in wastewater treatment in the Greater Cambridge area with mitigation be primarily delivered through policy I/ID: Infrastructure and delivery. It is therefore recommended that there is specific consideration of this in the plan to ensure that there is a commitment in the GCLP to ensure that there is sufficient capacity for wastewater treatment in the Greater Cambridge area and that there specific inclusion of wording that outlines that any development proposed will only be permitted where there is sufficient capacity within the WRC infrastructure. As advised by Natural England, there should be specific detail in the plan on the mechanism and timescale of delivery for mitigation that will implemented. This will be informed by the preparation of the Greater Cambridge IWMP: Detailed Water Cycle Study and supported by the upcoming Anglian Water Drainage and Waste Water Management Plan, who the council are liaising with Anglian Water on.

Conclusion

5.76 Subject to the findings of the Greater Cambridge IWMS being confirmed and delivered a conclusion of no adverse effect on integrity can be reached. However, in the absence of this study and in line with a precautionary approach, a conclusion of no adverse effect on integrity cannot be reached in relation to the effect of water quality on Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC and Portholme SAC either alone or in-combination until further detail is provided and presented in the GCLP.

Summary of Appropriate Assessment

5.77 The conclusions of the Appropriate Assessment are summarised in Table 5.1:

- The European sites that are shown as screened out with no colour indicate sites that were considered to have no likely significant effect at the screening stage.
- The European sites highlighted in grey were found to have no adverse effect on integrity (AEoI) provided the mitigation measures detailed in Chapter 5 are implemented.
- For the remaining European site in orange, the potential impacts of the plan in relation to this site are uncertain until more detail is obtained through relevant studies.

Table 5.1: Summary of Appropriate Assessment

European Site	Physical Damage and Loss	Non-physical Disturbance	Air Pollution	Recreation	Water Quantity and Quality
Eversden and Wimpole Woods SAC	No AEoI	No AEoI	Screened out	Screened out	Screened out
Ouse Washes SAC	Screened out	Screened out	Screened out	Screened out	Uncertain
Devil's Dyke SAC	Screened out	Screened out	Screened out	Screened out	Screened out
Fenland SAC	Screened out	Screened out	Screened out	No AEoI	Uncertain

European Site	Physical Damage and Loss	Non-physical Disturbance	Air Pollution	Recreation	Water Quantity and Quality
Ouse Washes SPA	Screened out	Screened out	Screened out	Screened out	Uncertain
Ouse Washes Ramsar	Screened out	Screened out	Screened out	Screened out	Uncertain
Wicken Fen Ramsar	Screened out	Screened out	Screened out	Potential LSE	Uncertain
Chippenham Fen Ramsar	Screened out	Screened out	Screened out	No LSE	Uncertain
Portholme SAC	Screened out	Screened out	Screened out	Screened out	Uncertain

Chapter 6

Conclusion and Next Steps

6.1 At the Screening stage, likely significant effects on European sites, either alone or in combination with other policies and proposals, were identified for plan policies:

- S/JH: New jobs and homes
- S/DS: Development strategy
- S/NEC: North East Cambridge
- S/WC: West Cambridge
- S/AMC: Areas of Major Change
- S/OA: Opportunity Areas in Cambridge
- S/LAC: Land allocations in Cambridge
- S/CE: Cambridge East
- S/NWC: North West Cambridge
- S/CBC Cambridge Biomedical Campus (including Addenbrooke's Hospital)
- S/EOC Other Existing Allocations on the Edge of Cambridge
- S/CB: Cambourne
- S/NS: Existing new settlements
- S/GC: Genome Campus, Hinxton
- S/BRC: Babraham Research Campus
- S/RSC: Village allocations in the Rural Southern Cluster
- S/SCP: Policy areas in the rural southern cluster
- S/RRA: Allocations in rest of the rural area

- CC/RE: Renewable energy projects and infrastructure

6.2 The findings of the HRA screening determined that impacts from physical damage and loss (offsite), non-physical disturbance (offsite), recreation and water quantity and quality could result in a likely significant effect in relation to:

- Physical damage and loss (offsite) – in relation to Eversden and Wimpole Woods SAC.
- Non-physical disturbance (offsite) – in relation to Eversden and Wimpole Woods SAC.
- Recreation – in relation to Wicken Fen Ramsar SAC and Fenland SAC.
- Water Quantity and Quality – in relation to Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC and Portholme SAC.

6.3 The Appropriate Assessment stage identified whether the above likely significant effects will, in light of mitigation and avoidance measures, result in adverse effects on integrity of the European sites either alone or in-combination with other plans or projects. The findings of the Appropriate Assessment are detailed below.

6.4 It can be concluded that no adverse effect on integrity will occur for the following European sites subject to the provision of safeguarding and mitigation measures as detailed in Chapter 5.

- Physical damage and loss (offsite) - the Appropriate Assessment concluded no adverse effect on integrity as a result of offsite physical damage and loss in relation to Eversden and Wimpole Woods SAC providing the following safeguards and mitigation measures are implemented:
  - Completion of bat surveys for site allocations identified with moderate or high potential to support barbastelle to determine the ecological value of these sites in relation to this bat species and to inform specific mitigation proposals.

- There is a commitment in the plan that proposed development will avoid key habitat features likely to be used by this species and to create and enhance suitable habitat for this species.
- It is also recommended that policy wording in the plan is strengthened to include specific inclusion of the safeguard measures detailed above.

- Non-physical disturbance - the Appropriate Assessment concluded no adverse effect on integrity as a result of non-physical disturbance in relation to Eversden and Wimpole Woods SAC providing the following safeguards and mitigation measures are implemented:
  - Completion of bat surveys for site allocations identified with moderate or high potential to support barbastelle to determine the ecological value of these sites in relation to this bat species and to inform specific mitigation proposals.
  - There is a commitment in the plan that proposed development will avoid key habitat features likely to be used by this species and to create and enhance suitable habitat for this species.
  - It is also recommended that Policy BG/BG Biodiversity and geodiversity is strengthened to include specific reference that mitigation provided should be suitable to the level of protection afforded to designated sites.
- Recreation – the Appropriate Assessment concluded no adverse effect on integrity as a result of increased recreational pressure in relation to Wicken Fen Ramsar site and Fenland SAC provided that the following safeguards and mitigation measures are required by the plan and successfully implemented. This includes:
  - A commitment in the plan to ensure that development within 20km of the Ramsar site and SAC to provide sufficient suitable alternative natural greenspace in line with advice from Natural England and that there should be specific detail on the policy on the appropriate quantity and quality of open spaces and how delivery and management in perpetuity will be secured.

6.5 Subject to the findings of the Greater Cambridge IWMS and the WRE IWMP being confirmed and delivered a conclusion of no adverse effect on integrity can be reached. However, in the absence of these studies and in line with a precautionary approach, a conclusion of no adverse effect on integrity cannot be reached in relation to the effect of water quantity and quality on Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC and Portholme SAC either alone or in-combination until further detail is provided and presented in the GCLP.

Next Steps

6.6 HRA is an iterative process and as such is expected to be updated in light of newly available evidence and comments from key consultees. As part of consultation of the First Proposals Local Plan, it is recommended that this report is subject to consultation with Natural England and the Environment Agency to confirm that the conclusions of the assessment are considered appropriate at this stage of plan-making.

Appendix A

Figures

LUC

Figure 1: Site Allocations

South Cambridgeshire
South Cambridgeshire 15km buffer
Cambridge City

Site allocation

Employment
Housing
Mixed Use

Map scale 1:290,000 @ A3

0 5 10 km

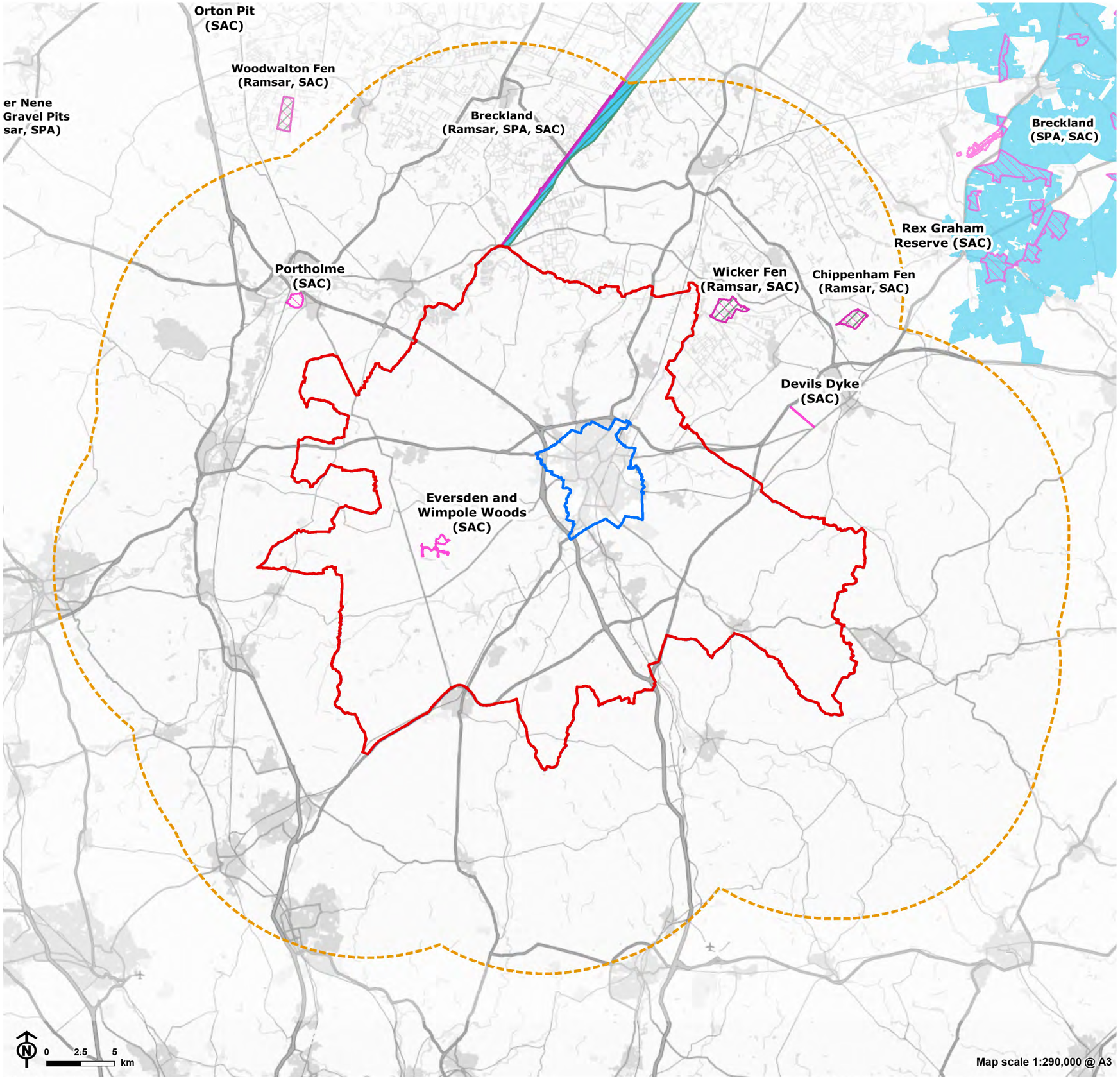
South Cambridgeshire District Council

CB:CB EB:Bean_C LUC FIG1_10860_NE_CAMBS_Allocations_r0_A3L 10/08/2021
Source: NE, OS

HRA Greater Cambridge
Local Plan and North East
Cambridge Area Action Plan

LUC

Figure 2: European Sites within 15km of Greater Cambridge



South Cambridgeshire
South Cambridgeshire 15km Buffer Boundary
Cambridge City
Cambridge City
Special Areas of Conservation
Ramsar Sites
Special Protection Areas

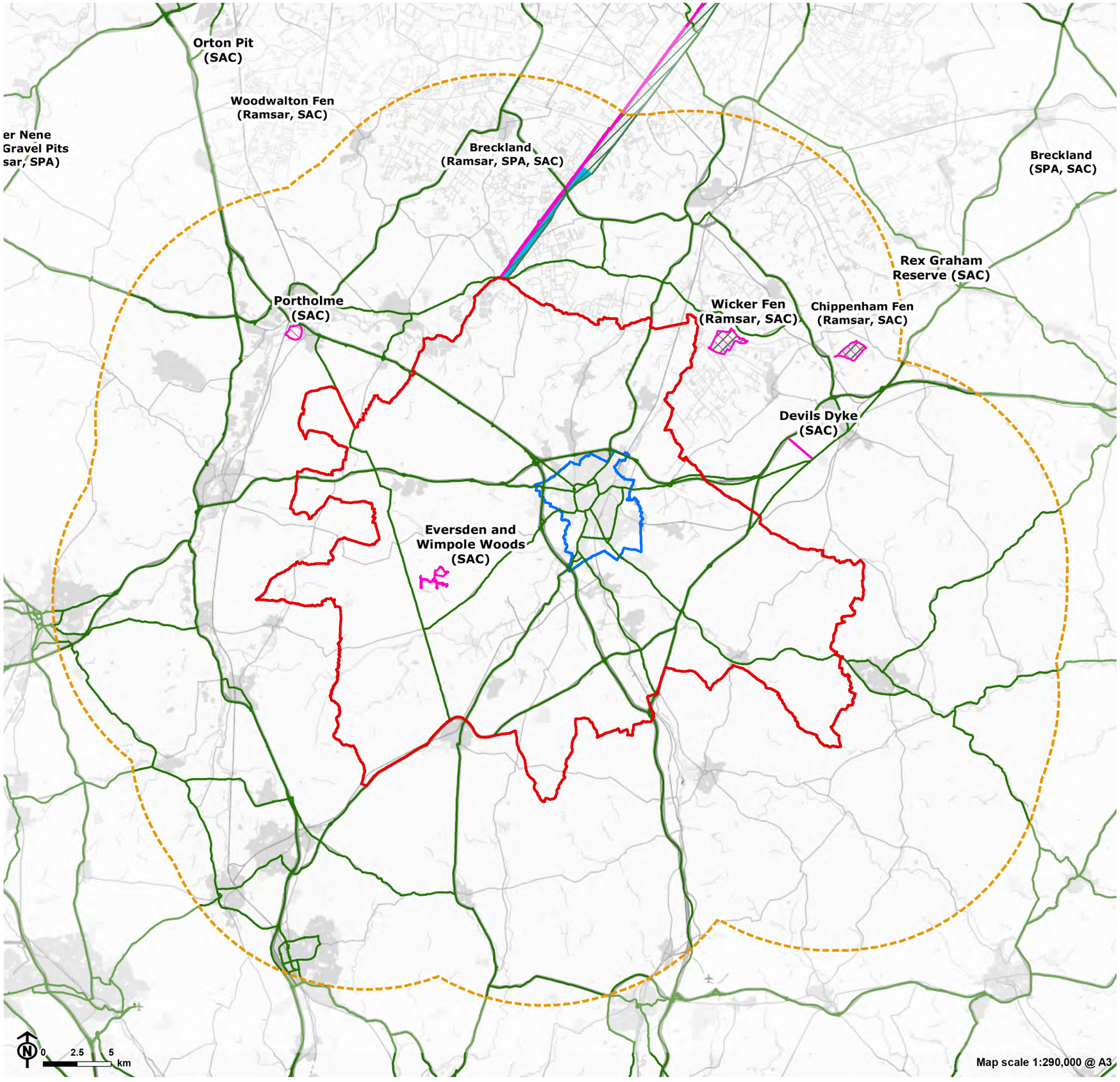
CB:CB EB:Packham_B LUC APNDX1_10860_EuropeanSites_r1_A3L 10/12/2019
Source: Natural England

South Cambridgeshire District Council

HRA Greater Cambridge
Local Plan and North East
Cambridge Area Action Plan

LUC

Figure 3: Strategic Roads within Greater Cambridge



South Cambridgeshire
South Cambridgeshire 15km Buffer
Strategic Roads
Cambridge City
Special Areas of Conservation
Ramsar Sites
Special Protection Areas

CB:CB EB:Packham_B LUC APNDX3_10860_Roads_r1_A3L 10/12/2019
Source: Natural England

South Cambridgeshire District Council

Appendix B

Attributes of European Sites

B.1 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) **[See reference** 38**]**, Standard Data Forms or Ramsar Information Sheets available from the JNCC website **[See reference** 39**]** and Supplementary Advice Notes **[See reference** 40**]**, which advise on the sites features and how to implement the conservation objectives. Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs **[See reference** 41**]**.

Eversden and Wimpole Woods SAC

Summary of reasons for designation

- Qualifying species:
- S1308 Barbastelle Barbastella 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 **[See reference** 42**]**.
- 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 uncommon species such as the Barbastelle bat. 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 **[See reference** 43**]**.

European site pressures and threats

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 manage important bat habitats.

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 site-relevant critical loads in the ancient woodland used by Barbastelle bats as a summer maternity roost where female bats give birth and for foraging therefore, there is a risk of harmful effects on the bats **[See reference** 34**]**.

Conservation objectives

- 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
  - The distribution of qualifying species within the site **[See reference** 44**]**.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- 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.

Other comments

- None

Portholme SAC

Summary of reasons for designation

- Qualifying features:
- H6510 Lowland hay meadows (Alopecurus pratensis, 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 with flood water and the site supports grassland communities of alluvial flood meadow type **[See reference** 45**]**.

European site pressures and threats

Undesirable Species

- Non-woody and woody vascular plants species may require active management to avert unwanted succession to a different and less 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 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.

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 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.

Conservation objectives

- 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 structure and function (including typical species) of qualifying natural habitats; and
  - The supporting processes on which qualifying natural habitats rely **[See reference** 46**]**.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- Dependent on seasonal inundation by flood waters and therefore dependent upon the maintenance of historic conditions without notable changes in levels of pollutants, nutrients or silt.

Other comments

- None

Devil's Dyke SAC

Devil's Dyke consists of a mosaic of CG3 Bromus erectus and CG5 Bromus erectus – Brachypodium pinnatum calcareous grasslands. It is the only known UK semi-natural dry grassland site for lizard orchid Himantoglossum hircinum.

Summary of reasons for designation

Annex I habitats:

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites)

European site pressures and threats

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:
  - 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.
  - 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.

Conservation objectives

- 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 structure and function (including typical species) of qualifying natural habitats; and
  - The supporting processes on which qualifying natural habitats rely.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- The SAC's qualifying habitat relies on:
  - Thin, well-drained, lime-rich 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 the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat. In particular, for species such as the Lizard orchid, Himantoglossum hircinum.
  - Active and ongoing conservation management is needed to protect, maintain or restore this habitat.

Other comments

- None

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 broad-leaved woodland carr.

Summary of reasons for designation

- 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)

European site pressures and threats

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: 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:
  - 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 species present in these habitats.
  - Increased cover of trees and shrubs can result in desiccation of these habitats.
  - Changes in land use on offsite habitat can result in deterioration of habitat within the SAC.
  - Changes in sediment may lead to sub-optimal conditions for spined loach.

- Inadequate quantities of water can adversely affect the structure and function of this habitat type.

Conservation objectives

- 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 qualifying species;
  - The structure and 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.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- In general, qualifying habitats of the SAC rely on:
  - 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 the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat.
  - Active and ongoing conservation 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 clayey-silt-laden soils (Molinion caeruleae); Purple moor-grass 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; Calcium-rich 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 that they feed on (see list of diets below).
  - Habitat connectivity is important for the viability of these species populations
- 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.
  - Great Crested Newts Habitat preferences – requires aquatic habitat, such as ponds for breeding in areas such as pastoral and arable farmland, woodland and grassland.
  - Diet – aquatic invertebrates.

Other comments

- National Trust undertaking remedial land management work.

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. The washlands support both breeding and wintering waterbirds.

Summary of reasons for designation

SAC qualifying species

- Annex II: Spined loach Cobitis taenia

SPA qualifying species

- Article 4.1, Annex 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; 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

European site pressures and threats

Current pressures

- Inappropriate water levels – interest features are being adversely affected by increased flooding.

Potential future threats

- Water pollution

Conservation objectives

- 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 (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.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- In general, the qualifying 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).
  - 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 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.

Other comments

- Long term tidal strategy - regular problems summer flooding- severe siltation of Great Ouse River. Smaller watercourses could drain into Great Ouse River and to Ouse Washes SPA/SAC. Large land holdings by RSPB, Cambridgeshire Wildlife Trust and Wetlands and Wildfowl Trust.

Chippenham Fen Ramsar

Summary of reasons for designation

- 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 carvifolia).

European site pressures and threats

- 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.

Conservation objectives

- Not applicable.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- In general, the qualifying habitats of the Ramsar rely on:

  - Key structural, influential and/or distinctive species, such as grazers, surface borers, predators to maintain the structure, function and quality of habitat.
  - Insect, such as bees and flies for pollination of flowering plants.
  - Habitat connectivity to the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat.
  - Management of habitats to protect, maintain and restore it.
- In general, the qualifying species of the Ramsar rely on:
- Invertebrates
  - Diets – flowering plants, organic matter and other invertebrate species for food resources.

Other comments

- Inappropriate scrub control, cutting and mowing in several units contributing to unfavourable no change status.

Wicken Fen Ramsar

Summary of reasons for designation

- 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.

European site pressures and threats

- 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.

Conservation objectives

- Not applicable.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- In general, the qualifying habitats of the Ramsar rely on:
  - Key structural, influential and/or distinctive species, such as grazers, surface borers, predators to maintain the structure, function and quality of habitat.
  - Insect, such as bees and flies for pollination of flowering plants.
  - Habitat connectivity to the wider landscape to allow for migration, dispersal and genetic exchange of species typical of this habitat.
  - Management of habitats to protect, maintain and restore it.
- In general, the qualifying habitats of the Ramsar rely on:
  - Invertebrates
  - Diets – flowering plants, organic matter and other invertebrate species for food resources.

Other comments

- Issues caused by inappropriate water levels and scrub control in some areas. WLMP in place to address these issues.

Appendix C

Screening Matrix

C.1 The following section below shows which types of impacts on European sites could potentially result from each of the policies and site allocations in the Greater Cambridge Local Plan. Where a policy or site allocation is not expected to have a particular type of impact, a bullet point detailing this is below the name. Where a policy or site allocation could potentially have a certain type of impact, a bullet point detailing this is listed below the name. The final column sets out the nature of potential significant effects if they were to arise. Where uncertain or likely significant effects are identified, these are srequired to be considered further via Appropriate Assessment.

Theme 1: How much development and where?

Policy S/JH: New jobs and homes

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This makes provision for 44,400 new homes over the plan period.
- The policy also makes provision for 58,500 new jobs. However, the policy does not reference any specific employment types or associated development locations.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy defines the overall quantum of housing development that will be proposed as part of the plan and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/DS: Development strategy

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – this policy outlines the distribution and quantity of development over the plan period and beyond to 2050.

Potential effects if proposal implemented

- Loss of offsite functional habitat

- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes. This policy outlines the distribution and quantity of housing development as part of the plan and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/SH: Settlement hierarchy

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No – This policy will group together similar settlements into categories that reflect their scale, characteristics and sustainability. It forms part of the sustainable development strategy and helps to direct housing to the most sustainable locations, whilst enabling recycling of land and delivery of new homes to meet local housing needs.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy S/SB: Settlement boundaries

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will define the boundaries of settlements for planning purposes.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Theme 2: The city of Cambridge

Policy S/NEC: North East Cambridge

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy will set out the placemaking vision for, and the scale and scope of development at North East Cambridge. This site is one of the last few remaining significant brownfield sites within the city. Redevelopment of North East Cambridge is anticipated to deliver 8,350 new homes, 15,000 additional jobs.

Potential effects if proposal implemented

- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy defines the overall quantum of housing development and new jobs that will be proposed as part of the plan for North East Cambridge and therefore will contribute to effects, including non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/WC: West Cambridge

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This will continue to provide a policy for future development of the West Cambridge site, refined to better reflect the themes of the new Local Plan, including providing an element of flexibility to include some new homes where it would support the vibrancy of the campus.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy defines the development needs of Cambridge University with regards to education, sui generis research, academic research, commercial research, and development of products or processes and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution and recreation. There is also potential for water abstraction/treatment effects in relation to this type

of development and the inclusion for some housing for keyworkers as part of the policy.

Policy S/AMC: Areas of Major Change

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy will provide continued policy guidance for existing Areas of Major Change in the urban area of Cambridge identified in the Cambridge Local Plan 2018. Areas of Major Change are extensive areas of development comprising defined and known sites collectively shaping the spatial structure of Cambridge. It does not constitute a policy for development itself but instead ensures careful integration with existing nearby communities.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy will result in development and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution and recreation. There is also potential for water abstraction/treatment effects.

Policy S/OA: Opportunity Areas in Cambridge

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy identifies specific locations as Opportunity Areas that would benefit from a holistic approach to development that also improves public transport access and infrastructure delivery.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy involves mixed use development within and surrounding existing assets in Cambridge and therefore, has the potential to contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution and recreation. There is also potential for water abstraction/treatment.

Policy S/LAC: Land allocations in Cambridge

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy identifies specific land allocations for development in the Cambridge urban area, mainly rolling forward sites from the 2018 Cambridge Local Plan with one new housing site and one refined employment site.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy will result in development in Cambridge and therefore, has the potential to contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution and recreation. There is also potential for water abstraction/treatment.

Theme 3: The edge of Cambridge

Policy S/CE: Cambridge East

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes- This policy will set the placemaking vision and the amount of development for land at Cambridge East. This includes approximately 7,000 homes and 9,000 jobs. It is anticipated that around 2,900 homes will be delivered by 2041. There will be a mix of employment uses.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy defines the overall quantum of housing development and new jobs that will be proposed as part of the plan for Cambridge East and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/NWC: North West Cambridge

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy will guide the continued development of the University's North West Cambridge development, known as Eddington, including the provision of new dwellings. This is anticipated to be in the region of 1,000 to 1,500 homes.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy defines the overall quantum of housing development that will be proposed as part of the plan for North West Cambridge and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/CBC Cambridge Biomedical Campus (including Addenbrooke's Hospital)

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy will guide the continued development and evolution of the Cambridge Biomedical Campus. This is to meet local, regional or national health care needs or for biomedical and biotechnology research and development activities, related higher education and sui generis medical research institutes, associated support activities to meet the needs of employees and visitors, and residential uses where it would provide affordable and key worker homes for campus employees.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy will guide the development of the Cambridge Biomedical Campus. This will involve predominately employment and healthcare development. This will potentially contribute to the loss of offsite functionally linked habitat and non-physical disturbance.

Policy S/EOC Other Existing Allocations on the Edge of Cambridge

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This policy will provide guidance for existing allocations on the edge of Cambridge including housing and employment developments.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. The policy involves housing and employment development which have the potential to result in effects including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Theme 4: New settlements

Policy S/CB: Cambourne

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - The policy will set out the intention to identify Cambourne as a broad location for future growth in the 2030's to respond to the opportunity that will be provided by the proposed East West Rail that includes a station at Cambourne. The policy involves mixed use development including, new housing, services, employment and transport opportunities.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure

- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy would result in mixed use development around Cambourne including houses, jobs, new transport connections and services which have the potential to result in effects including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment. The exact area for proposed development has yet to be defined and as such potential impacts are considered at a broad location scale.

Policy S/NS: Existing new settlements

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This policy will confirm that the three new settlements of Northstowe, the new town north of Waterbeach, and Bourn Airfield new village, will continue to be developed during the period of the new Local Plan and beyond. These developments are mixed use developments.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution

- Recreational pressure
- Change in water quantity and increased water pollution.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy would result in mixed use development at existing new settlements. These have the potential to result in effects including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Theme 5: The rural southern cluster

Policy S/GC: Genome Campus, Hinxton

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This policy will guide the future expansion and development of the existing Genome Campus site. This will be an employment development involving proposals for industrial and warehouses developments.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)

- Air pollution
- Change in water quantity and increased water pollution.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy would result in employment related development to expand the existing Genome Campus. This has the potential to result in effects including loss of offsite functional habitat, non-physical disturbance, air pollution and water abstraction/treatment.

Policy S/BRC: Babraham Research Campus

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This policy would result in mixed use development to expand the existing Babraham Research Campus. It would involve development on the Green Belt. Developments proposals are to support Research and Development of products and processes.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy would result in mixed use development to expand the existing Babraham Research Campus. This has the potential to result in effects including loss of offsite functional habitat, non-physical disturbance air pollution and water abstraction/treatment.

Policy S/RSC: Village allocations in the Rural Southern Cluster

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This policy will allocate small sites for housing and employment. The proposed developments are in or adjoining villages within the rural southern cluster.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy will result in small-scale development. This has potential to result in effects in combination with proposed development in Greater Cambridge and other plans and projects. Potential effects include loss of offsite functional habitat, non-physical disturbance air pollution and water abstraction/treatment.
- however, the land allocations are within or adjoining existing villages and are small areas of land. Additionally. the number of houses to be developed are small (approx. 100 houses in each land allocation). Therefore, it should not result in LSE upon European sites.

Policy S/SCP: Policy areas in the rural southern cluster

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy will provide a context for one new and one existing policy areas within the rural southern cluster area. The new policy area will support redevelopment in the Whittlesford Parkway Station Area to accommodate a transport hub, employment and housing. The existing policy area is to maintain the policy approach in the South Cambridgeshire Local Plan 2018 which restricts residential development in the area of Linton south of the A1307 to improvements to existing properties.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy involves redevelopment of an area including mixed use development at Whittlesford and improvements to infrastructure and access to services at Linton. Therefore, there is potential to result in effects including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Theme 6: Rest of the rural area

Policy S/RRA: Allocations in rest of the rural area

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes – This policy involves land allocations for housing and employment across the rural area of Greater Cambridge.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Recreational pressure
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy involves housing, employment and mixed-use developments at small land allocations across the rural area. Therefore, there is potential to result in effects including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/RRP: Policy areas in the rest of the rural area

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No – This policy will provide a continuing context for existing policy areas within the rest of the rural area outside the rural southern cluster area. It will involve re-development/ re-use of existing built land or within existing areas of development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will result in development; however, it proposes re-development of existing built land or existing areas of development. Therefore, it should not result in LSE upon European sites.

Theme 7: Climate Change

Policy CC/NZ: Net zero carbon new buildings

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set the levels of energy use that will be allowed for new development, how renewable energy should be used to meet that energy need, and how whole-life carbon emissions (emissions associated with constructing buildings), should be taken into account.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the carbon effects of development.

Policy CC/WE: Water efficiency in new developments

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set the standards of water efficiency that new developments must comply with.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy provides mitigation of the impacts of development on water resources, particularly through avoiding abstraction from chalk aquifers as a result of development within the new Local Plan.

Policy CC/DC: Designing for a changing climate

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how the design of developments should take account of our changing climate, for example extreme weather events such as heat waves and flash flooding.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy CC/FM: Flooding and integrated water management

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No. This policy will set out how development should address flood risk and implement integrated water management including sustainable drainage systems in new development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the potential effects of development on water quality that can occur during heavy rainfall and flood events through integrating Sustainable Drainage Systems (SuDS).

Policy CC/RE: Renewable energy projects and infrastructure

- This could potentially have a certain type of impact.

Likely activities (operation) to result as a consequence of the proposal

- Yes - This policy will control how renewable energy generation projects and associated infrastructure should be planned and designed.

Potential effects if proposal implemented

- Loss of offsite functional habitat
- Non-physical disturbance (lighting and noise)
- Air pollution
- Change in water quantity and increased water pollution

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes. This policy provides framework support to renewable energy developments. Therefore, this will contribute to effects including loss of offsite functional habitat, non-physical disturbance, air pollution and water abstraction/treatment.

Policy CC/CE: Reducing waste and supporting the circular economy

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control how developers should manage the waste generated by construction, how new developments should provide for waste and recycling storage and collection, and how circular economy principles should be considered in development proposals.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the effects of construction activities on the environment through reducing waste and supporting the circular economy. This will help to prevent air and water pollution.

Policy CC/CS: Supporting land-based carbon sequestration

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control development of land that is capable of becoming an important carbon sink.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will support the creation of land and habitats that play a role as carbon sinks and protect existing carbon sinks from development in particular undisturbed or undrained peat. It will also promote approaches that minimise soil disturbance, compaction and disposal during construction projects.
- This will act as mitigation for the carbon emissions and air pollution that result from development.

Theme 8: Biodiversity and Green Spaces

Policy BG/BG: Biodiversity and geodiversity

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control the biodiversity impacts from development, including the approach to Biodiversity Net Gain. The policy will require development to achieve a minimum 20% biodiversity net gain.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will regulate and provide mitigation for the effects on biodiversity that result from development. This policy will ensure that significant impacts upon European sites are avoided and mitigated for wherever possible.

Policy BG/GI: Green infrastructure

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy identifies the existing green infrastructure network and the strategic initiatives intended to enhance it and addresses how development proposals should relate to green infrastructure.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the effects of recreation upon European sites that result from housing developments through providing active transport routes and open space.

Policy BG/TC: Improving tree canopy cover and the tree population

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No – This policy will control how development impacts tree canopy cover, the tree population, and protected trees and hedgerows.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will regulate and provide mitigation for the effects on biodiversity that result from development.

Policy BG/RC: River corridors

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control development that has an impact on river corridors of the River Cam and its tributaries in Greater Cambridge.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will regulate and provide mitigation for the effects on biodiversity that result from development.

Policy BG/PO: Protecting open spaces

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No – This policy will identify and protect open spaces, including village greens, parks, sports and recreation areas, allotments, community orchards and Protected Village Amenity Areas, and Local Green Space.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the effects of recreation upon European sites that result from housing developments through protecting existing open space.

Policy BG/EO: Providing and enhancing open spaces

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how new development should provide new and enhanced open space to meet the needs it generates.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the effects of recreation upon European sites that result from housing developments through creating new areas and enhancing existing open space.

Theme 9: Wellbeing and social inclusion

Policy WS/HD: Creating healthy new developments

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will integrate health considerations into the planning and design of new development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the effects of developments in terms of air pollution through maximising active travel opportunities.

Policy WS/CF: Community, sports, and leisure facilities

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out what new community (including culture, education and healthcare), sports, and leisure facilities should be provided and sustained through new development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy WS/MU: Meanwhile uses during long term redevelopments

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out when and how meanwhile uses should be provided before and during development of major sites.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy WS/IO: Creating inclusive employment and business opportunities through new developments

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how new developments should support the skills and training needs of local residents and provide opportunities for local businesses.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy WS/HS: Pollution, health and safety

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how development should take account of sources of pollution. It will require that development does not lead to or is subject to significant adverse effects as a result of noise, vibration, odour, light pollution.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for the effects of construction upon European sites by impacts on air and water quality and also through non-physical disturbance.

Theme 10: Great Places

Policy GP/PP: People and place responsive design

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set a strategic vision for achieving high quality design in Greater Cambridge for both urban and rural areas.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy GP/LC: Protection and enhancement of landscape character

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how development should address landscape character and features in Greater Cambridge.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy GP/GB: Protection and enhancement of the Cambridge Green Belt

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set the framework for consideration of development proposals in the Green Belt.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy provides mitigation for the effects of development upon functionally linked habitat through protecting and enhancing the Green Belt.

Policy GP/QD: Achieving high quality development

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out our requirements for the design quality to be achieved by new developments, and alterations and extensions to existing development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy GP/QP: Establishing high quality landscape and public realm

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - The policy will set out our requirements for the quality of design of landscape and public realm proposals.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy GP/HA: Conservation and enhancement of heritage assets

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control development that involves or affects Greater Cambridge's historic buildings or structures and its historic places.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy GP/CC: Adapting heritage assets to climate change

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how the environmental performance of heritage assets should be balanced against the need to protect and enhance the character and value of that asset.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will provide mitigation for existing assets by reducing emissions and air pollution from existing heritage assets and improving energy efficiency.

Policy GP/PH: Protection of public houses

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control development proposals involving the loss of public houses.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No.

Theme 11: Jobs

Policy J/NE: New employment development proposals

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the criteria that will determine whether proposals for employment development in urban areas, villages, and the countryside are acceptable.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/RE: Supporting the rural economy

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the approach to re-use and replacement of rural buildings, and proposals related to land-based enterprises.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/AL: Protecting the best agricultural land

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out when and how development on agricultural land and soils should be controlled.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/PB: Protecting existing business space

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will state what existing business space will be protected and how business space and employment land can be changed to other uses.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/RW: Enabling remote working

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how proposals for remote working hubs and working at home should be considered.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/AW: Affordable workspace and creative industries

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how affordable workspace, including for creative businesses, should be provided across Greater Cambridge.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/EP: Supporting a range of facilities in employment parks

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will guide consideration of proposals for shared facilities in employment parks and campuses.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/RC: Retail and centres

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will cover the treatment of retail, leisure (arts, culture and entertainment) and other city centre proposals in Cambridge, and the

towns and villages of South Cambridgeshire, as well as out-of-town development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy J/VA: Visitor accommodation, attractions and facilities

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will state where hotel and other types of visitor accommodation development will be supported in Greater Cambridge and how the loss or gain of new hotels/visitor accommodation will be managed.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No.

Policy J/FD: Faculty development and specialist/language schools

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will state when new faculty (higher education) development, teaching hospital facilities, specialist colleges and language schools will be supported, and the requirements that will need to be satisfied.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Theme 12: Homes

Policy H/AH: Affordable Housing

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how affordable housing will be delivered, by specifying the size of developments on which affordable homes will be provided and setting out the types of affordable housing required to address identified needs.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/ES: Exception Sites for Affordable Housing

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the circumstances in which rural exception sites and First Homes exception sites would be supported.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/HM: Housing Mix

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the mix of housing to be provided by new development, to ensure that new housing is generally of a size and type to meet the housing needs of different groups in the community.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/HD: Housing Density

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will ensure that land is used effectively when being developed for new housing.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/GL: Garden land and subdivision of existing plots

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out criteria to determine when it will be acceptable for garden land and existing residential plots to be developed for new housing.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/SS: Residential Space Standards and accessible homes

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set the required standards for internal spaces within new homes, the proportion of accessible and adaptable dwellings to be provided as part of dwelling mix, and provision of external private and shared amenity space.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/SH: Specialist Housing

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will guide proposals for specialist housing designed to support a variety of groups.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/CB: Self and Custom Build Homes

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how custom build and/or self-build homes across Greater Cambridge will be delivered.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/BR9: Build to Rent Homes

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out when and how proposals for Build to Rent homes would be supported.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/MO: Houses in Multiple Occupation (HMO's)

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set the standards that proposals for HMOs must meet.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/SA: Student Accommodation

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how and when proposals for new student accommodation for higher education institutions would be supported.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/DC: Dwellings in the Countryside

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the types of residential development that may be acceptable in the countryside outside of defined settlement boundaries.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/RM: Residential Moorings

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the criteria to be used when considering proposals for new residential moorings.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/RC: Residential Caravans

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the criteria to be used when considering proposals for new residential caravan sites.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/GT: Gypsy and Traveller and Travelling Show People sites

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - The policy will set out how the accommodation needs of Gypsies and Travellers and Travelling Showpeople will be provided for over the plan

period, and provide policy guidance regarding the location and design of sites.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy H/CH: Community led housing

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the criteria to be used when considering proposals for new community-led housing developments.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Theme 13: Infrastructure

Policy I/ST: Sustainable Transport and Connectivity

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how the transport impacts of development should be managed, and how new development should be connected to the transport network.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will promote sustainable modes of transport and will promote developments that can make use of existing transport connections. This policy should mitigate the effects of development with regards to air pollution.

Policy I/EV: Parking and Electric Vehicles

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the requirements for cycle and vehicle parking, including infrastructure for electric vehicle charging.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No. This policy will promote sustainable modes of transport. This policy should mitigate the effects of development with regards to air pollution.

Policy I/FD: Freight and Delivery Consolidation

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how developments of delivery hubs should be considered, and how development proposals should provide space for servicing, storage and deliveries.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy I/SI: Safeguarding important infrastructure

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out what infrastructure should be safeguarded from the impacts of development, and how this should be assessed.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy I/AD: Aviation Development

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will control development proposals related to aviation, and set out in what circumstances, and how, developments should take account of aviation safety.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy I/EI: Energy Infrastructure Master planning

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out the requirements for energy infrastructure to support development.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy I/ID: Infrastructure and Delivery

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how necessary infrastructure to support development should be delivered.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No

Policy I/DI: Digital Infrastructure

- This is not expected to have a particular type of impact.

Likely activities (operation) to result as a consequence of the proposal

- No - This policy will set out how developments should contribute to Greater Cambridge's requirements for broadband, mobile phone and smart infrastructure.

Potential effects if proposal implemented

- N/A

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No.

Appendix D

Review of other plans and projects for in-combination effects

District level Local Plans (strategic issues/'core strategies') providing for development

South Cambridgeshire Local Plan **[See reference 47]**

Plan Owner/Competent Authority

- South Cambridgeshire District Council

Related work HRA/AA

- South Cambridgeshire Local Plan Submission Sustainability Appraisal Report and Habitats Regulations Screening Assessment (2014) **[See reference** 48**]**

Notes on Plan documents

- The South Cambridgeshire Local Plan was adopted on September 2018 and continues to be effective until 2031.

- The Local Plan proposes the creation of 19,500 homes and the provision of 22,000 new jobs during the 2011-2031 time period.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- The HRA of the South Cambridgeshire Local Plan 2014 considered the following European Sites within the assessment:
  - Eversden and Wimpole Woods SAC (within the District)
  - Ouse Washes SAC, SPA and RAMSAR (within a neighbouring District)
  - Devil's Dyke SAC (within a neighbouring District)
- The potential impacts on the designated sites were summarised as: physical habitat loss; impacts on migratory species; physical disturbance (through recreational pressures and improved transport infrastructure); changes in water quality and quantity, and atmospheric pollution.
- The HRA concluded that the proposed policies and allocations as worded within the Local Plan were unlikely to result in significant effects on the listed European Sites, in isolation or in combination with neighbouring plans or infrastructure projects. Therefore, there was no requirement for an appropriate assessment.

Cambridge City Local Plan **[See reference 49]**

Plan Owner/Competent Authority

- Cambridge City Council

Related work HRA/AA

- Habitat Regulations Assessment: Screening Report for the Draft Cambridge Local Plan 2014 (2013) **[See reference** 50**] [See reference** 51**]**

Notes on Plan documents

- The Local Plan sets out the vision, policies and proposals for the future development and land use in Cambridge between 2018 and 2031.
- The Plan proposes the provision of 35,773 homes and 22,100 new jobs.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- There are no European Sites within Cambridge itself, but the following designated sites within the wider area were considered as part of the assessment given their close proximity to the district boundary and/or due to their conservation objectives or interests:
  - Eversden and Wimpole Woods SAC
  - Ouse Washes SAC, SPA and RAMSAR
  - Devil's Dyke SAC
- Potential impacts considered included:
  - Physical habitat loss
  - Recreational pressure and disturbance
  - Impact on protected species outside the protected sites
  - Water quantity and quality
  - Air pollution

- The Cambridge Local Plan 2014 - Towards 2031 is unlikely to have significant impacts on the conservation objectives of: Devil's Dyke SAC; Ouse Washes SAC, SPA and Ramsar; Eversden and Wimpole Woods SAC; or Fenland SAC and Ramsar sites. With regards to the possible impacts resulting from policies and allocations contained within the adopted Cambridgeshire and Peterborough Minerals and Waste LDF documents no adverse effects were identified on the listed European Sites.

Huntingdonshire Local Plan **[See reference 52]**

Plan Owner/Competent Authority

- Huntingdonshire District Council

Related work HRA/AA

- Huntingdonshire Local Plan to 2036: Proposed Main Modifications 2018 Habitats Regulations Assessment **[See reference** 53**]**

Notes on Plan documents

- The Local Plan was adopted in 2019 which outlines all policies and proposals until 2036. This replaces the 2009 Core Strategy, 2011 Huntingdon West Area Action Plan 2011, and saved policies from the Local Plan 1995 and Local Plan Alteration 2002.
- The Local Plan proposes the delivery of 20,100 new homes and the provision of 14,400 new job between 2011-2036

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- European Sites assessed
  - Ouse Washes SAC, SPA
  - Eversden and Wimpole Woods SAC
- Potential impacts considered
  - Air pollution
  - Recreational pressures
  - Hydraulic conditions (drought and flooding)
  - Non-native species
  - Groundwater pollution
  - Water quality
- The HRA concluded that the Local Plan would not result in any significant effects on the integrity of the any designated sites included within the assessment, as a consequence of the proposed policies or allocations as currently worded. The Local Plan was also not considered to result in any significant effects as a result of in combination effects in conjunction with neighbouring authorities' local plans.

East Cambridgeshire Local Plan **[See reference 54]**

Plan Owner/Competent Authority

- East Cambridgeshire District Council

Related work HRA/AA

- Habitats Regulation Assessment: East Cambridgeshire Local Plan (2018) **[See reference** 55**]**

Notes on Plan documents

- The East Cambridgeshire Local Plan 2015 was formally withdrawn in February 2019, however the Plan will remain adopted as the Local Plan for the district until a new Local Plan is formed.
- This Plan will inform policies and allocations up to 2031. The Plan will facilitate the need for 10,835 dwellings, and the creation of 6,000 new jobs between 2011 and 2031.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- The HRA scoped in the following designated sites at the screening stage:
  - Fenland SAC,
  - Wicken Fen RAMSAR
  - Ouse Washes SAC, SPA, RAMSAR
  - Devil's Dyke SAC
- European Sites assessed
- Devil's Dyke SAC: Not screened out – taken to appropriate assessment (AA). Assumed potential impacts:
  - Physical habitat loss
  - Physical damage
  - Disturbance/recreational pressure

- Atmospheric pollution

- Wicken Fen SAC, RAMSAR: Not screened out – taken to appropriate assessment (AA). Assumed potential impacts:
  - Physical habitat loss
  - Physical damage
  - Disturbance/recreational pressure
  - Water quantity
  - Water quality
  - Atmospheric pollution
- Ouse Washes SAC, SPA, RAMSAR: Not screened out – taken to appropriate assessment (AA). Assumed potential impacts:
  - Physical habitat loss
  - Physical damage
  - Disturbance/recreational pressure
  - Water quality
  - Water quantity
- Conclusion of the HRA
- The East Cambridgeshire Local Plan was found to be compliant with the Habitats Regulations, and provided that the proposed recommendations within the report are followed, the proposed policies and allocations will not result in likely significant effects on designated sites.
- The recommendations below are as stated within the report:
  - The Local Plan adopts a precautionary approach and includes a requirement for applicable allocation site policies (i.e. site allocations in Ely and Littleport that fall within the Goose and Swan Functional Land IRZ) to include a requirement for a project-level HRA screening to demonstrate that proposed development will not have any adverse effect on Ouse Washes functional land.

- An additional paragraph to the supporting text of LP30 should be added which explains how land beyond the site boundary of a European site may also provide important functional habitat for qualifying bird species and to ensure that any 'windfall' greenfield sites that fall within the Goose and Swan Functional Land IRZ also demonstrate no adverse effects on the qualifying species of the Ouse Washes.
- Strengthening of policy Littleport6 to require a new Country Park that is "of a scale and quality to attract residents from the whole of Littleport, thereby creating a significant area of strategic open space". This would provide an open space for recreation, for both new and existing residents, which is a suitable alternative to the Ouse Washes. The policy could be further strengthened to clarify that the provision of a well-connected Green Infrastructure Network should include both internal connections as well as connections to the wider Green Infrastructure Network beyond the site allocation boundary.
- The Local Plan is strengthened at Policy LP21 Open Space, Sport and Recreational Facilities to ensure no likely significant effects on the Breckland and Devil's Dyke Natura 2000 sites as a result of increased recreational pressure arising from new residential development.
- Policy Isleham4 should include the requirement for project level HRA that should consider the effects of increased recreational pressure on Natura 2000 sites. Where there are risks, appropriate mitigation measures should be proposed.
- It will be important that all new residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan.

Fenland Local Plan **[See reference 56]**

Plan Owner/Competent Authority

- Fenland District Council

Related work HRA/AA

- Fenland Core Strategy (Further Consultation Draft) Habitats Regulations Assessment Screening Report (2012)

Notes on Plan documents

- The council is currently preparing a new Local Plan which will replace the current Fenland Local Plan 2014.
- The current Local Plan proposes the provision of 11,000 new homes and the creation of 40,000 new jobs.

Finding of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- European Sites assessed
  - Fenland SAC,
  - Wicken Fen RAMSAR
  - Ouse Washes SAC, SPA, RAMSAR
- Potential impacts considered
  - Physical habitat loss

  - Physical damage
  - Non-physical disturbance
  - Contamination/pollution
  - Water quantity
  - Biological disturbance
- Conclusion of the HRA
- The HRA concluded that the Local Plan would not result in any significant effects on the integrity of the any designated sites included within the assessment, as a consequence of the proposed policies or allocations as currently worded. The Local Plan was also not considered to result in any significant effects as a result of in combination effects in conjunction with neighbouring authorities' local plans.

West Suffolk: Forest Heath and St Edmundsbury Local Plan

Plan Owner/Competent Authority

- West Suffolk Council

Related work HRA/AA

- Habitats Regulations Assessment of the Forest Heath Allocations Local Plan (2019)

Notes on Plan documents

- The West Suffolk Local Plan consists of the former Forest Heath and St Edmundsbury areas. It is comprised of the following documents:

  - Core Strategy (2010) former FHDC area
  - Core Strategy Single Issue Review (SIR) (2019)
  - Core Strategy (2010) Former SEBC area
  - Joint Development Management Policies Document 2015
  - Forest Heath Site Allocations Local Plan
- The Joint Development Management Policies Document outlined that the 15km buffer radiating from the North Cambridgeshire boundary encompasses a small section of the former Forest Heath area. Therefore the Core Strategy (2010) former FHDC area will be reviewed in relation to proposed policies and allocations that may have an adverse effect on designated sites.
- The Core Strategy SIR states that the Forest Heath area has quantified a total of 6800 homes are needed between 2011 and 2031, and a target of creating 7,300 additional jobs.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan.
- European Sites assessed
  - Devil's Dyke SAC
  - Ouse Washes SAC, SPA and RAMSAR
  - Wicken Fen RAMSAR
- Potential effects to be considered during the assessment:
  - Direct loss or physical damage due to construction
  - Disturbance and other urban edge effects from construction or occupation of buildings
  - Disturbance from construction or operation of roads

  - Recreational pressure
  - Water quantity
  - Water quality
  - Air quality
- Conclusions from the HRA
- The HRA screening assessment could not rule out likely significant effects from the plan, either alone or in combination with other plan and projects, in relation to the following types of effects:
  - Direct loss or physical damage due to construction
  - Disturbance and other urban edge effects from construction or occupation of buildings
  - Disturbance from construction or operation of roads
  - Recreational pressure
  - Water quantity
  - Water quality
  - Air quality
- Therefore, an Appropriate Assessment (AA) was required to identify if any adverse effects on the integrity of any European sites would occur as a result of the list potential impacts. The Appropriate Assessment was able to rule out an adverse effect of the integrity of any European site either alone or in combination with other plans and projects.

North Essex Authorities' Shared Strategic Section 1 Plan – Braintree District Local Plan 2013-2033 Section 1 **[See reference 57]**

Plan Owner/Competent Authority

- Braintree District Council
- Colchester Borough Council
- Tendring District Council

Related work HRA/AA

- HRA Report for North Essex Authorities Shared Strategic Section 1 Local Plan (2019)

Notes on Plan documents

- The current adopted Braintree district development plan is made up of a number of documents:
  - Local Plan Review 2005
  - Core Strategy 2011
  - Local Plan 2033 – Section 1 (Section 2 is currently undergoing examination).
- The shared strategic plan will make provision for a minimum of 43,720 new homes and 93.3ha at the higher growth scenario over the plan period between 2013-2033.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan.
- No European sites assessed as part of the HRA of the Shared Strategic Plan – Section 1 were considered within the scope of the HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan. No further consideration is given to in-combination effects that may arise from potential development in Braintree.

Uttlesford Local Plan **[See reference 58]**

Plan Owner/Competent Authority

- Uttlesford District Council

Related work HRA/AA

- A local Plan was submitted and subsequently withdrawn in 2014.
- A revised pdf icon Local Development Scheme was approved by the Cabinet on 16 February 2016 with the draft Plan, including allocation of sites and supporting policies, due to be published in October 2016.
- Uttlesford District Council Habitats Regulations Assessment (2018)

Notes on Plan documents

- Development provided for in the Plan includes 11,500 new homes and 1,900 new jobs between 2011 and 2031.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- The HRA concluded that there were no Likely Significant Effects (namely Epping Forest SAC) in relation to the Focused Changes of the Regulation 19 Local Plan. No recommendations are made and no further Appropriate Assessment is required.

Central Bedfordshire Local Plan **[See reference 59]**

Plan Owner/Competent Authority

- Central Bedfordshire Council

Related work HRA/AA

- Central Bedfordshire Local Plan Habitats Regulations Assessment Addendum March 2021
- HRA of the Pre-submission Local Plan 2018

Notes on Plan documents

- The Local Plan makes provision for 44,756 new homes and 118ha of employment land over the plan period up to 2035.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- European sites assessed:
  - Chippenham Fen Ramsar
  - Fenland SAC
  - Ouse Washes SAC, SPA and Ramsar
  - Portholme SAC.
  - Wicken Fen Ramsar.
- The HRA screening assessment could not rule out likely significant effects from the plan, either alone or in combination with other plan and projects, in relation to water quality.
- Therefore, an Appropriate Assessment (AA) was required to identify if any adverse effects on the integrity of any European sites would occur as a result of the list potential impacts. The Appropriate Assessment was able to rule out an adverse effect of the integrity of any European site either alone or in combination with other plans and projects. The 2018 HRA Report was subject to further consultation comments and advice from Natural England, who advised it is satisfied with the conclusions of the HRA.

Bedford Borough Local Plan 2030 **[See reference 60]**

Plan Owner/Competent Authority

- Bedford Borough Council

Related work HRA/AA

- Bedford Borough Local Plan – Habitats Regulations Assessment: Appropriate Assessment 2018

Notes on Plan documents

- The Local Plan makes provision for 14,550 new homes and sufficient land for 6,900 net additional jobs over the plan period between 2015-2030.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- European sites assessed:
- Portholme SAC
- Ouse Washes SAC, SPA and Ramsar
- Eversden and Wimpole Woods SAC
- Therefore, an Appropriate Assessment (AA) was required to identify if any adverse effects on the integrity of any European sites would occur as a result of the list potential impacts.

North Hertfordshire Proposed Submission Local Plan 2011 – 2031 **[See reference 61]**

Plan Owner/Competent Authority

- North Hertfordshire District Council

Related work HRA/AA

- North Hertfordshire District Council Habitat Regulations Assessment Screening Report 2016

Notes on Plan documents

- The Local Plan makes provision for at least 14,000 new homes and an adequate supply of employment land in Hitchin, Letchworth Garden City, Baldock and Royston over the plan period.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan
- European sites assessed:
  - Eversden and Wimpole Woods SAC
- The Screening Assessment concluded no likely significant effect and as such no Appropriate Assessment was required. However, given this HRA was prepared prior to the People Over Wind Judgement, mitigation has been applied as the screening stage to ensure no likely significant effect. This would now required consideration at the Appropriate Assessment.

Review of projects for in-combination effects

Cambridgeshire and Peterborough Minerals and Waste Local Plan **[See reference 62]**

Plan Owner/Competent Authority

- Cambridgeshire County Council and Peterborough City Council

Related work HRA/AA

- Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, Proposed Submission Draft, Habitats Regulations Assessment (2019)13

Notes on Plan documents

- Cambridgeshire County Council and Peterborough City Council are in the process of reviewing the joint Minerals and Waste Development Plan. The councils have consulted on a Preliminary Draft Local Plan (May 2018); a Further Draft Local Plan (March 2019) and, more recently, a Proposed Submission Local Plan (November 2019). It is anticipated that the final plan will be adopted in November 2020.
- The current Core Strategy Development Plan Document (DPD) was adopted in 2011 and the Site Specific Proposals DPD was adopted in 2012. These two plans are being reviewed and a single joint Minerals and Waste Local Plan (MWLP) covering the two authority areas is being produced to replace them.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Cambridgeshire and Peterborough Minerals and Waste Local Plan
- European Sites assessed
  - Ouse Washes SAC, SPA and RAMSAR
  - Eversden and Wimpole Woods SAC
  - Fenland SAC and Wicken Fen RAMSAR
  - Devils Dyke SAC
- Potential impacts considered
  - Physical loss/damage off-site habitat
  - Changes in surface/groundwater hydrology
  - Water quality
  - Indirect disturbance - noise, vibration, lighting disturbance
  - Dust contamination
  - Air pollution
- The HRA scoped in the following designated sited at the screening stage:
- Wicken Fen RAMSAR and Fenland SAC: Not screened out – taken to appropriate assessment (AA) - assumed potential impacts:
  - Changes in water quantity and/or quality
  - Introduction of invasive species
- Ouse Wash SAC, SPA and RAMSAR: Not screened out – taken to appropriate assessment (AA) - assumed potential impacts:
  - Physical loss or damage of habitat (off-site, functionally connected)
  - Noise, vibration and light pollution
  - Changes in water quantity and/or quality

- The HRA scoped out the following designated sited at the screening stage:
  - Eversden and Wimpole Woods SAC
  - Devils Dyke SAC
- Conclusion from the HRA:
- Following Stage 1 HRA Screening, it was not possible to screen out physical loss/damage to off-site habitat, changes in surface/groundwater hydrology, changes in water quality, disturbance from noise, vibration and/or light pollution, dust contamination or air pollution impacts arising from policies and sites. Subsequently, a Stage 2 Appropriate Assessment was carried out to assess these effects on the Ouse Washes, Nene Washes and Fenland (Wicken Fen) European sites.
- The Appropriate Assessment concluded that the MWLP will not result in significant adverse effects as a result of physical loss of off-site habitat, changes in surface/groundwater hydrology, changes in water quality, disturbance from noise, vibration and/or light pollution, dust contamination or air pollution impacts arising from policies and sites. For development coming forward on either the allocated sites or non-allocated sites, it is considered that there are sufficient mitigation measures set out in the MWLP itself, or elsewhere, such as via regulatory requirements managed by the Environment Agency.
- To conclude, provided the recommendations made in this Report are (where applicable) incorporated into the Local Plan, it is possible to conclude that the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, Proposed Submission Draft, is compliant with the Habitats Regulations and will not result in likely significant effects on any of the European sites identified, either alone or in combination with other plans and projects.

Cambridgeshire and Peterborough Strategic Spatial Framework **[See reference 63]**

Plan Owner/Competent Authority

- Cambridgeshire and Peterborough Combined Authority

Related work HRA/AA

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Notes on Plan documents

- The devolution deal is centred around achieving ambitious levels of growth across Cambridgeshire and Peterborough for the benefit of all our communities – namely over 100,000 new homes and 90,000 new jobs by 2036.
- The devolution deal between all Cambridgeshire and Peterborough Authorities and Government established that the Combined Authority will:
- Create a non-statutory spatial framework, which will act as a framework for planning across the Combined Authority area, and for the future development of Local Plans.

Plan Owner/Competent Authority

- Cambridgeshire and Peterborough Combined Authority

Findings of the HRA

- No HRA has been carried out to date.

Cambridgeshire and Peterborough Combined Authority Local Transport Plan **[See reference 64]**

Plan Owner/Competent Authority

- Cambridgeshire and Peterborough Combined Authority

Related work HRA/AA

- Cambridgeshire and Peterborough Combined Authority Local Transport Plan, Habitats Regulation Assessment Task 1 Screening (2019) **[See reference** 65**]**

Notes on Plan documents

- This is the first Local Transport Plan for Cambridgeshire and Peterborough. It replaces the Interim Local Transport Plan, which was published in June 2017 and which was based upon the existing Local Transport Plans for Cambridgeshire (Local Transport Plan 3) and Peterborough (Local Transport Plan 4).
- The current Local Transport Plan does not fully reflect the aspirations of the CPCA as set out by the Mayor and in the wider CPCA 2030 Strategy and so a new LTP is being developed. Details of projects still pending.
- The draft Local Transport Plan was launched on 17th June.

Findings of the HRA

- Conclusions on potential effects of relevance to European sites within scope of HRA of Cambridgeshire and Peterborough Combined Authority Local Transport Plan

- European Sites assessed
  - - Ouse Washes SAC, SPA and RAMSAR
  - - Eversden and Wimpole Woods SAC
  - - Fenland SAC & Wicken Fen RAMSAR
  - - Devils Dyke SAC
- Potential impacts considered
- Direct impacts:
  - - Habitat loss (including loss of breeding and resting sites)
  - - Habitat fragmentation (including changes to habitat structure and function)
  - - Wildlife casualties (due to increased frequency of traffic)
  - - Disturbance and/or displacement of species due to increased frequency of transport
- Indirect impacts:
  - - Air pollution for designated sites within 200m (DMRB Vol 11 Section 3 Part 1)
  - - Noise and vibration
  - - Artificial lighting
  - - Water pollution
  - - Contamination
- Conclusions from the HRA:
- This HRA Task 1 screening considers that the proposed Local Transport Plan, either alone or in-combination, is not likely to have a significant effect on any European site or their associated features.

The Oxford-Cambridge Arc **[See reference 66]**

Plan Owner/Competent Authority

- Government, local authorities across the Oxford to Cambridge Arc, Cambridgeshire and Peterborough Combined Authority, the Arc's four local enterprise partnerships (LEPs), and England's Economic Heartland.

Related work HRA/AA

- -

Notes on Plan documents

- The project is still in it's early development and in March 2019 a document was produced by the government which provides an early update on the work to develop a robust economic evidence base for the Arc
- The overarching ambition is to strengthen the corridor connecting Cambridge, Milton Keynes and Oxford by infrastructure and connectivity. Central to achieving this vision are completion of the new East-West Rail line connecting Oxford and Cambridge by 2030 and accelerating the development and construction of the Oxford-Cambridge Expressway. In addition to infrastructure, there is an ambition to build one million new homes by 2050.

Findings of the HRA

- No HRA has been carried out to date.

References

1 The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (2007) SI No. 2007/1843. TSO (The Stationery Office), London.

2 The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), TSO (The Stationery Office), London.

3 The exception to this would be where 'imperative reasons of overriding public interest' can be demonstrated; see paragraph 1.17.

4 The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated. (Source: UK Government Planning Practice Guidance).

5 https://www.gov.uk/guidance/appropriate-assessment

6 Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').

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9 https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017

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11 NPPF para 176, available from https://www.gov.uk/guidance/national-planning-policy-framework

12 The HRA Handbook, Section A3. David Tyldesley & Associates, a subscription based online guidance document: https://www.dtapublications.co.uk/handbook/European

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15 Conservation objectives are published by Natural England for SACs and SPAs.

16 In line with the CJEU judgment in Case C-323/17 People Over Wind v Coillte Teoranta, mitigation must only be taken into consideration at this stage and not during Stage 1: HRA Screening.

17 In addition to SAC and SPA citations and conservation objectives, key information sources for understanding factors contributing to the integrity of the sites include (where available) conservation objectives supplementary advice and Site Improvement Plans prepared by Natural England: http://publications.naturalengland.org.uk/category/5458594975711232

18 CHAPMAN, C. & TYLDESLEY, D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions. Natural England Commissioned Reports, Number 207.

19 Obtained from the Natural England website (www.naturalengland.org.uk).

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24 Ibid.

25 Collins, J. (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

26 English Nature Research Reports, (2004), Advice for the management of flightlines and foraging habitats of the barbastelle bat Barbastella barbastellus.

27 Wealden v SSCLG [2017] EWHC 351 (Admin)

28 The reference to transport measures in this section refers to the provision of road traffic measures and design that will be implemented as part of the plan.

29 Figure C1 from Design Manual for Roads and Bridges (May 2007) Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques. Part 1 HA207/7 Air Quality.

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32 https://rewildingeurope.com/wp-content/uploads/2019/12/wickenfenvisionbooklet2018final.pdf

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36 Environment Agency, (2017), Cam and Ely Ouse Abstraction Licencing Strategy.

37 Anglian Water, (2018), Water Recycling Long-term Plan

38 Site Improvement Plans: East of England, Natural England, http://publications.naturalengland.org.uk/category/4873023563759616

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