

Habitats Regulations Assessment of Greater Cambridge Local Plan

Draft Local Plan Regulation 18 Consultation

Cambridge City Council and South Cambridgeshire District Council

Final report
Prepared by LUC
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Land Use Consultants Limited

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Chapter 1

Introduction

1.1 LUC has been commissioned by Cambridge City Council and South Cambridgeshire District Council (hereafter referred to as 'the Councils') to undertake a Habitats Regulations Assessment (HRA) of the Greater Cambridge Local Plan (GCLP). This iteration of the HRA assesses the impacts of the Regulation 18 version of the Local Plan and should be read in conjunction with that document.

Context for the Greater Cambridge Local Plan

- **1.2** Cambridge City Council and South Cambridgeshire District Council have committed to preparing a joint Local Plan for their combined area, referred to as Greater Cambridge, a strand of work which originated as part of the City Deal agreement with central government established in 2014. The individual Councils both adopted separate Local Plans in September and October respectively in 2018, which set out the development needs of the local authority areas up to 2031.
- **1.3** The adopted Local Plans acknowledged the commitment to an early review of their Local Plans beginning in 2019. This decision to take forward the early review of the Local Plans was made in order to establish what impact the anticipated changed infrastructure and economic growth in the area might have on housing need and other aspects of spatial and transport planning. Furthermore, during Examination of the individual Local Plans, a number of issues were highlighted for specific attention. These related to the assessment of housing needs, progress in delivering the development strategy and in particular the proposed new settlements and provision to meet the requirements of caravan dwellers.
- **1.4** The plan period for the Greater Cambridge Local Plan will cover the period 2024-2045. It will replace both the Cambridge Local Plan (2018) and the South Cambridgeshire Local Plan (2018).

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 new Local Plan, the Councils

are therefore required by law to carry out an HRA. The Councils can commission consultants to undertake HRA work on their behalf and this is then reported to and considered by the Councils as the 'competent authority'. The Councils should then consider this work and would usually only progress a plan if they consider that the plan will not adversely affect the integrity [See reference 3] of any 'Habitats site', as defined below. The exception to this would be where 'imperative reasons of overriding public interest' can be demonstrated (see paragraph 1.17). 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 4] (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 1st January 2021, are protected in the UK by the Habitats Regulations 2017 (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 5] and species (Annex II). The listed habitat types and species (excluding birds) are those considered to be most in need of conservation at a European level. Before exiting the EU, designation of SACs also had regard to the coherence of the 'Natura 2000' network of Habitats sites. After exiting the EU, regard is had to the importance of such sites for the coherence of the UK's 'national site network'.
 - SPAs are classified for rare and vulnerable birds (Annex I of the EU Birds Directive [See reference 6]), and for regularly occurring migratory species not listed in Annex I.
- **1.7** The term 'European sites' was previously used in HRA to refer to 'Natura 2000' sites [See reference 7] and Ramsar sites (international designated under the Ramsar Convention). However, a Government Policy Paper [See reference 8] on changes to the Habitats Regulations 2017 post-EU Exit 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 9] states that:
- "Any proposals affecting the following sites would also require an HRA because these are protected by government policy:
 - proposed SACs
 - potential SPAs
 - Ramsar sites wetlands of international importance (both listed and proposed)
 - areas secured as sites compensating for damage to a European site."
- 1.9 Furthermore, the NPPF [See reference 10] and practice guidance [See reference 11] currently still state that competent authorities responsible for carrying out HRA should treat Ramsar sites in the same way as SACs and SPAs. The legislative requirement for HRA does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves.
- 1.10 In line with feedback from Natural England on other recent HRAs, this report uses the term 'Habitats sites' rather than 'European sites' or 'national site network' to refer to SAC, SPA and Ramsar sites, the latter of which does not form part of the national site network.
- **1.11** The overall purpose of the HRA is to conclude whether or not a proposal, or policy, or the whole development plan would adversely affect the integrity of the Habitats sites 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 Habitat Regulations Assessment

1.12 This section below summarises the stages involved in carrying out an HRA, based on various guidance documents [See reference 12 and 13]. This HRA presents the methodology and findings of Stage 1: Screening and Stage 2: Appropriate Assessment.

Stage 1: Screening (the 'Significance Test')

Task

- Description of the development plan and confirmation that it is not directly connected with or necessary to the management of Habitats sites.
- Identification of potentially affected Habitats sites and their conservation objectives [See reference 14].
- 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. In line with the Court of Justice for the European Union (CJEU) judgment in Case C-323/17 People Over Wind v Coillte Teoranta, mitigation cannot be taken into consideration during Stage 1: HRA Screening.

Outcome

- Where effects are unlikely, prepare a 'finding of no significant effect report'.
- Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.

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

Task

- Information gathering (development plan and data on Habitats sites [See reference 15]).
- Impact prediction.
- Evaluation of development plan impacts in view of conservation objectives of Habitats sites.
- Where impacts are considered to affect qualifying features of Habitats sites directly or indirectly, identify how these effects will be avoided or reduced ('mitigation').

Outcome

- Appropriate Assessment report describing the plan, Habitats site baseline conditions, the adverse effects of the plan on the Habitats site, how these effects will be avoided through, firstly, avoidance, and secondly, mitigation, including the mechanisms and timescale for these mitigation measures.
- If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.

Stage 3: Assessment where no alternatives exist, and adverse impacts remain taking into account mitigation

Task

- Demonstrate no alternatives exist.
- Identify and demonstrate 'imperative reasons of overriding public interest' (IROPI). Different tests apply depending on whether the Habitats Site(s) that may be affected hosts a 'priority' habitat type or species (indicated by an asterisk in Annexes I and II of the Habitats Directive). The plan needs to be:
 - Imperative essential that it proceeds for public interest reasons;
 - In the public interest it has benefits for the public, not just for private interests, including benefits of a social or economic nature (if no priority habitat type or species); or (if there are priority habitat types or species) the reasons must relate to human health, public safety, or benefits of primary importance to the environment; and
 - Overriding the public interest outweighs the harm, or risk of harm, to the integrity of the Habitats Site
- Submit a written request to obtain the opinion of the Secretary of State as to whether there are IROPI.
- If the SoS opinion confirms IROPI, identify potential compensatory measures. These must ensure that the overall coherence of the National Site Network is protected.

Outcome

■ The Local Plan can only be adopted if the Secretary of State agrees that it has imperative reasons of overriding public interest, and that the necessary

compensatory measures can be secured. Guidance notes that this stage is very unlikely to be needed for Local Plans. National plans or policy statements and major projects are more likely to have a high level of public interest and be able to show they are imperative and overriding.

Requirements of the Habitat Regulations Assessment

- 1.13 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 that 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 Habitats site.
- 1.14 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 very unlikely to be justified for a Local Plan and would involve engagement with the Secretary of State prior to the plan being adopted.

1.15 The HRA should be undertaken by the 'competent authority'. In this case, this includes both 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

- **1.16** This HRA has been prepared in accordance with relevant case law findings, including most notably the 'People over Wind' and 'Holohan' rulings from the CJEU.
- **1.17** 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 considered 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."
- **1.18** 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 Habitats sites. Instead, any such measures will be considered at the Appropriate Assessment stage as relevant.
- **1.19** The approach to this HRA is also consistent with the Holohan v An Bord Pleanala (November 2018) CJEU judgement, which stated:

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.

- **1.20** In undertaking this HRA, LUC is considering 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 Habitats 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 Habitats site that may be important in supporting the ecological processes of the qualifying features, is also being fully considered in this HRA.
- **1.21** Similarly, effects on both qualifying and supporting habitats and species on functionally linked land (FLL) or habitat are being considered in the HRA, in line with the High Court judgment in RSPB and others v Secretary of State and London Ashford Airport Ltd [2014 EWHC 1523 Admin] (paragraph 27), which stated that:

"There is no authority on the significance of the non-statutory status of the FLL. However, the fact that the FLL was not within a protected site does not mean that the effect which a deterioration in its quality or function could have on a protected site is to be ignored. The indirect effect was still protected. Although the question of its legal status was mooted, I am satisfied That while no particular legal status attaches to FLL, the fact that land is functionally linked to protected land means that the indirectly adverse effects on a protected site, produced by effects on FLL, are scrutinised in the same legal framework just as are the direct effects of acts carried out on the protected site itself. That is the only sensible and purposive approach where a species or effect is not confined by a line on a map or boundary fence. This is particularly important where the boundaries of designated sites are drawn tightly as may be the UK practice".

- **1.22** 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.
- **1.23** 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.
- **1.24** In light of this judgment, this HRA will therefore consider 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.
- **1.25** 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."
- **1.26** 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."
- **1.27** The HRA of the Local Plan therefore will 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

1.28 Chapter 1 has introduced the requirement to undertake HRA of the Local Plan Review. The remainder of the report is structured as follows:

- Chapter 2: Greater Cambridge Local Plan summarises the content of the Regulation 18 plan, which is the subject of this report.
- Chapter 3: Method sets out the approach used, and the specific tasks undertaken during the Screening stage and Appropriate Assessment 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 of the HRA.
- Chapter 6: Conclusions and Next Steps summarises the HRA conclusions for the Greater Cambridge Local Plan and describes the next steps to be undertaken.

Chapter 2

Greater Cambridge Local Plan

2.1 This chapter summarises the contents of the Regulation 18 version of the Greater Cambridge Local Plan, which is the subject of this report.

Vision

2.2 The Regulation 18 version of the Greater Cambridge Local Plan presents an overall vision for Greater Cambridge as follows:

"We want Greater Cambridge to be a place where impacts on our climate and environment are significantly reduced, balance with the continued flourishing of our internationally significant innovation economy, and a big increase in the quality of everyday life for all our communities. New development must minimise carbon emissions and reliance on the private car; create thriving neighbourhoods with the variety of jobs and homes and supporting infrastructure we need; increase our network of nature, wildlife and multi-functional green spaces; and safeguard our unique, locally distinctive heritage and landscapes."

Strategic priorities

- **2.3** The Regulation 18 version of the Greater Cambridge Local Plan sets out seven strategic priorities which will support the delivery of the vision. The strategic objectives comprise:
 - 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 to reduce environmental impacts, adapts to and mitigates against climate change and is resilient to current and future climate risks, including flooding.
 - 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.
 - Great places: Sustain the unique character and identities of Cambridge and South Cambridgeshire, and complement it with beautiful and distinctive development, creating a place where people want to live, work, visit and play.

- Wellbeing and social inclusion: Help improve equality of access and opportunities for people in Greater Cambridge to lead healthier and happier lives, ensuring that everyone benefits from the development of new homes and jobs.
- 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.
- Jobs: Encourage a flourishing, dynamic and mixed economy in Greater Cambridge which includes a wide range of jobs, while maintaining our area's global reputation for education and innovation.
- Connectivity and 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 existing and growing communities.

Policies

2.4 Under these seven strategic objectives, the Regulation 18 version of the Greater Cambridge Local Plan sets out policies which will be used to guide and support development within Greater Cambridge. Specific policies have also been created regarding the development strategy. In total, there are 76 policies within the Regulation 18 version of the Greater Cambridge Local Plan.

Site Allocations, Strategic Industrial Estates and Policy Areas

- 2.5 The Regulation 18 version of the Greater Cambridge Local Plan includes site allocations, which are potential land parcels where small, medium, and large housing and employment developments are proposed to take place within the Greater Cambridge boundary. Policy Areas are also identified by the Local Plan and include Strategic Enhancement Areas (SEA), Public Realm Improvement Areas (PRIAs) and Areas of Major Change (AMC). Strategic Industrial Estates have also been identified as suitable for continued development industrial and warehousing uses, and protected from other uses. These are existing employment areas, which will be carried forward as part of this Local Plan.
- **2.6** The distribution of site allocations, policy areas, and strategic industrial estates in Greater Cambridge is shown in Error! Reference source not found. in Error! Reference source not found.

Chapter 3

Method

- **3.1** This chapter describes the methodology that is being used for the HRA of the Greater Cambridge Local Plan. This consists of two stages:
 - Screening Assessment.
 - Appropriate Assessment.

Screening assessment

- **3.2** HRA Screening of the Local Plan has been undertaken in line with current available guidance and to meet the requirements of the Habitats Regulations. The tasks that have been undertaken during the Screening stage of the HRA are described in detail below:
- **3.3** The purpose of the Screening stage is to:
 - Identify all aspects of the plan that would have no effect on a Habitats site. These can be eliminated from further consideration in respect of this and other plans.
 - Identify all aspects of the plan that would not be likely to have a significant effect on a Habitats site (i.e. would have some effect because of links/connectivity, but effect is 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 Habitats 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 Habitats Sites that may be affected by the Local Plan

- **3.4** As a first step to identifying Habitats sites that could potentially be affected by a plan, it is established practice in HRA to consider sites within the area covered by the plan, and other sites that may be affected beyond this area.
- **3.5** Geographical Information Systems (GIS) data has been used to map the locations and boundaries of Habitats sites in and within 15 kilometres of the Greater

Cambridge boundary (Figure 2, Appendix A), using publicly available data from Natural England. All Habitats sites lying partially or wholly within 15 kilometres have been included. A distance of 15 kilometres is generally considered appropriate for identifying potential impact pathways. Habitats sites located beyond 15 kilometres can be included if they share functional ecological connectivity to the plan area, for example via river systems. This assessment includes The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site, which are located 52 kilometres north of the Greater Cambridge plan area, due to their hydrological connectivity downstream to the River Cam, which is located within the boundary of Greater Cambridge and as such may be impacted by changes in water quantity and quality.

- **3.6** The assessment also takes into account areas that may be functionally linked to the Habitats sites. The term 'functional linkage' is used to refer to the role or 'function' that land beyond the boundary of a Habitats 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.
- 3.7 While the boundary of a Habitats 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 16]. HRA therefore considers whether any Habitats sites make use of functionally linked habitats and the impacts that could affect those habitats.
- 3.8 Habitat sites identified for inclusion in this HRA are listed below in **Table 3.1** and are mapped in Error! Reference source not found. in **Error! Reference source not found.** Detailed information about each Habitats site is provided in **Error!**Reference source not found., described with reference to Standard Data Forms for the SPAs and SACs, and Natural England's Site Improvement Plans [See reference 17]. Natural England's conservation objectives [See reference 18] 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: Habitats sites within 15 kilometres of Greater Cambridge District Boundary

Habitats Site	Closest Distance / direction from GCLP Area	
Eversden and Wimpole Woods SAC	Within GCLP Area (west)	
Ouse Washes SAC	Adjacent to north	
Portholme SAC	4 kilometres / north west	
Devil's Dyke SAC	5.8 kilometres / north east	
Fenland SAC	1 kilometres / north east	
Ouse Washes SPA	Adjacent to north	
Ouse Washes Ramsar Site	Adjacent to north	
Wicken Fen Ramsar Site	1 kilometres / north east	
Chippenham Fen Ramsar Site	10.3 kilometres to north east	
The Wash and North Norfolk Coast SAC	52 kilometres / north	
The Wash SPA	52 kilometres / north	
The Wash Ramsar Site	52 kilometres / north	

Assessment of 'likely significant effects' of the Greater Cambridge Local Plan

- **3.9** As required under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 **[See reference** 19] (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 Habitats sites. The screening assessment has been conducted without taking mitigation into account, in accordance with the 'People over Wind' judgment.
- **3.10** 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).
 - Non-toxic contamination.
 - Air pollution.
 - Recreational pressure.

- Changes to hydrology, including water quantity and quality.
- 3.11 This thematic / impact category approach will allow for consideration to be given to the cumulative effects of the site allocations and policy areas, rather than focussing exclusively on individual developments proposed in the plan. It should be noted that the site allocations and policy areas (areas of major change, policy areas and public realm improvement areas) have been assessed separately in this HRA in the screening stage and as these sites are non-developable have not been brought forward for the appropriate assessment. For Strategic Enhancement Areas, which is a sub-category of policy areas, these are not an individual designation and sit within site allocations. It is recognised that these types of policy areas cannot function on their own and will come forward in conjunction with the associated site allocation.
- **3.12** A risk-based approach involving the application of the precautionary principle has been 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 proposal in the plan would have a significant effect on the integrity of a Habitats site.
- **3.13** A screening exercise was carried out (Appendix C) to document consideration of the potential for likely significant effects resulting from each policy in the plan.
- **3.14** 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'

- **3.15** 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.
- **3.16** In the Waddenzee case **[See reference** 20**]**, 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).

- **3.17** 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."
- **3.18** 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'.
- **3.19** The HRA Screening assessment therefore considers whether the Local Plan policies could have likely significant effects either alone or in combination.

Mitigation provided by the plan

3.20 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 Habitats 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 will be 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

- **3.21** 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 Habitats site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, it will be necessary to consider whether any impacts identified from the Local Plan may combine with other plans or projects to give rise to significant effects in-combination.
- **3.22** Where the Local Plan is likely to have an effect on its own e.g., due to water pollution (due to impact pathways being present), but it is not likely to be significant, the in-combination assessment at Screening stage will need to determine whether

there may also be the same types of effect from other plans or projects that could combine with the Local Plan to produce a significant effect. If so, this likely significant effect (e.g., water pollution) arising from the Local Plan in combination with other plans or projects, would then need to be considered through the Appropriate Assessment stage (for example to determine if water pollution would have an adverse effect on integrity of the relevant Habitats site). Where the Screening assessment has concluded that there is no impact pathway between development proposed in the Local Plan and the conditions necessary to maintain qualifying features of a Habitats site, then there will be no in-combination effects to assess at the Screening or Appropriate Assessment stage. This approach accords with recent guidance on HRA [See reference 21].

- 3.23 If impact pathways are found to exist for a particular effect but it is not likely to be significant from the Local Plan alone, the in-combination assessment will identify which other plans and programmes could result in the same impact on the same Habitats site. This will focus on planned growth (including housing, employment, transport, minerals, and waste) around the affected site, or along the impact corridor, for example, if impacts could arise as a result of changes to a waterway, then planned growth in local authorities along that waterway will be considered.
- **3.24** The potential for in-combination impacts will therefore focus on plans prepared by local authorities that overlap with Habitats sites that are within the scope of this HRA. The findings of any associated HRA work for those plans will be reviewed where available. Where relevant, any strategic projects in the area that could have incombination effects with the GCLP will also be identified and reviewed.
- 3.25 The online HRA Handbook suggests the following plans and projects may be relevant to consider as part of the in-combination assessment:
 - Applications lodged but not yet determined, including refusals subject to an outstanding appeal or legal challenge.
 - Projects subject to periodic review e.g., annual licences, during the time that their renewal is under consideration.
 - Projects authorised but not yet started.
 - Projects started but not yet completed.
 - Known projects that do not require external authorisation.
 - Proposals in adopted plans.
 - Proposals in draft plans formally published or submitted for final consultation, examination, or adoption.

Appropriate Assessment

3.26 Following the Screening stage, if likely significant effects on Habitats 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 Habitat 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 Habitats sites with respect to their conservation objectives and to their structure and function [See reference 22]. This includes consideration of plans and projects with the potential for in-combination effects, where relevant.

Assessing the effects on site integrity

- **3.27** 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 Habitats sites also need to be considered. The Appropriate Assessment will therefore build upon the information set out in Error! Reference source not found, of this report to consider the characteristics of supporting habitats and species that could be affected by impacts identified at the Screening stage.
- **3.28** 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.
- **3.29** A conclusion needs to be reached as to whether or not a plan would adversely affect the integrity of any Habitats 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 23].
- **3.30** 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 Habitats sites.
- **3.31** For each Habitats site where an uncertain or likely significant effect was identified in relation to the plan, the Appropriate Assessment will set out the potential impacts and make a judgement (based on the information available) on whether the impact will have an adverse effect on the integrity of the Habitats site. Consideration will be 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 Habitats site.

Chapter 4

Screening assessment

4.1 As described in the Method chapter (Error! Reference source not found.), a Screening assessment was carried out in order to identify the likely significant effects of the Greater Cambridge Local Plan on the scoped-in Habitats sites. The full Screening assessment, which sets out the decision-making process, can be found in Error! Reference source not found. and the findings are summarised below.

HRA screening of policies

No 'likely significant effect' predicted

- **4.2** The following policies in the Local Plan are not expected to directly result in development and therefore will not result in significant effects on Habitats sites:
 - S/DE: Defined Development Extents
 - S/GB: The Cambridge Green Belt
 - S/MO: Monitoring
 - CC/NZ: Net zero Carbon New Buildings
 - CC/DC: Designing for a Changing Climate
 - CC/FM: Flood Risk Management
 - CC/RE: Renewable and Infrastructure
 - WS/HD: Creating Healthy New Developments
 - WS/CF: Community, Sports, and Leisure Facilities
 - WS/CH: Cultural and Creative Hubs (new)
 - WS/NC: Meeting the Needs of New and Growing Communities
 - WS/MU: Meanwhile Uses During Long Term Redevelopments
 - WS/IO: Creating Inclusive Employment and Business Opportunities Through New Developments
 - WS/PH: Public Houses
 - GP/CC: Adapting Heritage Assets to Climate Change

- GP/PP: People and Place Responsive Design
- GP/QD: Achieving High Quality Development
- GP/LC: Protection and Enhancement of Landscape Character
- GP/HD: Housing Density
- GP/ST: Skyline and Tall Buildings
- GP/HE: Historic Environment
- GP/HA: Designated Heritage Assets
- GP/ND: Non-Designated Heritage Assets
- GP/AR: Archaeology
- GP/SF: Shopfronts
- J/RE: Supporting the Rural Economy
- J/AL: Protecting the Best Agricultural Land
- J/PB: Protecting Existing Business Space
- J/AW: Affordable Workspace and Creative Industries
- J/EP: Supporting a Range of Facilities in Employment Parks
- J/SA: Cambridge City's Primary Shopping Area
- J/MS: Markets and street trading
- H/AH: Affordable Housing
- H/ES: Exception Sites for Affordable Housing
- H/HM: Housing Mix
- 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/BR: Build to Rent Homes
- H/MO: Houses in Multiple Occupation (HMOs)
- H/SA: Student Accommodation
- H/DC: Dwellings in the Countryside

- H/RM: Residential Moorings
- H/GT: Gypsy and Traveller and Travelling Showpeople Plots
- H/CO: Co-living
- I/TH: Travel Hub Facilities
- I/SD: Servicing and Last-mile Delivery
- I/SI: Safeguarding Important Infrastructure
- I/AD: Aviation Development
- I/EI: Energy Infrastructure Masterplanning
- I/ID: Infrastructure and Delivery
- I/DT: Digital and Telecommunications Infrastructure
- S/PA/CC: Cambridge City Centre
- S/RRP: Policy Areas in the Rest of the Rural Area
- S/SCP: Policy Areas in the Rural Southern Cluster
- **4.3** The following policies also will not result in development or other activities that could impact upon Habitats sites, and additionally include measures that could directly or indirectly help to avoid or mitigate impacts on Habitats sites and so will not have likely significant effects for this reason (note that any mitigation provided by these policies for the likely effects of other policies has not been considered at the Screening stage in line with the People over Wind judgment):
 - CC/SD: Sustainable Development and the Climate Emergency
 - CC/WE: Water Efficiency in New Developments
 - CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality
 - CC/CE: Supporting a Circular Economy and Sustainable Resource Use
 - CC/CS: Supporting Land-based Carbon Sequestration and Carbon Sinks
 - BG/BG: Biodiversity and Geodiversity
 - BG/GI: Green and blue 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/HS: Pollution, Health and Safety
- GP/QP: Establishing High Quality Landscape and Public Realm
- I/ST: Sustainable Transport and Connectivity
- I/EV: Parking and Electric Vehicles
- I/CM: Construction Management

'Likely significant effect' predicted

- **4.4** The following policies in the Local Plan could result in development, and therefore could have likely significant effects on Habitats sites:
 - S/JH: New Jobs and Homes
 - S/SH: Settlement Hierarchy
 - S/DS: Development Strategy
 - J/NE: New Employment Development Proposals
 - J/RC: Retail and Other Complementary Town Centre Uses
 - J/VA: Visitor Accommodation. Attractions and Facilities
 - J/FD: Faculty Development and Specialist/Language Schools
 - Policy S/NEC: North East Cambridge
 - Policy S/LAC: Other site allocations in Cambridge
 - Policy S/PA/CC: Cambridge City Centre
 - Policy S/AMC: Areas of Major Change
 - Policy S/PRIA: Public Realm Improvements Areas
 - Policy S/CE: Cambridge East
 - Policy S/CBC: Cambridge Biomedical Campus (including Addenbrooke's Hospital)
 - Policy S/WC: West Cambridge
 - Policy S/NWC: Eddington
 - Policy S/HHR: Land between Huntingdon Road and Histon Road (Darwin Green), Cambridge

- Policy S/EOC: Other site allocations on the edge of Cambridge
- Policy S/CBN: Cambourne North
- Policy S/CB: Cambourne
- Policy S/GF: Land adjacent to A11 and A1307 at Grange Farm
- Policy S/NST: Northstowe New Town
- Policy S/WNT: Land north of Waterbeach
- Policy S/BA: Bourn Airfield New Village
- Policy S/RSC/WGC: Wellcome Genome Campus, Hinxton
- Policy S/RSC/BRC: Babraham Research Campus
- Policy S/RSC: Other site allocations in the Rural Southern Cluster
- Policy S/RRA: Site Allocations in the Rest of the Rural Area
- Policy S/RRP: S/SHF: Land at Slate Hall Farm, Bar Hall

HRA screening of impacts

Physical Damage and Loss of Habitat – onsite

- **4.5** Any development resulting from the plan would take place within the boundary of GCLP area; therefore, only Habitats 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 Habitats site located within Greater Cambridge and therefore the only Habitats site with the potential to be directly affected by physical damage and/or loss due to development.
- **4.6** No development, including site allocations and policy areas, 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 of Habitat – Functionally Linked Habitat

4.7 Habitat loss from development in areas outside of the Habitats site boundaries may result in likely significant effects where that habitat contributes towards

maintaining the interest feature for which the Habitats 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. Habitats 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 Woods SAC.
- Ouse Washes SAC.
- Ouse Washes SPA and Ramsar Site.
- **4.8** Natural England has advised that their recognised distance for the consideration of off-site functionally linked land in relation to birds is generally 2 kilometres, but for certain species, including most notably, golden plover and lapwing, a greater distance of 15 kilometres may be appropriate. This buffer has been considered for each of the above listed Habitats sites, which are designated for supporting qualifying bird species. These buffers were applied in this assessment where applicable.
- **4.9** All other Habitats 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 Woods SAC

- **4.10** Eversden and Wimpole Woods SAC supports barbastelle bats, 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.
- **4.11** A review of data sources identified that this species typically travels within a Core Sustenance Zone (CSZ) of 6 kilometres [See reference 24]. 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. This is further supported by the Draft Greater Cambridge Biodiversity Supplementary Planning Document [See reference 25], which outlines an Impact Risk Zone (IRZ) for development of 5 kilometres, which is considered by Natural England to be a key conservation area for barbastelle, and an IRZ of 10 kilometres, which is considered by Natural England to be the supporting area for sustenance and wider conservation for barbastelle. It is understood that this species will travel up to 20 kilometres 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]. However, it is considered unlikely for habitats beyond 10 kilometres to represent key habitat that contributes to maintaining the barbastelle population of the SAC. Therefore, in this assessment a buffer of 10 kilometres was applied.
- **4.12** A review of site allocations identified the following housing and employment allocations to be located within 10 kilometres of the SAC:
 - S/RRA/SNR: Land to the north of St Neots Road, Dry Drayton
 - S/BA: Bourn Airfield New Village
 - S/RRA/CR: Land to the west of Cambridge Road, Melbourn
 - S/RRA/H: Land at Highfields (phase 2), Caldecote
 - S/RRA/CRH: Land adjacent to Cambridge Road (A10) and Mill Lane, Hauxton
 - S/CBN: Cambourne North
 - S/RRA/ML: The Moor, Moor Lane, Melbourn
- **4.13** A review of policy areas identified the following to be located within 10 kilometres of the SAC:
 - S/SEA/BA: Non-development area adjacent to Bourn Airfield (Strategic Enhancement Area)
 - S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area)
- 4.14 Both policy areas located within 10 kilometres of the SAC are identified as Strategic Enhancement Areas, which will include measures to mitigate and enhance the land, through measures such as drainage, habitat compensation and delivery of informal open space. These policy areas are non-development areas and as such no likely significant effect is predicted either alone or in-combination with other plans and projects.
- **4.15** There is potential for likely significant effects to occur in relation to offsite physical damage and loss. Therefore, this effect is considered further 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.

Ouse Washes SAC

- **4.16** 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.
- **4.17** There are no site allocations and policy areas proposed in close proximity to the SAC, with the nearest site allocation proposed 5.7 kilometres and the nearest policy area proposed at 7.8 kilometres at the closest point. Due to limited dispersal of this species and the lack of hydrological connectivity between these site allocations and policy areas 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

- **4.18** 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 2 kilometres buffer was applied to identify site allocations and policy areas with potential to affect the SPA and Ramsar.
- **4.19** No development, including site allocations and policy areas, are proposed within 2 kilometres 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 incombination with other plans and projects.

Non-Physical Disturbance – onsite

- **4.20** 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 Habitats 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.
- **4.21** 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 Habitats site with qualifying features sensitive to these disturbances. Habitats sites susceptible to non-physical disturbance and located within 500 metres of GCLP area were identified as:

- Eversden and Wimpole Woods SAC.
- Ouse Washes SAC.
- Ouse Washes SPA and Ramsar Site.
- **4.22** All other Habitats 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 Woods SAC

- **4.23** Eversden and Wimpole Woods 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.
- **4.24** No development, including site allocations and policy areas, are proposed within 500 metres of the SAC 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.

Ouse Washes SAC

- **4.25** The SAC is designated for supporting populations of spined loach, which is susceptible to impacts from non-physical disturbance, such as disturbance from noise, vibration and increased lighting.
- **4.26** No development, including site allocations and policy areas, are proposed within 500 metres of the SAC and as such no likely significant effect is predicted as a result of off-site physical damage and loss either alone or in-combination with other plans and projects.

Ouse Washes SPA and Ramsar site

4.27 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.

4.28 No development, including site allocations and policy areas, are proposed within 500 metres of the SPA and Ramsar site and as such no likely significant effect is predicted as a result of off-site physical damage and loss either alone or incombination with other plans and projects.

Non-Physical Disturbance – Functionally Linked Habitat

- 4.29 Non-physical disturbance may also affect qualifying species at functionally linked habitat. It was established in the Physical Loss of Habitat - Functionally Linked Habitat section above that the following qualifying species may use functionally linked habitat occurring within GCLP area boundary:
 - Eversden and Wimpole Woods SAC.
 - Ouse Washes SAC.
 - Ouse Washes SPA and Ramsar Site.
- 4.30 All other Habitats sites were screened out of the assessment as they do not support qualifying features that are reliant on off-site functionally linked habitat and were not considered susceptible to impacts from non-physical disturbance.

Eversden and Wimpole Woods SAC

- 4.31 Eversden and Wimpole Woods SAC supports barbastelle bats, 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. As detailed in the Physical Loss of Habitat -Functionally Linked Habitat section above, a buffer of 10 kilometres was applied in this assessment.
- **4.32** A review of site allocations identified the following housing and employment allocations to be located within 500 metres of the 10 kilometres functionally linked land buffer applied in this assessment:
 - S/RRA/SNR: Land to the north of St Neots Road, Dry Drayton
 - S/BA: Bourn Airfield New Village
 - S/RRA/CR: Land to the west of Cambridge Road, Melbourn
 - S/RRA/H: Land at Highfields (phase 2), Caldecote
 - S/RRA/CRH: Land adjacent to Cambridge Road (A10) and Mill Lane, Hauxton
 - S/CBN: Cambourne North

- S/RRA/ML: The Moor, Moor Lane, Melbourn
- **4.33** A review of policy areas identified the following to be located within 500 metres of the 10 kilometres functionally linked land buffer applied in this assessment:
 - S/SEA/BA: Non-development area adjacent to Bourn Airfield (Strategic Enhancement Area)
 - S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area)
- **4.34** Both policy areas located within 10 kilometres of the SAC are identified as Strategic Enhancement Areas, which will include measures to mitigate and enhance the land, through measures such as drainage, habitat compensation and delivery of informal open space. These policy areas are non-development areas and as such no likely significant effect is predicted either alone or in-combination with other plans and projects.
- **4.35** 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.
- **4.36** 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

- **4.37** Ouse Washes SAC supports spined loach, which relies on habitat within the SAC and functionally linked habitat.
- **4.38** There are no site allocations and policy areas proposed in close proximity to the SAC, with the nearest site allocation proposed 5.7 kilometres and the nearest policy area proposed 7.8 kilometres at the closest point. Due to limited dispersal of this species and the lack of hydrological connectivity between these site allocations and policy areas 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

4.39 Ouse Washes SPA and Ramsar Site supports qualifying wetland bird species. These are mobile species, which relies on habitat within the SPA and Ramsar site

and functionally linked habitat in the wider area, which provides important foraging habitat for this species. As detailed in the Physical Loss of Habitat - Functionally Linked Habitat section above, a buffer of 2 kilometres has been applied.

4.40 A review of site allocations and policy areas identified no development to be located within 500 metres of the 2 kilometres functionally linked land buffer applied in this assessment. Therefore, 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-Toxic Contamination

- **4.41** Development may result in non-toxic contamination if it involves generation of dust or sediment. This can smother terrestrial habitats preventing natural processes or affect the turbidity of aquatic habitats. It can also contribute to nutrient enrichment, potentially leading to changes in the rate of vegetative succession and habitat composition.
- **4.42** The effects of non-toxic contamination are most likely to be significant if development takes place within 500 metres of a Habitats site with qualifying features sensitive to these disturbances, such as riparian and wetland habitats, or sites designated for habitats and plant species. This is the distance that, in our experience, provides a robust assessment of effects in plan-level HRA and meets with the agreement of Natural England.
- **4.43** The following Habitat sites were considered located within 500 metres of the GCLP boundary and were considered susceptible to impacts from non-toxic contamination:
 - Ouse Washes SAC.
 - Ouse Washes SPA and Ramsar Site.
- **4.44** All other Habitats sites are located over 500 metres from the GCLP boundary at the closest point and/or do not support qualifying features that are susceptible to impacts from non-toxic contamination. This included Eversden and Wimpole Woods SAC, which is located within GLCP boundary, and is designated for barbastelle which is not considered sensitive to impacts from non-toxic contamination.

Ouse Washes SAC

4.45 Ouse Washes SAC is designated for supporting spined loach, which relies on habitat within the Counter Drain, Old Bedford/River Delph areas of the Ouse

Washes, which supports abundant macrophytes and is considered of particular importance for maintaining a healthy population [See reference 27]. The SAC is therefore considered susceptible to impacts from non-toxic contamination.

4.46 No development, including site allocations and policy areas, are proposed within 500 metres of the SAC 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.

Ouse Washes SPA and Ramsar Site

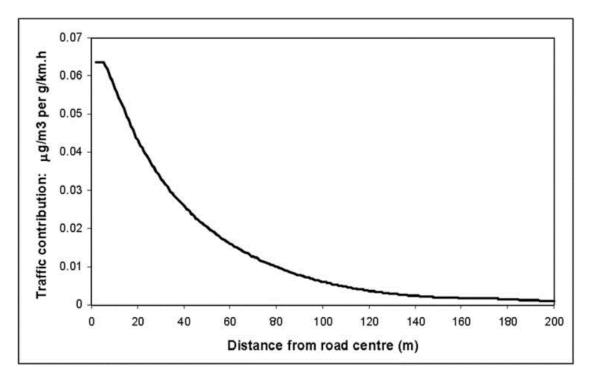
- **4.47** Ouse Washes SPA and Ramsar Site supports qualifying wetland bird species, which rely on aquatic and terrestrial plant material and invertebrate species, which in turn rely on plant species, as key part of their diet and as such susceptible to impacts from non-toxic contamination.
- **4.48** No development, including site allocations and policy areas, are proposed within 500 metres 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 incombination with other plans and projects.

Air Pollution

- **4.49** Air pollution is most likely to affect Habitats 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.
- **4.50** 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. The HRA will refer to the UK Air Pollution Information System [See reference 28] to determine whether concentrations of NOx at the Habitats Sites are currently exceeding critical loads or not.
- **4.51** Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Document LA105: Air Quality **[See reference** 29**]** (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200 metres from the road itself. Where increases in traffic volumes are

forecast, this 200 metres buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts. 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 30]



- **4.52** The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:
 - Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
 - Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
 - Daily average speed will change by 10 kilometres/hour or more; or
 - Peak hour speed will change by 20 kilometres/hour or more; or
 - Road alignment will change by 5 metres or more.
- **4.53** In line with the Wealden judgment [See reference 31], Natural England now expects to see in-combination air pollution effects assessed. The implication of the

judgment is that, where the road traffic effects of other plans or projects are known or can be reasonably estimated (including those of adopted plans or consented projects), then these should be included in road traffic modelling by the local authority whose Local Plan or project is being assessed. The screening criteria of 1,000 AADT should then be applied to the traffic flows of the plans in combination.

- **4.54** Roads forming part of the strategic road network **[See reference** 32**]** (motorways and trunk roads) are most likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT etc.) alongside some important major roads. As such, where a site is within 200 metres of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.
- **4.55** The JNCC's 'Guidance on decision-making thresholds for air pollution' **[See reference** 33] states that, when assessing the air pollution impacts of a plan, 10 kilometres should be used as a zone of influence within which the plan is likely to have significant effects on air quality. This buffer has been applied in this assessment.
- **4.56** Strategic roads within the GCLP area and within a 10 kilometres buffer of the GCLP area include:
 - M11, A1 (M), A1, A10, A11, A14, A141, A142, A143, A421, A428, A505, A507, A603, A1092, A1017, A1096, A1123, A1134, A1198, A1301, A1303, A1304, A1307, A1309, A1421 and A6001 which are highlighted in Error! Reference source not found. in Error! Reference source not found.
- **4.57** Habitats sites within 10 kilometres of the Greater Cambridge boundary and also within 200 metres of a strategic road include Devil's Dyke SAC (A14 and A1304), Ouse Washes SAC, SPA and Ramsar (A1123 and A142), and Portholme SAC (A1307).
- **4.58** These Habitats sites are subject to further screening assessment below using data provided by Atkins Global on current baseline AADT for daily traffic flows and heavy-duty vehicle flows as well as predicted future AADT taking account of growth proposed in the Local Plan and neighbouring authorities' Local Plans. This data and assessment are based on the Greater Cambridge Local Plan: First Proposals 2021, which had slightly lower housing and employment figures than the draft Local Plan. The threshold of 1,000 AADT was not surpassed when taking the previous figures into consideration. Nevertheless, the following conclusions on Devil's Dyke SAC, Ouse Washes SAC, SPA and Ramsar and Portholme SAC will be re-assessed on receipt of updated traffic data at Proposed Submission stage.

4.59 All other Habitats sites were situated over 200 metres from a road or were located over 10 kilometres from GCLP area boundary and as such were not considered to be susceptible to impacts from air pollution and were therefore screened out of the assessment.

Devil's Dyke SAC

- **4.60** The SAC lies adjacent to two strategic roads: the A14 to the north and the A1304 to the south of the Habitats site. A total proportion of 2.35% of the SAC was situated within 200 metres of the A14 and 7.67% within 200 metres of the A1304.
- **4.61** Habitats present within 200 metres of the strategic roads consist entirely of lowland calcareous grassland, which is the qualifying feature of the SAC. Based on Air Pollution Information System (APIS) data, this qualifying feature is sensitive to both nitrogen and acidity. In terms of nitrogen, this correlates to:
 - a critical load of between 10 kilograms N/ha/yr and 20 kg N/ha/yr for nitrogen,
 - a critical level of 1 ug/m³ for ammonia,
 - a critical level of 30 ug/m³ for nitrogen oxide, and
 - a critical level of 10 for sulphur dioxide ug/m³.
- **4.62** In terms of acidity, this correlates to:
 - a critical load minimum of 0.856 Keg/ha/yr for nitrogen, and
 - a maximum of 4.856 Keg/ha/yr for nitrogen and 4 Keg/ha/yr for sulphur.
- **4.63** The latest APIS data from 2020-2022 revealed that Devil's Dyke SAC has a nitrogen deposition of 13.92 kilograms N/ha/yr, ammonia concentration of 1.3 ug/m³, nitrogen oxide concentration of 8.634 ug/m³ and sulphur dioxide concentration of 0.8 ug/m³. In addition, acid deposition is at 1.02 Keq/ha/yr. It can therefore be concluded that the critical level of ammonia is currently being exceeded at Devil's Dyke SAC, which has the potential to modify the chemical status of the habitat's substrate, accelerating or damaging plant growth, altering vegetation structure and composition, and ultimately damaging the calcareous grassland present there.
- **4.64** A review of the 2021 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 respective thresholds of 1000 AADT and 200 AADT either with or without proposed transport measures [See reference 34]. Detail of this is presented in **Table 4.1** and **Table 4.2** below.

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

Road	AADT – Baseline	AADT – Predicted (without transport measures)	AADT – Predicted (with transport measures)	Absolute Difference - Predicted (without transport measures)	Absolute Difference - 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)	,		40,772	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 – Baseline	AADT – Predicted (without transport measures)	AADT – Predicted (with transport measures)	Absolute Difference - Predicted (without transport measures)	Absolute Difference - Predicted (with transport measures)
A1304 (Northbound)	779	697	716	-82	-63
A1304 (Southbound)	808	654	674	-154	-134
A14 (Northbound)	-, -		5,255	-30	-37
A14 (Southbound)	5,096	5,238	5,214	141	118

4.65 Therefore, no likely significant effect is predicted in relation to Devil's Dyke SAC as a result of increased traffic from proposed development in the GCLP or in combination with growth in neighbouring authorities' plans. This conclusion may need to be revisited at the Proposed Submission stage once updated traffic data are available.

Ouse Washes SAC

- **4.66** A small area of the Ouse Washes SAC lies within 200 metres of the A1123. This comprised a total proportion of 0.38% of the SAC.
- **4.67** A small area of the Ouse Washes SAC lies within 200 metres of the A142. This comprised a total proportion of 1.37% of the SAC.
- **4.68** Habitats present within 200 metres of the A1123 and the A142 included river habitat, which the qualifying species of the SAC depend on.
- **4.69** Ouse Washes SAC is designated because it supports the spined loach. Based on Air Pollution Information System (APIS) data, this qualifying species is considered potentially sensitive to changes in air quality, particularly in relation to nitrogen and acidity. However, no critical load or critical level estimates for nitrogen or acidity are available for meso/eutrophic systems. Therefore, consideration of potential impacts on this species should be taken at a site-specific level as the habitat sensitivity depends on nitrogen or phosphorus limitation in the water body.
- **4.70** 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 respective thresholds of 1000 AADT and 200 AADT either with or without proposed transport measures. Detail of this is presented in **Table 4.3** and **Table 4.4** below.

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

Road	AADT – Baseline	AADT – Predicted (without transport measures)	AADT – Predicted (with mitigation)	Absolute Difference - Predicted (without transport measures)	Absolute Difference - 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 – Baseline	AADT – Predicted (without transport measures)	AADT – Predicted (with transport measures)	Absolute Difference - Predicted (without transport measures)	Absolute Difference - Predicted (with transport measures)
A142 (Northbound)	735	735	735	0	0
A142 (Southbound)	775	774	773	-1	-1
A1123 (Eastbound)	400	404	405	4	5
A1121 (Westbound)	462	474	474	12	12

4.71 Therefore, no likely significant effect is predicted in relation to Ouse Washes SAC as a result of increased traffic from proposed development in the GCLP or in combination with growth in neighbouring authorities' plans. This conclusion may need to be revisited at the Proposed Submission stage once updated traffic data are available.

Ouse Washes SPA and Ramsar Site

- **4.72** A small area of the Ouse Washes SPA and Ramsar site lies within 200 metres of the A1123. This comprised a total proportion of 0.8% of the SPA and Ramsar site.
- **4.73** A small area of the Ouse Washes SPA and Ramsar site lies within 200 metres of the A142. This comprised a total proportion of 1.43% of the SPA and Ramsar site.
- **4.74** Habitats present within 200 metres of the A1123 and the A142 included river habitat, rough grassland and wet pasture, which the qualifying species of the SPA and Ramsar depend on.
- **4.75** The SPA and Ramsar site support a range of qualifying bird species which are considered potentially sensitive to changes in air quality. Based on Air Pollution Information System (APIS) data, the majority of these bird species are not sensitive to nutrient nitrogen impacts on their broad habitats. However, the Eurasian wigeon does have the potential to be negatively impacted due to nutrient nitrogen impacts on for the Habitat Site's Atlantic upper-mid & mid-low salt marshes habitat. This has a critical load of between 10 kg N/ha/yr and 20 kilograms N/ha/yr for nitrogen, and the lower level of 10 kg N/ha/yr should be applied to the more densely vegetated upper marsh and to areas of marsh subjected to direct run-off from adjacent catchments. The latest APIS data from 2020-2022 shows that Ouse Washes SPA and Ramsar site has a nitrogen deposition of 15.32 kg N/ha/yr. Therefore, the nitrogen critical load for Atlantic upper-mid & mid-low salt marshes is currently being exceeded, meaning any increases in nitrogen deposition as a result of air pollution from increased vehicle traffic would alter the composition of this habitat, thus impacting Eurasian wigeon.
- **4.76** Based on APIS data on acidity, other qualifying species, the great cormorant and black-tailed godwit, are sensitive to acidity impacts on broad habitat types and have the potential to be negatively impacted. The calcareous grassland habitat of the black-tailed godwit has a critical load minimum of 1.071 for nitrogen and a maximum of 5.071 for nitrogen and 4 for sulphur. The latest APIS data from 2020-2022 shows that Ouse Washes SPA and Ramsar site has an acid deposition of 1.12 Keq/ha/yr which is within the critical load range, suggesting that increases in nitrogen deposition as a result of air pollution from increased vehicle traffic would not necessarily impact this habitat and ultimately the black-tailed godwit. The freshwater habitat, which the great cormorant depends upon, does not have critical load values associated with it, and so cannot be further assessed.

- **4.77** The same traffic data provided by Atkins Global in **Table 4.3** and **Table 4.4** above can be used for Ouse Washes SPA and Ramsar site, as it relates to traffic flows along the A1123 and the A142, which the SPA and Ramsar site are also within 200 metres of. This demonstrates that the increase in AADT for daily traffic flows and heavy-duty vehicle flows would not exceed the respective thresholds of 1000 AADT and 200 AADT, either with or without proposed transport measures.
- **4.78** Therefore, no likely significant effect is predicted in relation Ouse Washes SPA and Ramsar as a result of increased traffic from proposed development in the GCLP or in combination with growth in neighbouring authorities' plans. This conclusion may need to be revisited at the Proposed Submission stage once updated traffic data are available.

Portholme SAC

- **4.79** The SAC lies in proximity of the A1307 at approximately 45 metres to the south. A total proportion of 4.1% of the SAC is situated within 200 metres of the A1307.
- **4.80** Habitats present within 200 metres of the A1307 comprise entirely of lowland neutral grassland, which is the qualifying feature of the SAC. Based on APIS data, this qualifying feature is sensitive to both nitrogen and acidity. In terms of nitrogen, this correlates to:
 - a critical load of between 10 kg N/ha/yr and 20 kg N/ha/yr,
 - a critical level of 3 for ug/m³ for ammonia,
 - a critical level of 30 ug/m³ for nitrogen oxide, and
 - a critical level of 20 for sulphur dioxide ug/m³.
- **4.81** In terms of acidity, this correlates to:
 - a critical load minimum of 1.071 Keg/ha/yr for nitrogen, and
 - a maximum of 5.071 for nitrogen Keq/ha/yr and 4 Keq/ha/yr for sulphur.
- **4.82** The latest APIS data from 2020-2022 revealed that Portholme SAC has a nitrogen deposition of 14.515 kg N/ha/yr, ammonia concentration of 1.497 ug/m³, nitrogen oxide concentration of 13.15 ug/m³ and sulphur dioxide concentration of 1.644 ug/m³. In addition, acid deposition is at 1.11 Keq/ha/yr. It can therefore be concluded that levels of nutrient nitrogen or acidity are not currently being exceeded at Portholme SAC.

4.83 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 respective thresholds of 1000 AADT and 200 AADT either with or without proposed transport measures. Detail of this is presented in **Table 4.5** and **Table 4.6**.

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

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

4.84 Therefore, no likely significant effect is predicted in relation Portholme SAC as a result of increased traffic from proposed development in the GCLP or in combination with growth in neighbouring authorities' plans. This conclusion may need to be revisited at the Proposed Submission stage once updated traffic data are available.

Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC

4.85 Wicken Fen Ramsar and part of Fenland SAC lie 300 metres from the A1123 at the nearest point and Chippenham Fen Ramsar and part of Fenland SAC lies 460 metres from the A142. As these Habitats sites fall beyond the 200 metres threshold where significant effects might occur, no likely significant effects are predicted as a result of increased traffic from proposed development in the GCLP.

Eversden and Wimpole Woods SAC

4.86 Eversden and Wimpole Woods SAC is located 650 metres from the A1198 at the closest point. As this Habitats site falls beyond the 200 metres threshold where significant effects might occur, no likely significant effects are predicted as a result of increased traffic from proposed development in the GCLP

Recreational Pressure

- **4.87** Recreational activities and human presence can result in significant effects on Habitats Sites as a result of erosion and trampling, associated impacts such as fire and vandalism, or disturbance to sensitive features, such as birds through both terrestrial and water-based forms of recreation.
- **4.88** The GCLP will result in housing growth, and associated population increase within the Greater Cambridge area. Where increases in population are likely to result in significant increases in recreation at a Habitats site, either alone or in-combination, the potential for likely significant effects will require assessment.
- **4.89** Each Habitats site will typically have a 'Zone of Influence' (ZOI) within which increases in population would be expected to result in likely significant effects. ZOIs are usually established following targeted visitor surveys, and the findings are therefore typically specific to each Habitats site (and often to specific areas within a Habitats Site). The findings are likely to be influenced by a number of complex and interacting factors and therefore it is not always appropriate to apply a generic or non-specific ZOI to a Habitats site.
- **4.90** Specific ZOI have been identified in relation to the following Habitats sites:
 - Devil's Dyke SAC 5.5 kilometres
 - Wicken Fen Ramsar Site 10.3 kilometres
- **4.91** This has been defined as part of targeted visitor surveys, which identified 75% of visitors to travel within this distance to the Devil's Dyke SAC and Wicken Fen

Ramsar Site as part of recent recreational disturbance avoidance and mitigation study for West Suffolk in 2024 [See reference 35]. These ZOIs have been applied in this assessment to determine whether impacts may arise in relation to recreational pressure as a result of growth in the Local Plan.

4.92 In relation to Eversden and Wimpole Woods SAC, Ouse Washes SAC, SPA and Ramsar Site and Portholme SAC, Natural England advised as part of the draft HRA Scoping Report for the Greater Cambridge Local Plan [See reference 36] that a 'zone of potential risk' for recreational pressure of 2 kilometres and 5 kilometres, which has been derived from the Impact Risk Zones (IRZ) should be applied to inform initial impacts to recreation on Habitats 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 SSSIs and Habitats sites, this zone of potential influence can therefore be used to appropriately identify the potential risks to Habitats sites from the Local Plan in this assessment. **Table 4.7** below outlines the zones of potential of risk for each Habitats 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 – 5 kilometres
Ouse Washes SAC, SPA and Ramsar	L – 2 kilometres
Portholme SAC	H – 5 kilometres
Devil's Dyke SAC	H – 5 kilometres

^{*}Zones of Potential Risk have been defined by Natural England as either higher risk (and therefore have a larger buffer, 5 kilometres, within which recreational pressure could have likely significant effects) or lower risk (with a smaller buffer of 2 kilometres). These higher and lower buffers have been applied as part Natural England's guidance.

- **4.93** It should be noted that Devil's Dyke SAC was also included in this initial advice from Natural England in 2019, however given the more up-to-date visitor survey evidence described above in relation to specific ZOIs, this advice has been superseded.
- **4.94** Due to the distance of Devil's Dyke SAC and Portholme SAC from the boundary of the GCLP area (>5.5 kilometres), no likely significant effect is predicted in relation

to recreational pressure from proposed development in the GCLP for these Habitats sites

Wicken Fen Ramsar Site

- **4.95** A review of site allocations identified the following housing and employment allocations to be located within 10.3 kilometres of Wicken Fen Ramsar Site:
 - S/RRA/OHD: Old Highways Depot, Twenty Pence Lane, Cottenham
 - S/NEC: North East Cambridge
 - S/WNT: Waterbeach New Town
- 4.96 No policy areas were identified to be located within 10.3 kilometres of Wicken Fen Ramsar Site.
- **4.97** There is potential for likely significant effects to occur in relation to increased recreational pressure and therefore this effect is considered further at the Appropriate Assessment stage.

Eversden and Wimpole Woods SAC

- 4.98 A review of site allocations identified the following housing and employment allocations to be located within 5 kilometres of Eversden and Wimpole Woods SAC:
 - S/BA: Bourn Airfield New Village
- **4.99** A review of policy areas identified the following to be located within 5 kilometres of Eversden and Wimpole Woods SAC:
 - S/SEA/BA: Non-development area adjacent to Bourn Airfield (Strategic Enhancement Area)
- **4.100** This policy area located within 5 kilometres of the SAC is identified as a Strategic Enhancement Area, which will include measures to mitigate and enhance the land, through measures such as drainage, habitat compensation and delivery of informal open space. This policy area is a non-development area and as such no likely significant effect is predicted either alone or in-combination with other plans and projects.
- **4.101** There is potential for likely significant effects to occur in relation to increased recreational pressure and therefore this effect is considered further at the Appropriate Assessment stage.

Ouse Washes SAC, SPA and Ramsar Site

4.102 No development is proposed within 2 kilometres of the SAC, SPA and Ramsar site and, as such, no likely significant effect is predicted as a result of increased recreational pressure resulting from the GCLP either alone or in-combination with other plans and projects.

Chippenham Fen Ramsar Site

4.103 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 5 kilometres zone of potential risk, which is the higher zone of potential risk outlined in **Table 4.7**. More specific ZOIs 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 (>5 kilometres), no likely significant effect is predicted in relation to recreational pressure from proposed development in the GCLP for this Habitats site.

Fenland SAC

- **4.104** 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 on the area of SAC which overlaps Chippenham Fen Ramsar, is therefore screened from the assessment.
- **4.105** Likely significant effects relating to recreational pressure could not be screened out in relation to the component part of Fenland SAC, which overlaps Wicken Fen Ramsar site, and will therefore require further consideration at the Appropriate Assessment.

Water

4.106 The Greater Cambridge area is one of the driest in the UK and is designated as under 'Serious water stress' by the Environment Agency [See reference 37]. An increase in demand for water abstraction and treatment resulting from the growth proposed in the GCLP could result in changes in hydrology at Habitats sites. Depending on the qualifying features and particular vulnerabilities of the Habitats

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.

- **4.107** The following Habitats 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.
 - Ouse Washes SPA and Ramsar.
 - Wicken Fen Ramsar.
 - Chippenham Fen Ramsar.
 - Fenland SAC.
 - Portholme SAC.
 - The Wash and North Norfolk Coast SAC.
 - The Wash SPA and Ramsar.
- **4.108** The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar were only considered sensitive to impacts from changes in water quality, due to these sites having hydrological connectivity with the River Cam, which would receive wastewater discharge from the proposed Cambridge Water Recycling Centre, which will serve development coming forward in this plan. No likely significant effects were predicted in relation to water quantity due to the distance of these Habitat sites from the River Cam at approximately 50 kilometres and given the habitats and species of these Habitat sites are not considered to rely on freshwater inputs and/or functionally linked land within the River Cam. Therefore, no likely significant effect is predicted in relation to increased water demand from proposed growth in the Local Plan.
- **4.109** 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 any likely significant effects to these Habitats sites.

Water Quantity

4.110 Greater Cambridge is located within the 'CW Company Wide Water Resource Zone', which is supplied by Cambridge Water. Cambridge Water published its latest Water Resources Management Plan (WRMP24) in March 2025 [See reference 38], which outlines how it will continue to meet the demand for water in the Cambridge

region. Currently, almost all water is supplied in the region through abstraction from chalk aquifers and while the WRMP incorporates a reduction in aquifer use, abstraction from surface waterbodies is 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 abstractions located on the lower River Cam and River Great Ouse.

- **4.111** A Water Supply Evidence document for Greater Cambridge has recently been developed by AtkinsRéalis [See reference 39], which assesses the water availability forecasts in the WRMP24 preferred programme. This states that any new development that takes place within Greater Cambridge must not increase abstraction and risk deterioration to rivers and water bodies, of which 90% are already considered to have lower than 'good' ecological status. As such, Cambridge Water has committed to significantly reducing abstraction over the planning period (2025 2050). To meet future demand, new supply options will be developed such as a short-term transfer from Anglian Water's Grafham Water reservoir and a new Fens reservoir alongside enhanced demand management. Despite overall reductions in abstraction from all sources of supply, including groundwater, the document highlights that the River Cam Abstraction will provide 7 million litres of water per day from 2040, which could have implications for the Habitats sites that are hydrologically connected to the River Cam and are susceptible to impacts from changes in water quantity, as outlined below.
- **4.112** Ouse Washes SAC, SPA and Ramsar supports washland habitat within the Greater Cambridge Water Resource Zone. The Habitats site lies within and adjacent to River Great Ouse and its tributaries, which are hydrologically connected to the River Cam. As a result, there is potential for likely significant effects to occur in relation to Ouse Washes SAC, SPA and Ramsar from changes in water demand and it is therefore screened in for further assessment.
- **4.113** 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. Natural England has previously explained that there are indications that the water present within this Habitats site is fed by groundwater [See reference 40]. Due to the location of the site and chemistry of the water, it is expected that the site lies outside of the influence of the Cambridge chalk aquifer. However, given the reliance of the qualifying habitats and species on water, a precautionary approach has been applied, and Wicken Fen Ramsar has therefore been screened in for further assessment in relation to changes in water demand and treatment.

- **4.114** Chippenham Fen Ramsar supports fenland and grassland habitat and associated invertebrate species, and it is dependent upon an adequate supply of high-quality water from the chalk aquifer that supplies Greater Cambridge. There is potential for likely significant effects to occur in relation to Chippenham Fen Ramsar from changes in water demand and treatment and therefore this effect is screened in for further assessment.
- **4.115** The Fenland SAC overlaps Wicken Fen Ramsar and Chippenham Fen Ramsar and as such the details presented above in relation to impacts from water quantity for these Habitats 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 aquifers, there is potential for likely significant effects to occur in relation to the qualifying habitats and species of the Fenland SAC from changes in water demand and treatment and therefore is screened in for further assessment.
- **4.116** Portholme SAC supports lowland hay meadows, which are sensitive to prolonged flooding events and from input of nutrients from the River Great Ouse. Increased demand for water abstraction and treatment has the potential to result in impacts to the River Great Ouse as discussed above, and therefore the potential for likely significant effects in relation to Portholme SAC from changes in water demand and treatment have been screened in for further assessment.

Water Quality

Water Treatment and Discharge

- **4.117** Habitats can also be affected by changes in water quality such as nutrient enrichment, changes in salinity, smothering from dust, and run-off, discharge or spillage from industry, agriculture, or construction. Changes in water abstraction, discharge and land use can also affect water quality, for example a change in land use from agriculture to residential, applicable to these proposals, reduces direct nutrient run-off to watercourses but increases the volume of nutrient discharge from wastewater treatment works.
- **4.118** Nutrient pollution is an environmental issue for many areas across England. Increased levels of nitrogen and phosphorus entering aquatic environments via surface water and groundwater can severely threaten the sensitive habitats and species within a Habitats site. The elevated levels of nutrients can cause eutrophication, leading to algal blooms that disrupt normal ecosystem function and cause major changes in the aquatic community.

- **4.119** Nutrient neutrality is a means of ensuring that a plan or project does not add to existing nutrient burdens so there is no net increase in nutrients as a result of the plan or project. Where nutrient neutrality is properly applied and the existing land use does not undermine the conservation objectives, Natural England considers that an adverse effect on integrity alone and in combination can be ruled out during Appropriate Assessment. Any development within the catchment of a Habitats site with nutrient issues will be considered further during the Appropriate Assessment stage.
- **4.120** Where Habitats sites are already in unfavourable condition, extra wastewater from new developments exacerbates the issue and undermines ongoing efforts to recover these sites. However, when development is designed alongside suitable mitigation measures, that additional damage can often be avoided and improvements potentially made through the provision of new wastewater treatment centres or upgrades to existing centres.
- **4.121** While no nutrient neutrality sensitive catchments were identified within Greater Cambridge [See reference 41], as discussed above in relation to water quantity, the relevant Habitats sites are susceptible to impacts from changes in water treatment. Furthermore, the potential for in-combination effects, as a result of development from the Local Plan cannot be ruled out.
- **4.122** The Greater Cambridge Integrated Water Management Study (IWMS) [See reference 42] prepared by Stantec highlights that several proposed development areas within Greater Cambridge, such as Bourn Airfield New Village, have been assigned to Water Recycling Centres (WRC) with known capacity constraints. If waste water treatment and water recycling infrastructure is not expanded or enhanced to deal with the increase in wastewater, there is the potential for likely significant effects in relation to water quality for Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC, Portholme SAC, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site either alone or in-combination. These sites are therefore screened in for further assessment.

Direct pollution / run-off

4.123 Development resulting from the proposals in the GCLP has the potential to increase pollution from direct run-off at nearby Habitats sites or functionally linked land. Distances can vary depending on topography and connectivity, but 500 metres is used as an initial screening distance.

4.124 No site allocations and policy areas were identified within 500 metres of a Habitats site. They are therefore all screened out of further assessment as no likely significant effect is predicted as a result of direct pollution / run off either alone or incombination with other plans and projects.

Summary of screening assessment

- **4.125 Table 4.8** summarises the Screening conclusions reached in this HRA. Impact types for which a conclusion of No Likely Significant Effect (LSE) was reached are shown with no colour. Those potential impacts where likely significant effects could not be ruled out are shown in orange and these are considered in more detail at the Appropriate Assessment stage in Error! Reference source not found..
- **4.126** These effects have the potential to arise from the policies identified at the beginning of Error! Reference source not found. as well as the site allocations referred to under each of the different impact pathways discussed above.

 Table 4.8: Summary of Screening Assessment

Habitats Site	Physical Damage and Loss	Non-physical Disturbance	Non-toxic Contamination	Air Pollution	Recreation	Water Quantity	Water Quality
Eversden and Wimpole Woods SAC	Potential LSE (offsite only)	Potential LSE (offsite only)	No LSE	No LSE	Potential LSE	No LSE	No LSE
Ouse Washes SAC	No LSE	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
Devil's Dyke SAC	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Fenland SAC	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE	Potential LSE
Ouse Washes SPA	No LSE	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
Ouse Washes Ramsar	No LSE	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
Wicken Fen Ramsar	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE	Potential LSE
Chippenham Fen Ramsar	No LSE	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
Portholme SAC	No LSE	No LSE	No LSE	No LSE	No LSE	Potential LSE	Potential LSE
The Wash and North Norfolk Coast SAC	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No LSE	Potential LSE

Habitats Site	Physical Damage and Loss	Non-physical Disturbance	Non-toxic Contamination	Air Pollution	Recreation	Water Quantity	Water Quality
The Wash SPA	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No LSE	Potential LSE
The Wash Ramsar Site	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	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 Habitats sites, in view of their conservation objectives.
- **5.2** European Commission Guidance **[See reference** 43**]** 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 Habitats sites with respect to their conservation objectives and to their structure and function.
- **5.3** This stage seeks to determine whether implementation of the plan that is subject to HRA will result in an adverse effect on the integrity of the whole Habitats site in question (many Habitats sites are made up of a number of fragments of habitat). It also considers as appropriate the potential for in-combination effects from other development. Consideration is given to mitigation measures that may reduce the likelihood and significance of effects on Habitats sites.
- **5.4** A Habitats 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 Habitats site's conservation objectives is realised and where the Habitats 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 Functionally Linked Land in relation to Eversden and Wimpole Woods SAC.
 - Non-physical disturbance Functionally Linked Land in relation to Eversden and Wimpole Woods SAC. Recreational Pressure in relation to Wicken Fen Ramsar site, Fenland SAC and Eversden and Wimpole Woods SAC.
 - Water Quantity in relation to Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar SAC, Chippenham Fen Ramsar SAC, Fenland SAC and Portholme SAC.
 - Water Quality in relation to Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar SAC, Chippenham Fen Ramsar SAC, Fenland SAC, Portholme

SAC, the Wash and North Norfolk Coast SAC, the Wash SPA and the Wash Ramsar Site.

- **5.6** Therefore, Appropriate Assessment needs to be undertaken for these Habitats sites to determine whether the plan will result in Adverse Effects on Integrity (AEoI).
- **5.7** The Appropriate Assessment focuses on those impacts that are judged likely to have a significant effect on the qualifying features of a Habitats site, or where insufficient certainty regarding this remained at the Screening stage. As described in Error! Reference source not found., a conclusion needs to be reached as to whether or not a policy in the plan would adversely affect the integrity of a Habitats site. To reach a conclusion, consideration is 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 Habitats 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 Woods SAC supports the qualifying species, barbastelle bat, 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** As detailed in the Screening Assessment, this species has been identified to travel within a Core Sustenance Zone of 6 kilometres from a known roost. It is understood that this species will travel up to 20 kilometres provided 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 44]**. However, it is considered unlikely that for habitats beyond 10 kilometres to represent key habitat that contributes to maintaining the barbastelle population of the SAC and as such a buffer of 10 kilometres distance has been applied in this assessment.
- **5.12** Eight site allocations were identified to be located within 10 kilometres of the SAC. These site allocations were then subject to a desk-based review to determine the suitability of these sites for this qualifying species. This assessment can be found in Error! Reference source not found.. A summary of the findings of this assessment is presented below:
 - The majority of the site allocations are of negligible or low value to support barbastelle bats and are therefore discounted from further consideration in terms of physical damage and loss of functionally linked land.
 - Two site allocations are considered to have moderate suitability to support barbastelle bats. These are:
 - S/BA: Bourn Airfield New Village

- S/CBN: Cambourne North
- Development within these site allocations could generate physical damage and loss to functionally linked land, which in turn could adversely affect this species through the severance and fragmentation of habitat.
- **5.13** In addition to the above site allocations, there is potential for additional development to come forward as part of the plan through windfall sites as outlined in Policy S/DS: Development Strategy. The potential impacts on physical damage and disturbance to offsite functional habitat in relation to the SAC should be assessed on a site-by-site basis as these developments come forward.

Mitigation

- **5.14** Mitigation and safeguarding measures will be provided within the plan through Policy BG/BG: Biodiversity and Geodiversity, which outlines that development proposals will not be permitted where they have direct or indirect adverse effects on sites of biodiversity importance. Exceptions will only be allowed where the benefits for development significantly outweigh any adverse impacts. This would need to demonstrate that the mitigation hierarchy has been implemented and that the intrinsic natural features of particular interest are safeguarded and enhanced, with specific regard to the international, national or local status and designation of the Habitats site.
- **5.15** Policy BG/TC: Improving Tree Canopy Cover and the Tree Population and Policy BG/RC: River corridors will also ensure developments protect and enhance trees, hedgerows and river corridors which are important habitat for barbastelle bats.
- **5.16** In addition to this, Policy S/BA Bourn Airfield and Policy S/CBN Cambourne North includes for the provision of a Strategic Enhancement Area, which will provide ecological mitigation and enhancement measures. This includes the proposed Cambourne Forest within Policy S/CBN Cambourne North, which will provide woodland habitat that has potential to contribute to mitigating impacts arising in relation to barbastelle bats. This policy also makes provision for retaining habitats of value for bats and to maintain dark corridors and as such maintaining connectivity through the site.
- **5.17** However, to provide certainty that impacts from physical damage and loss of functionally linked land 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.
- **5.18** Therefore, it is recommended that the requirement for proposed development coming forward on the two site allocations to deliver these measures is stated in the Local Plan at the Proposed Submission stage. The Local Plan should also make it clear that these safeguarding measures will be required for any windfall development proposals coming forward under Policy S/DS: Development Strategy on sites that have been identified as having moderate or high suitability to support barbastelle bats.

Conclusion

5.19 Provided that the above mitigation is implemented successfully, adverse effects on the integrity of Eversden and Wimpole Woods SAC, as a result of physical damage and loss of functionally linked land will be avoided.

Non-physical Disturbance – Functionally Linked Land (offsite)

Eversden and Wimpole Woods SAC

- **5.20** As detailed under 'Physical Habitat and Loss Functionally Linked Land' in paragraphs 5.9-5.11 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.
- **5.21** No development is proposed within 500 metres 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 offsite non-physical disturbance, particularly from increased light spill on functional habitat within or adjacent to proposed site allocations and policy areas.

5.22 As detailed in the Screening Assessment, this species has been identified to travel within a CSZ of 6 kilometres from a known roost. It is understood that this species will travel up to 20 kilometres provided 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 45]. However, it is considered unlikely that for habitats beyond 10 kilometres to represent key habitat that contributes to maintaining the barbastelle population of the SAC and as such a buffer of 10 kilometres distance has been applied in this assessment. Following a precautionary approach, an additional 500 metres has been added to this because non-physical disturbance (noise, vibration and light pollution) is capable of causing an adverse effect if development takes place within 500 metres of functionally linked land which is used by qualifying species which are sensitive to these disturbances.

5.23 Eight site allocations were identified to be located within 10.5 kilometres of the SAC. The site allocations have been subject to a more detailed assessment as summarised above under 'Physical Damage and Loss – Functionally Linked Land' and found fully within Appendix D.

- The majority of the site allocations are of negligible or low value to support barbastelle bats and are therefore discounted from further consideration in terms of physical disturbance of functionally linked land.
- Two site allocations are considered to have moderate suitability to support barbastelle bats. These are:

■ S/BA: Bourn Airfield New Village

■ S/CBN: Cambourne North

5.24 Development within these site allocations could physically disturb functionally linked land, which in turn could adversely affect this species through the severance and fragmentation of habitat.

5.25 In addition to the above site allocations, there is potential for additional development to come forward as part of the plan through windfall sites as outlined in Policy S/DS: Development Strategy. 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 proposals come forward.

5.26 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

- **5.27** Mitigation and safeguarding measures will be provided within the plan through Policy BG/BG: Biodiversity and Geodiversity, which outlines that development proposals will not be permitted where they have direct or indirect adverse effects on sites of biodiversity importance. Exceptions will only be allowed where the benefits for development significantly outweigh any adverse impacts. This would need to demonstrate that the mitigation hierarchy has been implemented and that the intrinsic natural features of particular interest are safeguarded and enhanced, with specific regard to the international, national or local status and designation of the Habitats site.
- **5.28** Policy BG/TC: Improving Tree Canopy Cover and the Tree Population and Policy BG/RC: River corridors will also ensure developments protect and enhance trees, hedgerows and river corridors, which are important habitat for barbastelle bats.
- **5.29** Further to this, Policy S/NS: Existing New Settlements, Policy S/BA Bourn Airfield and Policy S/CBN: Cambourne North provide Strategic Enhancement Areas, which will offer opportunity to deliver habitat mitigation and enhancement for bats.
- **5.30** However, to provide certainty that impacts from non-physical disturbance on functionally linked land 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.
- **5.31** Therefore, it is recommended that the requirement for proposed development coming forward on the two site allocations to deliver these measures is stated in the Local Plan at the Proposed Submission stage. The Local Plan should also make it clear that these safeguarding measures will be required for any windfall development

proposals coming forward under Policy S/DS: Development Strategy on sites that have been identified as moderate or high suitability to support barbastelle bats.

Conclusion

5.32 Provided that the above mitigation is implemented successfully, adverse effects on the integrity of Eversden and Wimpole Woods SAC, as a result of non-physical disturbance of functionally linked land will be avoided.

Recreation

Wicken Fen Ramsar Site / Fenland SAC

- **5.33** Wicken Fen Ramsar and a component part of Fenland SAC are located 1 kilometre 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 46]. Following a visitor study of the Wicken Fen Vision Area, visitors to the Habitats 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 [See reference 47]. However, as noted in the West Suffolk Recreation Disturbance and Avoidance and Mitigation Study 35, Natural England have raised concerns in relation to housing growth with issues likely to relate to visitors avoiding the main visitor centres and car parks, and accessing the site via public rights of way.
- **5.34** Key activities undertaken by visitors to the Habitats 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.
- **5.35** 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 and SAC from recreational pressure to occur.

- **5.36** As detailed in the Screening Assessment, a ZOI of 10.3 kilometres has been applied in this assessment. This has been defined as part of targeted visitor surveys, which identified 75% of visitors to travel within this distance to Wicken Fen Ramsar Site as part of recent recreational disturbance avoidance and mitigation study for West Suffolk in 2024 [See reference 48]. A review of site allocations identified the following within 10.3 kilometres of Wicken Fen Ramsar site and the component part of Fenland SAC:
 - S/RRA/OHD: Old Highways Depot, Twenty Pence Lane, Cottenham
 - S/NEC: North East Cambridge
 - S/WNT: Waterbeach New Town
- **5.37** No proposed policy areas were identified to be located within 10.3 kilometres of Wicken Fen Ramsar Site.
- **5.38** 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 Ramsar site and 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 Ramsar site and SAC.

Eversden and Wimpole Woods SAC

- **5.39** As detailed in the Screening Assessment, a ZOI of 5 kilometres has been applied in this assessment. This follows guidance on 'zones of potential risk' from Natural England acquired as part of the draft Scoping Report for the Greater Cambridge Local Plan.
- **5.40** A review of site allocations identified the following within 5 kilometres of Eversden and Wimpole Woods SAC:
 - S/BA: Bourn Airfield New Village
- **5.41** 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

- **5.42** 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 Habitats 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.
- **5.43** Policies in the plan will provide some degree of mitigation, including Policy BG/BG: Biodiversity and Geodiversity as well as Policies BG/GI: Green and blue Infrastructure, BG/PO: Protecting open spaces and BG/EO: Providing and enhancing open spaces, which outline requirements for development to make provision and enhance green infrastructure and open spaces.
- **5.44** In Policy BG/BG: Biodiversity and geodiversity, there is specific detail on the requirements for development to mitigate for recreational impacts to designated sites. The plan states the following in relation to this policy:
- "Development will mitigate evidenced recreational impacts on designated biodiversity and geodiversity sites, including providing Strategic Alternative Green Space for development proposed within Natural England's Impact Risk Zones for Sites of Special Scientific Interest."
- **5.45** It is however recommended that the policy is strengthened further at the Proposed Submission stage by providing a commitment in the plan that any development proposed within 10.3 kilometres of Wicken Fen Ramsar site and Fenland SAC or within 5 kilometres of Eversden and Wimpole Woods SAC will be required to mitigate for impacts arising from recreation, including to provide Strategic Alternative Green Spaces (SANGS) that is specifically designed and managed to alleviate visitor pressure on these Habitats sites. In addition to this, it is recommended that that the policy outlines the quantity and quality of SANGS provision and how delivery and management in-perpetuity will be secured.
- **5.46** In terms of the quantity of SANGS to be provided, 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 advice is also applicable to the Local Plan and included the following:

- Provision of 8ha/1000 population, which is advocated through the Suitable Alternative Green Spaces (SANGS) Guidance [See reference 49].
- Provision of green infrastructure that seeks to achieve the Natural England Accessible Greenspace Standard [See reference 50]. (Note the greenspace standards have been updated since the advice on the North East Cambridge AAP, and now include a minimum standard of 0.5 ha accessible greenspace within 200 metres 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 51] 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.
- **5.47** Specific strategic green infrastructure initiatives across Greater Cambridge have been identified in Policy BG/GI: Green and blue Infrastructure, which will contribute to enhancing and providing alternative opportunities outside of the Habitats sites network for people to enjoy nature.

Conclusion

5.48 Provided that the above recommendation for Policy BG/BG is incorporated into the plan at Proposed Submission stage and implemented successfully, adverse effects on the integrity of the Wicken Fen Ramsar site and Fenland SAC and Eversden and Wimpole Woods 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

5.49 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.

- **5.50** In March 2025, Cambridge Water published its latest WRMP **[See reference** 52] for the period of 2025 to 2050. The plan outlines how they will continue to meet the demand for water in the Cambridge region whilst also focusing on the protection and enhancement of the environment over the next 25 years. Since the previous WRMP in 2019 and in response to climate change and the associated impacts relating to future water supply needs for both people and the environment, a regional water resource planning group, known as Water Resource East (WRE), was developed, which includes Cambridge Water, Anglian Water, Affinity Water and Essex and Suffolk Water. This has led to the development of a regional plan, which combines the supply and demand needs from these water companies and non-public water supply sectors. Cambridge Water WRMP is closely aligned with other companies' WRMPs in WRE to ensure consistency of approach.
- **5.51** 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 "more water than is needed there to meet demand, so the surplus water is transferred to other zones as required". The water resources used to supply development within the WRZ are currently obtained from nearly 100% abstraction of chalk aquifers.
- **5.52** The Cambridge Water supply region lies adjacent to Affinity Water to the south 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 Habitats sites susceptible to impacts from changes in water quantity in-combination with development in areas outside of the GCLP area.

Abstraction Licensing Strategy (ALS)

- **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 ALS process to:
 - Meet River Basin Management Plan (RBMP) objectives for water resources activities.
 - Prevent deterioration of water body status due to new abstractions.

- Identify potential water available for licensing, from both surface water and groundwater.
- **5.54** Greater Cambridge area is located within the Cam and Ely Ouse abstraction area for which the most recent ALS was published in 2020 [See reference 53]. The Cam and Ely Ouse catchment was selected as a priority catchment in the Defra water abstraction plan, largely due to the high demand from the large agricultural sector, which may be negatively affecting ecology.
- **5.55** The ALS 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** The most recent ALS demonstrates that 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, Q70 and Q95).
- **5.57** In relation to groundwater abstraction, the ALS states:
- "Water not available for licensing; groundwater unit balance shows more water has been abstracted based on recent amounts than the amount available; we will not grant further consumptive licences."
- **5.58** As a result, there is no water available for new consumptive abstraction licences from groundwater in Greater Cambridge. This strengthens the importance of mitigation measures within the GCLP that will reduce demand on water within new and existing developments.

Mitigation

5.59 Cambridge Water's WRMP published in March 2025 outlines that sufficient water availability can be provided to meet the needs of growth in the Cambridge Region between 2025 and 2050. This will be delivered through the following stages as summarised in the Cambridge Area Water Supply Evidence report [See reference 54]:

- Short-term pressure pre-2032: There is little excess water available for use beyond that currently planned for.
- Mid-term surplus 2032 to 2040: The Anglian Water Transfer and Fens Reservoir come online to provide more water availability and compensate abstraction reductions, providing environmental protection to the sensitive chalk water sources of the region.
- Long-term pressure post 2040: Environmental Destination to restore and protect the region's freshwater environment dramatically reduces water available for use and results in little excess water availability beyond that currently planned for.
- **5.60** Cambridge Water's WRMP is closely aligned with other companies' WRMPs to ensure consistency of approach in relation to water resource needs in the region and how this will be addressed by water companies and stakeholders.
- **5.61** The WRMP will be updated every five years and reviewed by regulators, such as the Environment Agency. This takes into account growth within the supply area, including growth within Greater Cambridge provided for in the Local Plan.
- **5.62** Greater Cambridge Shared Planning service (GCSP) have worked closely with Cambridge Water, WRE, the Water Scarcity Group and other key stakeholders in the region to understand the timeline of water availability. This has informed the preparation of the Local Plan, which has ensured that growth is phased so that it aligns with water availability in the region. This has included the delay of large-scale development until 2032 and beyond, once the Anglian Water Transfer comes online. The Local Plan also makes provision for policy safeguards to improve household and non-household water efficiency as detailed below under "Policy Mitigation".
- **5.63** Further to this, GCSP have commissioned the development of a water supply and demand dashboard, which will support local planners and water resource managers to track and monitor their delivery strategy against the current and future water availability. This will ensure that development can continue to be phased as required.

5.64 The HRA of the WRMP **[See reference** 55] concluded that adverse effects on integrity can be avoided during the construction of the supply-side options provided sufficient standards and best practice mitigation measures are implemented. There does remain a level of uncertainty as to the impacts that may arise in relation to the construction of these options due to the level of detail available for each option at this stage. This would be informed by a project level HRA to determine requirements for mitigation to ensure adverse effects on integrity are avoided. It should be noted that no adverse effects on integrity were identified in relation to the operation of these supply-side options.

Policy Mitigation

5.65 The following measures outlined in the Local Plan will provide safeguarding and mitigation and as such will need to be adhered to and implemented successfully through the development management process. Specifically, Policy CC/WE: Water efficiency in new developments will ensure:

All development proposals (with the exception of householder applications) must demonstrate that there will be an adequate water supply available to serve the development.

5.66 This policy also provides specific and stringent requirements to ensure efficient use of water. This includes:

All development must demonstrate highly water efficient design in line with the following requirements:

- for residential development of 100 or more dwellings, water usage of no more than 80 litres/person/day. To achieve this level, some form of water reuse or recycling will be necessary with dual pipe systems for potable and non-potable water. Proposals that seek to deliver levels of water usage below this level are encouraged.
- for residential development of less than 100 dwellings, water usage of between 90 to 100 litres/person/day. Proposals that seek to deliver levels of water usage below this level are encouraged.
- for non-residential development, 5 credits for category Wat 01 of BREEAM, unless demonstrated not practicable. Also, full credits for category Wat 02 and category Wat 03 of BREEAM.

- for non-residential developments that use water as part of a commercial process(es), full credits for category Wat 04 of BREEAM.
- proposals involving the refurbishment or change of use of existing buildings should undertake retrofitting to increase water efficiency.
- **5.67** The water usage requirement as detailed above is very water efficient and goes further than the proposed 110 litres per person per day, which is being encouraged by the WRE [See reference 56].
- **5.68** This is further supported by Policy BG/BG: Biodiversity and Geodiversity, which outlines the requirement for protection of international, national and local designated sites to ensure that no adverse effects will arise. This would account for protection of Habitats sites as detailed in this HRA.

Conclusion

5.69 In light of the above and provided the water supply-side options published by the Cambridge Water WRMP are taken forward and that the safeguard measures provided within the Local Plan are implemented successfully, it can be concluded that adverse effects on the integrity of the Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar Site, Chippenham Fen Ramsar Site and Fenland SAC as a result of impacts from water quantity will be avoided.

Water Quality

Ouse Washes SAC, SPA and Ramsar / Wicken Fen Ramsar Site / Chippenham Fen Ramsar Site / Fenland SAC / The Wash and North Norfolk Coast SAC / The Wash SPA and Ramsar Site

5.70 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.

- **5.71** The Greater Cambridge area is currently serviced by 33 wastewater treatment works (WwTW) with an additional six WwTW that lie outside of the GCLP area, but which service some settlements within the boundary. The Greater Cambridge Integrated Water Management Study (IWMS) from Stantec identified 11 treatment works are currently at or exceeding their Dry Weather Flow (DWF) permits provided by the Environment Agency. This includes Barley, Bassingbourn, Bourn, Cambridge, Foxton (Cambs), Guilden Morden, Haslingfield, Melbourn, Over, Teversham and Uttons Drove (Bar Hill). A further seven WwTWs have been identified as nearing DWF permits (>75% capacity). This includes Coton, Great Chesterford, Royston, Sawston, Thurlow, Waresley and West Wickham.
- **5.72** 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 Habitats sites that are susceptible to impacts from water and are hydrologically connected to waterbodies which the WwTW discharge into.
- **5.73** 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 Centre (WRC) outfalls.
 - Overloading of the combined sewer network during storm events with the potential for flooding and contamination of hydrologically connected Habitats 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 Habitats 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

5.74 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, Fenland SAC, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar Site in combination with other plans and projects, the following mitigation measures will be implemented:

- Upgrades to Water Recycling Centres (WRC) to allow for an increase 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 Recycling Long Term Plan 2018 [See reference 57] planned upgrades have been identified in relation to Bourn, Cambridge, Coton, Foxton, Melbourn, Over, Royston, Uttons Drove and Waterbeach. This will be subject to delivery by Anglian Water.
- Relocation of Cambridge Waste Water Treatment Plan (CWWTP) as part of upgrades to the WRC in the Greater Cambridge area, the most significant is in relation to the relocation of the existing Cambridge Waste Water Treatment Plant (CWWTP). This would deal with the wastewater from a population equivalent of 548,000 and would allow the regeneration of the North East Cambridge area as set out in the S/NEC allocation. Noting the above, appropriate infrastructure must be secured to deal with the increase in demand for wastewater treatment whilst preventing a deterioration in water quality, including identifying required enhancements both at CWWTP (assuming it remains in situ) and other WRC locations within Greater Cambridge.
- **5.75** Whilst the large-scale options to increase capacity in terms of wastewater treatment to support growth are uncertain, Policy CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality, mitigates this risk by stating:

To protect and enhance water quality, all development proposals must demonstrate that:

- there is capacity for wastewater treatment and adequate wastewater conveyancing infrastructure to serve the whole development, or an agreement is in place with the relevant service provider to ensure the provision of the necessary infrastructure prior to the occupation of the development (where development is being phased, this must be demonstrated for each phase before first occupation).
- **5.76** Policy CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality, goes further to ensure water quality improvements at the local scale, specifically stating:
 - New development must incorporate Sustainable Drainage Systems (SuDS) as part of an Integrated Water Management approach to the design of the whole site, and
 - Development will be permitted provided that SuDS have been designed to manage water quality to minimise the risk of pollution.

Conclusion

5.77 In order to conclude no adverse effects on integrity for the relevant Habitats sites, it will be necessary for GCSP to continue to engage with Anglian Water and ideally reach a statement of common ground prior to submission of the Local Plan to gain certainty that the necessary WWTW upgrades will be achieved. At this stage in the plan preparation process, the strong wording in policy CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality, surrounding the requirement for developments to have sufficient infrastructure or connections in place for wastewater treatment, alongside small-scale interventions such as SuDS, will help to avoid adverse effects on the integrity of Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC, Portholme SAC, The Wash and North Norfolk SAC and The Wash SPA and Ramsar site in relation to water quality either alone or in-combination.

Summary of Appropriate Assessment

5.78 The conclusions of the Appropriate Assessment are summarised in Table 5.1.

- The Habitats sites that are shown as screened out with no colour indicating sites that were considered to have no likely significant effect at the screening stage.
- The Habitats sites highlighted in grey were found to have no adverse effect on integrity (AEoI) provided the mitigation measures detailed in Error! Reference source not found. are implemented.
- For the remaining Habitats sites highlighted in orange, the conclusion of no AEoI will need to be reviewed at the Proposed Submission stage of the GCLP preparation process to confirm that the necessary WWTW upgrades will be achieved to be able to serve the growth identified in the GCLP.

Table 5.1: Summary of Appropriate Assessment

Habitats Site	Physical Damage and Loss	Non-physical Disturbance	Non-toxic Contamination	Air Pollution	Recreation	Water Quantity	Water Quality
Eversden and Wimpole Woods SAC	No AEol	No AEol	Screened out	Screened out	No AEol	Screened out	Screened out
Ouse Washes SAC	Screened out	Screened out	Screened out	Screened out	Screened out	No AEol	Potential AEol
Devil's Dyke SAC	Screened out	Screened out	Screened out	Screened out	Screened out	Screened out	Screened out
Fenland SAC	Screened out	Screened out	Screened out	Screened out	No AEol	No AEol	Potential AEol
Ouse Washes SPA	Screened out	Screened out	Screened out	Screened out	Screened out	No AEol	Potential AEol
Ouse Washes Ramsar	Screened out	Screened out	Screened out	Screened out	Screened out	No AEol	Potential AEol
Wicken Fen Ramsar	Screened out	Screened out	Screened out	Screened out	No AEol	No AEol	Potential AEol
Chippenham Fen Ramsar	Screened out	Screened out	Screened out	Screened out	Screened out	No AEol	Potential AEol
Portholme SAC	Screened out	Screened out	Screened out	Screened out	Screened out	No AEol	Potential AEol

Habitats Site	Physical Damage and Loss	Non-physical Disturbance	Non-toxic Contamination	Air Pollution	Recreation	Water Quantity	Water Quality
The Washes and North Norfolk Coast SAC	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	Screened out	Potential AEol
The Washes SPA	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	Screened out	Potential AEol
The Washes Ramsar site	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	No impact pathway identified	Screened out	Potential AEol

Chapter 6

Conclusions and next steps

- **6.1** At the Screening stage, likely significant effects on Habitats sites, either alone or in combination with other policies and proposals, were identified for the following policies:
 - S/JH: New Jobs and Homes
 - S/SH: Settlement Hierarchy
 - S/DS: Development Strategy
 - J/NE: New Employment Development Proposals
 - J/RC: Retail and Other Complementary Town Centre Uses
 - J/VA: Visitor Accommodation, Attractions and Facilities
 - J/FD: Faculty Development and Specialist/Language Schools
 - S/NEC: North East Cambridge
 - S/LAC: Other site allocations in Cambridge
 - S/PA/CC: Cambridge City Centre
 - S/AMC: Areas of Major Change
 - S/PRIA: Public Realm Improvements Areas
 - S/CE: Cambridge East
 - S/CBC: Cambridge Biomedical Campus (including Addenbrooke's Hospital)
 - S/WC: West Cambridge
 - S/NWC: Eddington
 - S/HHR: Land between Huntingdon Road and Histon Road (Darwin Green), Cambridge
 - S/EOC: Other site allocations on the edge of Cambridge
 - S/CBN: Cambourne North
 - S/CB: Cambourne
 - S/GF: Land adjacent to A11 and A1307 at Grange Farm
 - S/NST: Northstowe New Town

- S/WNT: Land north of Waterbeach
- S/BA: Bourn Airfield New Village
- S/RSC/WGC: Wellcome Genome Campus, Hinxton
- S/RSC/BRC: Babraham Research Campus
- S/RSC: Other site allocations in the Rural Southern Cluster
- S/RRA: Site Allocations in the Rest of the Rural Area
- S/RRP: S/SHF: Land at Slate Hall Farm, Bar Hall
- **6.2** The findings of the HRA Screening assessment determined that these policies could result in a likely significant effect in relation to:
 - Physical damage and loss Functionally Linked Land in relation to Eversden and Wimpole Woods SAC.
 - Non-physical disturbance Functionally Linked Land in relation to Eversden and Wimpole Woods SAC.
 - Recreational Pressure in relation to Wicken Fen Ramsar site, Fenland SAC and Eversden and Wimpole Woods SAC.
 - Water Quantity in relation to Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC and Portholme SAC.
 - Water Quality in relation to Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsarsite, Chippenham Fen Ramsarsite, Fenland SAC, Portholme SAC, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site.
- **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 the integrity of the Habitats sites either alone or in-combination with other plans or projects. The conclusions of the Appropriate Assessment are summarised below.
 - Physical damage and loss Functionally Linked Land 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 and/or windfall sites 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 Functionally Linked Land 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 and/or windfall sites 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.
 - There is a commitment in the plan that development proposals will not be permitted if they have direct or indirect effects on sites of biodiversity importance. If they are permitted due to exceptional circumstances, the mitigation hierarchy must be followed, and safeguarding measures must reflect the international, national or local status and designation of the Habitats site.
- Recreational Pressure the Appropriate Assessment concluded no adverse effect on integrity as a result of increased recreational pressure in relation to Wicken Fen Ramsar site, Fenland SAC and Eversden and Wimpole Woods 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 any development within 10.3 kilometres of Wicken Fen Ramsar site and Fenland SAC and within 5 kilometres of Eversden and Wimpole Woods SAC will include the provision of alternative natural greenspace, specifically designed and managed to alleviate visitor pressure on these Habitats sites.
- Water Quantity the Appropriate Assessment concluded no adverse effect on integrity in relation to water quantity 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 provided site-supply options identified in the WRMP are brought forward and that the following safeguard

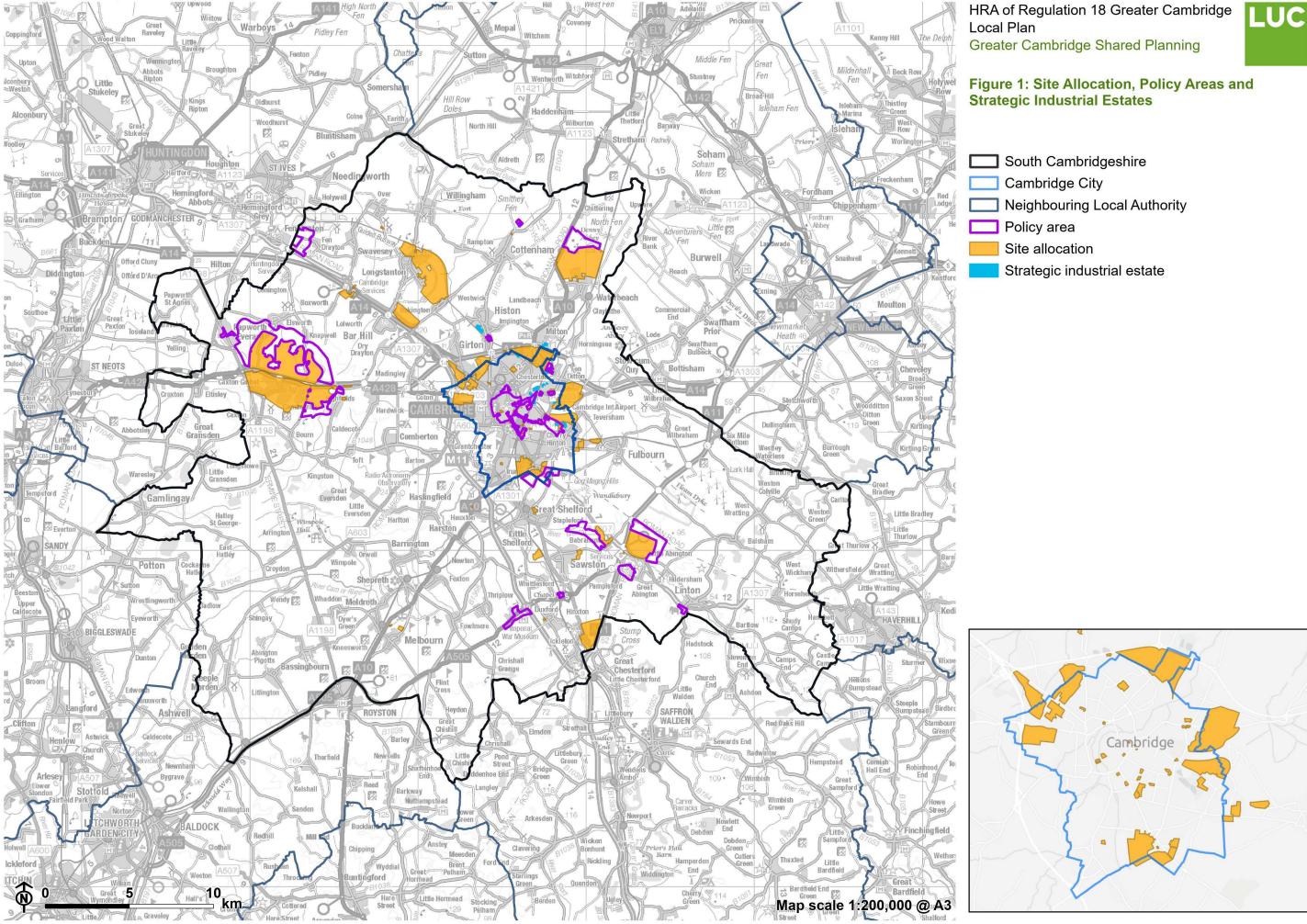
and mitigation measures already required by the plan are implemented successfully. This includes:

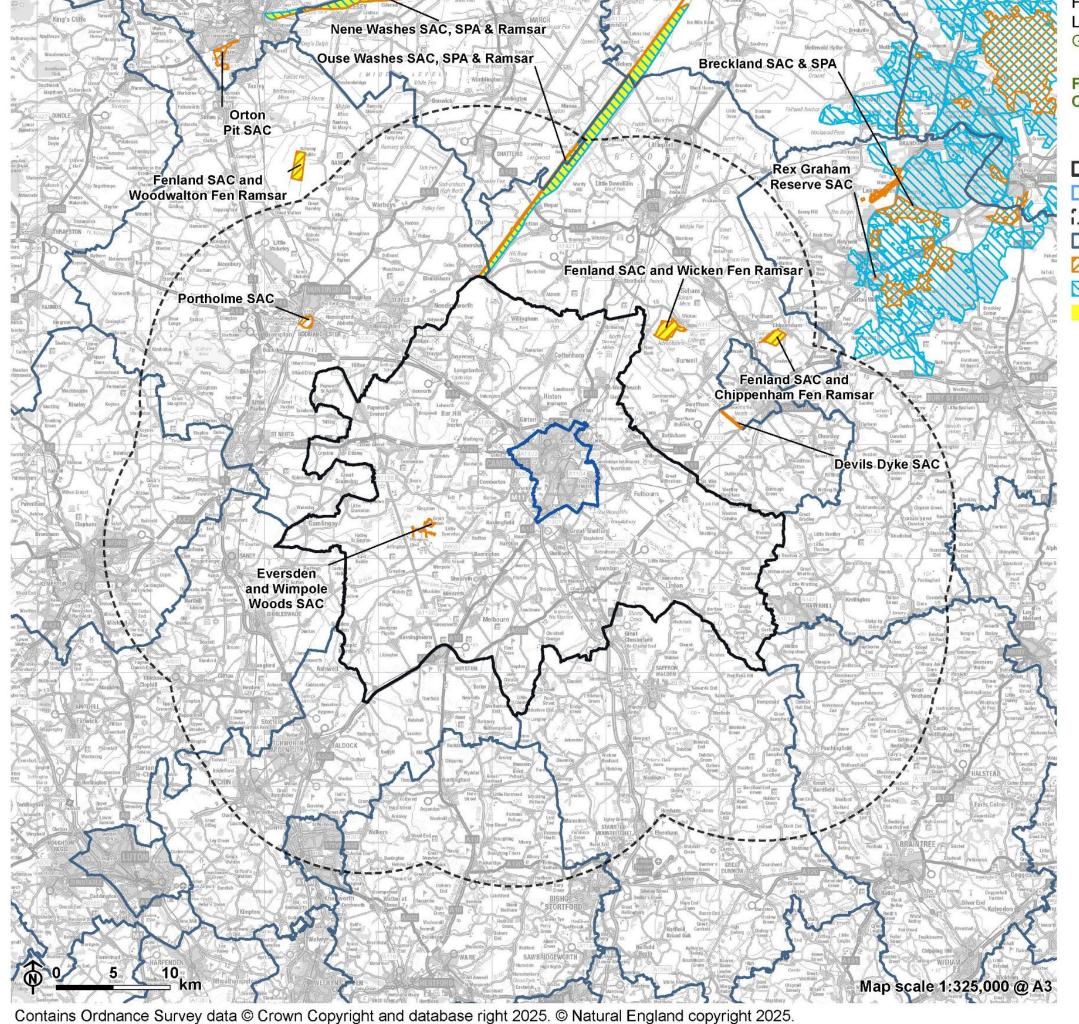
- There is a commitment in the plan, which ensures that all development proposals must demonstrate that there is an adequate water supply available to serve the development.
- There is a commitment in the plan to deliver water efficient design, including water usage of no more than 80 litres/person/day for residential developments of 100 or more and 90 to 100 litres/person/day for residential developments of less than 100 dwellings.
- There is a commitment in the plan to protect designated sites, including Habitat sites, as identified in this HRA, from adverse effects as a result of development proposals coming forward through the plan period.
- Water Quality the Appropriate Assessment concluded no adverse effect on integrity in relation to water quality at Ouse Washes SAC, SPA and Ramsar site, Wicken Fen Ramsar site, Chippenham Fen Ramsar site, Fenland SAC, Portholme SAC, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site provided that a statement of common ground with Anglian Water is reached prior to submission of the GCLP to confirm that the necessary WWTW upgrades will be achieved, and the following safeguards and mitigation measures already required by the plan are successfully implemented. This includes:
 - There is a commitment in the plan that ensures any development is supported by sufficient wastewater treatment infrastructure to protect and enhance water quality.
 - There is a commitment in the plan that ensures water quality improvements through the incorporation of SuDS into all new developments.

Next Steps

- **6.4** This report will be subject to consultation with Natural England to confirm that the conclusions of the assessment are considered appropriate at this stage of planmaking.
- **6.5** HRA is an iterative process and as such this report will be updated at the Proposed Submission stage of the Local Plan preparation process, in light of newly available evidence and comments from key consultees.

Appendix AFigures





HRA of Regulation 18 Greater Cambridge Local Plan

Greater Cambridge Shared Planning



Figure 2: Habitat sites within 15km of Greater Cambridge

South Cambridgeshire

Cambridge City

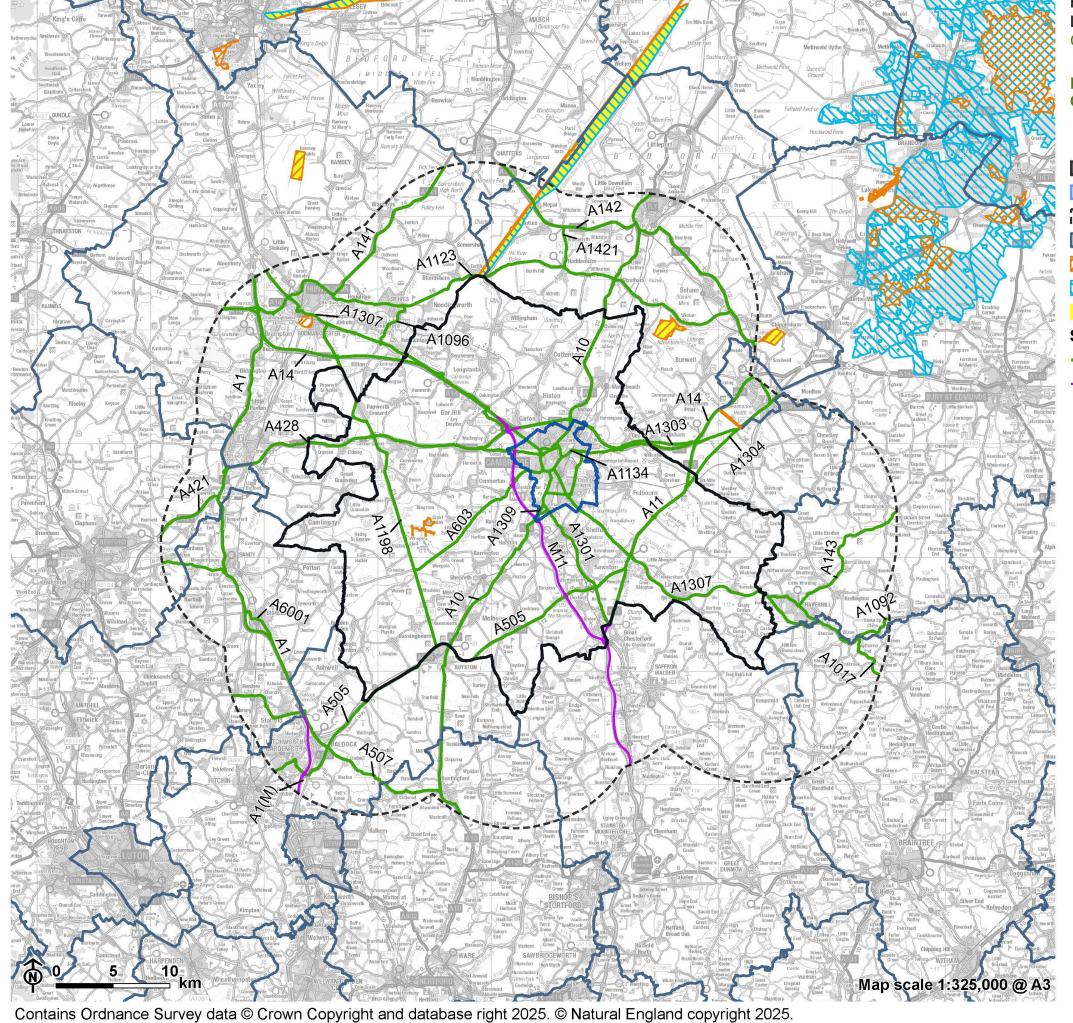
[__] South Cambridgeshire 15km buffer

Neighbouring Local Authority

Special Area of Conservation (SAC)

Special Protection Area (SPA)

Ramsar site



HRA of Regulation 18 Greater Cambridge Local Plan

Greater Cambridge Shared Planning



Figure 3: Strategic roads within 10km of **Greater Cambridge**

South Cambridgeshire

Cambridge City

South Cambridgeshire 10km buffer

Neighbouring Local Authority

Special Area of Conservation (SAC)

Special Protection Area (SPA)

Ramsar site

Strategic road

— A Road

Motorway

Appendix B

Attributes of Habitats Sites

B.1 This appendix contains information about the Habitats sites scoped into the HRA. Information about each site's area, the site descriptions, qualifying features, pressures and threats are drawn from Natural England's Site Improvement Plans (SIPs) [See reference 58], Standard Data Forms or Ramsar Information Sheets available from the JNCC website [See reference 59] and Supplementary Advice Notes [See reference 60]. These advise on the site's 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 61].

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 62].
 - The site is ancient woodland of ash-maple type which is now very localised, both locally 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. The site also holds colonies of 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 63].

Habitats 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 64].

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 65].

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 northwest 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 70 metres 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 66].

Habitats 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 67].

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 seminatural 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)

Habitats 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 Habitats 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)

Habitats 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 Habitats 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

An extensive area of seasonally flooding wet grassland ('washland') which supports populations of Annex II species spined loach in the Counter Drain, Old Bedord/River Delph areas of the Ouse washes.

Summary of reasons for designation

SAC qualifying species

Annex II: Spined loach Cobitis taenia

Habitats site pressures and threats

Potential future threats

Water pollution is a threat as this species relies on clear, oxygen-rich waters to feed and spawn.

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

- 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 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.

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 the 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.

Ouse Washes SPA

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

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; 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

Habitats site pressures and threats

Current pressures

■ Inappropriate water levels – breeding birds and overwintering birds are being adversely affected by increased flooding.

Potential future threats

Water pollution – breeding birds and overwintering birds have the potential to be affected by changes in the grassland mosaic resulting from inappropriate levels of nutrients from diffuse 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 aims of the Wild Birds Directive, by maintaining or restoring;
 - The extent and distribution of the habitats of the qualifying features
 - The structure and function of the habitats of the qualifying features
 - The supporting processes on which the habitats of the qualifying features rely
 - The population of each of the qualifying features, and,
 - The distribution of the qualifying features within the site.

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

- In general, the qualifying bird species of the SPA 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 10-30 centimetres.

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.

Ouse Washes Ramsar

Summary of reasons for designation

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

Habitats site pressures and threats

- Inappropriate water levels interest features are being adversely affected by increased flooding.
- Water pollution resulting from agricultural runoff and sewage treatment works.
- Vegetation succession due to changes in the hydrological regime.

Conservation objectives

Not applicable.

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).

Habitats 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

 Diet – 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.

Habitats 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
 - Diet 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.

The Wash and North Norfolk Coast SAC

Summary of reasons for designation

- Qualifying species:
 - 1110 Sandbanks which are slightly covered by sea water all the time. On this site sandy sediments occupy most of the subtidal area, resulting in one of the largest expanses of sublittoral sandbanks in the UK. It provides a representative example of this habitat type on the more sheltered east coast of England. The subtidal sandbanks vary in composition and include coarse sand through to mixed sediment at the mouth of the embayment. Sublittoral communities present include large dense beds of brittlestars Ophiothrix fragilis. Species include the sand-mason worm Lanice conchilega and the tellin Angulus tenuis. Benthic communities on sandflats in the deeper, central part of the Wash are particularly diverse. The subtidal sandbanks provide important nursery grounds for young commercial fish species, including plaice Pleuronectes platessa, cod Gadus morhua and sole Solea solea.
 - 1140 Mudflats and sandflats not covered by seawater at low tide. The Wash, on the east coast of England, is the second-largest area of intertidal flats in the UK. The sandflats in the embayment of the Wash include extensive fine sands and drying banks of coarse sand, and this diversity of substrates, coupled with variety in degree of exposure, means that there is a high

diversity relative to other east coast sites. Sandy intertidal flats predominate, with some soft mudflats in the areas sheltered by barrier beaches and islands along the north Norfolk coast. The biota includes large numbers of polychaetes, bivalves and crustaceans. Salinity ranges from that of the open coast in most of the area (supporting rich invertebrate communities) to estuarine close to the rivers. Smaller, sheltered and diverse areas of intertidal sediment, with a rich variety of communities, including some eelgrass *Zostera* spp. beds and large shallow pools, are protected by the north Norfolk barrier islands and sand spits.

- 1160 Large shallow inlets and bays. The Wash is the largest embayment in the UK, and represents Large shallow inlets and bays on the east coast of England. It is connected via sediment transfer systems to the north Norfolk coast. Together, the Wash and North Norfolk Coast form one of the most important marine areas in the UK and European North Sea coast, and include extensive areas of varying, but predominantly sandy, sediments subject to a range of conditions. Communities in the intertidal include those characterised by large numbers of polychaetes, bivalve and crustaceans. Sublittoral communities cover a diverse range from the shallow to the deeper parts of the embayments and include dense brittlestar beds and areas of an abundant reef-building worm ('ross worm') Sabellaria spinulosa. The embayment supports a variety of mobile species, including a range of fish and 1365 Common seal Phoca vitulina.
- 1170 Reefs. The Wash is the largest embayment in the UK with extensive areas of subtidal mixed sediment. In the tide-swept approaches to the Wash, with a high loading of suspended sand, the relatively common tube-dwelling polychaete worm Sabellaria spinulosa forms areas of biogenic reef. These structures are varied in nature, and include reefs which stand up to 30 centimetres proud of the seabed and which extend for hundreds of metres (Foster-Smith & Sotheran 1999). The reefs are thought to extend into The Wash where super-abundant S. spinulosa occurs and where reef-like structures such as concretions and crusts have been recorded. The site and its surrounding waters is considered particularly important as it is the only currently known location of well-developed stable Sabellaria reef in the UK. The reefs are particularly important components of the sublittoral as they are diverse and productive habitats which support many associated species (including epibenthos and crevice fauna) that would not otherwise be found in predominantly sedimentary areas. As such, the fauna is quite distinct from other biotopes found in the site. Associated motile species include large numbers of polychaetes, mysid shrimps, the pink shrimp Pandalus montagui, and crabs. S. spinulosa is considered to be an important food source for the commercially important pink shrimp *P. montagui*

- 1310 Salicornia and other annuals colonizing mud and sand. The largest single area of this vegetation in the UK occurs at this site on the east coast of England, which is one of the few areas in the UK where saltmarshes are generally accreting. The proportion of the total saltmarsh vegetation represented by Salicornia and other annuals colonising mud and sand is high because of the extensive enclosure of marsh in this site. The vegetation is also unusual in that it forms a pioneer community with common cord-grass Spartina anglica in which it is an equal component. The inter-relationship with other habitats is significant, forming a transition to important dune, saltmeadow and halophytic scrub communities.
- 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae). This site on the east coast of England is selected both for the extensive ungrazed saltmarshes of the North Norfolk Coast and for the contrasting, traditionally grazed saltmarshes around the Wash. The Wash saltmarshes represent the largest single area of the habitat type in the UK. The Atlantic salt meadows form part of a sequence of vegetation types that are unparalleled among coastal sites in the UK for their diversity and are amongst the most important in Europe. Saltmarsh swards dominated by sea-lavenders Limonium spp. are particularly well-represented on this site. In addition to typical lower and middle saltmarsh communities, in North Norfolk there are transitions from upper marsh to freshwater reedswamp, sand dunes, shingle beaches and mud/sandflats.
- 1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*). The Wash and North Norfolk Coast, together with the North Norfolk Coast, comprises the only area in the UK where all the more typically Mediterranean species that characterise Mediterranean and thermo-Atlantic halophilous scrubs occur together. The vegetation is dominated by a shrubby cover up to 40 centimetres high of scattered bushes of shrubby seablite Suaeda vera and sea-purslane *Atriplex portulacoides*, with a patchy cover of herbaceous plants and bryophytes. This scrub vegetation often forms an important feature of the upper saltmarshes, and extensive examples occur where the drift-line slopes gradually and provides a transition to dune, shingle or reclaimed sections of the coast. At a number of locations on this coast perennial glasswort *Sarcocornia perennis* forms an open mosaic with other species at the lower limit of the sea-purslane community.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

■ 1150 Coastal lagoons

Annex II species that are a primary reason for selection of this site:

- 1365 Harbour seal Phoca vitulina. The Wash, on the east coast of England, is the largest embayment in the UK. The extensive intertidal flats here and on the North Norfolk Coast provide ideal conditions for Harbour seal Phoca vitulina breeding and hauling-out. This site is the largest colony of common seals in the UK, with some 7% of the total UK population.
 - Annex II species present as a qualifying feature, but not a primary reason for site selection:
- 1355 Otter Lutra lutra

Habitats site pressures and threats

Public Access/Disturbance

- The Wash, Gibraltar Point and North Norfolk coast is a very popular area for recreational activity and visitor numbers are likely to grow, for example as a result of the English Coastal Path and housing development. The range of recreational activities may have adverse impacts on the sites (Boating; motor boating; water skiing; jet skis; commercial and non-commercial wildlife tours; commercial shipping; kiters (including surfers, boarders and buggy boarders); moorings; access to moorings; motorised vehicles; bikes, hovercraft; bird/wildlife watching; (dog) walking; Samphire collection, shellfish collection, bait digging, reed cutting, beachcombing, sea lavender gathering; beach barbecues; littering; wildfowling). Conflicts with the management of fragile habitats and species which can be easily disturbed by recreational activity will need to be carefully managed. To overcome these challenges further collaboration between stakeholders and local people may be needed with the aim of more holistic management of the area.
- Low altitude, non-military flying aircraft (microlites, paragliders, hang gliders) have a negative impact on many features. High risk locations are identified through the EMS management scheme, using advisory groups and the Incident Reporting Process. The EMS scheme has mechanisms to reduce damage from recreational activity. Incidents are reported through IRP, but still a chance of future incidents occurring by members of the public unaware of the potential impacts.

Siltation

Sediment accrretion is occuring in the Wash, and in such a dynamic system may be natural. However, activities associated with the Lincshore beach nourishment program may contribute to changes in sediment movement in the site. It is difficult to separate natural from anthropogenic change. The Environment Agency Lincshore scheme is part of the Saltfleetby-Gibraltar Point Coastal Strategy (part of the Flamborough Head to Gibraltar Point Shoreline Management Plan).

Fisheries: Recreational Marine and Estuarine

■ Recreational sea fishing and shoreline angling is a large scale activity with potential to impact on fish stocks as a resource for designated birds, but the size of the activity locally and its impact is not known. With the release of the national sea angling report, the Eastern IFCA are looking to follow this up to ensure all fisheries in their district are sustainable.

Invasive Species

■ There is a risk of introduction and spread of non-native/invasive species (e.g. American Razor Clam Ensis directus; Slipper limpet Crepidula fornicata; Pacific Oyster *Crassostrea giga*; oyster parasite Bonamia) from future fisheries and mussel lay stocking. There is also a risk of translocation of invasive species through ballast water transfer and discharge.

Inappropriate Coastal Management

■ Following the recent tidal event of December 2013 there may now be conflicts between flood risk management and the protection and provision of SPA/SAC habitats.

Fisheries: Commercial marine and estuarine

- A consent was granted to a private fishery tenant in 1984 for collection of shellfish, killing of starfish and application of lime to the sea bed. No restriction on harvesting methodology or level were applied to the consent. Therefore, there is a risk to site features due to uncertainty of current management.
- Fishing activities categorised as 'Red' for these as part of Defra's revised approach to commercial fisheries management in EMSs, and appropriate management measures are being implemented by EIFCA/MMO. A by-law has

been in place since May 2014. Hydraulic dredges, dredges and benthic trawls are categorised as 'Red' for the sub-feature subtidal boulder and cobble communities and Sabellaria spinulosa reef as part of Defra's revised approach to commercial fisheries management in EMSs. Hydraulic dredges, dredges, benthic trawls and shore-based activities are categorised as 'Red' for the Zostera attribute of the muddy sand subfeature as part of Defra's revised approach to commercial fisheries management in EMSs. Requisite mechanisms are being, or will be implemented by Eastern IFCA. Adaptive management measures will be used to protect features from 'red' categorised activities. Once management measures are established to protect the features, ongoing work will be required by the Regulator and Natural England to ensure compliance and to inform the adaptive management process.

Commercial fishing activities categorised as 'amber or green' under Defra's revised approach to commercial fisheries in EMSs require assessment and (where appropriate) management. This assessment will be undertaken by Eastern IFCA. For activities categorised as 'green', these assessments should take account of any incombination effects of amber activities, and/or appropriate plans or projects, in the site. Where these assessments indicate management is required, appropriate measures will be introduced by the Regulator by 2016. If management measures are established to protect the feature(s), ongoing work will be required by the Regulator to ensure compliance with management measures and an appropriate level of reporting to ensure sites are well managed and to provide information to Natural England to enable the provision of advice on the condition of features and potential condition threats.

Coastal Squeeze

Coastal squeeze at this site may lead to a gradual loss of intertidal and coastal habitats due to sea level rise and the erection and maintenance of coastal defences. The Wash Shoreline Management Plan and the North Norfolk Coast Shoreline Management Plan are subject to Habitats Regulations Assessment. Some areas of compensatory habitat still need to be designated.

Change in Land Management

Grazing management. Areas of saltmarsh may be over and under-grazed throughout the site. Ascertaining what the appropriate grazing regime is and tackling where inappropriate grazing occurs required.

Air Pollution: Impact of Atmospheric Nitorgen Deposition

■ Nitrogen deposition exceeds the critical loads for some sensitive habitats. Scrub encroachment in (unfavourable recovering) dune habitats may be exacerbated by atmospheric nitrogen.

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

- Habitat The qualifying habitats of the SAC are reliant on a range of coastal factors, including salinity, sedimentation, tide, sea level, turbidity, and elevation. These factors influence the complex interdependent intertidal, subtidal, and terrestrial habitats present along the coast.
- Additional factors are provided below for each habitat (where relevant):
 - Sandbanks which are slightly covered by sea water all the time.
 - Reef-building species such as *Sabellaria spinulosa* help to stabilize the sediment, allowing the colonization of sessile animals.
- In general, the qualifying mammal species of the SAC rely on:

- The site's 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 provides foraging habitat for these species.
- Harbour Seal
 - Habitat preferences harbours, bays, sandy intertidal zones, and estuaries.
 - Diet carnivorous (piscivorous) generalists, eating small to medium-sized fish, including cod, herring, and mackerel, as well as crustaceans, octopus, and squid. Shrimp is especially important for young Harbor seal pups.
- Otter
 - Habitat preferences rivers, canals, lakes, wetlands, coastlines
 - Diet fish, amphibians, birds, eggs, insects

Other comments

None

The Wash SPA

Summary of reasons for designation

- Qualifying species:
- Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC (Breeding)
 - Common tern Sterna hirundo, Little tern Sterna albifrons
- Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC (Non-breeding)
 - Black-tailed godwit Limosa limosa islandica, Red knot Calidris canutus, Bartailed godwit Limosa lapponica, Sanderling Calidris alba, Eurasian curlew Numenius arquata, Dunlin Calidris alpina alpina, Common redshank Tringa tetanus, Grey plover Pluvialis squatarola, Ruddy turnstone Arenaria interpres, Northern pintail Anas acuta, Eurasian wigeon Anas penelope, Gadwall Anas strepera, Pink-footed goose Anser brachyrhynchus, Darkbellied brent goose Branta bernicla bernicla, Common goldeneye Bucephala

clangula, Bewick swan Cygnus columbianus bewickii, Eurasian oystercatcher Haematopus ostralegus, Black (common) scoter Melanitta nigra, Common shelduck Tadorna tadorna

Habitats site pressures and threats

Inappropriate Water Levels

Structures which control water along the North Norfolk Coast have fallen into disrepair. The issue is preventing appropriate water level controls for breeding birds.

Public Access/Disturbance

- The Wash, Gibraltar Point and North Norfolk coast is a very popular area for recreational activity and visitor numbers are likely to grow, for example as a result of the English Coastal Path and housing development. The range of recreational activities may have adverse impacts on the sites (Boating; motor boating; water skiing; jet skis; commercial and non-commercial wildlife tours; commercial shipping; kiters (including surfers, boarders and buggy boarders); moorings; access to moorings; motorised vehicles; bikes, hovercraft; bird/wildlife watching; (dog) walking; Samphire collection, shellfish collection, bait digging, reed cutting, beachcombing, sea lavender gathering; beach barbecues; littering; wildfowling). Conflicts with the management of fragile habitats and species which can be easily disturbed by recreational activity will need to be carefully managed. To overcome these challenges further collaboration between stakeholders and local people may be needed with the aim of more holistic management of the area.
- Low altitude, non-military flying aircraft (microlites, paragliders, hang gliders) have a negative impact on many features. High risk locations are identified through the EMS management scheme, using advisory groups and the Incident Reporting Process. The EMS scheme has mechanisms to reduce damage from recreational activity. Incidents are reported through IRP, but still a chance of future incidents occurring by members of the public unaware of the potential impacts.

Fisheries: Recreational Marine and Estuarine

Recreational sea fishing and shoreline angling is a large scale activity with potential to impact on fish stocks as a resource for designated birds, but the size of the activity locally and its impact is not known. With the release of the national sea angling report, the Eastern IFCA are looking to follow this up to ensure all fisheries in their district are sustainable.

Inappropriate Coastal Management

■ Following the recent tidal event of December 2013 there may now be conflicts between flood risk management and the protection and provision of SPA/SAC habitats.

Fisheries: Commercial marine and estuarine

- A consent was granted to a private fishery tenant in 1984 for collection of shellfish, killing of starfish and application of lime to the sea bed. No restriction on harvesting methodology or level were applied to the consent. Therefore, there is a risk to site features due to uncertainty of current management.
- Fishing activities categorised as 'Red' for these as part of Defra's revised approach to commercial fisheries management in EMSs, and appropriate management measures are being implemented by EIFCA/MMO. A by-law has been in place since May 2014. Hydraulic dredges, dredges and benthic trawls are categorised as 'Red' for the sub-feature subtidal boulder and cobble communities and Sabellaria spinulosa reef as part of Defra's revised approach to commercial fisheries management in EMSs. Hydraulic dredges, dredges, benthic trawls and shore-based activities are categorised as 'Red' for the Zostera attribute of the muddy sand subfeature as part of Defra's revised approach to commercial fisheries management in EMSs. Requisite mechanisms are being, or will be implemented by Eastern IFCA. Adaptive management measures will be used to protect features from 'red' categorised activities. Once management measures are established to protect the features, ongoing work will be required by the Regulator and Natural England to ensure compliance and to inform the adaptive management process.
- Commercial fishing activities categorised as 'amber or green' under Defra's revised approach to commercial fisheries in EMSs require assessment and (where appropriate) management. This assessment will be undertaken by Eastern IFCA. For activities categorised as 'green', these assessments should take account of any in-combination effects of amber activities, and/or appropriate plans or projects, in the site. Where these assessments indicate management is required, appropriate measures will be introduced by the Regulator by 2016. If management measures are established to protect the feature(s), ongoing work will be required by the Regulator to ensure compliance

with management measures and an appropriate level of reporting to ensure sites are well managed and to provide information to Natural England to enable the provision of advice on the condition of features and potential condition threats.

Coastal Squeeze

Coastal squeeze at this site may lead to a gradual loss of intertidal and coastal habitats due to sea level rise and the erection and maintenance of coastal defences. The Wash Shoreline Management Plan and the North Norfolk Coast Shoreline Management Plan are subject to Habitats Regulations Assessment. Some areas of compensatory habitat still need to be designated.

Changes in Species Distribution

■ The breeding population of Little terns at Gibraltar Point is reliant on continued intervention to prevent loss of nests through inundation and predation. There is also loss of nesting habitats due to natural coastal processes and succession of the shingle ridge, which is disappearing from Gibraltar Point where Little terns are nesting.

Conservation objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

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

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

- In general, the qualifying bird species of the SPA 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.

Common tern

- Habitat preferences shallow water, along coasts, at freshwater inland lakes and in estuaries.
- Diet mainly eat fish, but also consume shrimps and other crustaceans, small squid, marine worms, and leeches.

Little tern

- Habitat preferences nest exclusively on the coast in well-camouflaged shallow scrapes on sand and shingle beaches, spits or inshore islets.
- Diet fish, crustacean and invertebrates.

Black-tailed godwit

- Habitat preferences marshy grassland and steppe, on migration mudflats.
- Diet invertebrates, some plant material.

Red knot

- Habitat preferences Marine and Intertidal, Wetland
- Diet Shellfish and worms.

Bar-tailed godwit

- Habitat preferences Coastal tundra, on migration mudflats, flooded fields.
- Diet Invertebrates, esp insects, molluscs, crustaceans and worms.

Sanderling

- Habitat preferences Tundra, on migration coastal.
- Diet Mostly small invertebrates, some plant material when newly arrived on arctic breeding grounds.

Eurasian curlew

- Habitat preferences Marsh, grassland, on migration mudflats.
- Diet Omnivorous, though principally invertebrates located by touch.

Dunlin

- Habitat preferences tundra, moor, heath, on migration estuaries & coasts.
- Diet Invertebrates, located by sight and touch.

Common redshank

- Habitat preferences Rivers, wet grassland, moors & estuaries.
- Diet Invertebrates, esp earthworms, cranefly larvae (inland) crustaceans, molluscs, marine worms (estuaries).

Grey plover

- Habitat preferences Tundra, on migration pasture & estuaries.
- Diet Summer, invertebrates, Winter primarily marine worms, crustaceans and molluscs.

Ruddy turnstone

- Habitat preferences Tundra, on migration beaches & rocky coasts.
- Diet Summer, mostly insects, wider range of invertebrates and other material at other times.

Northern pintail

- Habitat preferences lakes, rivers and marsh.
- Diet omnivorous, feeds on mud bottom at depths of 10-30 centimetres.

Eurasian wigeon

- Habitat preferences marsh, lakes, open moor, on migration also estuaries.
- Diet mostly leaves, shoots, rhizomes and some seeds.

Gadwall

- Habitat preferences marshes, lakes, on migration also rivers, estuaries.
- Diet Leaves, shoots.

■ Pink-footed goose

Dark-bellied brent goose

■ Habitat preference – tundra, on migration marshes & estuaries.

- Diet Eelgrass (Zostera), also vegetation by grazing on land or shallow water.
- Common goldeneye
 - Habitat preferences Marine and Intertidal, Wetland
 - Diet Mussels, insect larvae, small fish and plants
- Bewick swan
 - Habitat preferences lakes, ponds and rivers, also estuaries on migration.
 - Diet plant material in water and flooded pasture.
- Eurasian oystercatcher
 - Habitat preferences Upland, Marine and Intertidal, Farmland, Wetland, Grassland
 - Diet Mussels and cockles on the coast, mainly worms inland.
- Black (common) scoter
 - Habitat preferences marine and Intertidal
 - Diet molluscs.
- Common shelduck
 - Habitat preferences Coasts, estuaries & lakes.
 - Diet Mostly invertebrates, esp. insects, molluscs and crustaceans

Other comments

None

The Wash Ramsar Site

Summary of reasons for designation

Ramsar Criterion 1:

■ The Wash is a large shallow bay comprising very extensive saltmarshes, major intertidal banks of sand and mud, shallow water and deep channels.

Ramsar Criterion 3

Qualifies because of the inter-relationship between its various components including saltmarshes, intertidal sand and mud flats and the estuarine waters. The saltmarshes and the plankton in the estuarine water provide a primary source of organic material which, together with other organic matter, forms the basis for the high productivity of the estuary.

Ramsar Criterion 5

- Assemblages of international importance:
 - Species with peak counts in winter:
 - 292541 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar Criterion 6

- Qualifying Species/populations (as identified at designation):
- Species with peak counts in spring/autumn:
 - Eurasian oystercatcher, Haematopus ostralegus
 - Grey plover, Pluvialis squatarola
 - Red knot, Calidris canutus islandica
 - Sanderling, Calidris alba
 - Eurasian curlew, Numenius arquata arquata
 - Common redshank, Tringa totanus tetanus
 - Ruddy turnstone, Arenaria interpres interpres
- Species with peak counts in winter:
 - Pink-footed goose, Anser brachyrhynchus
 - Dark-bellied brent goose, Branta bernicla bernicla
 - Common shelduck, Tadorna tadorna
 - Northern pintail, Anas acuta
 - Dunlin, Calidris alpina alpina
 - Bar-tailed godwit, Limosa lapponica lapponica
- Species/populations identified subsequent to designation for possible future consideration under criterion 6.
- Species with peak counts in spring/autumn:
 - Ringed plover, Charadrius hiaticula
 - Black-tailed godwit, Limosa limosa islandica

- Species with peak counts in winter:
 - European golden plover, Pluvialis apricaria
 - Northern lapwing, Vanellus vanellus

Habitats site pressures and threats

See The Wash and North Norfolk Coast SAC and The Wash SPA above.

Conservation objectives

None available.

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

- See The Wash and North Norfolk Coast SAC and The Wash SPA above.
- Ringed plover
 - Habitat preferences Sandy areas with low vegetation, on migration estuaries
 - Diet Summer, invertebrates, Winter primarily marine worms, crustaceans and molluscs.
- Golden plover
 - Habitat preferences Upland, Marine and Intertidal, Farmland, Heathland, Wetland, Grassland
 - Diet Worms, beetles and insects.
- Lapwing
 - Habitat preferences Upland, Marine and Intertidal, Farmland, Wetland, Grassland
 - Diet Worms and insects.

Other comments

None

Appendix C

Screening Assessment

C.1 The sections below detail which types of impacts on Habitats sites could potentially result from each of the policies, policy areas and site allocations in the Regulation 18 Greater Cambridge Local Plan. Where uncertain or likely significant effects are identified, these are required to be considered further via Appropriate Assessment

Development Strategy

Policy S/JH: New jobs and homes

C.2 Likely activities (operation) to result as a consequence of the proposal:

- Yes This policy includes for the provision of at least 48,195 new houses for the total population including for affordable housing and the needs of specific groups. It also includes for the provision of 73,300 additional jobs.
- C.3 Potential impacts if policy is implemented:
 - Physical damage/disturbance (offsite)
 - Non-physical disturbance (offsite)
 - Non-toxic contamination
 - Air pollution
 - Recreational pressure
 - Changes to hydrology, including water quantity and quality.

C.4 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

C.5 Likely activities (operation) to result as a consequence of the proposal:

■ Yes - This policy will deliver new houses and employment land in Greater Cambridge. Some of these will be delivered within new strategic scale allocations such as 8,250 homes at North East Cambridge, 8,000 homes at Cambridge East, 13,000 homes and 120,000m² of employment floorspace at Cambourne and 6,000 homes and 20,000m² of employment floorspace at Grange Farm.

C.6 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (offsite)
- Non-toxic contamination
- Air pollution
- Recreational pressure
- Changes to hydrology, including water quantity and quality.

C.7 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

C.8 Likely activities (operation) to result as a consequence of the proposal:

Yes - This policy sets out the groupings of settlements into categories that reflect their scale, characteristics and sustainability to ensure development is located in the most sustainable places. It then sets out the scale of development proposals coming through planning applications for unallocated (windfall) sites that would be potentially suitable in each category of settlement.

C.9 Potential impacts if policy is implemented:

Physical damage/disturbance (offsite)

- Non-physical disturbance (offsite)
- Non-toxic contamination
- Air pollution
- Recreational pressure
- Changes to hydrology, including water quantity and quality.

C.10 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – sets out the scale and location of housing development coming through as site allocations in the Local Plan and through windfall development and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution, recreation and water abstraction/treatment.

Policy S/DE: Defined Development Extents

C.11 Likely activities (operation) to result as a consequence of the proposal:

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

C.12 Potential impacts if policy is implemented:

■ N/A

C.13 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development.

Policy S/GB: The Cambridge Green Belt

C.14 Likely activities (operation) to result as a consequence of the proposal:

No - This policy sets out the specific purposes of the Cambridge Green Belt and provides a framework for consideration of any development proposals within the Green Belt.

C.15 Potential impacts if policy is implemented:

N/A

C.16 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will define and maintain the boundaries of the Green Belt in Greater Cambridge. It will not directly lead to development.

Policy S/MO: Monitoring

C.17 Likely activities (operation) to result as a consequence of the proposal:

■ No - This policy sets out the Councils' approach to monitoring the performance of the other policies and allocations included within the Plan.

C.18 Potential impacts if policy is implemented:

■ N/A

C.19 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy focuses on assessing compliance with other policies and allocations in the Local Plan and will not directly lead to development.

Theme 1: Climate Change

Policy CC/SD: Sustainable Development and the Climate Emergency

C.20 Likely activities (operation) to result as a consequence of the proposal:

No - This policy sets out the Sustainability Statement requirements for development in Greater Cambridge. Sustainability Statements provide an important mechanism through which planning applications can demonstrate compliance with policies on sustainability and addressing the climate challenge in the Local Plan.

C.21 Potential impacts if policy is implemented:

N/A

C.22 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will ensure planning applications for developments have appropriately considered ways to mitigate and adapt to climate change. This will provide mitigation for some of the negative effects associated with development.

Policy CC/NZ: Net zero carbon new buildings

C.23 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 considered.

C.24 Potential impacts if policy is implemented:

■ N/A

C.25 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 associated with new buildings.

Policy CC/DC: Designing for a Changing Climate

C.26 Likely activities (operation) to result as a consequence of the proposal:

■ No - This policy will set out how developments should take account of our changing climate and how design and placemaking can be used to help address the challenge of climate change, including overheating.

C.27 Potential impacts if policy is implemented:

N/A

C.28 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will ensure planning applications for developments have appropriately considered ways to mitigate and adapt to climate change.

Policy CC/WE: Water efficiency in new developments

C.29 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, responding to the water supply pressures facing Greater Cambridge and the need to protect the water environment.

C.30 Potential impacts if policy is implemented:

■ N/A

C.31 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/IW: Integrated Water Management, Sustainable **Drainage and Water Quality**

C.32 Likely activities (operation) to result as a consequence of the proposal:

No - This policy establishes how water management should be considered in a holistic and integrated way in new developments.

C.33 Potential impacts if policy is implemented:

■ N/A

C.34 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will ensure all development proposals adopt an integrated approach to water management, which considers water efficiency, sustainable drainage, water quality, flood risk and biodiversity. This will mitigate the potential effects of development on water quality through design such as Sustainable Drainage Systems (SuDS).

Policy CC/FM: Flood Risk Management

C.35 Likely activities (operation) to result as a consequence of the proposal:

No - This policy establishes how flood risk from all sources will be avoided and managed when planning new developments.

C.36 Potential impacts if policy is implemented:

- N/A
- C.37 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?
 - No This policy will ensure that all the flood risk of developments will be managed using the sequential, risk-based approach set out in the National Planning Policy Framework.

Policy CC/RE: Renewable and Infrastructure

- **C.38** Likely activities (operation) to result as a consequence of the proposal:
 - No This policy provides requirements for the development of renewable and low-carbon energy infrastructure. It also allocates a strategic district heating zone in Cambridge city centre, with a requirement for all developments within this zone to connect to this local carbon heat network.
- **C.39** Potential impacts if policy is implemented:
 - N/A
- C.40 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?
 - No This policy will not directly lead to the development of renewable and lowcarbon energy infrastructure. It provides requirements that proposals must align with to ensure that adverse impacts upon the environment and amenity of Greater Cambridge are avoided or adequately mitigated.

Policy CC/CE: Supporting a Circular Economy and Sustainable Resource Use

- C.41 Likely activities (operation) to result as a consequence of the proposal:
 - No This policy will set out how developments across Greater Cambridge should consider and demonstrate circular economy principles including requirements for operational waste management, recycling storage and collection and prioritisation of retrofitting and reusing existing buildings.
- **C.42** Potential impacts if policy is implemented:
 - N/A

C.43 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, reducing embodied carbon emissions and supporting the circular economy. This will help to prevent air and water pollution.

Policy CC/CS: Supporting land-based carbon sequestration and carbon sinks

C.44 Likely activities (operation) to result as a consequence of the proposal:

No - This policy seeks to protect existing carbon sinks, promote the protection of soils during the construction of new developments and maximise the opportunities for carbon sequestration in new developments.

C.45 Potential impacts if policy is implemented:

■ N/A

C.46 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will support the protection of peatland, which acts as a carbon sink. It will also support developments that seek to enhance and create new carbon sinks through the provision of green infrastructure. This will mitigate carbon emissions and air pollution which result from development.

Theme 2: Biodiversity and Green Spaces

Policy BG/BG: Biodiversity and geodiversity

C.47 Likely activities (operation) to result as a consequence of the proposal:

No - This policy controls the biodiversity impacts from development, including the approach to biodiversity net gain (BNG) which requires developers to ensure habitats for wildlife are enhanced and left in a measurably better state than they were in before development. The policy also controls development affecting sites and species of biodiversity and geodiversity importance.

C.48 Potential impacts if policy is implemented:

■ N/A

C.49 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will help support the restoration of biodiversity through development as medium and major developments will have to provide a BNG uplift of 20% and minor developments will have to provide a BNG uplift of 10%. It will also ensure effects on Habitats sites are mitigated through the provision of Strategic Alternative Green Space within developments.

Policy BG/GI: Green and Blue infrastructure

C.50 Likely activities (operation) to result as a consequence of the proposal:

No - This policy sets out green infrastructure provision and green infrastructure design standards for new development to adhere to. The policy also identifies and protects the existing green infrastructure network, and the strategic green infrastructure initiatives intended to enhance the green infrastructure network. This policy requires developments to support the delivery of identified strategic green infrastructure initiatives through either on-site provision or financial contributions.

C.51 Potential impacts if policy is implemented:

■ N/A

C.52 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 Habitats sites that result from housing developments through protecting existing green infrastructure and enhancing it so that Cambridge residents have access to a wide range of multi-functional green and blue spaces.

Policy BG/TC: Improving Tree Canopy Cover and the Tree Population

C.53 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy controls how development impacts tree canopy cover, the tree population, and protected trees and hedgerows.

C.54 Potential impacts if policy is implemented:

■ N/A

C.55 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy seeks to ensure that developments protect existing trees and hedgerows and incorporate significant planting in the design stage of proposals. This will help mitigate climate change and air pollution whilst contributing to biodiversity.

Policy BG/RC: River Corridors

C.56 Likely activities (operation) to result as a consequence of the proposal:

■ No - This policy controls development that has an impact on river corridors in Greater Cambridge, including in particular the River Cam and River Ouse and their tributaries.

C.57 Potential impacts if policy is implemented:

N/A

C.58 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy establishes riparian buffer zones around watercourses to protect them from effects that can arise from development during and post construction.

Policy BG/PO: Protecting open spaces

C.59 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy will address how important open spaces are considered in the planning process and seek to protect them from development.

C.60 Potential impacts if policy is implemented:

N/A

C.61 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 Habitats sites that result from housing developments through protecting existing open space. This includes previously unidentified sites if they qualify under the Council's assessment.

Policy BG/EO: Providing and enhancing open spaces

C.62 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how new development should provide new and enhanced open space to meet the needs it generates.

C.63 Potential impacts if policy is implemented:

■ N/A

C.64 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 Habitats sites that result from housing developments through creating new areas and enhancing existing publicly accessible open space such as children's play spaces, food growing spaces, outdoor sports facilities and country parks.

Theme 3: Wellbeing and Social Inclusion

Policy WS/HD: Creating healthy new developments

C.65 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how new development can support healthy lifestyles and promote the health and wellbeing of residents.

C.66 Potential impacts if policy is implemented:

N/A

C.67 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure development promotes the health and well-being of residents.

Policy WS/CF: Community, Sports, and Leisure Facilities

C.68 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out policy guidelines for proposals that would deliver new community, sports and leisure facilities.

C.69 Potential impacts if policy is implemented:

■ N/A

C.70 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure that new and existing communities have access to community, sports and leisure facilities.

Policy WS/CH: Cultural and Creative Hubs

C.71 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy explains the requirements that need to be satisfied for new cultural / creative hubs and districts in new and existing designated centres.

C.72 Potential impacts if policy is implemented:

■ N/A

C.73 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure new cultural and creative hubs appropriately sit alongside new and existing development.

Policy WS/NC: Meeting the Needs of New and Growing Communities

C.74 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy establishes requirements for the provision and delivery of new facilities to meet the needs generated by new development.

C.75 Potential impacts if policy is implemented:

■ N/A

C.76 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure facilities and services are delivered to support new development.

Policy WS/MU: Meanwhile uses during long term redevelopments

C.77 Likely activities (operation) to result as a consequence of the proposal:

No – This policy sets out how new development can support healthy lifestyles and promote the health and wellbeing of residents.

C.78 Potential impacts if policy is implemented:

■ N/A

C.79 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure temporarily vacant land or spaces within developments will contribute to the local area and community.

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

C.80 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how new development will provide training, employment and supply chain opportunities to local residents and businesses through the creation and implementation of an Employment and Skills Plan.

C.81 Potential impacts if policy is implemented:

N/A

C.82 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy outlines the need for developments to submit and implement an Employment and Skills Plan and will not directly lead to development.

Policy WS/HS: Pollution, health and safety

C.83 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how development should take account of sources of pollution and mitigate them to an acceptable level.

C.84 Potential impacts if policy is implemented:

N/A

C.85 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not lead to development. It should mitigate the effects of development by ensuring that new and existing developments will not significantly contribute to light, noise, vibration, air, water or soil pollution or land instability within Greater Cambridge.

Policy WS/PH: Public houses

C.86 Likely activities (operation) to result as a consequence of the proposal:

No – This policy will control development proposals involving the loss of public houses and support proposals that seek to enhance public house services in Greater Cambridge.

C.87 Potential impacts if policy is implemented:

N/A

C.88 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will protect existing public houses and will not directly lead to development.

Theme 4: Great Places

Policy GP/PP: People and place responsive design

C.89 Likely activities (operation) to result as a consequence of the proposal:

No – This policy sets a strategic vision for achieving high quality design in developments taking place within Greater Cambridge.

C.90 Potential impacts if policy is implemented:

■ N/A

C.91 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure that developments sustain and enhance the unique qualities of their local contexts.

Policy GP/LC: Protection and Enhancement of landscape character

C.92 Likely activities (operation) to result as a consequence of the proposal:

No – This policy sets out how development in Greater Cambridge should protect and enhance landscape character and features. It also sets out the purpose of Important Countryside Frontages which are to be protected from development.

C.93 Potential impacts if policy is implemented:

■ N/A

C.94 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure that the varied and distinctive landscape character of Greater Cambridge is properly considered in planning decisions.

Policy GP/QD: Achieving high quality development

C.95 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the requirements for the design quality to be achieved by new developments, and alterations and extensions to existing development.

C.96 Potential impacts if policy is implemented:

■ N/A

C.97 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

No – This policy will not directly lead to development. It will ensure that existing and new developments are designed effectively to be sustainable and to improve wellbeing, thus mitigating negative effects such as air and light pollution linked to development.

Policy GP/HD: Housing density

C.98 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. It responds to national planning policy which seeks an uplift in densities in accessible areas like town centres or areas well served by public transport.

C.99 Potential impacts if policy is implemented:

N/A

C.100 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It sets out requirements for higher-density development proposals to meet.

Policy GP/ST: Skyline and tall buildings

C.101 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out a criterion to be used to assess any development proposals that seeks to change the skyline or differ from the surrounding built form.

C.102 Potential impacts if policy is implemented:

N/A

C.103 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will seek to maintain and enhance the character and qualities of the skyline in Greater Cambridge.

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

C.104 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy outlines how development proposals are required to deliver high-quality landscape and public realm.

C.105 Potential impacts if policy is implemented:

N/A

C.106 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy does not directly lead to development. It will ensure developments positively contribute to the local public realm. Developments will be required to undertake initiatives such as retaining trees and integrating surface water management which will mitigate negative effects such as air pollution and water pollution often associated with development.

Policy GP/HE: Historic Environment

C.107 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy aims to ensure that development proposals that may affect heritage assets, or their settings, are carefully considered and that the historic context of the area is integrated into new development.

C.108 Potential impacts if policy is implemented:

N/A

C.109 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development but will ensure that development conserves and enhances the historic environment of Greater Cambridge.

Policy GP/HA: Designated Heritage Assets

C.110 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how proposals to alter, extend or change the use of designated heritage assets or development that affects their setting will be assessed.

C.111 Potential impacts if policy is implemented:

■ N/A

C.112 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ultimately prevent alterations that are detrimental to the historical character of buildings and structures.

Policy GP/ND: Non-Designated Heritage Assets

C.113 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how proposals to alter, extend or demolish nondesignated heritage assets will be assessed.

C.114 Potential impacts if policy is implemented:

■ N/A

C.115 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

No - This policy will not directly lead to development. It will ultimately prevent alterations that are detrimental to the historical character of buildings and structures which are non-designated.

Policy GP/AR: Archaeology

C.116 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how proposals that may affect sites of known or potential archaeological importance or interest will be assessed.

C.117 Potential impacts if policy is implemented:

■ N/A

C.118 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure that archaeological sites and remains are safeguarded from being lost or damaged through development.

Policy GP/CC: Adapting heritage assets to climate change

C.119 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy establishes how works to enhance the environmental performance of heritage assets will be balanced against the need to protect and enhance the character and significance of that asset.

C.120 Potential impacts if policy is implemented:

■ N/A

C.121 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will provide mitigation by delivering energy efficiency savings and reducing air pollution whilst retaining the historical value of these buildings.

Policy GP/SF: Shopfronts

C.122 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out requirements for proposals for new shopfronts, signage and security measures, or alterations to existing shopfronts.

C.123 Potential impacts if policy is implemented:

■ N/A

C.124 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure that development does not erode the historic or aesthetic value of the streetscape.

Theme 5: Jobs

Policy J/NE: New employment development proposals

C.125 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy guides where proposals for employment development in urban areas, villages, and in the countryside are acceptable within Greater Cambridge. Specific provision will be made within Established Employment Areas such as Cambourne Business Park and Cambridge Research Park.

C.126 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.127 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development of employment facilities. The effects of this development will depend on where it takes place within Greater Cambridge.

Policy J/RE: Supporting the rural economy

C.128 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the approach to proposals for re-use and replacement of rural buildings, and proposals related to land-based enterprises.

C.129 Potential impacts if policy is implemented:

N/A

C.130 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It outlines what proposals for re-use and replacement of rural buildings and development of new buildings need to demonstrate in order to be accepted.

Policy J/AL: Protecting the best agricultural land

C.131 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how development proposals affecting agricultural land and soils should be considered.

C.132 Potential impacts if policy is implemented:

N/A

C.133 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will seek to protect agricultural land from future development for its economic and environmental value within Greater Cambridge.

Policy J/PB: Protecting existing business space

C.134 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy seeks to protect business space in Greater Cambridge from losses to other uses unless it is justified, including specific protection for Strategic Industrial Areas.

C.135 Potential impacts if policy is implemented:

■ N/A

C.136 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development but seeks to retain existing employment sites and premises. This will reduce the pressure for new employment sites and in turn prevent the negative effects associated with developing these.

Policy J/AW: Affordable workspace and creative industries

C.137 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy seeks affordable workspace to be included in large commercial developments, specifying the size of developments on which affordable workspace will be sought and setting out the ways in which they must be operated and managed.

C.138 Potential impacts if policy is implemented:

■ N/A

C.139 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will ensure developments incorporate affordable workspace into their schemes to address the shortage of these spaces available for small and medium-sized enterprises.

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

C.140 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy supports proposals for shared facilities in employment parks and campuses.

C.141 Potential impacts if policy is implemented:

■ N/A

C.142 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will support the integration of facilities such as outdoor leisure, eating, social and collaboration spaces within employment parks.

Policy J/RC: Retail and other complementary town centre uses

C.143 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy sets out the strategic approach to retail and other main town centre uses in Greater Cambridge's city, towns and villages and sets out the requirement for proposals that would result in the loss of retail other main town centre uses. This includes support for development of new town centres at

Cambourne North, Waterbeach New Town, Northstowe and smaller centres at strategic allocations.

C.144 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.145 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development as it will deliver retail and leisure facilities within Greater Cambridge. The effects of this development will depend on the extent and location, which will be subject to sequential approach.

Policy J/SA: Cambridge City's Primary Shopping Area

C.146 Likely activities (operation) to result as a consequence of the proposal:

■ No – this policy sets out the approach to development within the Primary Shopping Areas designation situated in Cambridge City Centre.

C.147 Potential impacts if policy is implemented:

■ N/A

C.148 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. This policy outlines the uses that are deemed acceptable within the Primary Shopping Area and the criteria with which development will be supported in relation to leisure or other main town centre uses, and those proposals, which require planning permission that will result in a loss/change of any retail or other main town centre use.

Policy J/MS: Markets and street trading

C.149 Likely activities (operation) to result as a consequence of the proposal:

■ No – this policy provides detail in which local markets and street traders will be supported in Designated Centres.

C.150 Potential impacts if policy is implemented:

■ N/A

C.151 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No - This policy will not directly lead to development. This policy outlines that proposals that will seek to protect and enhance the daily market in The Market Square or the arts and crafts market on All Saints Garden will be supported. It also provides detail on where proposals for new markets and street trading with Designated Centres will be supported and how their offer complements rather than competes with permanent retail units.

Policy J/VA: Visitor accommodation, attractions and facilities

C.152 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy sets out 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. This will be focused in areas such as the Cambridge Biomedical Campus, Cambridge East and Cambridge Science Park.

C.153 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.154 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes – This policy will lead to the development of tourist facilities and visitor accommodation such as hotels and guesthouses within Greater Cambridge. Significant effects will take place where the development occurs but also produce more diffuse effects such as recreational pressure and increased water abstraction.

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

C.155 Likely activities (operation) to result as a consequence of the proposal:

Yes – This policy sets out the circumstances when development of new faculty, research, administrative sites, specialist colleges, language schools and medical teaching/hospital facilities (higher education), will be supported, and the requirements that will need to be satisfied.

C.156 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.157 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes – This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield. Specific locations where this development is planned include Mill Lane/Old Press site, New Museums site, Eastern Gate Public Realm Improvement Area and Fitzroy/Burleigh Street/Grafton Area.

Theme 6: Homes

Policy H/AH: Affordable Housing

C.158 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how affordable housing will be delivered on new housing developments, including specifying the size of developments on which affordable homes will be provided and the proportion of affordable homes required, and setting out the tenures of affordable housing required to address identified needs.

C.159 Potential impacts if policy is implemented:

N/A

C.160 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It outlines the provision of affordable housing within new major developments.

Policy H/ES: Exception Sites for Affordable Housing

C.161 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the circumstances in which Rural Exception Sites for affordable housing and First Homes Exception Sites in South Cambridgeshire will be supported.

C.162 Potential impacts if policy is implemented:

N/A

C.163 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

No – This policy will not directly result in development. It outlines the criteria to be applied for planning applications related to affordable housing on Rural Exception Sites and First Homes Exception Sites.

Policy H/HM: Housing Mix

C.164 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the mix of housing to be provided by new development, to ensure that new homes are generally of a size and type that meet the housing needs of different groups in the community.

C.165 Potential impacts if policy is implemented:

■ N/A

C.166 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development but specifies a varied choice, type and mix of housing within developments to help satisfy the range of housing needs within a community.

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

C.167 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out criteria to determine when it will be acceptable in principle for garden land and existing residential plots to be developed for new housing.

C.168 Potential impacts if policy is implemented:

■ N/A

C.169 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It is a criterion to be used for planning applications related to developments on garden land.

Policy H/SS: Residential Space Standards and accessible homes

C.170 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets the required standards for internal spaces within new homes, the proportion of accessible and adaptable dwellings to be provided, and the required standards for external private and shared amenity space.

C.171 Potential impacts if policy is implemented:

N/A

C.172 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It outlines the standards required to create high-quality, inclusive and adaptable internal and external spaces.

Policy H/SH: Specialist Housing

C.173 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy guides proposals for specialist housing designed to support a variety of groups such as older people, disabled people, people with alcohol or drug dependency, those requiring refuge from harassment and violence and looked after children.

C.174 Potential impacts if policy is implemented:

■ N/A

C.175 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It outlines the provision of specialist housing within new residential developments.

Policy H/CB: Self and Custom Build Homes

C.176 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how self and custom build homes will be delivered in Greater Cambridge. This includes specifying the size of developments on which self and custom build homes will be provided, the proportion of self and custom build homes required, where exceptions apply and how specific proposals for self and custom build homes will be assessed.

C.177 Potential impacts if policy is implemented:

N/A

C.178 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It outlines how serviced plots for custom and self-build houses will be allocated within developments, specifying the proportion and criteria to be used.

Policy H/BR: Build to Rent Homes

C.179 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out when and how proposals for Build to Rent homes will be supported.

C.180 Potential impacts if policy is implemented:

N/A

C.181 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It sets out a criterion to support the incorporation of Affordable Private Rent homes within developments.

Policy H /CL: Co-living

C.182 Likely activities (operation) to result as a consequence of the proposal:

■ No – this policy sets the criteria and standards that proposals for all Co-living homes must meet.

C.183 Potential impacts if policy is implemented:

■ N/A

C.184 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No - This policy will not directly result in development. It sets out criterion to support the proposals for Co-living developments.

Policy H/MO: Houses in Multiple Occupation (HMOs)

C.185 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets the criteria and standards that proposals for all houses in multiple occupation (HMOs) that require planning permission (C4 or sui generis) must meet.

C.186 Potential impacts if policy is implemented:

N/A

C.187 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development but just sets the criteria and standards for the planning permission of HMOs.

Policy H/SA: Student Accommodation

C.188 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how and when proposals for new student accommodation for higher education institutions will be supported.

C.189 Potential impacts if policy is implemented:

N/A

C.190 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It outlines the criterion to be used in relation to planning applications for new student accommodation and sets out conditions on what this accommodation should provide.

Policy H/DC: Dwellings in the Countryside

C.191 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the types of residential development that may be acceptable in the countryside outside of defined development extents (previously known as settlement boundaries or development framework boundaries).

C.192 Potential impacts if policy is implemented:

N/A

C.193 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It sets out instances when proposals for residential development in the countryside would be supported.

Policy H/RM: Residential Moorings

C.194 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the criteria to be used when considering proposals for new residential moorings in Cambridge and South Cambridgeshire.

C.195 Potential impacts if policy is implemented:

■ N/A

C.196 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development. It sets out instances when proposals for residential moorings would be supported.

Policy H/GT: Gypsy and Traveller and Travelling Showpeople Plots

C.197 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the requirements for any new Gypsy and Traveller pitches or Travelling Showpeople plots, including specifying where they should be located and how they should be designed.

C.198 Potential impacts if policy is implemented:

N/A

C.199 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It outlines the requirements for proposals for new Gypsy and Traveller pitches or new Travelling Showpeople plots in terms of design.

Theme 7: Infrastructure

Policy I/ST: Sustainable transport and connectivity

C.200 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how the transport impacts of development should be managed, and how new development should be located, designed and connected to the transport network to enable travel by sustainable modes.

C.201 Potential impacts if policy is implemented:

■ N/A

C.202 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 such as walking, cycling and public transport and will ensure new developments give priority to these as well as connecting to existing transport links. This will reduce air pollution and therefore mitigate the effects of development.

Policy I/TH: Travel hub facilities

C.203 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy supports proposals of new travel hub sites and supports the improvements to the quality and attractiveness of existing park and ride sites in order to retain them.

C.204 Potential impacts if policy is implemented:

■ N/A

C.205 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will support planning applications related to new travel hub facilities and existing travel hubs, provided they can demonstrate the need and feasibility for such changes.

Policy I/EV: Parking and electric vehicles

C.206 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.

C.207 Potential impacts if policy is implemented:

N/A

C.208 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 which will reduce air pollution and therefore mitigate the effects of development.

Policy I/SD: Servicing and Last-mile Deliveries

C.209 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how development proposals should include adequate provision for servicing and deliveries. It also establishes the Local Planning Authority's approach to micro-consolidation centres and overnight and long-term lorry parking on industrial and distribution centres.

C.210 Potential impacts if policy is implemented:

N/A

C.211 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy outlines how developments should facilitate safe, clean and efficient deliveries. It will not directly lead to development.

Policy I/SI: Safeguarding important infrastructure

C.212 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the important infrastructure that should be safeguarded from any adverse impacts that may arise from development.

C.213 Potential impacts if policy is implemented:

■ N/A

C.214 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. Instead, it seeks to protect locally and nationally important infrastructure from development proposals that would adversely affect their operation.

Policy I/AD: Aviation development

C.215 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy guides development proposals related to aviation, and sets out in what circumstances, and how, developments should take account of potential impacts on quality of life, amenity, the environment and aviation safety.

C.216 Potential impacts if policy is implemented:

N/A

C.217 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It sets out the criteria against which planning applications for new airfields or flying sites will be assessed.

Policy I/EI: Energy infrastructure masterplanning

C.218 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out requirements for energy infrastructure masterplanning for large scale developments, to help facilitate decarbonisation and make best use of grid infrastructure.

C.219 Potential impacts if policy is implemented:

N/A

C.220 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development but just outlines the need for masterplanning in order to take a more joined up approach to energy infrastructure provision and decarbonisation across Greater Cambridge.

Policy I/ID: Infrastructure and delivery

C.221 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy seeks to ensure there is sufficient infrastructure capacity to support and meet all the requirements arising from the new development, and at the time when they are needed. Developers will be required to deliver infrastructure directly, or fund infrastructure in full or part through financial contributions including Section 106 planning obligations and/or community infrastructure levy or its successor.

C.222 Potential impacts if policy is implemented:

N/A

C.223 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly lead to development. It will ensure that all new developments are serviced by important infrastructure such as schools, libraries, roads, public transport and parks.

Policy I/DT: Digital and Telecommunications Infrastructure

C.224 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out how developments should contribute to Greater Cambridge's access to broadband, telecommunication infrastructure and smart infrastructure.

C.225 Potential impacts if policy is implemented:

■ N/A

C.226 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy will not directly result in development but will ensure that developments will provide high-quality digital connectivity to residents.

Policy I/CM: Construction Management

C.227 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy sets out the construction management details that need to be agreed with the local planning authority prior to the commencement of development in Greater Cambridge to ensure that the environment and residential amenity are properly protected.

C.228 Potential impacts if policy is implemented:

N/A

C.229 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No – This policy seeks to mitigate the negative effects of construction associated with development. In particular, reducing the generation of dust, pollutants and noise, the abstraction of water and the production of waste.

Local Plan – Sites and Policy Areas

Policy S/NEC: North East Cambridge

C.230 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this policy makes provision 182 hectares of mixed-use development, including 8350 homes and 320,000 m² of business floorspace and 27,300 m² of industrial floorspace.

C.231 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.232 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development.

Policy S/LAC: Other site allocations in Cambridge

C.233 Likely activities (operation) to result as a consequence of the proposal:

Yes – this policy makes provision for 13 housing allocations, one employment allocations and 10 mixed-use allocations.

C.234 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.235 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/PA/CC: Cambridge City Centre

C.236 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy outlines the ways in which Cambridge City Centre will maintain and improve its vitality, vibrancy, inclusivity, diversity and viability through development.

C.237 Potential impacts if policy is implemented:

■ N/A

C.238 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No - This policy will not directly result in development but will strive to maintain the vibrancy and uses of Cambridge City Centre.

Policy S/AMC: Areas of Major Change

C.239 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this policy outlines criteria within which development within areas of major change will be supported and includes provision for policy areas of major change, which will be brought forward in the Local Plan.

C.240 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.241 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/PRIA: Public Realm Improvements Areas

C.242 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy outlines criteria within which development within areas of major change will be supported and includes provision for policy areas of major change, which will be brought forward in the Local Plan.

C.243 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.244 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/CE: Cambridge East

C.245 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy makes provision for approximately 8,000 dwellings and a minimum of 20,000m2 B2/B8 employment floorspace alongside other infrastructure to support communities such as schools, food stores and amenity spaces.

C.246 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment

Direct surface water run-off

C.247 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

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

C.248 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this policy will include land allocated for expansion. This will include provision of 1,000 new homes on campus and 530,000 m² of clinical healthcare and hospital facilities.

C.249 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.250 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – this policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development.

Policy S/WC: West Cambridge

C.251 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this policy makes provision for 37,000m² of academic floorspace, 2,500m² of nursery floorspace, 4,000m² of retail/food and drink floorspace, between 3,000 and 4,100m² of assembly and leisure floorspace, 5,700m² of sui generis uses, and associated infrastructure including roads, cycle and pedestrian routes.

C.252 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.253 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – this policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development.

Policy S/NWC: Eddington

C.254 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this will make provision for 5,500 new homes and 100,000 m² of employment space as part of development at Eddington.

C.255 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction

- Increased water treatment
- Direct surface water run-off

C.256 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes – this policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development.

Policy S/HHR: Land between Huntingdon Road and Histon Road (Darwin Green), Cambridge

C.257 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy includes the provision of approximately 2,700 dwellings and a range of services and facilities such as schools and retail units commensurate with a sustainable urban extension of this scale.

C.258 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.259 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/EOC: Other site allocations on the edge of Cambridge

C.260 Likely activities (operation) to result as a consequence of the proposal:

Yes – This policy makes provision for 3 housing allocations and one employment allocation.

C.261 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.262 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/CBN: Cambourne North

C.263 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy includes the provision of approximately 13,000 homes, 108,000 square meters gross internal floor area of employment floorspace, with a range of supporting services and facilities including retail, community, cultural, faith, leisure, education and sports and open space uses. This will also include provision of Strategic Enhancement Areas, which will provide benefits to the landscape and ecology.

C.264 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)

- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.265 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/CB: Cambourne

C.266 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this policy makes provision for 2,720 new homes, 34,600m² of mixed employment floorspace and community, retail and sports provision and associated infrastructure.

C.267 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.268 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/GF: Land adjacent to A11 and A1307 at Grange Farm

- Likely activities (operation) to result as a consequence of the proposal:
- Yes this policy will make provision for 6000 new homes, approximately 20,000m² of local last mile logistics hub/warehousing, 12 gypsy and traveller pitches, local centre, which provides a mix of retail, commercial and community facilities, provisional educational facilities and high quality green space and recreation provision.

C.269 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.270 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/NST: Northstowe

C.271 Likely activities (operation) to result as a consequence of the proposal:

Yes – This policy includes the three housing allocations of Northstowe.

C.272 Potential impacts if policy is implemented:

Physical damage/disturbance (offsite)

- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.273 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to extensive development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/NST: Waterbeach New Town

C.274 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy includes the three housing allocations of Waterbeach New Town. This will also include provision of Strategic Enhancement Areas, which will provide benefits to the landscape and ecology.

C.275 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.276 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes - This policy will directly lead to extensive development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield. This will also include provision of Strategic Enhancement Areas, which will provide benefits to the landscape and ecology.

Policy S/NST: Bourn Airfield New Village

C.277 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy includes the three housing allocations of Bourn Airfield New Village. This will also include provision of Strategic Enhancement Areas, which will provide benefits to the landscape and ecology.

C.278 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.279 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes - This policy will directly lead to extensive development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield. This will also include provision of Strategic Enhancement Areas, which will provide benefits to the landscape and ecology.

Policy S/RSC/WGC: Wellcome Genome Campus, Hinxton

C.280 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy includes the provision of 127,5000 square meters of employment space, 1,500 homes and associated uses including retail, leisure and conference spaces within the existing campus...

C.281 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.282 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/RSC/BRC: Babraham Research Campus

C.283 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – this policy will make provision for 48,000m² of gross internal floor area of additional research and development floorspace, 120 additional Campus worker and affordable house and up to 430m² of additional nursery floorspace, 500m² of retail space and 3.5ha of amenity space. This will also include provision of Strategic Enhancement Areas, which will provide benefits to the landscape and ecology.

C.284 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution

- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.285 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/RSC: Other site allocations in the Rural Southern Cluster

C.286 Likely activities (operation) to result as a consequence of the proposal:

Yes – This policy makes provision for three housing allocations and two employment allocations.

C.287 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.288 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/SCP: Policy Areas in the Rural Southern Cluster

C.289 Likely activities (operation) to result as a consequence of the proposal:

■ No – this policy outlines the requirements by which development will or will not be supported within S/PA/WHD Whittlesford Parkway Station Area, S/AMC/GP: Granta Park, S/PA/LN: South of A1307, Linton

C.290 Potential impacts if policy is implemented:

N/A

C.291 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ No - This policy will not directly lead to development but aims to guide development at these sites and/or to protect areas from windfall residential development.

Policy S/RRA: Site Allocations in the Rest of the Rural Area

C.292 Likely activities (operation) to result as a consequence of the proposal:

■ Yes – This policy makes provision for two housing allocations, seven employment allocations and two mixed-use allocations.

C.293 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.294 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

Yes - This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Policy S/RRP: Policy Areas in the Rest of the Rural Area

C.295 Likely activities (operation) to result as a consequence of the proposal:

■ No – This policy outlines requirements for the redevelopment of Papworth Everard West Central, Imperial War Museum at Duxford and Papworth Hospital.

C.296 Potential impacts if policy is implemented:

N/A

C.297 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

No - This policy will not directly lead to development but aims to guide redevelopment at these sites to reinvigorate them.

Policy S/RRP: S/SHF: Land at Slate Hall Farm, Bar Hall

C.298 Likely activities (operation) to result as a consequence of the proposal:

Yes – This policy makes provision for 111.3ha of new employment land .

C.299 Potential impacts if policy is implemented:

- Physical damage/disturbance (offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

C.300 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

■ Yes – This policy will directly lead to development within Greater Cambridge and thus has the potential to lead to significant effects at the location of the development and further afield.

Appendix D

Assessment of site allocations for suitability for barbastelle bats of Eversden and Wimpole Woods SAC

Method

D.1 All site allocations and policy areas within 10.5 kilometres of Eversden and Wimpole Woods SAC have been subject to a detailed assessment to determine their suitability support this qualifying species.

D.2 This assessment was informed by desk-based review involving:

- 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 Habitats site.

D.3 Each site and policy area was then assigned a classification based on the criteria below:

High Habitat Suitability

Description

D.4 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.

D.5 Within 6 kilometres Core Sustenance Zone of the SAC.

Moderate Habitat Suitability

Description

D.6 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.

D.7 Within 10 kilometres Sustenance Zone of the SAC.

Low Habitat Suitability

Description

D.8 Poorer quality habitat such as arable fields or amenity grassland with some connectivity to other suitable poorer quality habitat.

D.9 Within 10 kilometres Sustenance Zone of the SAC.

Negligible Habitat Suitability

Description

D.10 Unsuitable habitats such as built environments and developed land. Within 10 kilometres Sustenance Zone of the SAC.

Suitability of Site Allocations for Barbastelle Bats of Eversden and Wimpole Woods SAC

Site Allocations

S/RRA/SNR: Land to the north of St Neots Road, Dry Drayton

Review of Site Parameters

■ Distance from Habitats site: 6.32 kilometres north

- Size:4.62 hectares
- Habitats Present: Arable field next to A428 road.
- Functional Connectivity: The land allocation is of low suitability but is bordered by scrub in the north which provides some connectivity to the balancing pond located to the east of the site which could be used for foraging.

Assessment of Suitability for Barbastelle Bats

Low

S/BA: Bourn Airfield New Village

Review of Site Parameters

- Distance from Habitats site: 4.9 kilometres north
- Size: 171.81 hectares
- Habitats Present: Predominantly arable fields with hardstanding runways and several buildings. A small patch of deciduous woodland is present in the centre of the site which has the potential to support roosting bats and a drain of standing water and several hedgerows have the potential to offer commuting and foraging opportunities.
- Functional Connectivity: The hedgerows provide connectivity to a larger patch of high-quality, deciduous woodland called Bucket Hill Plantation woodland situated to the south of the site which has been recorded to offer significant foraging and roosting opportunities to barbastelle bats [See reference 68]. In addition, the Site sits within the 6 kilometres Core Sustenance Zone of the SAC.

Assessment of Suitability for Barbastelle Bats

Moderate

S/RRA/CR: Land to the west of Cambridge Road, Melbourn

Review of Site Parameters

- Distance from Habitats site: 7.88 kilometres south east
- Size: 6.65 hectares

- 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

S/RRA/H: Land at Highfields (phase 2), Caldecote

Review of Site Parameters

- Distance from Habitats site: 5.46 kilometres north
- Size: 6.04 hectares
- Habitats Present: The land consisted of developed land, a small pond and grassland surrounded by hedgerows and woodland.
- Functional Connectivity: The site is of negligible value for barbastelle bats. However, the adjacent habitats such as Waters Woods were considered of moderate value given the proximity to site.

Assessment of Suitability for Barbastelle Bats

Low

S/RRA/CRH: Land adjacent to Cambridge Road (A10) and Mill Lane, Hauxton

Review of Site Parameters

- Distance from Habitats site: 8.19 kilometres east
- Size: 0.40 hectares
- Habitats Present: Composed of hard standing. The site is in close proximity to the River Cam, which is likely to support commuting and foraging bats. Built environment.

■ Functional Connectivity: The site itself does not provide functional connectivity, however, the River Cam in close proximity may be used as a commuting route by bats.

Assessment of Suitability for Barbastelle Bats

Negligible

S/CBN: Cambourne North

Review of Site Parameters

- Distance from Habitats site: 6.36 kilometres north
- Size: 693 hectares
- Habitats Present: The land is predominantly arable, comprised of numerous large fields which offer negligible habitat to barbastelle bats. The fields are, however, bordered by hedgerows and drainage ditches offering commuting opportunities and there are several small patches of deciduous woodland and water bodies scattered around the site that offer foraging opportunities.
- Functional Connectivity: Connectivity provided by hedgerows and drainage ditches to larger parcels of high-quality, deciduous woodland such as Elsworth Wood which offer greater roosting and foraging opportunities than the dominant arable land.

Assessment of Suitability for Barbastelle Bats

■ Moderate (Assessed using a precautionary approach, as site allocation is only just outside the 6 kilometres Core Sustenance Zone and is in very close proximity to high-quality, deciduous woodland habitat).

S/RRA/ML: The Moor, Moor Lane, Melbourn

Review of Site Parameters

- Distance from Habitats site: 7.6 kilometres
- Size: 1.08 hectares
- Habitats Present: The land consists of 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

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Report produced by LUC

Bristol

12th Floor, Beacon Tower, Colston Street, Bristol BS1 4XE 0117 389 0700 bristol@landuse.co.uk

Cardiff

Room 1.12, 1st Floor, Brunel House, 2 Fitzalan Rd, Cardiff CF24 0EB 0292 254 0920 cardiff@landuse.co.uk

Edinburgh

Atholl Exchange, 6 Canning Street, Edinburgh EH3 8EG 0131 326 0900 edinburgh@landuse.co.uk

Glasgow

37 Otago Street, Glasgow G12 8JJ 0141 403 0900 glasgow@landuse.co.uk

London

250 Waterloo Road, London SE1 8RD 020 7199 5801 london@landuse.co.uk

Manchester

4th Floor, 57 Hilton Street, Manchester M1 2EJ 0161 802 2800 manchester@landuse.co.uk

Sheffield

32 Eyre Street, Sheffield, S1 4QZ 0114 392 2366 sheffield@landuse.co.uk

landuse.co.uk

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