Habitats Regulations Assessment of Greater Cambridge Local Plan

Local Plan Regulation 19 Consultation

Cambridge City Council & South Cambridgeshire District Council

Final report

Prepared by LUC

November 2026

Version	Status	Prepared	Checked	Approved	Date
1	Draft report for Regulation 19	E Blackman, C Collins, R Turner, K Sydney	K Sydney	T Livingston	27.05.2026
2	Updated draft report	E Blackman, C Collins, R Turner, K Sydney	K Sydney	T Livingston	08.06.2026
3	Final draft report	E Blackman, C Collins, R Turner, K Sydney	K Sydney	T Livingston	24.06.2026
4	Final report	E Blackman, C Collins, R Turner, K Sydney	K Sydney	T Livingston	23.07.2026
5	Revised Final report (to incorporate Air Quality Assessment and amendments reflecting Reg. 19 representations)	E Eales, E Mayhead, K Sydney, T Livingston	T Livingston	T Livingston	06.11.2026

EMS566057 FS566056 OHS627041

Land Use Consultants Limited
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Executive Summary

A Habitats Regulations Assessment (HRA) has been undertaken throughout the development of the Greater Cambridge Local Plan to assess whether it will have adverse impacts on designated wildlife sites. The type of designated sites relevant to HRA are: Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites; these are referred to as 'Habitats sites'. This HRA report assesses the current 'Regulation 19' version of the plan.

The HRA has been updated for the 'Regulation 22' stage of the Local Plan (submission for Examination) to incorporate the findings of the air quality assessment; and responds, where appropriate, to comments received from consultees on the Regulation 19 version of the HRA. The main changes are:

- The air quality assessment (vehicle emissions) has been completed and presented in full in Appendix F, with conclusions incorporated into Chapter 5.
- Further details have been provided of how in-combination effects have been considered (Chapters 3-5), particularly in relation to impacts on habitats used by bats from Eversden and Wimpole Woods SAC.
- Additional evidence has been provided to support the assessment of water quantity and quality, in relation to flooding (Chapters 4 and 5).
- The record of consultation (Appendix G) has been updated to reflect comments received during the Regulation 19 Local Plan consultation and other recent comments from consultees.
- Conclusions have been updated to reflect the above.
- Minor errors and typos have been corrected.

The overall purpose of the HRA is to determine whether or not the Local Plan would adversely affect the ecological integrity of any Habitats sites. This means considering whether the plan could prevent those sites from meeting their conservation objectives (which generally relate to maintaining or restoring the extent, distribution, function and population of the qualifying habitats and species). The HRA has involved the following key stages:

- HRA Screening: considers whether, without mitigation, the Local Plan is likely to have significant effects on Habitats sites either alone or in combination with other plans or projects. Where effects are unlikely, no further assessment is needed. Where effects are judged likely, or there is

not enough information to prove otherwise, the assessment proceeds to Appropriate Assessment.

- Appropriate Assessment: considers the impacts of the Local Plan in view of the conservation objectives of the Habitats sites and taking into account any mitigation, for example safeguards required or secured by Local Plan policies. Where impacts could affect the features for which the sites are protected and have an overall adverse effect on the site's integrity, this stage identifies how these effects will be avoided or reduced.

Habitats sites considered

The HRA uses a distance of 15km from the Local Plan area (Greater Cambridge, i.e. Cambridge City, and South Cambridgeshire district) as an initial distance to identify Habitats sites that could be affected by the plan. However, where there are Habitats sites beyond this distance that could be affected by the plan, they are also taken into consideration. The Habitats sites included in the HRA are:

- Eversden and Wimpole Woods SAC, which is within the Greater Cambridge area;
- Ouse Washes SAC, SPA and Ramsar site, adjacent to the north of Greater Cambridge;
- Portholme SAC, around 4 kilometres to the north west;
- Devil's Dyke SAC, around 5.8 kilometres to the north east;
- Fenland SAC, around 1 kilometre to the north east;
- Wicken Fen Ramsar site, around 1 kilometre to the north east;
- Chippenham Fen Ramsar site, around 10.3 kilometres to the north east;
- Breckland SPA and SAC, around 20.5 kilometres and 15.1 kilometres to the north east respectively; and
- The Wash and North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar site, around 52 kilometres to the north.

The HRA also considered habitats outside the boundaries of Habitats sites where these habitats may support mobile species (e.g. bats, birds or fish) for which the sites are protected. This is known as 'functionally linked habitat' and may provide offsite movement corridors or habitat for feeding or sheltering. Functionally linked habitats have been considered in relation to:

- barbastelle bats linked to Eversden and Wimpole Woods SAC;
- spined loach linked to Ouse Washes SAC and Fenland SAC;
- great crested newt linked to Fenland SAC; and
- wetland birds linked to Ouse Washes SPA and Ramsar site.

Screening findings

The screening identified that some policies could lead to likely significant effects and therefore needed further assessment. These included policies that set the overall amount and location of new homes, jobs, employment land, transport infrastructure, renewable energy development, visitor facilities, retail uses, and other forms of development. Site-specific and area-based policies were also screened in because they define where development may take place and the scale of that development.

The Screening found that these policies could potentially affect Habitats sites in several ways, without mitigation:

- Physical damage or loss of habitat onsite:
  - Eversden and Wimpole Woods SAC (due to precautionary assessment of possible windfall development arising from the Local Plan alone)
- Physical damage or loss of functionally linked habitats associated with:
  - Eversden and Wimpole Woods SAC (due to Local Plan alone, although potential for in combination effects with East West Rail is also noted and addressed in the Appropriate Assessment)
  - Ouse Washes SAC (due to Local Plan alone)
  - Ouse Washes SPA and Ramsar (due to Local Plan in combination with other plans resulting in residential development in the functionally linked habitats buffer, e.g. East Cambridgeshire and Fenland Local Plan)
  - Fenland SAC (due to Local Plan alone)
- Non-physical disturbance of habitat onsite:
  - Eversden and Wimpole Woods SAC (due to precautionary assessment of possible windfall development arising from the Local Plan alone)
- Non-physical disturbance at functionally linked habitats associated with:

  - Eversden and Wimpole Woods SAC (due to Local Plan alone, although potential for in-combination effects with East West Rail is also noted and addressed in the Appropriate Assessment)
  - Ouse Washes SAC (due to Local Plan alone)
  - Ouse Washes SPA and Ramsar (due to Local Plan in combination with other plans resulting in residential development in the functionally linked habitats buffer, e.g. East Cambridgeshire and Fenland Local Plan)
  - Fenland SAC (due to Local Plan alone)
- Air pollution from traffic at:
  - Portholme SAC (in combination with growth planned in neighbouring authorities only)
  - Devil's Dyke SAC (from growth in the Local Plan alone for some roads and in combination with growth planned in neighbouring authorities for other roads)
  - Ouse Washes SAC, SPA and Ramsar (from growth in the Local Plan alone for some roads and in combination with growth planned in neighbouring authorities for other roads)
- Air pollution from aviation and industry due to proposals in Local Plan in combination with other plans or projects across a wider area, affecting:
  - Portholme SAC
  - Devil's Dyke SAC
  - Ouse Washes Ramsar
  - Chippenham Fen Ramsar
  - Wicken Fen Ramsar
  - Fenland SAC
- Dust and sediment impacts on:
  - Ouse Washes SAC, SPA and Ramsar (due to Local Plan alone).
- Recreation pressure at:
  - Wicken Fen Ramsar (due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, e.g. East Cambridgeshire Local Plan or West Suffolk Local Plan)

  - Fenland SAC (due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, e.g. East Cambridgeshire Local Plan)
  - Eversden and Wimpole Woods SAC (due to the Local Plan alone, as the majority of the zone of influence is within the plan area)
  - Breckland SAC and SPA (due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, e.g. East Cambridgeshire and West Suffolk Local Plans)
- Changes to water quantity affecting:
  - Portholme SAC, Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC (due to the Local Plan in combination with other plans and projects in the Cambridge Water area of supply e.g. Huntingdonshire Local Plan, and the wider East Anglia region)
- Changes to water quality from wastewater treatment and discharge onsite and at functionally linked habitats of:
  - Ouse Washes SAC, SPA and Ramsar site, Portholme SAC, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site (due to the Local Plan in combination with other plans and projects utilising wastewater treatment works in the Cam or Great Ouse catchments], e.g. Huntingdonshire and East Cambridgeshire Local Plan)
- Changes to water quality from direct pollution/run-off at:
  - Ouse Washes SAC, SPA and Ramsar and functionally linked habitats (due to Local Plan alone).

These issues were therefore taken forward for more detailed assessment in the Appropriate Assessment.

Appropriate Assessment findings

The Appropriate Assessment considers whether the likely significant effects identified could lead to adverse effects on the integrity of protected Habitats sites, taking account of mitigation and avoidance measures. This includes consideration of the effects of the Local Plan alone and, where relevant, in combination with the effect of development proposed in other plans and projects, such as neighbouring Local Plans and infrastructure proposals such as East West Rail.

For most impact pathways, adverse effects on the integrity of Habitats Sites were ruled out because the Local Plan includes appropriate safeguards within its policies. This includes effects relating to physical damage or habitat loss, non-physical disturbance, dust and sediment, recreation pressure, and direct pollution.

The principal policy within the Local Plan that prevents adverse effects on the integrity of Habitats sites is Policy BG/BG: Biodiversity and geodiversity, which provides general protection for Habitats sites. There are also policies which provide safeguards relating to a specific impact pathway, for example Policy CC/WE, which provides additional safeguards in relation to water use. Adverse effects were also ruled out for aviation and industrial emissions, and for water quantity and quality (wastewater), because these issues are controlled through separate regulatory regimes, including emissions permitting and abstraction licensing.

Since the Regulation 19 HRA was published, an air quality assessment has been carried out. The air quality modelling and Appropriate Assessment of its findings is appended to this report. The assessment has concluded that there would be no adverse effects on the integrity of the assessed sites due to air pollution from vehicles (at Portholme SAC, Ouse Washes SAC, SPA and Ramsar site, and Devil's Dyke SAC).

The HRA was published in August 2026 for consultation alongside the Regulation 19 version of the Local Plan. It has since been updated to include the findings of the air quality assessment, and to address representations made during the Regulation 19 consultation.

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 19 version of the Local Plan and should be read in conjunction with that document. The HRA report was published in August 2026 for consultation alongside the Regulation 19 version of the Local Plan. HRA is an iterative process, and it has since been updated in this October 2026 version for the 'Regulation 22' stage of the Local Plan (submission for Examination) to include the findings of the air quality assessment, and to address representations made during the Regulation 19 consultation. The main changes are:

- The air quality assessment (vehicle emissions) has been completed and presented in full in Appendix F, with conclusions incorporated into Chapter 5.
- Further details have been provided of how in-combination effects have been considered (Chapters 3-5), particularly in relation to impacts on habitats used by bats from Eversden and Wimpole Woods SAC. .
- Additional evidence has been provided to support the assessment of water quantity and quality, in relation to flooding (Chapters 4 and 5).
- The record of consultation (Appendix G) has been updated to reflect comments received during the Regulation 19 Local Plan consultation and other recent comments from consultees.
- Conclusions have been updated to reflect the above.
- Minor errors and typos have been corrected.

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 the Cambridge Local Plan (2018), the South Cambridgeshire Local Plan (2018) and a number of existing Area Action Plans **[See reference 1]**.

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 2]**; the currently applicable version is the Habitats Regulations 2017 **[See reference 3]**, 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 4]** 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 1.12). The requirement for authorities to comply with the Habitats Regulations when preparing a plan is also noted in the Government's online Planning Practice Guidance **[See reference 5]** (PPG).

1.6 HRA refers to the assessment of the potential effects of a development plan on one or more sites afforded the highest level of protection in the UK: Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). These were classified under European Union (EU) legislation but, since 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 6]** 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 7]**), 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 8]** and Ramsar sites (international designated under the Ramsar Convention). However, a Government Policy Paper **[See reference 9]** on changes to the Habitats Regulations 2017 post-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 10]** 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 11]** and practice guidance **[See reference 12]** currently still state that competent authorities responsible for carrying

out HRA should treat Ramsar sites in the same way as SACs and SPAs. 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 13 and 14]**. 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 15]**.
- Review of other plans and projects.
- Assessment of likely significant effects of the development plan alone or in combination with other plans and projects, prior to consideration of avoidance or reduction (‘mitigation’) measures. 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 16]**).
- 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 Habitats 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. Appendix G presents a record of consultation undertaken in the preparation of this HRA and how consultation comments have been addressed.

Case law

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 19 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 19 version of the GCLP, which is the subject of this report. For the Regulation 22 update to the HRA, additional information has been provided to support the assessment, but the policies and site allocations assessed remain as set out in the Regulation 19 plan.

Vision

2.2 The Regulation 19 version of the GCLP presents an overall vision for Greater Cambridge as follows:

> "Greater Cambridge in 2045 and beyond will be a place where a big decrease in our climate and environmental impacts comes 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 19 version of the GCLP 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 reduce 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 risk, including the longer term risk of 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.

- 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.
- Great places: Sustain the unique character and identities of Cambridge and South Cambridgeshire, and complement it with well-designed and distinctive development, creating a place where people want to live, work, visit and play.
- 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, research and innovation.
- Homes: Plan for enough housing to meet our needs, including significant quantities of housing that is affordable to rent and buy, and different kinds of homes to suit our diverse communities.
- 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 19 version of the GCLP sets out policies which will be used to guide and support development within Greater Cambridge.. In total, there are 159 policies within the Regulation 19 version of the GCLP covering the development strategy, site allocations, policy areas and development management policies.

Site allocations and policy areas

2.5 The Regulation 19 version of the GCLP includes site allocations, which are land parcels where small, medium, and large housing and employment developments are proposed to take place within the Greater Cambridge boundary. There are also Policy areas in the Local Plan which include Areas of Major Change (AMC), Strategic Enhancement Areas (SEA) which are included within some of the site policies, and Public Realm Improvement Areas (PRIAs). Strategic Industrial Estates have also been identified as suitable for continued development industrial and warehousing uses and are protected from other uses. These are existing employment areas, which will be carried forward as part of this Local Plan.

2.6 Some of the site allocations have also been carried forward from the previous plan and have planning permission. In some cases, the development that could come forward due to the GCLP site allocation might differ from the existing planning permission. These have therefore been assessed on the basis of the GCLP site allocation policies, in the same way as the new sites allocated in the GCLP.

2.7 The distribution of site allocations and policy areas in Greater Cambridge is shown on **Figure 1 in Appendix A** and the site allocations assessed in the HRA (including those with planning permission) are listed in **Appendix C**.

2.8 In addition to development at allocated sites and other defined areas, the plan makes allowance for windfall housing development. Policy S/DS: Development Strategy identifies that some of the development needs will be met at smaller windfall development sites within the Cambridge urban area and rural settlements. Policy S/SH sets out the scale of windfall sites that would potentially be suitable in line with the settlement hierarchy and provided that adequate services, facilities and infrastructure are available or can be made available.

2.9 . Policy S/DE: Defined Development Extents states that:

> Outside defined development extents, development will not be permitted except for:
>
> - a. allocations within Made Neighbourhood Plans;
> - b. Rural Exception sites meeting local need for affordable housing;
> - c. development for agriculture, horticulture, forestry, outdoor recreation and other uses which need to be located in the countryside; or
> - d. where development is supported by other policies in this plan."

2.10 Policy S/DS: Development Strategy permits windfall development within rural settlements, where development is consistent with local service provision, and in line with the settlement hierarchy (Policy S/SH).

2.11 Other policies that could result in development outside defined development extent in specific circumstances include:

- Policy H/ES: Exception sites for affordable housing;
- Policy H/DC: Dwellings in the countryside;
- Policy H/RM: Residential moorings;
- Policy H/GT: Gypsy and Traveller and Travelling Showpeople sites;

- Policy J/NE: New employment development proposals;
- Policy J/RE: Supporting the rural economy; and
- Policy I/MH: Mobility hub facilities.

Chapter 3
Method

3.1 This chapter describes the methodology that is being used for the HRA of the GCLP. 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 downstream of the River Great Ouse which receives water from catchments and wastewater treatment works serving Greater Cambridge, and as such may be impacted by changes in water quantity and quality.
- Breckland SAC and SPA, which are c.20.5 kilometres and 15.1 kilometres to the north east, respectively. Survey work **[See reference** 17**]** has established that visitors to Breckland SAC/SPA travelling from within 26.3 kilometres from the site, could result in significant effects from recreation pressure.

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 18]**. 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 on **Figure 2 in Appendix A**. Detailed information about each Habitats site is provided in **Appendix B**, described with reference to Standard Data Forms for the SPAs and SACs, and Natural England's Site Improvement Plans **[See reference**

19]. Natural England's conservation objectives **[See reference** 20**]** for the SPAs and SACs have also been reviewed. These state that site integrity must be maintained or restored by maintaining or restoring the habitats of qualifying features, the supporting processes on which they rely, and populations of qualifying species.

Table 3.1: Habitats sites within 15 kilometres of Greater Cambridge District Boundary and additional more distant Habitats sites included in this HRA

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 kilometre / north east
Ouse Washes SPA	Adjacent to north
Ouse Washes Ramsar Site	Adjacent to north
Wicken Fen Ramsar Site	1 kilometre / north east
Chippenham Fen Ramsar Site	10.3 kilometres / north east
Breckland SPA	15.1 kilometres / north east
Breckland SAC	20.5 kilometres / 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

Functionally linked habitats

3.9 Impacts from development in areas outside of the Habitats site boundaries may also result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the Habitats site is designated for. This includes land that may provide offsite movement corridors or foraging and sheltering habitat for mobile species such as birds, bats 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 are:

- Chippenham Fen Ramsar – invertebrates.
- Eversden and Wimpole Woods SAC - mammals.

- Fenland SAC – fish and amphibians.
- Ouse Washes SAC - fish.
- Ouse Washes SPA and Ramsar site - birds.
- The Wash and North Norfolk Coast SAC – mammals.
- The Wash SPA and Ramsar – birds.

Invertebrates

3.10 Chippenham Fen Ramsar is designated for many rare and scarce invertebrates characteristic of ancient fenland. Priority habitat mapping **[See reference** 21**]** shows that there is no other lowland fen habitat near to the SAC (the nearest is >5 kilometres away); it is therefore unlikely that the Ramsar invertebrates make significant use of off-site habitats. Invertebrates are therefore not considered in relation to functionally linked habitats.

Amphibians

3.11 Fenland SAC is designated for great crested newts. Great crested newt typically inhabits the land within 500m of their breeding ponds and are known **[See reference** 22**]** to travel up to 1.3 kilometres from their breeding ponds. Newts make use of a broad range of habitats around ponds, including pastoral / arable farmland, woodland, scrub and grassland **[See reference** 23**]**.

3.12 Impacts on functionally linked habitats (habitats within 1.3 kilometres of the SAC) could therefore impact upon the qualifying species.

Fish

3.13 Ouse Washes SAC and Fenland SAC are designated for spined loach. This species occurs patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches; and may make use of waterbodies connected to the SACs.

3.14 The supplementary advice for conservation objectives for Fenland SAC states that:

> Spined loach populations within the SAC may be dependent on the integrity of sections of river channel and riparian areas that lie outside of the site boundary.

Headwater areas and tributaries may not fall within the site boundary, yet spined loach may use these areas for spawning and juvenile development and be critical for sustaining populations within the site.

It is possible that spined loach also inhabit the field drains within Wicken Fen at lower densities, but these haven't been surveyed. A density of 0.15 individuals per m^2 has been found in Reach Lode, outside the designated site boundary (Perrow and Jowitt 1998). It should be assumed that there may be spined loach in any of the good quality lodes within the Wicken Vision [management plan] area.

3.15 Impacts on functionally linked habitats (waterbodies connected to these SACs) could therefore impact upon the qualifying species.

Birds

3.16 Ouse Washes SPA & Ramsar and The Wash SPA & Ramsar are designated for a number of wetland bird species.

3.17 Based on our experience of HRAs elsewhere in the country, many bird species utilise functionally linked habitats within a core area of 2 kilometres from their primary habitats (i.e. the habitats for which the SPA/Ramsar sites are designated). For certain species a wider area is utilised, for example:

- Some swans and geese e.g. pink footed geese, which make use of habitats within 20 kilometres; and whooper swan, which make use of habitats within 10 kilometres;
- Terns - common tern forage up to 30 kilometres and little tern forage to 5 kilometres; and
- Golden plover and lapwing, which make use of habitats within 15 kilometres.

3.18 For the majority of the species for which the Ouse Washes SPA/Ramsar are designated, a buffer of 2 kilometres is appropriate. The exceptions are the SPA's two qualifying swan species (Bewick's swan and whooper swan), for which Natural England have advised that 10 kilometres is appropriate (see Appendix G). Functionally linked habitats for these species comprises open arable fields, which the swans feed at. The SPA/Ramsar's other qualifying species make use of a range of off-site habitats such as grassland, farmland, and various wetland habitats (as set out in Appendix B). Impacts on functionally linked habitats (arable fields within 10 kilometres or fields/grassland/wetland within 2 kilometres) could therefore impact upon the qualifying species of Ouse Washes SPA/Ramsar.

3.19 The Wash SPA/Ramsar is 52 kilometres from the plan area and has been scoped in in relation to water quality/quantity impacts only. There are no additional impacts on functionally linked habitats for this site that need to be considered.

Mammals

3.20 Eversden and Wimpole Woods SAC is designated for barbastelle bats; and The Wash and Norfolk Coast SAC is designated for harbour seal and otter.

3.21 Recent work by Natural England **[See reference** 24**]** related to the establishment of SSSI impact risk zones (IRZs) has established the distance from Eversden and Wimpole Woods SAC that functionally linked habitats used by barbastelle could occur. This is referred to as the Bat Consultation Area and comprises two zones:

- Core sustenance zone: up to 6 kilometres from the SAC boundary; and
- Landscape connectivity zone: extends from 6 kilometres to 10.2 kilometres from the SAC boundary.

3.22 The two consultation zones reflect the densities at which barbastelles originating from the SAC are likely to be encountered, and the relative importance of habitats to the SAC bats with increasing distance from the maternity roosts within the SAC. The current draft document states that:

> "Within the Core Sustenance Zone, if the proposal is within 50m of the Eversden and Wimpole Woods SAC, a significant effect upon the SAC is likely and the decision maker must consult Natural England regardless of the scale or type of proposal.
>
> Otherwise, within the Core Sustenance Zone, proposals which could increase lighting levels, restrict the movement of commuting bats at a local or landscape scale, affect potential roosting features such as trees, rural buildings/structures (manmade or natural), or impact barbastelle foraging resources such as waterbodies, streams and rivers, riparian habitats, damp grassland, golf courses, hedgerows, orchards and woodland, may have a likely significant effect on Eversden and Wimpole Woods SAC. This would include all proposals (except householder planning applications) located or extending outside of existing settlements or urban areas.
>
> Within the Landscape Connectivity Zone, and potentially beyond, proposals which could severely restrict the movement of commuting bats at a landscape scale, or impact barbastelle foraging resources such as waterbodies, streams

and rivers, riparian habitats, damp grassland, golf courses, hedgerows, orchards and woodland, may have a likely significant effect on Eversden and Wimpole Woods SAC. Proposals likely to generate such effects would typically include large scale housing (30 or more dwellings), employment or commercial development of 1ha or more, minerals or waste developments, large-scale road or rail schemes, or any lighting proposals close to the preferred habitats of barbastelles."

3.23 Impacts on functionally linked foraging or roosting habitats (various habitat types, as described above) could therefore impact upon the qualifying species of Eversden and Wimpole SAC.

3.24 The Wash and Norfolk Coast SAC's harbour seal utilise marine and coastal habitats. Otters utilise, and depend upon, the availability and connectivity of suitable riparian and wetland habitat across a wide area, including smaller watercourses and field drains. However, the SAC is 52 kilometres from the plan area. There are no impacts on functionally linked habitats related to The Wash and Norfolk Coast SAC that need to be considered in this HRA.

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

3.25 As required under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 **[See reference** 25**]** (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.

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

- Physical loss or damage to habitat.
- Non-physical disturbance (noise, vibration and light pollution).
- Air pollution – dust/sediment, vehicle emissions, industrial emissions.
- Recreation pressure.
- Changes to hydrology, including water quantity and quality.

3.27 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.

3.28 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.

3.29 A screening exercise was carried out (**Appendix D**) to document consideration of the potential for likely significant effects resulting from each policy in the plan.

3.30 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'

3.31 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.

3.32 In the Waddenzee case **[See reference** 26**]**, 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).

3.33 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."

3.34 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'.

3.35 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

3.36 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

3.37 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.

3.38 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

alone, 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 guidance on HRA **[See reference** 27].

3.39 In-combination assessment considers other plans and programmes that could result in the same impact on the same Habitats site; and focusses 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.

3.40 Where necessary to consider the potential for in-combination impacts (i.e. where the Local Plan is not likely to have a significant effect alone) the assessment focuses 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 in-combination effects with proposals in the GCLP will also be identified and reviewed. Further explanation of the approach taken is provided as relevant in Chapter 4 and Chapter 5.

Appropriate Assessment

3.41 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** 28**]**. This includes consideration of plans and projects with the potential for in-combination effects, where relevant.

Assessment of potential in-combination effects

3.42 If likely significant effects are identified at Screening stage from the Local Plan alone or in combination with other plans or projects, the competent authority should then consider the in-combination effects of the other plans and projects at Stage 2: Appropriate Assessment.

Assessing the effects on site integrity

3.43 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 **Appendix B** of this report to consider the characteristics of supporting habitats and species that could be affected by impacts identified at the Screening stage.

3.44 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.

3.45 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** 29**]**.

3.46 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.

3.47 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 3)**, 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 **Appendix D** 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/SH: Settlement Hierarchy;
- S/GB: The Cambridge Green Belt;
- S/MO: Monitoring;
- CC/DC: Designing for a Changing Climate;
- CC/NZ: Net zero Carbon New Buildings;
- CC/CE: Supporting a Circular Economy and Sustainable Resource Use;
- CC/FM: Flood Risk Management;
- BG/UGF: Urban Greening Factor;
- WS/HD: Creating Healthy New Developments;
- WS/NC: Meeting the Needs of New and Growing Communities;
- WS/IO: Creating Inclusive Employment and Business Opportunities Through New Developments;
- GP/PP: People and Place Responsive Design;
- GP/ST: Skyline and Tall Buildings;
- GP/LC: Protection, Conservation and Enhancement of Landscape Character;
- GP/HE: Historic Environment;

- GP/HA: Designated Heritage Assets;
- GP/ND: Non-Designated Heritage Assets;
- GP/CC: Adapting Heritage Assets to Climate Change;
- GP/AR: Archaeology;
- GP/SF: Shopfronts;
- J/AL: Protecting the Best Agricultural Land;
- J/PB: Protecting Existing Business Space;
- J/AW: Affordable Workspace and Creative Industries;
- J/SA: Cambridge City's Primary Shopping Area;
- J/MS: Markets and street trading;
- H/AH: Affordable Housing;
- H/HM: Housing Mix;
- 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;
- I/SD: Servicing and Last-Mile Delivery;
- I/SI: Safeguarding Important Infrastructure;
- I/EI: Energy Infrastructure Masterplanning;
- I/DT: Digital and Telecommunications Infrastructure;
- S/C/AMC: Cambridge Areas of Major Change;
- S/PRIA: Public Realm Improvement Areas (PRIA) in Cambridge; and
- S/PA/LN: South of A1307, Linton.

4.3 The following policies also will not result in development or other activities that could impact upon Habitats sites and so will not have likely significant effects for this reason. Additionally, they include measures that could directly or indirectly help to avoid or mitigate impacts on Habitats sites (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). These policies and the impact pathways they are relevant to are:

- CC/SD: Sustainable Development and the Climate Emergency – water quality / quantity, air pollution (vehicle emissions);
- CC/WE: Water Efficiency in New Developments – water quality / quantity;
- CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality – water quality;
- CC/CS: Supporting Land-based Carbon Sequestration and Carbon Sinks – physical damage and loss of habitat;
- BG/BG: Biodiversity and Geodiversity – general protection, physical damage and loss of habitat (including bat FLL);
- BG/GI: Green and Blue Infrastructure – recreation pressure;
- BG/TC: Improving Tree Canopy Cover and the Tree Population – physical damage and loss of habitat;
- BG/RC: River Corridors – physical damage and loss of habitat, water quality;
- BG/PO: Protecting Open Spaces – recreation pressure;
- BG/EO: Providing and Enhancing Open Spaces – recreation pressure;
- WS/HS: Pollution, Health and Safety – non-physical disturbance, water quality (direct pollution), air pollution (dust)
- GP/QD: Achieving High Quality Development – non-physical disturbance, water quality;
- GP/HD: Housing Density – air pollution (vehicle emissions);
- GP/QP: Establishing High Quality Landscape and Public Realm – recreation pressure;
- I/ST: Sustainable Transport and Connectivity – air pollution (vehicle emissions);
- I/CV: Cycle and Vehicle Parking – air pollution (vehicle emissions);
- I/ID: Infrastructure and Delivery – water quality / quantity, recreation pressure; and
- I/CM: Construction Management – non-physical disturbance, water quality, physical damage and loss of habitat.

4.4 The following policies will result in development, but the scale is such that there will be no likely significant effects:

- CC/SR Sustainable Retrofit;

- WS/CF: Community, Sports, and Leisure Facilities;
- WS/CH: Cultural and Creative Hubs;
- WS/MU: Meanwhile Uses During Long Term Redevelopments;
- WS/PH: Public Houses;
- J/RE: Supporting the Rural Economy;
- J/EP: Supporting a Range of Facilities in Employment Parks;
- H/ES: Exception Sites for Affordable Housing;
- H/GL: Garden Land and Subdivision of Existing Plots;
- H/CO: Co-living;
- H/MO: Houses in Multiple Occupation (HMOs);
- H/SA: Student Accommodation; and
- H/RM: Residential Moorings.

‘Likely significant effect’ predicted

4.5 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 – defines overall quantum of housing provision and number of new jobs;
- S/DS: Development Strategy – defines quantum of housing and employment development at strategic sites;
- S/DE: Defined Development Extents – identifies the circumstances in which development outside of allocated sites or existing settlements (windfall development) would be permitted.
- CC/RE: Renewable Energy Projects and Infrastructure - permits renewable and low-carbon energy infrastructure;
- 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;
- H/DC: Dwellings in the Countryside;

- H/GT: Gypsy and Traveller and Travelling Showpeople Plots;
- I/MH: Mobility Hub Facilities – supports new transport development;
- I/AD: Aviation Development – permits new airfield development and development at existing sites; and
- All site allocation / area based policies – which define the boundaries and scale of development at specific locations (see list in Appendix C).

HRA screening of impacts

Physical damage and loss of habitat – onsite

4.6 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.

4.7 No development, including site allocations and policy areas, is proposed by the GCLP within the boundaries of Eversden and Wimpole Woods SAC. However, windfall development could be proposed in unallocated locations in the rural area (see paragraphs 2.8-2.11), which in theory could occur within the SAC, without considering any mitigation provided by other policies in the Local Plan (as mitigation cannot be taken into account at the screening stage). The majority of the policies that permit windfall development relate to small scale development within or adjacent to existing buildings or settlements (e.g. Policies H/ES and J/RE), but the following policies could result in windfall development in other areas that in theory (i.e. without taking into account safeguards in other policies) could be within or immediately adjacent to the SAC:

- Policy H/DC: Dwellings in the Countryside;
- Policy H/GT: Gypsy and Traveller and Travelling Showpeople sites;
- Policy J/NE: New employment development proposals; or
- Policy I/MH: Mobility hub facilities.

4.8 As mitigation cannot be taken into account at the screening stage, the potential loss of habitat within Eversden and Wimpole Woods SAC has been screened in, in line with the precautionary principle (see paragraph 1.11). These likely significant

effects are possible, in theory, as a result of direct physical damage and loss, due to the Local Plan alone.

Physical damage and loss of habitat – functionally linked habitat

4.9 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 have been identified as:

- Eversden and Wimpole Woods SAC - bats.
- Ouse Washes SAC - fish.
- Ouse Washes SPA and Ramsar site - birds.
- Fenland SAC – amphibians, fish.

4.10 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

4.11 Eversden and Wimpole Woods SAC is designated for barbastelle bats. This is a mobile species, which relies on habitat within the SAC and functionally linked habitat in the wider area, which provides important foraging habitat for this species.

4.12 As set out in paragraphs 3.21-3.22, a buffer of 10.2 kilometres has been applied to the SAC to identify the area in which functionally linked habitats could occur.

4.13 A review of site allocations and policy areas has identified the following within 10.2 kilometres of the SAC:

- S/BA: Bourn Airfield New Village;
- S/SEA/BA: Non-development area adjacent to Bourn Airfield (Strategic Enhancement Area) – not earmarked for built development but could involve changes to habitats;
- S/CB: Cambourne;
- S/CBN: Cambourne North;

- S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area) – not earmarked for built development but could involve changes to habitats;
- S/C/PDC: Cambridge Professional Development Centre, Foster Road (although this is within an existing urban area and unlikely to have functionally linked habitats);
- S/ED: Eddington;
- S/WC: West Cambridge;
- S/RRA/CR: Land to the west of Cambridge Road, Melbourn;
- S/RRA/CRH: Bayer Crop Science Site, Hauxton;
- S/RRA/H: Highfields;
- S/RRA/ML: The Moor, Moor Lane, Melbourn; and
- S/RRA/SNR: Land to the north of St Neots Road, Hardwick.

4.14 Of these, S/BA, S/SEA/BA, S/CB and S/RRA/H are within 6 kilometres of the SAC, i.e. within the more sensitive 'core sustenance zone' of the SAC bats, rather than the wider 'landscape connectivity zone' (see paragraphs 3.21 & 3.22). There are no site allocations or policy areas within 50 metres of the SAC.

4.15 In addition to these, windfall development (see paragraph 4.7) could also occur within 6 or 10.2 kilometres of the SAC.

4.16 There is potential for likely significant effects to occur in relation to offsite physical damage and loss, if site allocations or windfall development are located on habitats used by Eversden and Wimpole Woods SAC barbastelle populations. The likely significant effect, if it occurs, would be significant due to the Local Plan alone. 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 or loss, and whether mitigation measures are required.

4.17 Given the conclusion above, it is not necessary at screening stage, to consider in combination effects as the need for an Appropriate Assessment in respect of impact on functionally linked habitat to Eversden and Wimpole Woods SAC arises due to the plan itself. That said, concerns have been raised by a number of consultees that there could be impacts in combination with East-West Rail, which proposes a new rail route between Cambridge and Oxford, through the area in which functionally linked habitats associated with Eversden and Wimpole Woods SAC

occur. Therefore, the potential for in combination effects is also considered in the Appropriate Assessment stage in **Chapter 5**.

Ouse Washes SAC

4.18 The Ouse Washes SAC is designated for spined loach. This species occurs patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches; and may make use of waterbodies connected to the SAC.

4.19 There are no site allocations and policy areas proposed in close proximity to the SAC, with the nearest site allocation 5.7 kilometres away and the nearest policy area 7.8 kilometres away at the closest point. However, windfall development could be permitted (see paragraph 4.7) near to the SAC or watercourses linked to it.

4.20 As mitigation cannot be taken into account at the screening stage, this impact has been screened in as a precaution. Likely significant effects are possible at Ouse Washes SAC as a result of physical damage and loss of fish functionally linked habitats, due to the Local Plan alone.

Ouse Washes SPA and Ramsar Site

4.21 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, which rely on offsite functional habitat.

4.22 As set out in paragraphs 3.17-3.18, for the majority of the species for which the Ouse Washes SPA/Ramsar are designated, a buffer of 2 kilometres has been used to identify the area in which functionally linked habitats could occur. The exceptions are the SPA's two qualifying swan species (Bewick's swan and whooper swan), for which Natural England have advised that 10 kilometres is appropriate (see Appendix G). These buffers have been applied to identify site allocations and policy areas with potential to affect the SPA and Ramsar.

4.23 The following site allocations and policy areas are proposed within 10 kilometres of the SPA and Ramsar site:

- S/AMC/FD Fen Drayton Former Land Settlement Association Estate;
- S/NS Northstowe and S/SEA/NS Non-developable area adjacent to Northstowe; and

- S/CBN Cambourne North and S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area).

4.24 In addition to these, windfall development could be permitted (see paragraph 4.7) within 10 kilometres of the SPA/Ramsar.

4.25 There is potential for likely significant effects to occur in relation to offsite physical damage and loss, if development occurs on habitats used by Bewick's swan or whooper swan. The habitats that the swans rely on are common and the loss of individual sites would be unlikely to significantly affect the SPA/Ramsar bird populations; therefore, any likely significant effect would be in combination, for example if development proposed in the East Cambridgeshire or Fenland Local Plans also results in the loss of these functionally linked habitats. Therefore, this effect is considered further at the Appropriate Assessment stage to determine the potential impacts of these site allocations in relation to offsite functionally linked habitat damage or loss, and whether mitigation measures are required.

Fenland SAC

4.26 Like Ouse Washes SAC, Fenland SAC is designated for spined loach, which may make use of watercourses connected to the SAC. Fenland SAC is also designated for great crested newts, which may make use of a variety of habitats (e.g. ponds, arable fields, woodland, scrub and grassland) within 1.3 kilometres of the SAC.

4.27 There are no site allocations or policy areas within 1.3 kilometres of the SAC. However, windfall development could be permitted (see paragraph 4.7) within 1.3 kilometres of SAC.

4.28 As mitigation cannot be taken into account at the screening stage, this impact has been screened in as a precaution. Likely significant effects are possible at Fenland SAC as a result of physical damage and loss of fish or great crested newts functionally linked habitats, due to the Local Plan alone.

Non-physical disturbance – onsite

4.29 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/Ramsar birds and movement or feeding areas of SAC bats.

4.30 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 are:

- Eversden and Wimpole Woods SAC – bats.
- Ouse Washes SAC – fish.
- Ouse Washes SPA and Ramsar site – birds.

4.31 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

4.32 Eversden and Wimpole Woods SAC lies in the west of the GCLP area and is designated for 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.

4.33 No development, including site allocations and policy areas, are proposed within 500 metres of the SAC. However, windfall development could be permitted (see paragraph 4.7) within 500m of the SAC.

4.34 As mitigation cannot be taken into account at the screening stage, this impact has been screened in, in line with the precautionary principle. Likely significant effects are possible at Eversden and Wimpole Woods SAC as a result of non-physical disturbance of bats at the SAC, due to the Local Plan alone.

Ouse Washes SAC

4.35 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.

4.36 No development, including site allocations and policy areas, are proposed within 500 metres of the SAC. However, windfall development could be permitted (see paragraph 4.7) within 500m of the SAC.

4.37 As mitigation cannot be taken into account at the screening stage, this impact has been screened in as a precaution. Likely significant effects are possible at Ouse Washes SAC as a result of non-physical disturbance to fish at the SAC, due to the Local Plan alone.

Ouse Washes SPA and Ramsar site

4.38 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.

4.39 No development, including site allocations and policy areas, are proposed within 500 metres of the SPA and Ramsar site. However, windfall development could be permitted (see paragraph 4.7) within 500m of the SAC.

4.40 As mitigation cannot be taken into account at the screening stage, this impact has been screened in as a precaution. Likely significant effects are possible at Ouse Washes SAC as a result of non-physical disturbance to birds at the SAC, due to the Local Plan alone.

Non-physical disturbance – functionally linked habitat

4.41 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 Habitats sites have qualifying species may use functionally linked habitat that could occur within GCLP area boundary (or within 500m of it):

- Eversden and Wimpole Woods SAC – bats.
- Ouse Washes SAC – fish.
- Ouse Washes SPA and Ramsar site – birds.
- Fenland SAC – amphibians, fish.

4.42 All other Habitats sites have been 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

4.43 As detailed in the 'Physical loss of habitat - functionally linked habitat' section above, habitats used by the SAC's barbastelle bats could occur within 10.2 kilometres of the SAC.

4.44 A review of site allocations has identified the following within 500 metres of the 10.2 kilometres functionally linked land buffer applied in this assessment:

- S/BA: Bourn Airfield New Village;
- S/CB: Cambourne;
- S/CBN: Cambourne North;
- S/C/PDC: Cambridge Professional Development Centre, Foster Road (although this is within an existing urban area and unlikely to contain or be near to functionally linked habitats);
- S/ED: Eddington;
- S/WC: West Cambridge;
- S/RRA/CR: Land to the west of Cambridge Road, Melbourn;
- S/RRA/CRH: Bayer Crop Science Site, Hauxton;
- S/RRA/H: Highfields;
- S/RRA/ML: The Moor, Moor Lane, Melbourn;
- S/RRA/SNR: Land to the north of St Neots Road, Hardwick.

4.45 Of these, S/BA, C/BA and S/RRA/H are within 6 kilometres of the SAC, i.e. within the more sensitive 'core sustenance zone' of the SAC bats, rather than the wider 'landscape connectivity zone' (see paragraphs 3.21 & 3.22). There are no site allocations or policy areas within 50 metres of the SAC.

4.46 In addition to these, windfall development (see paragraph 4.7) could also occur within 6 or 10 kilometres of the SAC.

4.47 A review of policy areas has identified the following 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).

4.48 Although these policy areas are "non-development areas", they could contain some infrastructure such as transport routes, which could result in non-physical disturbance.

4.49 Further assessment is necessary (see Chapter 5 Appropriate Assessment) to determine the potential impacts of the site allocations in relation to offsite functional habitat damage and loss and whether mitigation measures are required.

4.50 There is potential for likely significant effects to occur in relation to offsite non-physical disturbance and therefore this effect is considered further at the Appropriate Assessment stage. This impact could occur due to the Local Plan alone. However, as explained in paragraph 4.17, the potential for in-combination effects with East-West Rail is addressed at Appropriate Assessment stage in Chapter 5.

Ouse Washes SAC

4.51 Ouse Washes SAC supports spined loach, which relies on habitat within the SAC and functionally linked habitat.

4.52 There are no site allocations and policy areas proposed in close proximity to the SAC. However, windfall development could be permitted (see paragraph 4.7) within 500m of watercourses linked to the SAC.

4.53 As mitigation cannot be taken into account at the screening stage, this impact has been screened in as a precaution. Likely significant effects are possible at Ouse Washes SAC as a result of non-physical disturbance at fish functionally linked habitats, due to the Local Plan alone.

Ouse Washes SPA and Ramsar site

4.54 Ouse Washes SPA and Ramsar Site is designated for wetland bird species. These are mobile and rely 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 10 kilometres has been applied to the SPA/Ramsar to identify areas in which functionally linked habitats could occur.

4.55 The following site allocations and policy areas are proposed within 10.5 kilometres of the SPA and Ramsar site (10 kilometres within which habitats could occur plus 500 metres over which non-physical disturbance could be significant):

- S/AMC/FD Fen Drayton Former Land Settlement Association Estate;

- S/NS Northstowe and S/SEA/NS Non-developable area adjacent to Northstowe; and
- S/CBN Cambourne North and S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area).

4.56 In addition to these, windfall development could be permitted (see paragraph 4.7) within 10 kilometres of the SPA/Ramsar.

4.57 There is potential for likely significant effects to occur in relation to offsite non-physical disturbance, if windfall development occurs within 500m of habitats used by Bewick's swan or whooper swan. The habitats that the swans rely on are common; therefore, any likely significant effect would be in combination, for example if development proposed in the East Cambridgeshire or Fenland Local Plans also results in the loss of these functionally linked habitats. Therefore, this effect is considered further at the Appropriate Assessment stage to determine the potential impacts of these site allocations in relation to offsite non-physical disturbance at functionally linked habitat, and whether mitigation measures are required.

Fenland SAC

4.58 Like Ouse Washes SAC, Fenland SAC is designated for spined loach, which may make use of watercourses connected to the SAC. Fenland SAC is also designated for great crested newts, which may make use of a variety of habitats (e.g. ponds, arable fields, woodland, scrub and grassland) within 1.3 kilometres of the SAC.

4.59 There are no site allocations or policy areas within 1.3 kilometres of the SAC. However, windfall development could be permitted (see paragraph 4.7) within 1.3 kilometres of SAC.

4.60 As mitigation cannot be taken into account at the screening stage, this impact has been screened in as a precaution. Likely significant effects are possible at Fenland SAC as a result of non-physical disturbance at fish or great crested newts functionally linked habitats, due to the Local Plan alone.

Air pollution

4.61 Air pollution is most likely to affect Habitats sites where plant, soil and water habitats are the qualifying features. 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.

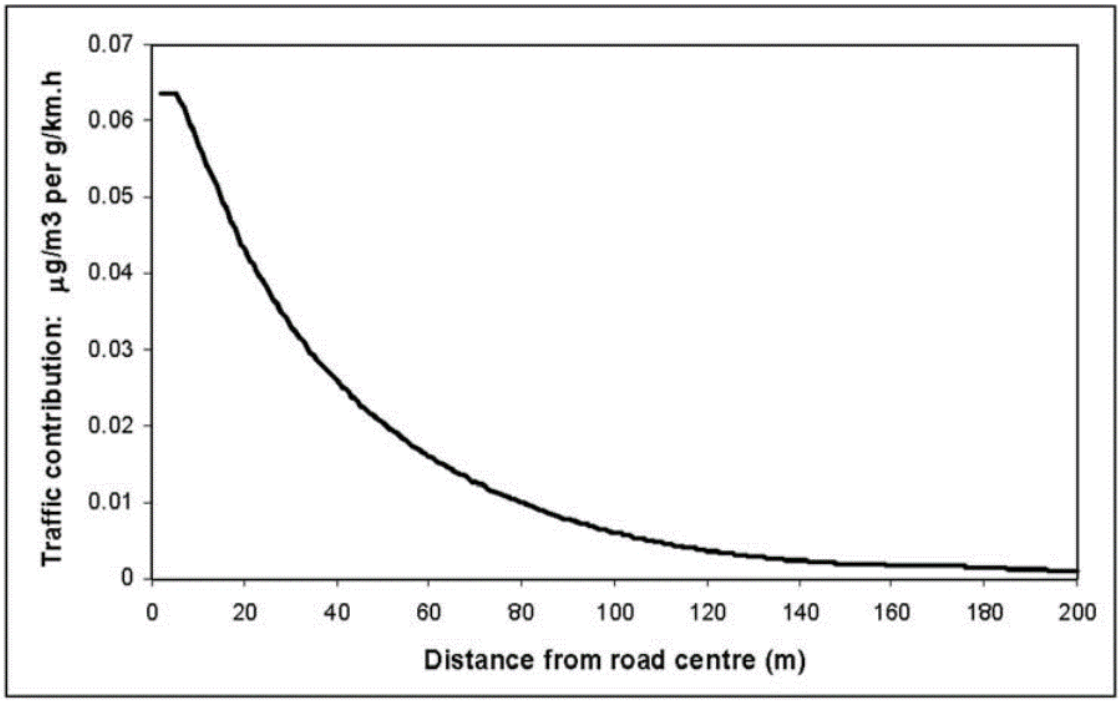
4.62 Air pollution has the potential to affect functionally linked habitats, although it is not considered likely that there would be significant effects on any Habitats site due to dust and sediment at a functionally linked habitat. Air pollution at a functionally linked habitat would need to be large in scale and/or widespread to prevent a Habitat site's conservation objectives from being met.

Vehicle emissions

4.63 All of the Local Plan policies and site allocations that lead to development (i.e. as listed in paragraph 4.5 and Appendix C) could contribute to changes in traffic flow, and therefore vehicle emissions. Increases in nitrogen deposition, nitrogen oxides (NOx), ammonia (NH_3) and acid deposition can all arise from vehicle emissions. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and can cause eutrophication of soils and water. The HRA has referred to the UK Air Pollution Information System (APIS) **[See reference** 30**]** to determine whether air pollutant levels at the Habitats sites are currently exceeding critical loads or not (the threshold at which harm could occur).

4.64 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Document LA105: Air Quality **[See reference** 31**]** (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 distances from the road centre [See reference **32**]



4.65 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.

4.66 In line with the Wealden judgment **[See reference** 33**]**, Natural England expects to see in-combination air pollution effects assessed against the same criteria. 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.

4.67 Roads forming part of the strategic road network **[See reference** 34**]** (motorways and A roads; see Figure 3 in Appendix A) are most likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT etc.). 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.

4.68 The JNCC's 'Guidance on decision-making thresholds for air pollution' **[See reference** 35**]** 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 to identify roads within 200 metres of a Habitats site that could experience significant increases in traffic flows.

4.69 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 (shown on Figure 3 in Appendix A).

4.70 Habitats sites within 200 metres of these roads are:

- Devil's Dyke SAC (A14 and A1304);
- Ouse Washes SAC, SPA and Ramsar (A1123 and A142); and
- Portholme SAC (A1307).

4.71 These Habitats sites have been subject to further screening assessment below using traffic data provided by Cambridgeshire County Council (based on a 2026 model of the Local Plan). The data is based on 2023 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 (i.e. all of the policies in the plan resulting in development, including windfall) and growth within neighbouring authorities' adopted Local Plans. 2023 has been used as the baseline as this is the year that the Cambridge and Peterborough Combined Authority Model is validated to, and the future traffic flows are forecast for 2046, the year after the end of the plan period. The data therefore predicts change over a slightly longer period than the plan, but it has been used as the currently available data.

4.72 All other Habitats sites are situated over 200 metres from a road or are located over 10 kilometres from GCLP area boundary. As such, they are not considered to be susceptible to impacts from air pollution from vehicle emissions and are therefore screened out of the assessment.

4.73 The assessment of in combination effects has considered the following, which have been incorporated into the traffic model:

- Sites with planning permission and site allocations in Adopted Local Plans of neighbouring authorities.
- Although not adopted, the Huntingdonshire Local Plan is at a late stage of preparation (Regulation 19 consultation; and therefore is still subject to change) and includes a mixed-use site allocation (Hemingford Abbots 1 (The Lattenburys)) which is in proximity to Greater Cambridge. This proposed site allocation has been included in the traffic model as it was found by Cambridgeshire County Council to be the only proposed allocation within the emerging Huntingdonshire Local Plan with a substantive impact on the strategic road network within Greater Cambridge.
- Transport schemes required to deliver Local Plan development: extension of CtoC busway over A428; Cambridge South East Transport busway phase 2; Cambridge Eastern Access phase B; East-West Rail new park and ride scheme at Cambourne.
- Other transport infrastructure schemes within the plan area: A11 Travel Hub; East-West Rail; Addenbrookes roundabout improvement scheme.
- Transport infrastructure schemes in Peterborough: Hampton Western peripheral road, Junction 2; Old Great North Road to Fletton Parkway link, Junction 3; Norwood Development access onto the A16; A16 Norwood Improvement Scheme; A47 Wansford to Sutton dualling; Station Quarter improvements; Fengate access study improvements; Edgerley Drain Road / Oxney Road roundabout; Eastfield Road pedestrian crossing; Great Haddon access junctions; A15 London Road / Hampton Avenue junction restriction; partial signalisation of Oundle Road / Orton Parkway roundabout; A15 London Road traffic calming.
- Transport infrastructure schemes in Cambridgeshire: A428 Black Cat to Caxton Gibbet dualling; Cambridge South Station; Waterbeach Station Relocation Chisholm Trail; Ditton Lane and Links to East Cambridgeshire; Perne Road/Radegund Road Roundabout; Madingley Road; Milton Road; A10 Ely to Cambridge dualling; Waterbeach to Cambridge North; Cambridge South East Transport Study Phase 1; Cambridge South West Travel Hub; Cambourne to Cambridge (C2C) Eastern Access phase A; Ring Fort Path; Fenstanton to Busway (part of St Ives Greenway); Waterbeach Greenway; Linton Greenway; Comberton Greenway; Broad St, March; St Peters Rd, March; A141/Twenty Foot Rd, March; Melbourn Greenway; St Ives Greenway; Barton Greenway; Bottisham Greenway; Horningsea Greenway; Sawston Greenway; Swaffhams

Greenway; Haslingfield Greenway; Fulbourn Greenway; Spittals Interchange - removal of signals; Mill Road Bridge bus gate.

Devil's Dyke SAC

4.74 The SAC lies adjacent to two strategic roads: the A14 to the north and the A1304 to the south of the Habitats site. 2.35% of the SAC area is situated within 200 metres of the A14 and 7.67% within 200 metres of the A1304.

4.75 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 APIS data, this qualifying feature is sensitive to both nitrogen and acidity. The critical levels/loads for lowland calcareous grassland are:

- Nitrogen deposition: 10-20 kilograms N/ha/yr;
- Ammonia: 1µg/m^3;
- NOx: 30µg/m^3; and
- Acid deposition: 0.856-4.856Keq/ha/yr.

4.76 The latest APIS data from 2020-2022 shows that the habitat at Devil's Dyke SAC is currently exceeding the minimum critical loads for nitrogen deposition and acid deposition, but is below the maximum critical loads for both. Air pollution 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.

4.77 A review of the traffic data provided by the County Council has identified that the increase in AADT for daily traffic flows are likely to exceed the respective thresholds of 1000 AADT (all vehicles) and 200 AADT (HDVs). Details of this are presented in **Table 4.1** and **Table 4.2** and exceedances of the criteria are indicated with underlined text.

Table 4.1: AADT figures for daily traffic flows on the A1304 and A14.

Road	AADT – 2023 baseline	AADT – 2046 predicted (without Local Plan)	AADT – 2046 predicted (with Local Plan)	AADT change – Local Plan alone	AADT change – Local Plan in combination
A1304 (Northbound)	5,757	8,106	8,426	974	5,386
A1304 (Southbound)	5,576	7,639	8,293		
A14 (Northbound)	35,044	53,880	54,329	1,071	39,579
A14 (Southbound)	35,384	55,056	55,678		

Table 4.2: AADT figures for HDVs on the A1304 and A14.

Road	AADT (HDV) – 2023 baseline	AADT (HDV) – 2046 predicted (without Local Plan)	AADT (HDV) – 2046 predicted (with Local Plan)	AADT (HDV) change – Local Plan alone	AADT (HDV) change – Local Plan in combination
A1304 (Northbound)	208	230	225	5	66
A1304 (Southbound)	283	332	332		
A14 (Northbound)	5,920	6,862	6,883	129	2,098
A14 (Southbound)	6,096	7,123	7,231		

4.78 Likely significant effects have been identified at Devil's Dyke SAC due to air pollution from vehicle emissions. Further assessment is necessary (see Chapter 5 Appropriate Assessment) to determine the potential impacts of development in these locations, in relation to vehicle emissions. The effects would be significant due to the

Local Plan alone on the A14 (all vehicles); and in combination with other plans/projects, on the A1304 (all vehicles) and A14 (HDVs).

Ouse Washes SAC, SPA and Ramsar site

4.79 A small area of the Ouse Washes SAC/SPA/Ramsar lies within 200 metres of the A1123, comprising 0.38% of the site.

4.80 A small area of the Ouse Washes SAC/SPA/Ramsar lies within 200 metres of the A142, comprising 1.37% of the site.

4.81 Habitats present within 200 metres of the A1123 and the A142 include river habitat, which the qualifying species of the SAC (spined loach) depend on; and river habitat, rough grassland and wet pasture, which the qualifying bird species of the SPA and Ramsar depend on.

4.82 Based on APIS data, the qualifying species of the SAC (spined loach) is considered potentially sensitive to changes in air quality, particularly acid deposition. However, no critical load or critical level estimates for nitrogen or acidity are available for spined loach or their freshwater habitats. APIS states that 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.

4.83 The SPA and Ramsar site support a range of qualifying bird species which are considered potentially sensitive to changes in air quality. Based on APIS data for the SPA (not available for the Ramsar specifically), the majority of these bird species are not sensitive to nutrient nitrogen impacts on their broad habitats. However, the Eurasian wigeon and black-tailed godwit have the potential to be negatively impacted due to nutrient nitrogen impacts on their supporting habitat ‘littoral sediment’ and ‘neutral grassland’. These habitats have critical loads of:

- Nitrogen deposition: 10-20 kilograms N/ha/yr;
- Ammonia: 1 or 3µg/m^3; and
- NOx: 30µg/m^3.

4.84 Several SPA/Ramsar species are also listed as having ‘site specific’ sensitivity to the impacts of nitrogen on their habitats (nitrogen deposition), depending on whether their supporting ‘standing open water and canals’ habitats are nitrogen or phosphorus limited: northern pintail, northern shoveler, Eurasian teal, Eurasian wigeon, mallard, gadwall, Bewick’s swan, whooper swan, and pochard. The critical loads for these habitats are:

- Ammonia: 1 or 3µg/m^3; and
- NOx: 30µg/m^3.

4.85 The latest APIS data from 2020-2022 shows that Ouse Washes SPA and Ramsar site has a nitrogen deposition of 15.36 kg N/ha/yr, which exceeds the minimum critical load for nitrogen deposition, but not the maximum. Increases in nitrogen deposition as a result of air pollution from increased vehicle traffic could alter the composition of the supporting habitats, of Eurasian wigeon or black-tailed godwit. The current levels of ammonia and NOx are not available.

4.86 Based on APIS data on acidity, only 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 acid deposition. The latest APIS data from 2020-2022 shows that Ouse Washes SPA and Ramsar site has an acid deposition of 1.09 Keq/ha/yr which is below the minimum critical load, suggesting that increases in acid deposition as a result of air pollution from increased vehicle traffic would not necessarily impact this habitat and ultimately the black-tailed godwit.

4.87 A review of traffic data provided by Cambridge County Council shows that the increase in AADT for daily traffic flows is likely to exceed the threshold of 1000 AADT (all vehicles) and 200 AADT (HDVs). Details of this are presented in **Table 4.3** and**Table 4.4** (exceedances underlined).

Table 4.3: AADT figures for daily traffic flows on the A142 and A1123.

Road	AADT – 2023 baseline	AADT – 2046 predicted (without Local Plan)	AADT – 2046 predicted (with Local Plan)	AADT change – Local Plan alone	AADT change – Local Plan in combination
A142 (Northbound)	7,136	8,739	9,362	1,734	4,618
A142 (Southbound)	7,820	9,101	10,212		
A1123 (Eastbound)	20,967	34,416	36,094	2,753	29,157
A1123 (Westbound)	20,498	33,453	34,528		

Table 4.4: AADT figures for HDVs on the A142 and A1123.

Road	AADT (HDV) – 2023 baseline	AADT (HDV) – 2046 predicted (without Local Plan)	AADT (HDV) – 2046 predicted (with Local Plan)	AADT (HDV) change – Local Plan alone	AADT (HDV) change – Local Plan in combination
A142 (Northbound)	146	142	138	12	5
A142 (Southbound)	262	273	265		
A1123 (Eastbound)	2,573	3,023	3,044	10	662
A1123 (Westbound)	2,320	2,532	2,501		

4.88 Likely significant effects have been identified at Ouse Washes SAC, SPA and Ramsar site due to air pollution from vehicle emissions on the A1123 (due to the Local Plan alone for all traffic and in combination for HDVs) and the A142 (due to the Local Plan alone for all traffic). Further assessment is necessary (see Chapter 5 Appropriate Assessment) to determine the potential impacts of development in these locations, in relation to vehicle emissions.

Portholme SAC

4.89 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.

4.90 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. The critical loads for lowland neutral grassland are:

- Nitrogen deposition: 10-20 kilograms N/ha/yr;
- Ammonia: 3µg/m^3;
- NOx: 30µg/m^3; and

- Acid deposition: 0.856-5.071Keq/ha/yr.

4.91 The latest APIS data from 2020-2022 show that Portholme SAC is currently exceeding the minimum critical load for nitrogen deposition, but not the maximum; additional nitrogen deposition could therefore impact the site's qualifying habitat. Acid deposition is currently below the minimum critical load; therefore, an increase in acidity will not necessarily impact upon the SAC qualifying features. Current levels of NOx and ammonia are not available.

4.92 The traffic data shows that the traffic flows on the A1307 will exceed the 1,000 AADT screening threshold for daily traffic flows and HDVs. Details of this are presented in **Table 4.5** and **Table 4.6** (exceedances underlined).

Table 4.5: AADT figures for daily traffic flows on the A1307.

Road	AADT – 2023 baseline	AADT – 2046 predicted (without Local Plan)	AADT – 2046 predicted (with Local Plan)	AADT change – Local Plan alone	AADT change – Local Plan in combination
A1307 (Eastbound)	12,271	14,673	14,697	395	6,850
A1307 (Westbound)	10,341	14,394	14,765		

Table 4.6: AADT figures for HDVs on the A1307.

Road	AADT (HDV) – 2023 baseline	AADT (HDV) – 2046 predicted (without Local Plan)	AADT (HDV) – 2046 predicted (with Local Plan)	AADT (HDV) change – Local Plan alone	AADT (HDV) change – Local Plan in combination
A1307 (Eastbound)	851	902	977	91	286
A1307 (Westbound)	526	670	686		

4.93 Likely significant effects have been identified at Portholme SAC due to air pollution from vehicle emissions on the A1307, in combination with other plans and projects (all vehicles and HDVs). Further assessment is necessary (see Chapter 5 Appropriate Assessment) to determine the potential impacts of development in these locations, in relation to vehicle emissions.

Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC

4.94 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 are 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

4.95 Eversden and Wimpole Woods SAC is located 650 metres from the A1198 at the closest point. As this Habitats site is 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.

Aviation and industrial emissions

4.96 Aviation and industrial emissions can result in a range of pollutants, which can contribute to air pollution locally and globally.

4.97 Policy I/AD: Aviation development could in theory permit new airfields or flying sites, and the expansion or intensification of existing sites. This could increase emissions from aviation (and associated vehicle emissions for trips to/from the airport).

4.98 The following site allocations and area policies permit industrial development:

- S/AMC/NEC: North East Cambridge: 182 hectares supporting mixed use development (no quantum identified).
- S/SHF: Land at Slate Hall Farm, Bar Hall: 111.3ha of new employment land (220,000m^2 commercial which could include general industrial, storage / distribution, and supporting amenities)
- S/CE: Cambridge East - 8,000 homes (3,950 in plan period), 24 gypsy & traveller pitches, 20,000m^2 employment (industrial, office, R&D), sport and leisure;

- S/CBN: Cambourne North - 13,000 homes (2,550 in plan period), 24 Gypsy and Traveller pitches, 108,000m^2 employment (office, R&D, industrial, service, leisure);
- S/GF: Land adjacent to A11 and A1307 at Grange Farm - 4,500 homes (2,600 in plan period), 12 Gypsy and Traveller pitches, 15,000m^2 employment (office) and 20,000m^2 industrial;
- S/WNT: Waterbeach New Town - 11,000 homes (5,629 within plan period; already permitted), 24 gypsy & traveller pitches, 1,050 units specialist accommodation, 39,800m^2 employment (office, R&D, industrial), 25,500m^2 retail, transport infrastructure;
- S/BA: Bourn Airfield New Village - 3,500 homes (all in plan period), 1,400m^2 employment (office, R&D or industrial);
- S/RRA/SCS: Land to the south of the Cambridge Services, A14 - 90,000m^2 employment (industrial, warehousing, parking).
- S/C/SCL: Land South of Coldham's Lane, Cambridge: Employment 86,000m^2 commercial & laboratory; 900m2 community use; plus shop/retail and industrial.
- S/EOC/FRE: Fulbourn Road East: Employment 56,000m^2 office / R&D / light industrial / storage or distribution (6.92ha).
- S/RRA/BBP: Land at Buckingway Business Park, Swavesey: Employment 10,000m^2 general industrial or storage/ distribution.
- S/RRA/SNR: Land to the north of St Neots Road, Hardwick: Employment 5,000m^2 office; R&D; industrial.
- S/RRA/OHD: Old Highways Depot, Twenty Pence Road, Cottenham: Employment 1,500m^2 offices; light industrial; storage / distribution.
- S/RRA/NW: Norman Way, Over: Employment 6,100m^2 office; R&D; light industrial; general industrial; storage/ distribution.
- S/RRA/CRH: Bayer Crop Science Site, Hauxton: Employment 2,000m^2 office; R&D; light industrial.

4.99 Aviation and industrial development are tightly regulated; however, because mitigation cannot be taken into account as this screening stage, this impact pathway has been screened in as a precaution. Aviation or industrial emissions could affect any of the Habitats sites with qualifying habitats or plant species (i.e. Portholme SAC, Devil's Dyke SAC, Chippenham Fen Ramsar, Wicken Fen Ramsar, Fenland SAC, and Ouse Washes Ramsar) and would arise due to the Local Plan in combination with other plans or projects (across a wide area).

Dust and sediment

4.100 Development may generate 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.

4.101 The effects of dust and sediment are most likely to be significant if development takes place within 500 metres of a watercourse that is hydrologically connected to a Habitats site; and where the Habitats Site has 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.

4.102 The following Habitat sites are adjacent to watercourses, downstream of the plan area, and are considered susceptible to impacts from dust and sediment:

- Ouse Washes SAC and Ramsar (directly) and SPA (indirectly) – water enters site from River Great Ouse; and
- Portholme SAC – water enters site from River Great Ouse.

4.103 All other Habitats sites are located a significant distance from the GCLP boundary (e.g. the site in The Wash), are not hydrologically linked via surface waterbodies (e.g. Chippenham Fen Ramsar, Wicken Fen Ramsar, and Fenland SAC, which are fed by groundwater), and/or do not support qualifying features that are susceptible to impacts from dust and sediment.

4.104 This includes Eversden and Wimpole Woods SAC, which is located within GLCP boundary, and is designated for barbastelle which is not considered sensitive to indirect impacts from dust and sediment on its woodland habitats (directly, or off site). Similarly, other indirect impacts on functionally linked habitats are not considered likely to be significant, as set out in paragraph 4.62.

Ouse Washes SAC, SPA and Ramsar

4.105 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** 36**]**. The Ramsar is partly designated for seasonally-flooding washland and nationally scarce aquatic

plants. The SAC and Ramsar are therefore considered susceptible to direct impacts dust and sediment, which could affect water quality.

4.106 Ouse Washes SPA and Ramsar Site is designated for 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 dust and sediment. Dust deposition could therefore indirectly affect SPA/Ramsar bird species, via their supporting habitats.

4.107 No site allocations or policy areas are proposed within 500 metres of the SAC/SPA/Ramsar. However, there are site allocations and policy areas within 500 metres of a watercourse upstream of the Habitats sites:

- S/AMC/FD Fen Drayton Former Land Settlement Association Estate – within 500 metres of Fen Drayton Lakes nature reserve, connected to the River Great Ouse.
- S/NS Northstowe and S/SEA/NS Non-developable area adjacent to Northstowe – within 500 metres of Swavesey Drain, connected to River Great Ouse.
- S/CBN Cambourne North and S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area) – within 500 metres of drains which flow towards Fen Drayton Lakes and the River Great Ouse.

4.108 In addition to these, windfall development (see paragraph 4.7) could also occur within 500 metres of the SAC/SPA/Ramsar or a watercourse upstream of Habitats Sites, for example at Over (Dockerel Brook), Willingham (Willingham Lode), or Swavesey (Swavesey Drain).

4.109 Further assessment is necessary (see Chapter 5 Appropriate Assessment) to determine the potential impacts of development in these locations, in relation to dust and sediment. The effects would be significant due to the Local Plan alone.

Portholme SAC

4.110 Portholme SAC is designated for lowland hay meadows, which are flooded by the Great Ouse. Development that is within 500m of a tributary of the Great Ouse could contribute dust and sediment to the river, at the SAC; however, there are no site allocations or policy areas adjacent to watercourses that flow west towards the Great Ouse, upstream of the SAC.

4.111 Windfall development could occur near watercourses upstream of the SAC (e.g. at Croxton, by the Gallow Brook; at Little Gransden by Abbotsley Brook; or in other areas near watercourses), but this would be small in scale and would not be

likely to result in significant effects at Portholme SAC. No likely significant effects is predicted as a result of dust and sediment, due to the Local Plan alone.

Recreation pressure

4.112 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.

4.113 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.

4.114 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.

4.115 Specific ZOIs have been identified in relation to the following Habitats sites:

- Devil's Dyke SAC – 5.5 kilometres;
- Wicken Fen Ramsar site – 10.7 kilometres;
- Breckland SAC and SPA – 26.3 kilometres.

4.116 The ZOI for Devil's Dyke SAC and Breckland SAC/SPA have been established in the recreational disturbance avoidance and mitigation study for West Suffolk in 2025 **[See reference** 37**]**. The study excludes the Breckland Farmland SSSI portion of the SPA, as this is not expected to have the same draw as other (e.g. heathland) parts of the site. The nearest part of the Habitats site to which the ZOI needs to be applied is therefore the boundary of the SAC (which overlaps the SPA), c.20.5 kilometres from the plan area. The same study also defined a ZOI for Wicken Fen Ramsar site, but this has been superseded by a more recent study **[See reference** 38**]**. These ZOIs have been applied in this assessment to determine whether impacts may arise in relation to recreation pressure as a result of growth in the Local Plan.

4.117 In relation to Eversden and Wimpole Woods SAC, Ouse Washes SAC, SPA and Ramsar Site and Portholme SAC, Natural England advised in response to the

draft HRA Scoping Report for the Greater Cambridge Local Plan (Appendix G) **[See reference** 39**]** that a 'zone of potential risk' for recreation pressure of 2 kilometres and 5 kilometres, which has been derived from SSSI Impact Risk Zones (IRZs), 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 recreation pressure to SSSIs from proposed development. As Habitats sites are underpinned by SSSIs, IRZs can be used as an indicator of site sensitivities. **Table 4.7** below outlines the zones of potential of risk for each Habitats site, which are considered to be at significant risk from recreation pressure.

Table 4.7: Cambridgeshire Recreation 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 recreation pressure could have likely significant effects) or lower risk (with a smaller buffer of 2 kilometres). These higher and lower buffers have been applied in line with Natural England's guidance.

4.118 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.

4.119 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 recreation pressure from proposed development in the GCLP for these Habitats sites.

4.120 No zone of potential risk was identified for Chippenham Fen Ramsar. To ensure that a precautionary approach is taken, this assessment has applied a 5 kilometres zone of potential risk, which is the higher zone of potential risk outlined in **Table 4.7.** 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 recreation pressure from proposed development in the GCLP for this Habitats site.

4.121 In some cases, recreation pressure also has the potential to affect functionally linked habitats; however, this is unlikely to be significant unless a specific site has been identified as being functionally linked and sensitive to recreation pressure. There are no known functionally linked sites that need to be considered in this assessment, in relation to recreation pressure.

Wicken Fen Ramsar site

4.122 A review of area and site policies has identified the following residential sites within 10.7 kilometres of Wicken Fen Ramsar Site:

- S/AMC/NEC: North East Cambridge; and
- S/WNT: Waterbeach New Town.

4.123 In addition to these, residential windfall development (e.g. due to Policy H/GT: Gypsy and Traveller and Travelling Showpeople Sites) could also occur within 10.7 kilometres of the Ramsar site.

4.124 The policy area S/SEA/WNT Non-development area adjacent to Waterbeach and site allocation S/RRA/OHD Old Highways Depot are also within 10.7 kilometres of Wicken Fen Ramsar Site, but are not allocated for residential development and will not result in recreation pressure.

4.125 There is potential for likely significant effects to occur in relation to increased recreation pressure and therefore this effect is considered further at the Appropriate Assessment stage. This impact would occur due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, i.e. East Cambridgeshire Local Plan or West Suffolk Local Plan.

Eversden and Wimpole Woods SAC

4.126 A review of area and site policies has identified the following residential site within 5 kilometres of Eversden and Wimpole Woods SAC:

- S/BA: Bourn Airfield New Village.

4.127 In addition to these, residential windfall development (e.g. due to Policy H/GT: Gypsy and Traveller and Travelling Showpeople Sites) could also occur within 5 kilometres of the SAC.

4.128 S/SEA/BA: Non-development area adjacent to Bourn Airfield (Strategic Enhancement Area) is also within 5 kilometres of the SAC but will not result in recreation pressure.

4.129 There is potential for likely significant effects to occur in relation to increased recreation pressure and therefore this effect is considered further at the Appropriate Assessment stage. This impact would occur due to the Local Plan alone, as the majority of the zone of influence is within the plan area.

Ouse Washes SAC, SPA and Ramsar site

4.130 No development is proposed within 2 kilometres of the SAC, SPA and Ramsar site. Residential windfall development (e.g. due to Policy H/GT: Gypsy and Traveller and Travelling Showpeople Sites) could occur within 2 kilometres of the SAC/SPA/Ramsar; however, this development would be small in scale and unlikely to significantly increase visitor numbers at Ouse Washes. As such, no likely significant effect is predicted as a result of increased recreation pressure resulting from the GCLP either alone or in combination with other plans and projects.

Fenland SAC

4.131 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 ZOIs for the two Ramsar sites have been applied. Based on this, likely significant effects are only possible in relation to the part of the SAC that overlaps with Wicken Fen Ramsar. For this portion of Fenland SAC, the 10.7 kilometres ZOI has been applied, and the site allocations and development in this ZOI are as set out in 4.116-4.117.

4.132 Likely significant effects relating to recreation 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. As with Wicken Fen Ramsar, this impact would occur due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, i.e. East Cambridgeshire Local Plan.

Breckland SAC and SPA

4.133 Breckland SPA is located just over 15 kilometres northeast of the plan area; and Breckland SAC (a smaller site that overlies part of the SPA) is just over 20 kilometres northeast. The sites have a ZOI of 26.3km, but the ZOI does not need to be applied to the Breckland Farmland SSSI portion of the SPA, which is the part of

the SPA nearest to the plan area. This means that the only part of the ZOI that extends into the plan area is associated with the SAC and a small part of the SPA adjacent to it (part of Tuddenham Heath). These are about.21 kilometres from the plan area.

4.134 The only residential site allocation or policy areas within the ZOI is therefore S/WNT: Waterbeach New Town; although windfall development could also fall within the ZOI of the SAC and SPA.

4.135 Likely significant effects relating to recreation pressure could not be screened out in relation to Breckland SAC and SPA and will therefore require further consideration at the Appropriate Assessment. This impact would occur due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, i.e. East Cambridgeshire and West Suffolk Local Plans.

Water

4.136 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 40]**. 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.

4.137 The following Habitats sites are designated for habitats and/or species that are susceptible to impacts from changes in water quantity and quality:

- Ouse Washes SAC – fish (spined loach).
- Ouse Washes SPA and Ramsar – various birds affected indirectly via wetland habitats.
- Wicken Fen Ramsar – fen habitats and associated invertebrates.
- Chippenham Fen Ramsar – fen habitats and associated invertebrates.
- Fenland SAC – wet grassland (Molinia meadows) and fish (spined loach).
- Portholme SAC – floodplain meadows (lowland hay meadows).
- The Wash and North Norfolk Coast SAC – various coastal and marine habitats, otter and seal.
- The Wash SPA- various birds affected indirectly via wetland/coastal habitats.

- The Wash Ramsar – various coastal and marine habitats, and associated birds (affected indirectly).

4.138 The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar were 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. These sites are also downstream of the River Great Ouse, which receives water from catchments and wastewater treatment works serving Greater Cambridge. 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 Rivers Cam or Great Ouse. Therefore, no likely significant effect is predicted in relation to increased water demand from proposed growth in the Local Plan.

4.139 Eversden and Wimpole Woods SAC and Devil's Dyke SAC support habitats that are not considered susceptible to impacts from changes in water quantity and quality. The proposed growth in the GLCP is therefore not predicted to result in any likely significant water effects at these Habitats sites.

Water quantity – onsite

4.140 Greater Cambridge is located within Cambridge Water's 'Company Wide Water Resource Zone', which also extends into the eastern third of Huntingdonshire and a very small area on the northern edge of Central Bedfordshire. Cambridge Water published its latest Water Resources Management Plan (WRMP24) in March 2025 **[See reference** 41**]**, which outlines how it will continue to meet the demand for water in the Cambridge region (including Greater Cambridge in combination with the parts of Huntingdonshire and Central Bedfordshire mentioned above). 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. Large abstractions of water from surface water are therefore 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.

4.141 A Water Supply Evidence document for Greater Cambridge was prepared by AtkinsRéalis in 2025 **[See reference** 42**]**, which assesses the water availability forecasts in the WRMP24. 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.

4.142 Ouse Washes SAC, SPA and Ramsar supports washland (floodplain) 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; and may also have connectivity to aquifers. In addition to impacts from potential increases in water abstraction, the Supplementary Advice on Conservation Objectives and the Site Improvement Plan for the Ouse Washes SPA provides information about the negative effects of high water levels and prolonged flood events on the designated features **[See reference** 43**]**. Qualifying features (including breeding birds, overwintering birds and supporting grassland communities) are being adversely affected by increased flooding on the Ouse Washes. Flooding during spring / early summer severely damages the breeding bird interest by flooding nests, drowning young and affecting habitat. Deep flooding during winter also impacts overwintering birds such as wigeon and impacts on the wetland fauna, especially invertebrate populations. Wetland flora is also affected through prolonged submersion, favouring swamp communities over the designated grassland species. Prolonged summer flooding disrupts essential management of the washland, affecting the condition of the grassland for breeding birds in subsequent spring/summer season(s) **[See reference** 44**]**. New development has the potential to exacerbate flooding and the rate of runoff if urbanisation effects are not mitigated. 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/or increased flooding and it is therefore screened in for further assessment.

4.143 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** 45**]**. 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.

4.144 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 therefore this effect is screened in for further assessment.

4.145 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 therefore is screened in for further assessment.

4.146 Portholme SAC supports lowland hay meadows, which are subject to flooding events from the River Great Ouse. Increased demand for water abstraction has the potential to result in impacts to the River Great Ouse if the river flows are significantly altered. As with Ouse Washes SPA above, the Supplementary Advice on Conservation Objectives for the Portholme SAC provides information about the negative effects of high water levels and prolonged flood events on the designated features **[See reference** 46**]**. New development has the potential to exacerbate flooding and the rate of runoff if urbanisation effects are not mitigated. Therefore, the potential for likely significant effects in relation to Portholme SAC from changes in water demand and/or increased flooding have been screened in for further assessment.

4.147 All of the Local Plan policies listed in in paragraph 4.5 (with the possible exception of Policies CC/RE Renewable Energy Projects and Infrastructure, and I/MH Mobility Hub Facilities, depending on the proposed development type) and their associated site allocations and windfall development could increase demand for water. This could therefore have impacts on: Ouse Washes SAC (and SPA and Ramsar, indirectly); Wicken Fen Ramsar; Chippenham Fen Ramsar; Fenland SAC; or Portholme SAC. These impacts would occur due to the Local Plan in combination with other plans and projects in the Cambridge Water area of supply **[See reference** 47**]** e.g. Huntingdonshire Local Plan, and the wider East Anglia region.

Water quantity – functionally linked habitat

4.148 Functionally linked habitats that are linked to watercourses or aquifers that supply water to the plan area could also be affected. Functionally linked habitats associated with the following Habitats sites could be affected by changes in water quantity:

- Ouse Washes SAC – fish.
- Ouse Washes SPA and Ramsar site – birds (indirectly).
- Fenland SAC – amphibians, fish.

4.149 The connectivity of these sites to water supply sources is similar to the Habitats sites themselves, i.e. the River Cam catchment and groundwater; and likely significant effects would occur due to the Local Plan in combination with other plans and projects.

Water quality – onsite

4.150 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 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.

Water treatment and discharge

4.151 Nutrient pollution, associated with wastewater treatment, 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.

4.152 Sewage services in Greater Cambridge are provided by Anglian Water. 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. Anglian Water's main wastewater treatment works (WwTWs) serving the plan area discharge into the following catchments **[See reference** 48**]**:

- River Cam catchment: Waterbeach, Cambridge, Teversham, Haslingfield, Foxton, Melbourn, Bassingbourn, Bourn, Sawston.
- River Great Ouse catchment: Uttons Drove, Over, Papworth Everard, Gamlingay.

4.153 Habitats sites downstream of these are:

- Ouse Washes SAC, SPA and Ramsar: downstream of WwTWs in the Great Ouse catchment. The SAC fish and SAC/Ramsar habitats and plant species could be affected directly, and the SPA and Ramsar bird species indirectly.
- Portholme SAC: downstream of WwTWs in the Great Ouse catchment (south of Huntingdon). The SAC habitats could be affected directly.
- The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site: downstream of WwTWs in the River Cam and Great Ouse catchments. The SAC and Ramsar habitats and plant species could be affected directly, and the SAC mammals and SPA and Ramsar bird species indirectly.

4.154 The Greater Cambridge Integrated Water Management Study (IWMS) **[See reference** 49**]** prepared by Stantec highlights that several Water Recycling Centres (WRC) have known capacity constraints and are currently at or exceeding their Dry Weather Flow (DWF) permits provided by the Environment Agency:

- Cam catchment: Barley, Bassingbourn, Bourn, Cambridge, Foxton, Guilden Morden, Haslingfield, Melbourn, Teversham.
- Great Ouse catchment: Over, Uttons Drove.

4.155 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.

4.156 All of the Local Plan policies listed in in paragraph 4.5 (with the possible exception of Policies CC/RE Renewable Energy Projects and Infrastructure, and I/MH Mobility Hub Facilities, depending on the proposed development type) and their associated site allocations and windfall development could increase demand for wastewater treatment. If wastewater 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, Portholme SAC, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site. These sites are therefore screened in for further assessment. These impacts would occur due to the Local Plan in combination with other plans and projects utilising wastewater treatment works in the Cam or Great Ouse catchments **[See reference** 50**]**, e.g. Huntingdonshire and East Cambridgeshire Local Plan.

Direct pollution / run-off

4.157 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 of a watercourse that is hydrologically connected to is used as an initial screening distance. Groundwater may also provide a hydrological connection, where sites are fed by aquifers.

4.158 As for dust and sediment, development adjacent to watercourses that are upstream of the Great River Ouse could result in direct pollution / run-off that affects:

- Ouse Washes SAC & Ramsar (and SPA, indirectly): there are site allocations and policy areas (S/AMC/FD, S/NS, S/SEA/NS, S/CBN, S/SEA/CBN) and windfall development that could occur within 500 metres of watercourses that flow into the River Great Ouse – likely significant effects (see also paragraphs 4.107 & 4.108).
- Portholme SAC: no site allocations or policy areas upstream. Windfall development could occur, but would be small in scale – no likely significant effects (see also paragraphs 4.110 & 4.111).

4.159 Development between Bourn and Orwell could affect Eversden and Wimpole Woods SAC if it was of a large enough scale to damage the woodland habitats supporting the SAC bat populations. However, there are no site allocations, policy areas, or locations in which windfall development could occur in these areas.

4.160 There are no other Habitats downstream that could be significantly affected by direct pollution; the sites at The Wash are too far to be significantly affected by the relatively small scale and localised direct pollution that could occur. Further assessment is necessary (see Chapter 5 Appropriate Assessment) to determine the potential impacts of development on Ouse Washes SAC and Ramsar (and SPA, indirectly), in relation to direct pollution / run-off. The effects would be significant due to the Local Plan alone.

Water quality – functionally linked habitats

4.161 The functionally linked habitats that could be affected by changes in water quality are hydrologically connected to the Habitats sites with water habitats that could be affected directly, i.e.:

- Ouse Washes SAC, SPA and Ramsar: SAC fish (directly); SPA/Ramsar birds (indirectly).

4.162 Functionally linked habitats associated with The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site have been screened out, as set out in paragraphs 3.19 and 3.24.

Wastewater treatment and discharge

4.163 Similarly to the assessment of wastewater treatment impacts onsite, functionally linked habitats associated with Ouse Washes SAC/SPA/Ramsar may be downstream of WwTWs in the Great Ouse catchment. The SAC fish and SAC/Ramsar habitats and plant species could be affected directly, and the SPA and Ramsar bird species indirectly.

4.164 All of the Local Plan policies listed in in paragraph 4.5 (with the possible exception of Policies CC/RE Renewable Energy Projects and Infrastructure, and I/MH Mobility Hub Facilities, depending on the proposed development type) and their associated site allocations and windfall development could increase demand for wastewater treatment. These are therefore screened in for further assessment. These impacts would occur due to the Local Plan in combination with other plans and projects utilising wastewater treatment works in the Cam or Great Ouse catchments **[See reference** 51**]**, e.g. Huntingdonshire and East Cambridgeshire Local Plan.

Direct pollution / run-off

4.165 With regards to direct pollution / run off at functionally linked habitats, there is no development proposed within the area in which habitats used by Ouse Washes SAC fish could occur (1.3 kilometres from the SAC). However, there is development proposed within 500 metres of watercourses that are upstream. These are the same development locations as for the onsite impacts, and are set out in paragraph 4.158.

4.166 Windfall development could also be permitted (see paragraph 4.7) within 10 kilometres of the SPA/Ramsar, where swan habitats could be present.

4.167 There is potential for likely significant effects to occur in relation to offsite pollution / run-off, if windfall development occurs on or adjacent to habitats used by SPA/Ramsar Bewick's swan or whooper swan, or within 500 metres of a watercourse upstream from the SAC fish habitat. Windfall development would be small in scale and the habitats that the swans rely on are common; therefore, any likely significant effect on the SPA/Ramsar would be in combination, for example if the East Cambridgeshire Local Plan also results in the loss of these habitats; however, impacts on the SAC could be due to the Local Plan alone as they have the potential to arise from several of the Local Plan site allocations or policy areas. Therefore, this effect is considered further at the Appropriate Assessment stage to determine the potential impacts of these site allocations in relation to offsite functionally linked habitat direct pollution, and whether mitigation measures are required.

Summary of screening assessment

4.168 Table 4.8 summarises the Screening conclusions reached in this HRA. Impact types for which likely significant effects were ruled out are shown with no colour and either as ‘no impact pathway’ or ‘no likely significant effect’ (i.e. there is an impact pathway, but the scale of impact is such that effects will not be significant). 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 Chapter 5.

4.169 These effects have the potential to arise from the policies identified at the beginning of this chapter 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 Impact type	Eversden & Wimpole Woods SAC	Portholme SAC	Devil's Dyke SAC	Ouse Washes SAC/SPA/Ramsar site	Chippen-ham Fen Ramsar (onsite only)	Wicken Fen Ramsar	Fenland SAC	The Wash & North Norfolk SAC and The Wash SPA/Ramsar (onsite only)	Breckland SAC and SPA
Physical damage and loss of habitat	Likely significant effects (onsite and FLL)	No impact pathway	No impact pathway	No impact pathway (onsite) Likely significant effects (SPA/Ramsar bird FLL & SAC fish FLL)	No impact pathway	No impact pathway	Likely significant effects (fish & amphibian FLL)	No impact pathway	No impact pathway
Non-physical disturbance	Likely significant effects (onsite and FLL)	No impact pathway	No impact pathway	No impact pathway (onsite) Likely significant effects (SPA/Ramsar bird FLL & SAC fish FLL)	No impact pathway	No impact pathway	Likely significant effects (fish & amphibian FLL)	No impact pathway	No impact pathway
Vehicle emissions (onsite only)	No likely significant effects	Likely significant effects	Likely significant effects	Likely significant effects	No likely significant effects	No likely significant effects	No likely significant effects	No likely significant effects	No impact pathway

Habitats site Impact type	Eversden & Wimpole Woods SAC	Portholme SAC	Devil's Dyke SAC	Ouse Washes SAC/SPA/Ramsar site	Chippen-ham Fen Ramsar (onsite only)	Wicken Fen Ramsar	Fenland SAC	The Wash & North Norfolk SAC and The Wash SPA/Ramsar (onsite only)	Breckland SAC and SPA
Aviation and industrial emissions (onsite only)	No likely significant effects	Likely significant effects	Likely significant effects	No likely significant effects (SAC & SPA) Likely significant effects (Ramsar)	Likely significant effects	Likely significant effects	Likely significant effects	No likely significant effects	No impact pathway
Dust and sediment (onsite only)	No impact pathway	No likely significant effects	No impact pathway	Likely significant effects (SAC and Ramsar directly, SPA indirectly)	No impact pathway	No impact pathway	No impact pathway	No impact pathway	No impact pathway
Recreation pressure (onsite only)	Likely significant effects	No likely significant effects	No likely significant effects	No likely significant effects	No likely significant effects	Likely significant effects	Likely significant effects (Wicken Fen component only)	No impact pathway	Likely significant effects

Habitats site Impact type	Eversden & Wimpole Woods SAC	Portholme SAC	Devil's Dyke SAC	Ouse Washes SAC/SPA/Ramsar site	Chippen-ham Fen Ramsar (onsite only)	Wicken Fen Ramsar	Fenland SAC	The Wash & North Norfolk SAC and The Wash SPA/Ramsar (onsite only)	Breckland SAC and SPA
Water quantity	No impact pathway	Likely significant effects	No impact pathway	Likely significant effects (SAC and fish FLL directly; SPA/Ramsar and bird FLL indirectly)	Likely significant effects	Likely significant effects	Likely significant effects (onsite and amphibian FLL)	No likely significant effect	No impact pathway
Wastewater treatment	No impact pathway	Likely significant effects	No impact pathway	Likely significant effects (SAC and fish FLL directly; SPA/Ramsar and bird FLL indirectly)	No impact pathway	No impact pathway	No impact pathway	Likely significant effects (SAC and Ramsar directly; SPA indirectly)	No impact pathway
Direct pollution	No impact pathway	No likely significant effects	No impact pathway	Likely significant effects (SAC, Ramsar habitats and fish FLL directly; SPA/Ramsar birds and bird FLL indirectly).	No impact pathway	No impact pathway	No impact pathway	No impact pathway	No impact pathway

Chapter 5
Appropriate Assessment

5.1 Following the Screening stage, likely significant effects have been identified. The Appropriate Assessment considers whether these impacts, once mitigation is taken into account, will have an adverse effect on the integrity of a Habitats site, due to the Local Plan alone or in combination with other plans or projects.

5.2 Likely significant effects were identified for the following sites and impact types:

- Physical damage and loss – onsite – in relation to Eversden and Wimpole Woods SAC (due to Local Plan alone)
- Physical damage and loss – Functionally Linked Land – in relation to Eversden and Wimpole Woods SAC (due to Local Plan alone, with potential for in combination effects) and Ouse Washes SPA/Ramsar (due to Local Plan and in-combination).
- Non-physical disturbance – onsite – in relation to Eversden and Wimpole Woods SAC (due to Local Plan alone)
- Non-physical disturbance – Functionally Linked Land – in relation to Eversden and Wimpole Woods SAC (due to Local Plan alone, with potential for in combination effects) and Ouse Washes SPA/Ramsar (due to Local Plan and in combination).
- Vehicle emissions – in relation to Devil's Dyke SAC, Ouse Washes SAC/SPA/Ramsar, and Portholme SAC (due to Local Plan alone and in combination).
- Aviation and industrial emissions – in relation to Portholme SAC, Devil's Dyke SAC, Ouse Washes Ramsar, Chippenham Fen Ramsar, Wicken Fen Ramsar, and Fenland SAC (due to Local Plan and in combination).
- Dust and sediment – in relation to Ouse Washes SAC and Ramsar, and SPA indirectly (due to Local Plan alone).
- Recreation pressure – in relation to Wicken Fen Ramsar site and Fenland SAC (due to Local Plan and in combination); and Eversden and Wimpole Woods SAC (due to Local Plan alone).
- Water quantity - in relation to Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar, Chippenham Fen Ramsar, Fenland SAC and Portholme SAC (due to Local Plan and in combination).

- Water quality (wastewater treatment) – in relation to Ouse Washes SAC, SPA and Ramsar, the Wash and North Norfolk Coast SAC, the Wash SPA and the Wash Ramsar Site and Portholme SAC (due to Local Plan and in combination).
- Water quality (direct pollution) – in relation to Ouse Washes SAC, SPA and Ramsar (due to Local Plan alone).

5.3 Therefore, Appropriate Assessment needs to be undertaken for these Habitats sites to determine whether the plan will result in Adverse Effects on Integrity (AEoI).

5.4 Appropriate Assessment takes into account mitigation within Local Plan policies and other sources, for example permitting processes. The principal policy within the Local Plan that prevents adverse effects on the integrity of Habitats sites is Policy BG/BG: Biodiversity and geodiversity. The relevant excerpt is reproduced below (other text in the policy is indicated with […]):

> […]
>
> Protection of biodiversity and geodiversity
>
> 7. For proposals where development may affect biodiversity (including sites of biodiversity importance, habitats and species of principal importance) or sites of geodiversity, prior to the determination of an application, applicants will provide survey information and site assessment that is proportionate to the likely severity of impacts.
>
> 8. Proposals coming forward on sites within the Natural England Impact Risk Zone for the Eversden and Wimpole Woods SAC and/or identified as having moderate or high suitability to support Barbastelle bats, will be required to undertake bat surveys in order to identify impacts and any necessary mitigation measures.
>
> 9. Development proposals which have a direct or indirect adverse effect on sites of biodiversity or geological importance as identified on the Policies Map (or other sites which meet the published criteria for selection), will not be permitted. Exceptions will only be made where the benefits of the development significantly outweigh any adverse impacts. In such cases where development is permitted, proposals must demonstrate that the mitigation hierarchy has been implemented, and the intrinsic natural features of particular interest must be safeguarded and enhanced having regard to:
>
> a) The international, national or local status and designation of the site; and,
>
> b) The nature and quality of the site's features, including its rarity value; and,

c) The extent of any adverse impacts on the notified features; and,

d) The likely effectiveness of any proposed mitigation with respect to the protection of the features of interest; and,

e) The need for compensatory measures in order to re-create, on or off the site, features or habitats that would be lost to development.

[…]

5.5 The supporting text of BG/BG states:

[…]

Sites and Habitats for Biodiversity in Greater Cambridge

5.20 The NPPF (2024) states that to protect and enhance biodiversity and geodiversity, plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them, along with areas identified by national and local partnerships for habitat management, enhancement, restoration or creation.

5.21 Greater Cambridge has a range of important sites and habitats for biodiversity, recognised through designations, from international to local importance. Some of these are also of geological importance. Sites of Biodiversity or Geological Importance are identified on the Policies Map and these represent a tiered network for the conservation of biodiversity and geodiversity within Greater Cambridgeshire. These sites include:

- Statutorily protected international Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and,
- National Sites of Special Scientific Interest (SSSIs) and,
- Local Nature Reserves (LNRs), Local Geological Sites (LGS) (worthy of protection for their Earth Science or landscape importance but not already protected as SSSIs), County and City Wildlife Sites (CWSs and CiWSs), and Protected Road Verges (PRV) are non-statutorily protected sites of local importance (sites without statutory protection designated at a local level).

5.22 European sites (SACs and SPAs) are protected by the Conservation of Habitats and Species Regulation 2017 as amended (the Habitats Regulations)

and the Councils must carry out a habitats regulations assessment (HRA) to test if a plan or project proposal could significantly harm the designated features of a European site. Plans or projects which may have a likely significant effect on a European site will require appropriate assessment. Natural England will be consulted on any planning application in or adjacent to a European Site, or any such candidate site.

5.23 The Habitats Regulations impose a strict negative test that permission can only be granted if it can be concluded that there will be no adverse effect on the site's conservation objectives. Derogations are only permitted where there are no alternative solutions, imperative reasons of overriding public interest and only then through provision of compensation. As such these tests are at a significantly higher level than would be applied to nationally or locally designated sites,

5.24 At present the only site of international importance within Greater Cambridge is the Eversden and Wimpole Woods SAC (the SAC is shown on the Policies Map). The site provides a habitat for a breeding colony of the Barbastelle bat, one of the rarest bats in Western Europe. The bats have been recorded at a small number of other sites up to eleven kilometres from the Woods. Proposals coming forward on sites within the Natural England Impact Risk Zone for the Eversden and Wimpole Woods SAC and/or identified as having moderate or high suitability to support Barbastelle bats are required to demonstrate that it will not have an adverse impact on their habitat and foraging areas and commuting flight paths. If mitigation is required, this will ensure the avoidance of key habitat features likely to be used by the bats and the creation and enhancement of suitable habitat for this species. Development proposals should have regard to the DEFRA Eversden and Wimpole Woods SAC Barbastelle Bat Protocol (or successor document)

[…]

Survey Information and Site Assessment

5.29 Prior to the determination of any development application (unless exempt under the Environment Act 2021), survey information and site assessment that is proportionate to the likely severity of impacts must be provided by applicants. Submitted documentation should be produced having regard to the guidelines for Ecological Impact Assessment produced by the Chartered Institute of Ecology and Environmental Management and relevant the best practice guidance for example British Standards on Biodiversity (BS 42020, 2013 or successor documents). Documentation should demonstrate that the mitigation hierarchy has been implemented and should evidence how the intrinsic natural features of particular interest are to be safeguarded or enhanced.

5.30 Survey information as required by the policy could include ecological appraisal, or an assessment of recreational pressure impacts on SSSIs where relevant.

5.31 Submitted ecological reports are expected to explain how the mitigation hierarchy has been embedded into the design of the development and to set out the steps to be followed in order of priority when delivering BNG. Where impacts on habitats and species cannot be avoided, a clear explanation of why alternative sites are not feasible, and what proposed mitigation and compensation measures are necessary to address all likely significant adverse effects is needed.

5.6 Other policies in the plan provide mitigation for specific impact pathways (see paragraph 4.3) and have been referred to and/or quoted as necessary in relation to the relevant impact pathways, below.

Physical damage/loss and non-physical disturbance

Eversden and Wimpole Woods SAC – direct impacts

5.7 The screening identified potential impacts due to loss or damage to habitats or non-physical disturbance of bats within the SAC, due to policies in the Local Plan that permit windfall development, which in theory could occur within the SAC boundaries (loss of habitat) or within 500m (non-physical disturbance).

Mitigation

5.8 In practice, development would not be permitted within the SAC, principally due to safeguards in Policy BG/BG; but also as a result of the operation of legislation such as the Habitats Regulations and the Wildlife and Countryside Act 1981 (which protects SSSIs, which underpin SACs, and protected species including bats).

5.9 Policy BG/BG also sets out requirements for bat surveys and mitigation which will apply to all development proposals within 10.2km of the SAC, including windfall development. This will ensure that, on a site-by-site basis, impacts on bats within the SAC (e.g. from lighting) would be assessed and where necessary mitigated.

Conclusion

5.10 There will be no adverse effects on the integrity of Eversden and Wimpole Woods SAC arising from the Local Plan due to direct loss or damage of habitats within the SAC or direct non-physical disturbance of bats within the SAC boundary.

Eversden and Wimpole Woods SAC – bat functionally linked habitats

5.11 Eversden and Wimpole Woods SAC is designated for barbastelle bats, which use the woodland in the SAC as a summer maternity colony. Barbastelles rely on offsite rich foraging habitats and well-connected commuting corridors between the roost site and wider landscape to sustain the SAC population.

5.12 This species primarily feeds on moths throughout the year. During the summer months, moth species can be found in a wider range of habitats compared to the winter months. Female barbastelles will typically 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.

5.13 As set out in the Screening Assessment (paragraphs 3.21-3.22), barbastelles studies have established that the bats rely on habitats within a Core Sustenance Zone of 6 kilometres from the SAC; and within a wider Landscape Connectivity Zone, which extends from 6 kilometres to 10.2 kilometres from the SAC. These distances have been determined (as confirmed in Natural England's currently unpublished 'Eversden and Wimpole Woods SAC Barbastelle Bat Protocol'), using records of tracked bats, confirmed to be from Eversden and Wimpole Woods SAC. The Bat Protocol is expected to be published soon and is referred to in the supporting text of Policy BG/BG (paragraph 5.24) which requires development proposals to have regard to it or its successor document.

5.14 13 site allocations or policy areas are within 10.2 kilometres of the SAC (see paragraph 4.13). These site allocations have been subject to a desk-based review to determine the suitability of these sites for this qualifying species. This assessment can be found in **Appendix E.** 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.

- One policy area is considered to have high suitability to support barbastelle bats - S/SEA/BA: Non development area adjacent to Bourn Airfield (Strategic Enhancement Area), due to hedgerows and woodland present within the SEA, wider connectivity to other roost sites such as Hardwick Wood, and its location within the Core Sustenance Zone. This area is not allocated for built development, but could involve habitat changes.
- Three site allocations and one policy area are considered to have moderate suitability to support barbastelle bats, due to being predominantly arable or urban sites but with some features that could be used by barbastelle bats. These are:
  - S/BA: Bourn Airfield New Village;
  - S/CB: Cambourne;
  - S/CBN: Cambourne North; and
  - S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area).
- Most of these site allocations / policy areas are within the 6 kilometre Core Sustenance Zone; Cambourne North is just outside it (6.4 kilometres).

5.15 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. An increase in non-physical disturbance (especially light spill) on these habitats also 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, mitigation is required, as detailed below.

5.16 The three site allocations and one policy area listed in paragraph 5.14 with moderate suitability and the one policy area with high suitability to support barbastelle bats could result in physical damage or loss of habitat and non-physical disturbance on land that is functionally linked to the Eversden and Wimpole Woods SAC.

5.17 In addition to the above site allocations, there is potential for additional development to come forward as part of the Local Plan through windfall sites. The potential impacts on physical damage and disturbance to offsite functionally linked habitat in relation to the SAC will need to be assessed on a site-by-site basis as these developments come forward.

Mitigation of Local Plan impacts

5.18 Policy BG/BG: Biodiversity and Geodiversity is the principal policy in the Local Plan which provides protection for habitats sites and sets out the approach and requirement for mitigation. This policy provides overarching protection for Habitats sites (paragraph 9 ensures that development that would have an adverse effect would not be permitted); and states that "Proposals coming forward on sites within the Natural England Impact Risk Zone for the Eversden and Wimpole Woods SAC and/or identified as having moderate or high suitability to support Barbastelle bats, will be required to undertake bat surveys in order to identify impacts and any necessary mitigation measures." (See extract of Policy BG/BG in paragraph 5.4 above). The supporting text of the policy (see extract in paragraph 5.5 above) also references the impact risk zones and Natural England's (currently unpublished) 'Eversden and Wimpole Woods SAC Bat Protocol' **[See reference** 52**]** which has informed the zones and provides further detail on the types of mitigation that may be appropriate. The Bat Protocol recommends that mitigation is site-specific but could include (and are not limited to):

- Creating, restoring or enhancing new dark corridors to maintain a network of flyways;
- Creating, restoring or enhancing foraging habitat in locations with functional linkage to known roosts;
- Ensuring habitats are designed and managed to promote moth abundance;
- Sensitive lighting design, following best practice guidance **[See reference** 53**]**; and
- Locating noise and vibration generating activities away from sensitive bat features.

5.19 The requirements for bat surveys and mitigation in Policy BG/BG will apply to all development proposals within 10.2km of the SAC (i.e. within the 'Core Sustenance Zone' or 'Landscape Connectivity Zone' established in Natural England's Bat Protocol), including windfall development. Given the specific requirements and examples of mitigation techniques set out in the Bat Protocol referred to above and in Policy BG/BG, it is expected that a range of conventional and well-established mitigation measures will be incorporated into the design of the development proposals, and can be relied upon to be effective. The preparation of such mitigation and its full implementation will be secured through the application of Local Plan policies, in particular BG/BG, to development proposals at the planning application stage. This will ensure that, on a site-by-site basis as any development proposals

come forward, impacts on bat functionally linked habitats will be fully assessed and understood and any adverse effects are mitigated.

5.20 The three large site allocations within or near the Core Sustenance Zone (S/CBN, S/CB, S/BA) and 'non development area' S/SEA/CBN require safeguards which are secured within the site policies, as follows:

- S/CB: Cambourne – states that development must "Retain existing woods, hedges, unimproved grassland areas and water features, contributing to the character and amenity of Cambourne West. These must be: managed to enhance their ecological value; […] Planned with sensitive lighting strategies and provide dark habitats and/or corridors where possible."
- S/BA: Bourn Airfield – development must "Retaining existing woodland buffers, particularly on the eastern edge of the site." And "In addition to retaining existing woodland along the eastern part of the site, planting new woodland at the open area backing onto residential properties in West Drive to form a continuous woodland belt; and Providing a sensitive lighting strategy and dark habitats/corridors where possible, linking to those being delivered as part of Cambourne North (Policy S/CBN), and around the outer edge of the settlement".
- S/SEA/BA: Bourn Airfield Strategic Enhancement Area – intended to "ensure sufficient separation from neighbouring settlements, including Highfields Caldecote, and maintain a soft, green landscape to protect the development's rural setting. These areas may also be used to deliver other associated uses, including drainage, habitat compensation and informal open space."
- S/CBN: Cambourne North – the policy states that "Cambourne North contains and is close to a number of nationally significant ecological and historic assets, including Ancient Woodlands, County Wildlife Sites, and an extensive network of archaeological remains and features. The future masterplan and land use pattern of the town will need to give due consideration to these assets, identifying and implementing measures that mitigate any impacts but also deliver enhancement wherever possible, including creating an extensive network of multi-functional green infrastructure corridors that respond appropriately to their respective ecological and landscape sensitivities."
- S/SEA/CBN: Cambourne North Strategic Enhancement Area – states that the SEA should "support the long-term viability and nature friendly farming principles of RSPB Hope Farm as well as delivering other appropriate associated uses including drainage, habitat compensation and public open space and sports facilities as part of a mosaic of landscapes typologies and uses. Where appropriate, the SEA may also include new and/or improved active

travel and highways connections. All uses and facilities within the SEA must be sensitively designed into the landscape context and ensure that ecological species, habitats and (dark) corridors are at the forefront of design considerations."

5.21 Other policies in the Local Plan providing relevant safeguards for physical damage or loss of functionally linked habitat are:

- 'Policy BG/TC: Improving Tree Canopy Cover and the Tree Population' and 'Policy BG/RC: River corridors' which require developments to demonstrate how they will protect and enhance trees, hedgerows and river corridors, which are important habitat for barbastelle bats.

5.22 Other policies providing relevant safeguards for non-physical disturbance of bats using functionally linked land are:

- Policy GP/QD: Achieving High Quality Development: "Design should minimise adverse impacts including loss of privacy, overlooking, overshadowing, poor daylight/sunlight access, microclimate effects, artificial lighting, noise, vibration, fumes, odours, and other forms of pollution."
- Policy I/CM: Construction Management: "All major development, or other development that due to its nature or location is likely to have an adverse impact on the local environment and amenity during construction, must be informed by a Demolition Environmental Management Plan (DMP), a Construction Environmental Management Plan (CEMP), or a combined Demolition and Construction Environmental Management Plan (DCEMP).", which should include details of "measures to be incorporated during demolition and/or construction to mitigate, control and monitor impacts arising in relation to artificial lighting, noise, vibration, surface water, drainage, dust, odour and other pollutants".

5.23 With the mitigation provided for within Local Plan policies, the Local Plan will not have an adverse effect on the integrity of Eversden and Wimpole Woods SAC, due to loss of bat functionally linked habitats.

Potential for in combination effects with East West Rail

5.24 There may also be physical damage or loss of habitat and non-physical disturbance to offsite functional habitat in relation to the SAC due to the development of the East West Rail (EWR) scheme. The EWR scheme has not yet been submitted for determination through the Development Consent Order (DCO) process. Therefore, although proposed routes are known, the final route and design and

mitigation of impacts on the SAC are still being developed and have not been published at this stage. The broad potential route is shown as Safeguarded Land on the Local Plan Proposals Map but EWR is not a policy or proposal of the Plan. Some of the Safeguarded Land for the potential route runs between the S/CB Cambourne and S/CBN: Cambourne North allocations and continues south east towards Cambridge, and is within the Core Sustenance Zone and the wider Landscape Connectivity Zone of the SAC bats.

5.25 It is understood that a project-level Habitats Regulations Assessment is being undertaken for the EWR scheme to supplement the wider Environmental Impact Assessment (EIA) also being carried out. These have not yet been finalised or published. Both of these assessment processes can be expected to help to inform the final design and specific route the EWR scheme will take.

5.26 The EWR Environmental Update Report published in 2024 **[See reference** 54**]** explains that it has been prepared to inform the public and other stakeholders about how environmental considerations have been, and will continue to be, reflected in the evolving design of the proposals.

5.27 Chapter 10 of the Environmental Update Report relating to the Croxton to Toft section of the route (which runs from west of Cambourne, passes Cambourne to the north, and then heads south east) provides the following information about habitats that are used by barbastelle bats and therefore functionally linked to the SAC:

- Paragraph 10.2.22: "…three ancient woodlands are near to the proposed route around Cambourne. Elsworth Wood and Knapwell Wood ancient woodlands are designated as Sites of Special Scientific Interest (SSSIs) and are respectively located approximately 600m and 100m north of the draft Order Limits. Hardwick Wood is also a SSSI, located approximately 560m south and west of the project. Further east, where the route would emerge from the tunnel south of the A428, an unnamed deciduous woodland with potential ancient woodland is situated to the north of Highfield Caldecote."
- Paragraph 10.2.23: "These ancient woodlands and several nearby woods (such as North Lodge plantation and woods at Wood Farm Cottages) have been identified for supporting barbastelle bats. It is likely that these provide supporting habitat for the Eversden and Wimpole Special Area of Conservation (SAC) as part of a wider network of ancient woodlands located in a swathe from Waresley to Great Eversden."
- Paragraph 10.2.24: "Between St Ives Road and Toft this route section lies within the SAC barbastelle bat core sustenance zone (Greater Cambridge Biodiversity Supplementary Planning Doc). To date, confirmed barbastelle roosts have been associated with woodland, although none have been identified within the draft

Order Limits. The project would, however, intersect with home ranges for barbastelle bats including those associated with Hardwick Wood SSSI and Kingston Wood."

5.28 Similar information is provided in Chapter 11 relating to the Comberton to Shelford section of the route:

- Paragraph 11.2.25: "The project would run closest to the Eversden and Wimpole Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) in this route section, at approximately 3km (1.8 miles) distance. Barbastelle bats are the qualifying feature of this internationally designated site and will be the principal subject of the Habitats Regulation Assessment for the project. There is a network of ancient woodland SSSIs located in this part of Cambridgeshire that form a swathe from Waresley to Great Eversden, though none is physically impinged by the project. This network is likely to provide supporting habitats for barbastelle and other bat species."
- Paragraph 11.2.29: "…the River Granta, Bourn Brook and River Rhee and their tributaries – including Hobson's and Coldham's brooks – are chalk streams, possessing nationally and internationally recognised unique habitats. These chalk streams support a variety of species including water voles and otters. In particular, the Bourn Brook is considered to be a stronghold for water voles and is a key commuting route and foraging area for barbastelle bats."

5.29 Therefore, there is potential for habitat features such as hedgerows, lines of trees, chalk streams and woodland used by the bats for foraging and commuting to be interrupted or severed by the EWR scheme where it intersects these habitats within the landscape. There is also potential for non-physical disturbance, in particular light, noise and vibrations which may degrade habitat suitability and impact the functionality of ecological features supporting bats. This is recognised in the information published already by the promotors of the EWR scheme.

East West Rail mitigation

5.30 The EWR scheme proposals are being subject to a separate project-level Habitats Regulations Assessment as they are developed, and appropriate mitigation measures will be identified and submitted for consideration as part of the DCO process in order for adverse effects on integrity to be avoided. EWR plans to submit its DCO application in 2027 and this will be accompanied by the full reports for the EIA and HRA processes.

5.31 The EWR November 2024 Environmental Update Report **[See reference** 55**]** noted the following with respect to how adverse impacts on barbastelle bats and the Eversden and Wimpole Woods SAC would be considered and potentially mitigated:

- Paragraph 10.2.27: "Direct impacts on ancient woodland through habitat loss would be avoided. Protection from indirect impacts on the network of ancient woodlands, and other retained habitats (including [habitat of principal importance] HPI), will be a key consideration for design and mitigation proposals, including management through the draft CoCP [Code of Construction Practice] to address risks of air pollution, as well as mitigating against habitat fragmentation and disruption of habitat connectivity. The need for habitat replacement areas will be determined as part of the EIA."
- Paragraph 10.2.28: "To ensure legal compliance with relevant wildlife legislation, appropriate mitigation strategies for legally protected species found to be present will be developed in consultation with Natural England as the ecology baseline for the project evolves. The potential for impacts on barbastelle bats associated with the SAC will also be considered through the Habitats Regulation Assessment."
- Paragraph 11.2.33: "Based on survey work to date (and with further surveys planned) bats, including barbastelle, are known to commute and forage widely across this area. Maintaining connectivity and enhancing their foraging areas would be a key consideration for the project design and mitigation, particularly as barbastelle bats are a qualifying feature of the Eversden and Wimpole SAC/SSSI. This would be achieved by considering this species in the ongoing design development, including appropriate mitigation measures within the draft Order Limits, and through engagement and working in partnership with others involved in strategic mitigation initiatives in the wider countryside, such as local nature partnerships."
- Paragraph 11.2.35: "The project may result in direct and/or indirect impacts to the Lord's Bridge Observatory county wildlife site without mitigation measures being designed into the proposals. The Chapel Hill tunnel allows a greater proportion of the agricultural field pattern on the hill to be retained, including hedgerows that could provide bat flight paths."
- Paragraph 11.2.36: "Planting on either side of the route, including hedgerow, grassland, woodland, and wetland creation would create wider visual and ecological linkages to existing woodland blocks. Woodland and hedgerow planting is proposed, associated with proposed bat crossings under the Bourn Brook viaduct, the bridge for Great and Little Eversden Footpath 26, the tributary of the Bourn Brook underbridge and the Long Brook underbridge, strengthening the green infrastructure links in this area. The realigned B1046

> Comberton Road bridge would be designed to maintain bat flight paths in this area."

5.32 The information published so far by the promoter of the East West Rail scheme has recognised the potential impact on functionally linked habitat associated with Eversden and Wimpole Woods SAC; and has confirmed that measures will be included in the scheme to mitigate adverse effects. The East West Rail proposals will progress through a Development Consent Order process, which will include a full assessment of the potential effects on the SAC and the securing of any required mitigation.

Conclusion

5.33 There will be no adverse effects on the integrity of Eversden and Wimpole Woods SAC, as a result of physical damage/loss or non-physical disturbance of functionally linked land due to the Local Plan alone. This is due to the requirements for survey and mitigation within Policy BG/BG, plus additional measures in Policies BG/TC, GP/QD, I/CM and the additional mitigation within the relevant site-based policies in the Greater Cambridge Local Plan, particularly S/CBN, S/BA and S/CB. The mitigation required by the Local Plan policies and which will be provided by development proposals being submitted for planning consent, can be relied upon to ensure no such adverse effects arise through the Local Plan alone.

5.34 However, the potential for in combination effects arising from the emerging East West Rail proposals has also been considered. As noted above, that scheme has not yet been finalised as to its details and is not the subject of any application for consent nor therefore any approval. It may however come forward in a way that affects the implementation of the Local Plan and its policies and therefore the potential for in combination effects has been considered.

5.35 The East West Rail scheme will be determined via the Development Consent Order process and will need to take into account the Local Plan proposals and mitigation, as the East West Rail proposals emerge and become more defined. In addition, developers submitting planning applications in relation to Cambourne, Cambourne North and Bourn Airfield or windfall proposals within the Core Sustenance Zone of 6 kilometres from the SAC; or the wider Landscape Connectivity Zone (which extends from 6 kilometres to 10.2 kilometres from the SAC) will be expected to engage and collaborate with the promoters of East West Rail to align mitigation measures. Such engagement and collaboration will be expected to form part of the assessment of impact on bats (and other protected species) as well as in the preparation of mitigation for any development proposal, as required by Local Plan policies. This engagement and collaboration will be undertaken at the development

management stage, and will take into account how advanced the East West Rail scheme proposals and supporting information are at the time. The Local Planning Authority, when scrutinising an application for planning permission and assessing that application against Local Plan policies, will ensure that this collaborative approach is undertaken and that mitigation provided for a development proposal is responsive to the details of the East West Rail scheme as it exists at the time. This will ensure that mitigation is effective and is appropriately secured, to ensure that there will be no adverse effects in the integrity of the SAC. As noted above, the information currently available in relation to East West Rail demonstrates that the promoters of the scheme are aware of the potential impact on Eversden and Wimpole Woods SAC and intend that this will be fully assessed (including through its own HRA) and mitigated as part of that scheme.

5.36 Natural England itself has advised on the need for collaboration and joined up design between the mitigation for the EWR scheme and future applications associated with the relevant allocations within the Local Plan to be explicitly stated within relevant Local Plan policies. Although the policies in the Reg.19 Local Plan are in their current form considered sufficient to achieve this, given Natural England's representations, the Councils are open to making modifications to the Local Plan during the Examination stage to address those representations. Therefore, it is concluded that there should be no residual in-combination effects from the Local Plan or East West Rail associated with physical damage or loss of functionally linked habitat and/or non-physical disturbance to bats using functionally linked land.

Ouse Washes SAC – fish functionally linked habitats

5.37 The screening identified potential impacts due to loss or damage to, or non-physical disturbance at, fish functionally linked habitats; if windfall development occurs near to watercourses linked to the SAC and used by spined loach.

Mitigation

5.38 Policy BG/BG (see paragraph 5.4) provides general protection for Habitats sites. The following provide additional safeguards:

- Policy I/CM: Construction management – requires major developments, or those otherwise expected to have an adverse impact on the environment, to produce a Demolition and Construction Environmental Management Plans. These must include measures to mitigate, control and monitor impacts relating to surface water, drainage, and groundwater contamination.

- Policy BG/RC: River corridors – states that "To help protect water quality and watercourse habitats, development proposals should retain or reinstate a buffer zone of at least 10m from the watercourse bank top, or 5m from a ditch bank top, according to the River/Ditch definitions set out under current BNG User Guidance. Within these riparian buffer zones, no development shall be permitted except for domestic extensions, soft landscaping, small amenity areas, or proposals where it is necessary for the nature and function of the development."

5.39 These are considered sufficient to avoid damage to fish functionally linked habitats from windfall development.

Conclusion

5.40 There will be no adverse effects on the integrity of Ouse Washes SAC due to loss or damage of, or non-physical disturbance at, fish functionally linked habitats.

Ouse Washes SPA & Ramsar site – bird functionally linked habitat

5.41 The following site allocations and policy areas are proposed within 10 kilometres of the SPA and Ramsar site and could result in the loss of functionally linked habitats used by the sites' Bewick's swan or whooper swan:

- S/AMC/FD Fen Drayton Former Land Settlement Association Estate;
- S/NS Northstowe and S/SEA/NS Non-developable area adjacent to Northstowe; and
- S/CBN Cambourne North and S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area).

5.42 In addition to these, windfall development could be permitted (due to Policy S/DS) within 10 kilometres of the SPA/Ramsar.

5.43 Bewick's swan and whooper swan make use of arable fields for foraging. These habitats are common and widespread, so the loss of a small amount of arable land within 10km of the SPA/Ramsar would not have an adverse effect on the integrity of the Habitats site, as the swans could find alternative foraging areas. However, loss of large or multiple areas of suitable habitat, could combine to have an adverse effect on the SPA/Ramsar swan populations.

Mitigation

5.44 Policy BG/BG (see paragraph 5.4) provides general protection for Habitats sites and consideration of ecological impacts. This is considered sufficient safeguard for damage/loss of habitat or non-physical disturbance at windfall sites.

5.45 The policies listed in paragraph 5.21 also provide sufficient safeguards for non-physical disturbance at functionally linked habitats, for site allocations and policy areas within 10 kilometres of Ouse Washes SPA/Ramsar.

5.46 The following requirement is also included in the policies of site allocations within 10 kilometres of Ouse Washes SPA/Ramsar (S/AMC/FD, S/NS, S/CBN): “ecological surveys to determine whether the site is used by Bewick’s swan or whooper swan linked to the Ouse Washes SPA and Ramsar site”, with further detail provided in the supporting text to the policies: “The Habitats Regulations Assessment identified that this site may be functionally linked habitat to the Ouse Washes SPA and Ramsar site for Bewick’s swan or whooper swan and ecological survey will be required to assess habitat suitability for these species. If the site is of moderate or high suitability, over wintering bird surveys will be required to confirm whether the site is likely to be functionally linked to the SPA/Ramsar site. Surveys should be undertaken to identify the species present, the numbers of birds involved and the type of use the birds make of the site e.g. roosting, loafing or feeding. Mitigation would depend on the species and habitats present but should either retain/enhance existing habitats; or create compensatory habitats to perform the same function as the affected habitat, and for the same species and numbers of birds. Measures could be delivered on or off site, depending on the land available, and would need to be maintained in perpetuity and monitored to ensure ongoing management remains appropriate. Mitigation needs to be in place and effective before harm resulting from the development occurs.”

5.47 Policy S/ CBN also states that the Strategic Enhancement Area for Cambourne North needs to “include areas of open agricultural fields, providing an appropriate context for the conservation areas to the north of the site and supporting farmland birds and other important species and habitats in this area.” This directly references the potential for birds at the site and supports the requirement for bird survey, and the SEA provides a location within which compensatory habitats could be provided, if required. Policy S/NS states in relation to the Strategic Enhancement Area for Northstowe “Where appropriate the SEA could also deliver other appropriate associated uses including drainage, habitat compensation and public open space.” Although this does not reference birds, the SEA would provide a location in which compensatory habitat could be provided, if required.

5.48 This would provide mitigation for the contribution of the Local Plan to potential in-combination effects of physical damage/loss of bird functionally linked habitats.

Conclusion

5.49 There will be no adverse effects on the integrity of Ouse Washes SPA/Ramsar due to loss or damage of, or non-physical disturbance at, bird functionally linked habitats.

Fenland SAC – fish and amphibian functionally linked habitats

5.50 The screening identified potential impacts due to loss or damage to, or non-physical disturbance at functionally linked habitats; if windfall development occurs within 1.3 kilometres of the SAC, on or adjacent to habitats used by the SAC's spined loach or great crested newts.

Mitigation

5.51 Policy BG/BG (see paragraph 5.4) provides general protection for Habitats sites and consideration of ecological impacts. This is considered sufficient safeguard for damage/loss of functionally linked habitat or non-physical disturbance resulting from windfall sites.

5.52 The following provide additional safeguards:

- Policy I/CM: Construction management – requires major developments, or those otherwise expected to have an adverse impact on the environment, to produce a Demolition and Construction Environmental Management Plans. These must include measures to mitigate, control and monitor impacts relating to surface water, drainage, and groundwater contamination.
- Policy BG/RC: River corridors – states that "To help protect water quality and watercourse habitats, development proposals should retain or reinstate a buffer zone of at least 10m from the watercourse bank top, or 5m from a ditch bank top, according to the River/Ditch definitions set out under current BNG User Guidance. Within these riparian buffer zones, no development shall be permitted except for domestic extensions, soft landscaping, small amenity areas, or proposals where it is necessary for the nature and function of the development."

5.53 These are considered sufficient to avoid damage to fish and amphibian functionally linked habitats from windfall development.

Conclusion

5.54 There will be no adverse effects on the integrity of Fenland SAC due to loss or damage of, or non-physical disturbance at fish or amphibian functionally linked habitats.

Air pollution – vehicle emissions

Portholme SAC, Devil's Dyke SAC, Ouse Washes SAC/SPA/Ramsar

5.55 Traffic data used in the HRA screening shows that traffic flows will exceed the screening threshold (1,000 AADT) on the following roads that pass within 200 metres of Habitats sites:

- Portholme SAC: A1307 due to the Local Plan in-combination with other plans and projects (all vehicles and HDVs);
- Devil's Dyke SAC: A14 due to the Local Plan alone (all vehicles) and in-combination (HDVs); and A1304 due to the Local Plan in combination with other plans and projects (all vehicles).
- Ouse Washes SAC/SPA/Ramsar: A1123 and A142 due to the Local Plan alone (all vehicles) and the A1123 in combination with other plans and projects (HDVs).

5.56 Air quality modelling and Appropriate Assessment have been carried out to determine whether this increase in traffic will have an adverse effect on the integrity of the SAC – see **Appendix F**. The air quality assessment predicts how far from each road nitrogen oxides (NOx), nitrogen deposition, acid deposition, and ammonia (NH3) will exceed the screening threshold (1% of the relevant critical load/level), and what the total concentrations of those pollutants will be, with the Local Plan alone and in combination. An Appropriate Assessment based on an ecological desk-based assessment has then been undertaken to understand what habitats are present in the affected areas and whether the predicted changes in pollutants would have an adverse effect on the sites' integrity.

5.57 In summary, the assessment presented in full in Appendix F has concluded that there will be no adverse effect on integrity due to vehicle emissions, for the following reasons:

- Portholme SAC: the Local Plan alone only affects a very small corner of the SAC. The Local Plan in combination affects a larger area, but the management of the site (grazing and hay cutting) and seasonal flooding mean that nutrients will be removed from the site by these processes and there will not be an adverse effect on the integrity of the SAC.
- Ouse Washes SAC, SPA and Ramsar site: the Local Plan alone only affects areas in which the sites' qualifying features are unlikely to be present (e.g. the road edge). For the Local Plan in combination, there are exceedances of the screening threshold to 129m from the A1123, 33m from the B1381, and 120m from both sides the A142. This could affect black-tailed godwit (SPA) or spined loach (SAC) indirectly via their supporting habitats, and emergent plant species (Ramsar). However, the washes are designed to hold flood water in winter and are grazed by livestock. The washes are subject to regular flooding, and the wet grasslands form part of a eutrophic freshwater system which is more strongly influenced by eutrophication from water pollution from other (non-airborne) sources. The habitats are phosphorous-limited rather than nitrogen limited and are not considered highly sensitive to nitrogen or acid deposition from air pollution. The combination of lower sensitivity to nitrogen and acid deposition, and the regular flooding that removes deposited pollutants, mean that there will not be an adverse effect on the integrity of the SAC, SPA or Ramsar site.
- Devil's Dyke SAC: the Local Plan alone only affects areas in which the sites' qualifying features are unlikely to be present (e.g. scrub/woodland). The Local Plan in combination results in the screening threshold being exceeded further into the SAC, but the presence of scrub and woodland at both ends of the dyke mean that only a small area of qualifying habitat at the northern end of the SAC (near the A14) is within the area of exceedance. The screening effect of woodland along the road and the A14 road cutting mean that the dispersion of pollutants into the site will be a smaller distance than modelled. Air pollution associated with the Local Plan in combination will only affect a very small area of the SAC and, on the basis of all available evidence, this will not have an adverse effect on the integrity of the site.

Mitigation

5.58 Adverse effects on integrity have been ruled out, therefore mitigation is not required; however, some of the policies in the Local Plan are intended to reduce trips by car and may contribute towards a reduction in traffic:

- I/ST: Sustainable Transport and Connectivity – developments must be designed around the principles of walkable neighbourhoods; provide routes for cycling/wheeling/walking; and provide improvements to public transport.

- I/CV: Cycle and Vehicle Parking – sets standards for cycle parking provision.
- GP/HD: Housing Density – encourages high density housing, near to places of work and amenities.
- CC/SD: Sustainable Development and the Climate Emergency – requires sustainability statements, which should include sustainable travel measures.

Conclusion

5.59 There will be no adverse effects on the integrity of Portholme SAC, Devil's Dyke SAC and Ouse Washes SAC/SPA/Ramsar due to air pollution from vehicle emissions.

Air pollution – aviation and industrial emissions

Portholme SAC, Devil's Dyke SAC, Ouse Washes Ramsar, Chippenham Fen Ramsar, Wicken Fen Ramsar, Fenland SAC

5.60 As stated in paragraphs 4.96-4.99, one policy could in theory permit aviation development; and several strategic allocations, site allocations and their associated policies permit industrial development. These could result in air pollution.

Mitigation

5.61 All industrial emissions are subject to control under the Industrial Emissions Directive (Directive 2010/75/EU), transposed into law in England by The Environmental Permitting Regulations (England and Wales) 2010 (as amended) and would require either a Part A(1) or A(2) environmental permit. Permits are issued by the Environment Agency. Permit applicants are required to undertake screening to identify European sites within 10 kilometres, calculate the predicted environmental concentration of each substance released to air and compare these with environmental standards, then take action to reduce emissions levels, where required **[See reference** 56**]**.

5.62 Aviation development that would be likely to have significant environmental effects would require (depending on its scale), project-level HRA, Environmental Impact Assessment, and/or a Development Consent Order. These processes would require environmental impacts, including air pollution, to be identified and mitigated if necessary / possible.

Conclusion

5.63 Control of aviation emission or industrial emissions is outside the remit of the Local Plan and is managed through emissions permitting, which will ensure that adverse effects on integrity are avoided. No additional safeguards are required in Local Plan policy to avoid adverse effects on the integrity of Habitats sites.

Air pollution – dust and sediment

5.64 The screening has identified that there are site allocations and policy areas (plus windfall) within 500 metres of a watercourse upstream of Ouse Washes SAC/SPA/Ramsar, which could therefore result in dust and sediment impacts at the Habitats site:

- S/AMC/FD Fen Drayton Former Land Settlement Association Estate – within 500 metres of Fen Drayton Lakes nature reserve, connected to the River Great Ouse.
- S/NS Northstowe and S/SEA/NS Non-developable area adjacent to Northstowe – within 500 metres of Swavesey Drain, connected to River Great Ouse.
- S/CBN Cambourne North and S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area) – within 500 metres of drains which flow towards Fen Drayton Lakes and the River Great Ouse.

Mitigation

5.65 Policy BG/BG (see paragraph 5.4) provides general protection for Habitats sites, and mitigation specific to dust or sediment is set out in:

- Policy CC/IW: Integrated water management, sustainable drainage and water quality – requires development to minimise impacts on water quality.
- Policy I/CM: Construction management – requires major developments, or those otherwise expected to have an adverse impact on the environment, to produce a Demolition and Construction Environmental Management Plans. These must include measures to mitigate, control and monitor impacts relating to surface water, dust, and other pollutants.
- Policy BG/RC: River corridors – states that “To help protect water quality and watercourse habitats, development proposals should retain or reinstate a buffer zone of at least 10m from the watercourse bank top, or 5m from a ditch bank top, according to the River/Ditch definitions set out under current BNG User

Guidance. Within these riparian buffer zones, no development shall be permitted except for domestic extensions, soft landscaping, small amenity areas, or proposals where it is necessary for the nature and function of the development."

- Policy GP/QD: Achieving high quality development – states that design should minimise pollution.
- WS/HS: Pollution, Health and Safety – states that "Development will be permitted where it can be demonstrated: that it does not lead to significant adverse effects on health, the environment or amenity from polluting or malodorous emissions, dust or other emissions to air."

5.66 These are considered sufficient safeguards to avoid dust and sediment deposition that would have an adverse effect on the integrity of Ouse Washes SAC/SPA/Ramsar.

Conclusion

5.67 With mitigation in Policies BG/BG and CC/IW, and additional measures in Policies I/CM, BG/RC, GP/QD and WS/HS, it can be concluded that adverse effects on the integrity of Ouse Washes SAC, SPA or Ramsar due to dust and sediment will be avoided.

Recreation pressure

Wicken Fen Ramsar Site and Fenland SAC

5.68 As detailed in the Screening Assessment, a ZOI of 10.7 kilometres has been applied in this assessment. Residential development would occur within 10.7 kilometres of Wicken Fen Ramsar site (and the Wicken Fen component part of Fenland SAC) at:

- S/AMC/NEC: North East Cambridge; and
- S/WNT: Waterbeach New Town.

5.69 Windfall development could also be permitted in the ZOI.

5.70 This impact would occur due to the Local Plan in combination with other plans resulting in residential development in the zone of influence, i.e. East Cambridgeshire Local Plan or West Suffolk Local Plan.

5.71 The 2026 visitor survey and recreation impact assessment report [Reference 43] states that:

> Overall, recreation pressure at Wicken Fen appears to be confined to the well-signposted network of publicly accessible pathways across the site. It is also clear from the interview data that visitors are unlikely to stray from pathways, as none of the routes cross the middle of the fens and SSSI units. Impacts from recreation include trampling and erosion of paths along the elevated banks, contamination to path edges via dog fouling, and a combination of trampling (loss of marginal vegetation) and potential contamination and disturbance to the waterways from dogs. Dog entry into waterways is likely to be the main cause of concern in terms of the wildlife interest of the site. Other potential impacts are of less concern due to the character of the site (i.e. elevation of pathways along lodes) and previous actions undertaken to manage impacts such as hard-surfacing.

Mitigation

5.72 Policy BG/BG (see paragraph 5.4) provides general protection for Habitats sites, and mitigation specific to recreation pressure is set out in:

- Policy BG/EO: Providing and enhancing open spaces – sets out quantity standards for new development;
- Policies BG/GI: Green and Blue Infrastructure (GBI) – requires development to protect and enhance GBI; and to integrate GBI into the proposals;
- BG/PO: Protecting open spaces – prevents net loss of open space;
- S/AMC/NEC: North East Cambridge – states that development "should deliver and/or contribute to an interconnected network of streets, parks, squares, green corridors and water features that successfully link to the wider green infrastructure network"; and
- S/WNT: Waterbeach New Town – includes a requirement for "strategic natural and publicly accessible open space within the Strategic Enhancement Area" and "a generous quantum of open space".

5.73 Policy BG/EO states:

1. New development must address the open space needs it generates, which will be secured through a mix of on-site provision and/or financial contributions for off-site open space provision, enhancement and/or management.

2. For green space and/or, open space, play and food growing space the scale and type of on-site provision, and any required financial contribution to off-site provision, will be determined in agreement with the Local Planning Authority, having regard to:

- site-specific constraints and opportunities, including the ability for the site to provide effective space/s for each typology at a scale that would be effective; and
- existing local provision and identified gaps in the relevant space type, including for accessible greenspace when assessed against the size-proximity criteria (as defined in Figure 133).

Accessible green and open space standards

All major development that are predominantly residentially-led must demonstrate total provision of accessible greenspace equivalent to 7.0 hectares per 1,000 population, and within this total:

3. Deliver a minimum on-site accessible greenspace provision that:

- is equivalent to 3.0 hectares per 1,000 of the population, unless the calculated on-site quantum falls below a functional minimum parcel size of 0.5 hectares. In such cases, the shortfall must be secured off-site; and
- Ensures access for all residences within the development to at least one appropriate tier of greenspace within the size-proximity criteria (as defined in Figure 133).

4. All commercial developments for 2,000m2 or more within Use Classes E(g)(i), E(g)(ii), as well as sui generis uses where the proposal comprises a research, innovation or institutional campus, must:

- Demonstrate open space provision equivalent to 2.0 hectares of open space per 1,000 employees and/or;
- where justified and agreed with the LPA, make provision off-site via financial contributions, with a focus on contributions to local greenspaces likely to be impacted by visits by on-site employees following occupation.

5. All green and/or open space must be designed to be welcoming and accessible meeting the needs of all users, with habitats and infrastructure appropriate to the local character and typology of greenspace. Green and/or open space design and management planning must have regard to best practice guidance as defined by the Green Flag Award criteria.

6.The residual accessible green and/or open space requirement not provided on-site will be secured as off-site provision and / or financial contributions to the delivery and/or management of accessible green and/or open space. Offsite contributions should be provided towards greenspaces that are within the relevant access catchments for the development as set out in Figure 4.3, and where possible, support the objectives of the Green Infrastructure Strategic Initiatives identified in the Greater Cambridge Green Infrastructure Opportunity Mapping Recommendations Report (2021) and green infrastructure schemes identified within the Greater Cambridge Local Plan Infrastructure Delivery Plan (or successor document).

7. Accessible Green Space provision for development proposals that are located within a zone of potential risk for a publicly accessible Site of Special Scientific Interest (SSSI), that is sensitive to the effects of recreational pressure, must be informed by Natural England guidance. For such development proposals:

- onsite Accessible Green Space provision must include areas designed to absorb significant proportions of the day-to-day recreational needs of residents; and
- any offsite contributions should be prioritised towards greenspaces that are located and designed in such a way that mitigates the impacts on the SSSI/s that are affected by that development.

[…]

5.74 The open space standards set out in this policy have been developed in consultation with Natural England, as part of the Local Plan evidence base.

5.75 As visitor access and pressure is well managed at Wicken Fen, the mitigation in Policy BG/EO is sufficient to provide alternative open space, to divert additional trips arising from the Local Plan away from Wicken Fen Ramsar (and the component of Fenland SAC). This will mitigate the Greater Cambridge Local Plan contribution to in-combination effects and avoid adverse effects on the integrity of the Ramsar or SAC.

Conclusion

5.76 With mitigation in Policy BG/EO and in the site policies for S/AMC/NEC and S/WNT, it can be concluded that adverse effects on the integrity of Wicken Fen Ramsar (and its component part of Fenland SAC) due to recreation pressure will be avoided.

Eversden and Wimpole Woods SAC

5.77 As detailed in the Screening Assessment, a ZOI of 5 kilometres has been applied in this assessment. One residential site allocation is within 5 kilometres of Eversden and Wimpole Woods SAC:

- S/BA: Bourn Airfield New Village

5.78 Windfall development could also occur within 5 kilometres of the SAC. Impacts on the SAC would occur due to the Local Plan alone.

Mitigation

5.79 As at Wicken Fen (paragraphs 5.57-5.58), Policy BG/EO is the principal mitigation with the Local Plan; this is supported by additional measures in BG/BG, BG/GI and BG/BG/PO. The site policy for S/BA also contains a requirement to provide 'strategic landscaping' and 'informal open space' within the adjacent Strategic Enhancement Area (S/SEA/BA) and "a network of multifunctional public spaces within the design".

5.80 The supplementary advice for conservation objectives for the SAC **[See reference** 57**]** states that:

> There is no evidence that daytime public access to woodland used by barbastelles causes disturbance to these bats. It seems very likely that light pollution during hours of darkness would be disturbing. Tree management that damaged actual or potential roosts, carried out for H&S reasons in areas used by the public, or indeed any other reason, would certainly cause serious disturbance to the bats.

5.81 Given the low sensitivity of the site and the provision within the Local Plan for additional accessible greenspace (within the open space standards and at S/SEA/BA), the mitigation is sufficient to avoid adverse effects on integrity at the SAC.

Conclusion

5.82 Given the above, and with mitigation in Policy BG/EO and in the site policy for S/BA, it can be concluded that adverse effects on the integrity of Eversden and Wimpole Woods SAC due to recreation pressure will be avoided.

Breckland SAC and SPA

5.83 As set out in the screening assessment, Breckland SAC and SPA have a ZOI of 26.3km, which is applied to exclude the Breckland Farmland SSSI component. S/WNT: Waterbeach New Town is within the ZOI of the SPA and SAC (c.24 kilometres away), and windfall development could also fall within the ZOI.

Mitigation

5.84 As at Wicken Fen (paragraphs 5.57-5.58), Policy BG/EO is the principal mitigation with the Local Plan; and this is supported by additional measures in BG/BG, BG/GI, BG/BG/PO. These are considered sufficient mitigation for the small-scale windfall development that could occur in the small area of the plan area that is within the ZOI. For Waterbeach New Town, which is c.24 kilometres from the accessible portion of the SAC/SPA, there are also the following policies:

- S/WNT: Waterbeach New Town – includes a requirement for "strategic natural and publicly accessible open space within its associated Strategic Enhancement Area" (S/SEA/WNT) and "a generous quantum of open space".
- S/SEA/WNT: Waterbeach Strategic Enhancement Area – includes a requirement for "provision for sports, recreation, ecology habitats and species as well as supporting the well-being of those living, working and visiting the town."

5.85 Waterbeach New Town already has outline planning permission and includes **[See reference** 58**]** c.35ha of open space (including an 8ha country park) on the eastern portion and open space around the central lake in the western portion.

5.86 These contain requirements for sufficient accessible open space, to provide alternative accessible greenspace and divert visitors that might otherwise have gone to Breckland SAC/SPA (for example by providing local greenspace for dog walking).

5.87 West Suffolk Council has a mitigation strategy (see paragraph 4.116) which requires residential development within the ZOI to contribute to both 'SANG' - suitable alternative natural greenspace, used to divert trips that would otherwise have

gone to Habitats sites; and 'SAMM' – strategic access management and monitoring, used to fund measures such as visitor management at the Habitats site/s. Natural England has confirmed (see Appendix G) that they do not require residential development outside of West Suffolk to contribute to the West Suffolk mitigation, e.g. to the SAMM funds for Breckland SAC/SPA; and that the Greater Cambridge Councils should decide on the most appropriate ways to mitigate recreation pressure.

5.88 It is considered that the current provision in the Local Plan is sufficient to avoid adverse effects on Breckland SAC/SPA due to recreation pressure. Open space policies BG/EO, BG/GI and BG/PO are sufficient to avoid adverse effects from windfall development, and there are additional requirements in S/WNT and S/SEA/WNT for Waterbeach New Town.

Conclusion

5.89 With mitigation in the plan, including Policy BG/EO, S/WNT and S/SEA/WNT, it can be concluded that adverse effects on the integrity of Breckland SAC and SPA due to recreation pressure will be avoided.

Water quantity

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

5.90 Increased demand for water supply associated with new development will increase abstraction from aquifers. The screening identified likely significant effects from this at Ouse Washes SAC/SPA/Ramsar (including bird and fish functionally linked habitats, off-site), Portholme SAC; and Chippenham Fen Ramsar, Wicken Fen Ramsar and the corresponding components of Fenland SAC (including functionally linked habitats used by the SAC's fish and amphibians). Excess water due to increased risk of surface flooding and runoff from new developments was also identified as likely to have a significant effect on Ouse Washes SPA and Portholme SAC due to the negative effects of high water levels and prolonged flood events on the designated features.

Mitigation

5.91 The paragraphs below describe the mitigation of increased demand for water abstraction first, and then the potential for increased surface flooding and runoff from new developments.

5.92 Greater Cambridge potable water is supplied by Cambridge Water, which sources the majority of the water in the region from chalk aquifers. 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.

5.93 In March 2025, Cambridge Water published its latest WRMP **[See reference 59]** 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.

5.94 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)

5.95 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.

5.96 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** 60**]**. 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.

5.97 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.

5.98 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).

5.99 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.”

5.100 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.

Water resource management by water companies

5.101 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** 61**]**:

- **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.

5.102 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.

5.103 The HRA of the 2024 WRMP **[See reference** 62**]** 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.

5.104 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.

5.105 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. The housing trajectory accompanying the Local Plan does not anticipate the first dwellings being completed on new strategic allocations (Cambridge East, North Cambourne, and Land adjacent to A11 and A1307) before 2032 when a new pipeline connection from Grafham Water to the Cambridge water zone is anticipated to be operational. The Local Plan also makes provision for policy safeguards to improve household and non-household water efficiency as detailed below under “Policy Mitigation".

5.106 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.

5.107 Water supply will continue to be monitored by water companies, and be taken into account in Cambridge Water’s WRMP29, which will provide water supply planning over a minimum 25 year horizon. Ongoing engagement between the Councils and Cambridge Water will ensure that growth in the Local Plan is taken into account in the WRMP. Water Resources East will also be producing an updated Regional Water Plan. Progress on infrastructure delivery will be monitored through the Councils’ annual Authority Monitoring Report and updates to the Infrastructure Delivery Plan.

Policy mitigation

5.108 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 I/ID Infrastructure and delivery, which states:

> Planning permission will only be granted for proposals that have made suitable arrangements for the improvement or provision of physical and social infrastructure necessary to make the scheme acceptable in planning terms. Where necessary developers will be required to deliver infrastructure directly, secure commitments from relevant providers to deliver new or improved infrastructure, and/or make financial contributions through planning obligations or

any Community Infrastructure Levy, as applicable at the point of the application. The nature, scale and phasing of any obligations sought will be related to the form of the development and its potential impact upon the surrounding area.

5.109 Policy CC/WE also provides specific and stringent requirements to ensure efficient use of water. This states:

All development must demonstrate highly water efficient design to minimise consumption of water and protect water resources 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. 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 90 litres/person/day. Proposals that seek to deliver levels of water usage below this level are encouraged.
- for non-residential development, a minimum of 4 credits for category Wat 01 of BREEAM, or an equivalent 60% reduction of water use, unless demonstrated not practicable. Also, full credits for category Wat 02 and category Wat 03 of BREEAM.
- in addition, for non-residential developments that use water as part of a commercial process(es), full credits for category Wat 04 and one credit for category Wat 05 of BREEAM. The achievement of the exemplary target for Wat 05 is encouraged.
- proposals for data centres should avoid water-based cooling, use closed-loop cooling systems and use additional water resources such as rainwater and grey water.
- proposals involving the refurbishment or change of use of existing buildings should undertake retrofitting to increase water efficiency, aiming to achieve at least 90 litres/person/day and integrating water reuse where possible for residential development or following the BREEAM requirements in this policy for non-residential development where practicable.

5.110 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 WRE **[See reference** 63**]**. The policy is intended to go beyond Building Regulation levels and draws on approaches set out in the Shared Standards in Water Efficiency for Local Plans **[See reference** 64**]**.

5.111 Some of the larger site allocation policies also contains specifications relating to water use:

- S/GF Land adjacent to A11 and A1307 at Grange Farm – states that c.4,500 homes will be delivered "subject to the necessary water infrastructure being available". The policy also says that development should "As part of the design, consider innovative approaches to incorporating low-carbon energy infrastructure, circular economy principles, and sustainable water management, including greywater recycling, rainwater harvesting, and sustainable drainage systems (SuDS), informed by preparation of an Integrated Water Management plan and Water Cycle Strategy."
- S/CBN: Cambourne North – states that c.13,000 homes will be delivered "subject to the necessary water infrastructure being available".
- S/CE Cambridge East – states that c.8,000 homes will be delivered (3,950 within the plan period, from 2032), "subject to the necessary water infrastructure being available."

5.112 The policies for these three sites also say: "Conditions are likely to be necessary to limit first occupations of new dwellings taking place until after the Grafham Transfer water supply intervention becomes operational or where alternative headroom is secured, in consultation with Cambridge Water and the Environment Agency, where the LPA is satisfied that there is scope for earlier development." This will help to ensure that development comes forward in step with infrastructure upgrades.

5.113 In relation to the potential for increased flooding from new developments and the effect this could have on water levels within Ouse Washes SPA and Portholme SAC, mitigation is provided within the following policies:

- Policy CC/FM: Managing flood risk –requires flood risk from all sources to be managed using the sequential, risk-based approach (further information below).
- Policy CC/IW: Integrated water management, sustainable drainage and water quality – requires development to minimise impacts on surface water flooding, for example through sustainable drainage systems.
- Policy I/CM: Construction management – requires major developments, or those otherwise expected to have an adverse impact on the environment, to

produce a Demolition and Construction Environmental Management Plans. These must include measures to mitigate, control and monitor impacts relating to surface water and drainage.

5.114 Policy CC/FM: Managing flood risk is the principal safeguard for flood management and reducing risk from new development, and states:

1. Development proposals, including change of use, will be supported where:

a. The sequential test and, if necessary, the exception test have been passed and demonstrate that the development is acceptable, having regard to actual and residual flood risks from all sources and taking into account the impacts of climate change;

b. Built development has been sequentially located within the site to avoid any areas of flood risk;

c. The development does not lead to an increase in flooding elsewhere and, where, possible reduces overall flood risk

[…]

g. The peak rate of run-off over the lifetime of the development, allowing for climate change, is no greater for the developed site than it was for the undeveloped greenfield site. Betterment must be provided on previously developed sites;

h. The post-development volume of run-off, allowing for climate change over the development's lifetime, is no greater than it would have been for the undeveloped site (if this cannot be achieved, then the limiting discharge is 2 litres per second for all events up to the 100-year return period event);

[…]

Managing Flood Water

3. If a proposal is considered to be acceptable within the 1% annual probability flood area (Flood Zone 3), taking into account the impacts of climate change, it must not decrease flood storage capacity, impair flow performance, accelerate flooding onset, or create unsustainable flood storage that requires ongoing silt removal, maintenance, or renewal.

4. If a proposal is within a functional floodplain (Flood Zone 3b), developers must ensure the floodplain's capacity to store or move water is maintained or

improved. Development will only be permitted where it results in no loss of floodplain performance.

5.115 These are 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

5.116 In light of the above, 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 (and any functionally linked habitats associated with these sites), as a result of impacts from changes in water quantity due to abstraction and/or flooding will be avoided.

Water quality – wastewater treatment

Ouse Washes SAC, SPA and Ramsar, The Wash and North Norfolk Coast SAC, The Wash SPA and Ramsar Site and Portholme SAC

5.117 The screening identified likely significant effects in relation to the following:

- Ouse Washes SAC, SPA and Ramsar: downstream of WwTWs in the Great Ouse catchment. The SAC fish (and functionally linked habitats used by fish) and SAC/Ramsar habitats and plant species could be affected directly, and the SPA and Ramsar bird species (and functionally linked habitats used by birds) indirectly. The Supplementary Advice on Conservation Objectives document for the Ouse Washes SPA **[See reference** 65**]** notes that many of the SPA qualifying bird species are dependent on wetland habitats supported by surface and/or ground water, therefore, maintaining the quality and quantity of water supply is critical, especially at certain times of year during key stages of their life cycle. High levels of phosphorus and nitrogen can affect the macrophyte and aquatic invertebrate communities, reducing diversity of forage for birds. In addition, extended periods of flooding lead to the release of phosphorus from the underlying soils. The Supplementary Advice document includes the

following water quality target for supportive habitat both within the SPA and functionally linked habitats:

- <0.1 mg/l annual mean soluble reactive phosphorus;
- a target level for nitrogen is not available in the Diffuse Water Pollution Plan (DWPP) which the Supplementary Advice document notes is being reviewed, however the DWPP for Ouse Washes has not yet been published.

- Portholme SAC: downstream of WwTWs in the Great Ouse catchment (south of Huntingdon). The qualifying lowland hay meadows habitat could be affected directly. The species-rich hay meadows are subject to seasonal flooding which maintains an input of nutrients, while traditional management is by hay cutting in mid-summer, followed by grazing of the aftermath in late summer until the autumn **[See reference** 66**]**. The Supplementary Advice on Conservation Objectives document for this SAC explains that the surface flooding regime and subsurface irrigation via gravel aquifers can be affected by land use change, water abstraction, flood alleviation, development and mineral extraction in the catchment. The flooding regime has been problematic for this site and in some years and on certain parts of the meadow it has led to a shift away from the H6510 plant community. The main issue is caused in years when the site has experienced severe and prolonged flooding during the winter and the nutrient enrichment associated with these prolonged flood events **[See reference** 67**]**. The Supplementary Advice notes the following with respect to water quality targets:
  - typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC.
- The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site: downstream of WwTWs in the River Cam catchment. The SAC and Ramsar habitats and plant species could be affected directly, and the SAC mammals and SPA and Ramsar bird species indirectly. The Supplementary Advice for the Wash and North Norfolk Coast SAC **[See reference** 68**]** notes the main impact of water quality on otters is its effect on the food supply. For example, moderate levels of eutrophication may increase certain fish populations, but excessive eutrophication can be detrimental. Excessive acidity in watercourses may also affect fish populations. The Supplementary Advice states that the targets for water quality for the qualifying habitats are the WFD standards of:

- to maintain Dissolved Oxygen (DO) at ≥ 5.7mg/l standardised to a salinity of 35 using 5th percentile of DO data (WFD High/Good boundary). Maintain the natural water quality and specifically winter dissolved inorganic nitrogen (DIN) to a concentration equating to Moderate Ecological Status (MES);
- targets for supporting habitats are to meet the surface water and groundwater environmental WFD standards.

5.118 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.

Mitigation

5.119 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.

5.120 Water companies must produce Drainage and Wastewater Management Plans (DWMPs) looking at current and future capacity, pressures, and risks to their networks such as climate change and population growth. Anglian Water published their current DWMP in 2023 **[See reference** 69**]**, and have begun a review. The next round of plans will be statutory. The DWMP 28 will cover the period 2030 to 2055. A draft will be published in late 2027, and the final plan is anticipated to be completed in mid 2028. Anglian Water are currently engaging with stakeholders including Local Planning Authorities regarding future growth scenarios.

5.121 Similarly to water supply issues, wastewater and drainage considerations for Cambridge are discussed through a subgroup of the Water Delivery Taskforce, seeking collaborative solutions to growth in the short, medium and long-term. This Taskforce is chaired by Defra and consists of key stakeholders including MHCLG, Ofwat, Environment Agency and Anglian Water. It meets on a monthly basis to discuss progress.

5.122 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 need to 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** 70**]** 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.
- Cambridge Waste Water Treatment Plant (CWWTP) – as part of upgrades to the WRC in the Greater Cambridge area, the relocation of the existing CWWTP was granted consent in 2025, but funding has since been withdrawn. Anglian Water have committed to exploring measures to address short, medium and long term wastewater needs from development, at the CWWTP site. Anglian Water have produced a two-stage Feasibility Study to identify works required in the immediate and short-term, to meet current growth and compliance at the works; as well as long-term growth needs included in this emerging Local Plan.

5.123 The phasing of development in the Local Plan with the strategic allocations not anticipated before 2032 when the new pipeline connection will be operational, will assist in enabling planning and delivery of wastewater infrastructure to take place. GCSP is continuing to engage with Anglian Water and the Environment Agency to confirm the availability of wastewater treatment infrastructure and necessary upgrades. The Detailed Water Cycle Study Wastewater Addendum (2026) looks further at wastewater and Anglian Water's statutory responsibility to bring forward a DWMP. The Local Plan will inform the DWMP process (prior to publication of the draft DWMP in 2027) and this process will take into account both growth and environmental objectives and will be subject to its own HRA. In addition, the Councils have produced a draft Statement of Common Ground on Wastewater between the Councils, Anglian Water, the Environment Agency and the Cambridge Growth Company which will be reviewed and signed prior to submission. The areas of agreement include that "Subject to appropriate infrastructure planning and funding being provided for the required need, through these processes wastewater treatment capacity is not a barrier to delivering the level of development proposed in the Local Plan including the identified housing trajectory with appropriate policy measures in place to align infrastructure delivery with phasing of growth".

5.124 Whilst the water company's large-scale options to increase capacity in terms of wastewater treatment to support growth are currently uncertain, policies within the Local Plan help to reduce the impacts associated with wastewater treatment and provide assurance that development would not be permitted that would exceed water

infrastructure capacity (and therefore potential have an adverse effect on Habitats sites):

- Policy CC/IW: Integrated waste management, sustainable drainage and water quality – states that: “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).”
- Policy I/ID: Infrastructure and delivery - requires developments to ensure that there is sufficient infrastructure (see paragraph 5.92); and
- Policy CC/WE; Water efficiency in new development - sets standards for water efficiency (see paragraph 5.93), which will reduce the volume of wastewater generated by developments.

5.125 The supporting text of Policy CC/IW provides further information on how wastewater treatment capacity must be confirmed: “To further protect and enhance water quality, the policy also requires that engagement has been undertaken with the service provider, Anglian Water, to confirm that there is capacity for wastewater treatment at a receiving Water Recycling Centre, and capacity in the wastewater conveyancing infrastructure or that extra capacity will be provided in time to serve the new development prior to first occupation. Where necessary, phasing conditions will be attached to planning permissions to ensure that new developments are not occupied until the required capacity is in place. Applicants will need to secure a connection with Anglian Water and details should be included as part of a Utilities Statement in line with the requirements in Policy I/ID.”

5.126 The Environment Agency response to the Regulation 19 Local Plan consultation states that: “We would conclude that, whilst the presentation of additional assessment and information within the [Detailed Water Cycle Study Wastewater] Addendum does not go as far as we would normally recommend at this stage, we are satisfied that the WCS can be kept up to date as more information becomes available.”

5.127 “We are satisfied to be able to recommend that the WCS evidence base, as it pertains to wastewater, can be considered sound on the basis that there are strong Policy and future infrastructure planning measures in place to manage potential risks, but we wish to set out the following caveat advice around environmental risk.”

5.128 "Should any growth come forward for delivery in the interim, ahead of the updated DWMP, or development phasing trajectories are unable to be aligned with WWTW investment upgrade plans thereafter, then there remains some degree of uncertainty regarding any potential risk of harm to water bodies from growth within the associated to the WWTW catchments facing capacity challenges, in the absence of more detailed strategic assessment at this stage. Therefore, we would refer to the positive wording of Policy CC/IW and the Water Quality section, which requires the capacity for waste water treatment to be demonstrated prior to occupation of development and ahead of any respective phases if applicable. In such circumstances, it may be pertinent for further assessment at the site-specific stage of planning to be undertaken to manage risk to the water environment and inform decision making, as well as potentially justify phasing condition approaches."

Conclusion

5.129 In light of the above, it can be concluded that there will be no adverse effects on the integrity of Ouse Washes SAC/SPA/Ramsar, Portholme SAC, The Wash & North Norfolk Coast SAC, and The Wash SPA/Ramsar as a result of impacts from water quality.

Water quality - direct pollution / run-off

Ouse Washes SAC, SPA and Ramsar

5.130 The HRA screening has identified likely significant effects relating to direct pollution / run-off, where development is proposed within 500 metres of watercourses that are upstream of Ouse Washes SAC/SPA/Ramsar. This could affect the Habitats sites directly or via functionally linked habitats: watercourses used by the SAC's fish or habitats used by the SPA/Ramsar swan species.

Mitigation

5.131 Policy BG/BG (see paragraph 5.4) provides general protection for Habitats sites, and mitigation specific to direct pollution is set out in:

- Policy CC/IW: Integrated water management, sustainable drainage and water quality – requires development to minimise impacts on water quality, for example through sustainable drainage systems (further information below).

- Policy I/CM: Construction management – requires major developments, or those otherwise expected to have an adverse impact on the environment, to produce a Demolition and Construction Environmental Management Plans. These must include measures to mitigate, control and monitor impacts relating to surface water, drainage, and groundwater contamination.
- Policy BG/RC: River corridors – states that "To help protect water quality and watercourse habitats, development proposals should retain or reinstate a buffer zone of at least 10m from the watercourse bank top, or 5m from a ditch bank top, according to the River/Ditch definitions set out under current BNG User Guidance. Within these riparian buffer zones, no development shall be permitted except for domestic extensions, soft landscaping, small amenity areas, or proposals where it is necessary for the nature and function of the development."
- Policy GP/QD: Achieving high quality development – states that design should minimise pollution.

5.132 Policy CC/IW: Integrated Water Management, Sustainable Drainage and Water Quality is the principal safeguard for direct pollution, and states:

1. All development proposals must adopt an integrated approach to water management which considers water efficiency, sustainable drainage, water quality, flood risk and biodiversity.

[…]

4. New development must ensure that Sustainable Drainage Systems (SuDS) are an integral part of an Integrated Water Management approach to the design of the whole site. *[…with further details of what those should comprise]*

5. The design and implementation of SuDS must be in line with the updated Construction Industry Research and Information Association (CIRIA) SuDS Manual and the National Standards for SuDS or successor documents and other best practice guidance.

6. To protect and enhance water quality, all development proposals must demonstrate that: […]

- appropriate water treatment and pollution control measures have been incorporated into the proposed foul and surface-water drainage systems to minimise the risk of water pollution. Soakaways and infiltration SuDS are unlikely to be suitable in areas of contaminated land unless it can be

demonstrated that there is no risk of mobilising pollutants into groundwater or surface water; and

- the quality of ground water and surface water bodies will not be harmed by the construction or operation of the development, and that opportunities have been explored and taken to maintain or improve water quality, including through nature-based solutions. […]

5.133 These measures are considered sufficient to avoid adverse effects on Ouse Washes SAC/SPA/Ramsar or its functionally linked habitats (birds or fish).

Conclusion

5.134 With mitigation in Policies BG/BG and CC/IW, and additional measures in Policies I/CM, BG/RC and GP/QD, it can be concluded that adverse effects on the integrity of Ouse Washes SAC, SPA or Ramsar (directly or via functionally linked habitats) due to direct pollution/run-off will be avoided.

Summary of Appropriate Assessment

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

- The Habitats sites that are shown as screened out with no colour indicate impact pathways 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), once mitigation is taken into account.

Table 5.1: Summary of Appropriate Assessment

Impact pathway	Eversden & Wimpole Woods SAC	Portholme SAC	Devil's Dyke SAC	Ouse Washes SAC/SPA/ Ramsar site	Chippen-ham Fen Ramsar (onsite only)	Wicken Fen Ramsar	Fenland SAC	The Wash & North Norfolk SAC and The Wash SPA/ Ramsar (onsite only)	Breckland SAC and SPA
Physical damage and loss of habitat	No AEOI	Screened out	Screened out	No AEOI	Screened out	Screened out	No AEOI	Screened out	Screened out
Non-physical disturbance	No AEOI	Screened out	Screened out	No AEOI	Screened out	Screened out	No AEOI	Screened out	Screened out
Vehicle emissions (onsite only)	Screened out	No AEOI	No AEOI	No AEOI	Screened out	Screened out	Screened out	Screened out	Screened out
Aviation and industrial emissions (onsite only)	Screened out	No AEOI	No AEOI	No AEOI	No AEOI	No AEOI	No AEOI	Screened out	Screened out

Impact pathway	Eversden & Wimpole Woods SAC	Portholme SAC	Devil's Dyke SAC	Ouse Washes SAC/SPA/ Ramsar site	Chippen-ham Fen Ramsar (onsite only)	Wicken Fen Ramsar	Fenland SAC	The Wash & North Norfolk SAC and The Wash SPA/ Ramsar (onsite only)	Breckland SAC and SPA
Dust and sediment (onsite only)	Screened out	Screened out	Screened out	No AEOI	Screened out	Screened out	Screened out	Screened out	Screened out
Recreation pressure (onsite only)	No AEOI	Screened out	Screened out	Screened out	Screened out	No AEOI	No AEOI	Screened out	No AEOI
Water quantity	Screened out	No AEOI	Screened out	No AEOI	No AEOI	No AEOI	No AEOI	Screened out	Screened out
Wastewater treatment	Screened out	Screened out	Screened out	No AEOI	Screened out	Screened out	Screened out	No AEOI	Screened out
Direct pollution	Screened out	Screened out	Screened out	No AEOI	Screened out	Screened out	Screened out	Screened out	Screened out

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 – defines overall quantum of housing provision and number of new jobs;
- S/DS: Development Strategy – defines quantum of housing and employment development at strategic sites;
- S/DE: Defined Settlement Extents – identifies the circumstances in which development outside of allocated sites or existing settlements (windfall development) would be permitted;
- CC/RE: Renewable Energy Projects and Infrastructure - permits renewable and low-carbon energy infrastructure;
- 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;
- I/MH: Mobility Hub Facilities - supports new transport development;
- I/AD: Aviation Development - permits new airfield development and development at existing sites; and
- All site/area-based policies that define boundaries and scale of development at specific locations.

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 of functionally linked habitats associated with Eversden and Wimpole Woods SAC (directly, or indirectly via bat functionally linked habitats), Ouse Washes SPA/Ramsar (indirectly via bird or fish functionally linked habitats), and Fenland SAC (indirectly via fish or amphibian functionally linked habitats).
- Non-physical disturbance at functionally linked habitats associated with Eversden and Wimpole Woods SAC (directly, or indirectly via bat functionally

linked habitats), Ouse Washes SPA/Ramsar (indirectly via bird functionally linked habitats), and Fenland SAC (indirectly via fish or amphibian functionally linked habitats).

- Air pollution from vehicle emissions at Portholme SAC, Devil's Dyke SAC, and Ouse Washes SAC, SPA and Ramsar site.
- Air pollution from aviation and industrial emissions at Portholme SAC, Devil's Dyke SAC, Ouse Washes Ramsar, Chippenham Fen Ramsar, Wicken Fen Ramsar, and Fenland SAC.
- Dust and sediment impacts on Ouse Washes SAC, SPA and Ramsar.
- Recreation pressure at Wicken Fen Ramsar site, Fenland SAC, Eversden and Wimpole Woods SAC, and Breckland SAC/SPA.
- Water quantity at Portholme SAC, Ouse Washes SAC, SPA and Ramsar (including fish and bird functionally linked habitats), Wicken Fen Ramsar site, Chippenham Fen Ramsar site, and Fenland SAC (including fish and amphibian functionally linked habitats).
- Water quality from wastewater treatment at Ouse Washes SAC, SPA and Ramsar, The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site.
- Water quality from direct pollution / run-off at Ouse Washes SAC, SPA and Ramsar.

6.3 The Appropriate Assessment stage considered 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 (for example development in the Local Plans of neighbouring authorities and/or the East-West Rail proposals). With mitigation requirements and safeguards within Local Plan policies and the potential mitigation measures that will be implemented for EWR, it has been possible to rule out adverse effects on integrity in relation to the following impact pathways:

- Physical damage and loss of habitat - ruled out on the basis of safeguards in Policies BG/BG (direct impacts and impacts on functionally linked habitats); and BG/TC, site-based (allocation) policies, and the potential mitigation measures that will be implemented for EWR (impacts on functionally linked habitats).
- Non-physical disturbance - ruled out on the basis of safeguards in Policies BG/BG (direct impacts and impacts on functionally linked habitats); and BG/TC, GP/QD, I/CM, site-based (allocation) policies, and the potential mitigation

measures that will be implemented for EWR (impacts on functionally linked habitats).

- Dust and sediment - ruled out on the basis of safeguards in Policies BG/BG, CC/IW, I/CM, BG/RC, GP/QD, WS/HS.
- Recreation pressure - ruled out on the basis of safeguards in Policies BG/BG, BG/EO, BG/GI, BG/PO and site-based policies.
- Direct pollution - ruled out on the basis of safeguards in Policies BG/BG, CC/IW, I/CM, BG/RC, GP/QD.

6.4 In addition, adverse effects on integrity have been ruled out in relation to the following, principally because of legislative safeguards (emissions and water abstraction/discharge permitting):

- Aviation and industrial emissions: controlled by emissions permitting.
- Water quantity: controlled by abstraction licencing, with additional measures in Policies CC/WE, CC/IW, CC/FM and I/CM.
- Water quality from wastewater treatment: controlled by water discharge permitting and the requirements of water companies to provide infrastructure for growth while meeting environmental legislation (such as Habitats Regulations); with additional measures in Policy CC/IW.

6.5 Adverse effects on integrity due to air pollution from vehicle emissions were ruled out following air quality assessment and consideration of the habitats likely to be affected by the predicted changes in pollution. No mitigation is required in relation to vehicle emissions.

Next steps

6.6 This report was subject to consultation alongside the Local Plan, as part of the Regulation 19 consultation. As part of this, Natural England was invited to comment and to confirm whether the conclusions of the assessment are considered appropriate at this stage of plan-making. Natural England provided a number of suggested amendments to the report, as well as recommendations for amendments to some of the Local Plan policies, as set out in **Appendix G**. Members of the public also commented on the HRA report, and their concerns are also summarised in **Appendix G**. This updated report has made a number of amendments seeking to address the concerns raised, as well as to set out the results of the air quality assessment which has been undertaken.

6.7 The next stage for the HRA will be the assessment of any main modifications proposed to the Local Plan. The HRA will then be published for consultation alongside the schedule of modifications.

LUC

November 2026

Appendix A
Figures

A.1 Figures referred to in the main report, titled as follows:

- Figure 1: Site allocations and policy areas;
- Figure 2: Habitats sites within 15 kilometres of Greater Cambridge; and
- Figure 3: Strategic roads within 10 kilometres of Greater Cambridge.

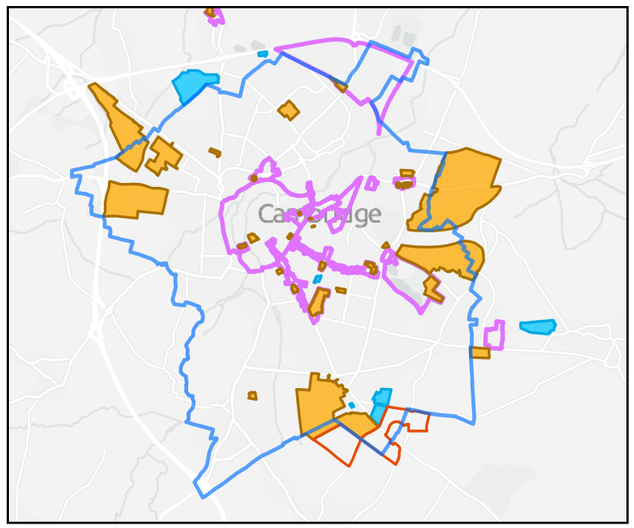
HRA of Regulation 19 Greater Cambridge Local Plan

Greater Cambridge Shared Planning

LUC

Figure 1: Site Allocations and Policy Areas

- South Cambridgeshire
- Cambridge City
- Neighbouring Local Authority
- Policy area
- Carried-forward allocation with planning permission
- Site allocation
- Non-development area adjacent to site allocation



0 5 10 km

Map scale 1:200,000 @ A3

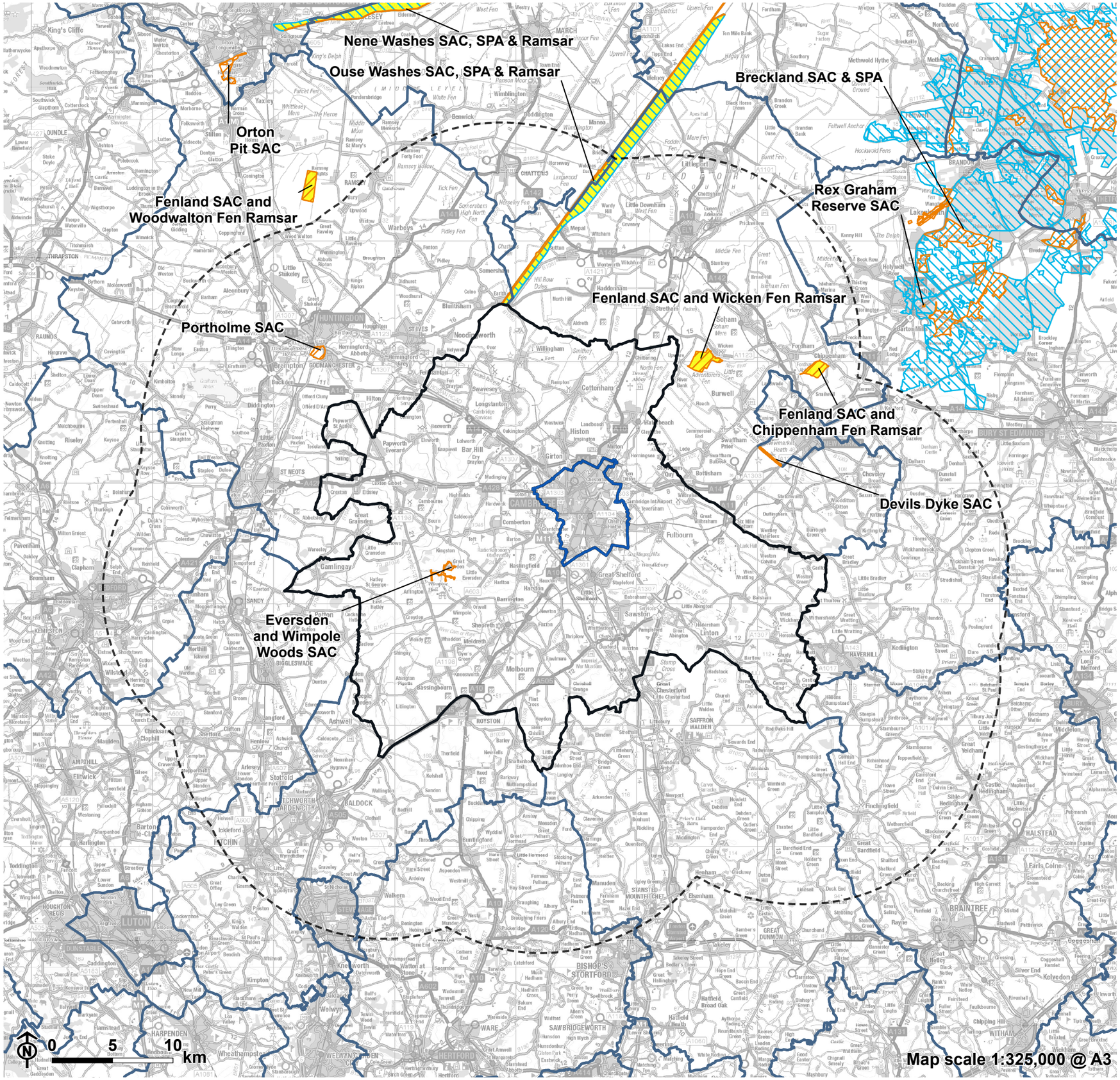
Contains OS data © Crown Copyright and database right 2026. Contains data from OS Zoomstack

HRA of Regulation 18 Greater Cambridge Local Plan

Greater Cambridge Shared Planning

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Figure 2: Habitat sites within 15km of Greater Cambridge and more distant sites also considered in this HRA

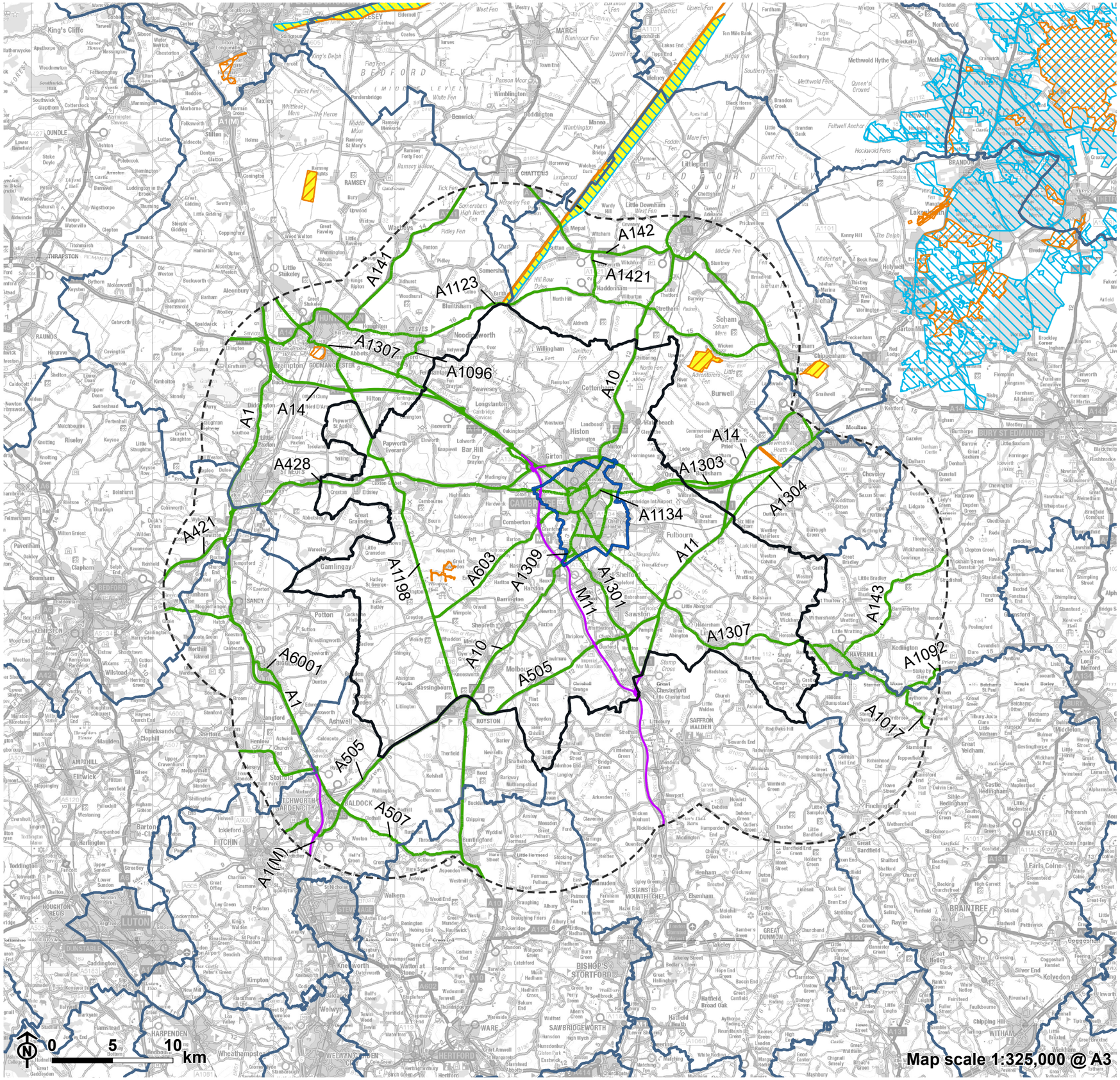


- South Cambridgeshire
- Cambridge City
- South Cambridgeshire 15km buffer
- Neighbouring Local Authority
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Ramsar site

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Figure 3: Strategic roads within 10km of Greater Cambridge



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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 71]**, Standard Data Forms or Ramsar Information Sheets available from the JNCC website **[See reference 72]** and Supplementary Advice Notes **[See reference 73]**. 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 74]**.

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 75]**.

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** 76**]**.

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** 77**]**.

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

- 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** 78**]**.
- 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*)

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 recreation 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** 79**]**.

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

- The site is located in Bedford and Cambridge Claylands National Character Area (88) adjacent to the River Great Ouse south of Huntington and north-west of Godmanchester. Portholme Meadow lies over a bed of calcareous Oxford Clay deposited during the Jurassic Period 160 million years ago and can be up 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** 80**]**.
- Dependent on seasonal inundation by flood waters and therefore dependent upon the maintenance of historic conditions without notable changes in levels of pollutants, nutrients or silt.

Other comments

- None

Devil’s Dyke SAC

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

Summary of reasons for designation

Annex I habitats:

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

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 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 features:
  - 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 sea-blite 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 accretion is occurring 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 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.

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 Nitrogen 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*, Bar-tailed 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*, Dark-bellied brent goose B*ranta 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
Development areas assessed in the HRA

C.1 The tables below set out the Local Plan site allocations and policy areas that have been assessed in this HRA.

Table 2 Local Plan site allocations

Site reference and title	Proposed use	Capacity
Site allocations – strategic sites		
S/C/LCR: Land at Clifton Road (including Cambridge Junction and Cambridge Leisure)	Mixed use	300 homes, leisure, employment, hotel (quantum not specified)
S/CE: Cambridge East	Mixed use	8,000 homes (3,950 in plan period), 24 gypsy & traveller pitches, 20,000m^2 employment (industrial, office, R&D), sports and leisure
S/CBC: Cambridge Biomedical Campus (including Addenbrooke's Hospital)	Mixed use	1,000 homes, 500,000m^2 employment (office and R&D)
S/WC: West Cambridge	Mixed use	400 homes, 383,000m^2 employment (office and R&D)
S/ED: Eddington	Mixed use	5,500 homes (2,500 in plan period), 200,000m^2 employment (R&D/education)
S/HHR: Land between Huntingdon Road and Histon Road (Darwin Green), Cambridge	Mixed use	2,700 homes, community uses (quantum not specified) and retail
S/CBN: Cambourne North	Mixed use	13,000 homes (2,550 in plan period), 24 gypsy and traveller pitches, 108,000m^2 employment (office, R&D, industrial, service, leisure)
S/CB: Cambourne	Mixed use	Cambourne West: 2,350 homes, 30,625m^2

Site reference and title	Proposed use	Capacity
		employment, community uses, retail. Cambourne Business Park: 265 homes, 4,000m^2 employment, retail. Cambourne Town Centre: 120 homes, retail, community uses.
S/GF: Land adjacent to A11 and A1307 at Grange Farm	Mixed use	4,500 homes (2,600 in plan period), 12 gypsy and traveller pitches, 35,000m^2 employment (office) and 20,000m^2 industrial
S/NS: Northstowe	Mixed use	10,180 homes (6,201 in plan period), 24 gypsy and traveller pitches, 850 units specialist accommodation, 20ha employment (office and R&D)
S/WNT: Waterbeach New Town	Mixed use	11,000 homes (5,629 within plan period; already permitted), 24 gypsy and traveller pitches, 1,050 units specialist accommodation, 39,800m^2 employment (office, R&D, industrial), 25,500m^2 retail, transport infrastructure
S/BA: Bourn Airfield New Village	Mixed use	3,500 homes (all in plan period), 1,400m^2 employment (office, R&D or industrial)
S/WGC: Wellcome Genome Campus – Expansion Land, Hinxton	Mixed use	1,500 homes (all in plan period), 127,500m^2 employment (office and R&D)
S/RSC/BRC: Babraham Research Campus	Mixed use	48,000m^2 R&D and 120 homes
S/SHF: Land at Slate Hall Farm, Bar Hill	Employment	220,000m^2 employment (industrial, warehousing)

Site reference and title	Proposed use	Capacity
Site allocations – other sites		
S/C/SMS: Garages at St Matthews Street and Norfolk Street	Housing	12 homes
S/C/HTR: 137-143 Histon Road	Housing	100 homes
S/C/HGH: Henry Giles House, 73-79 Chesterton Road	Housing	50 homes
S/C/HRC: Horizon Resource Centre, 285 Coldham's Lane	Housing	40 homes
S/C/PDC: Cambridge Professional Development Centre, Foster Road	Housing	40 homes
S/C/PPS: Police Station, Parkside	Housing	50 homes
S/C/NCA: North Cambridge Academy, 108, Arbury Road	Housing & sport	150 homes plus sports facilities
S/C/ER: 1-99 Ekin Road and 1-8 Ekin Walk	Housing	26 homes (net)
S/C/DR: 2-28 Davy Road and Garage Blocks	Housing	26 homes (net)
S/C/HPC: 1-78 Hanover Court, 1-49 Princess Court and Garage at Newtown Garages	Housing	38 homes (net)
S/C/GER: Former Garage Block, East Road	Housing	40 homes
S/C/SH: 1 - 33 Stanton House, Christchurch Street	Housing	29 homes (net loss of 5 homes)
S/C/MRG: Milton Road Garages	Mixed use	95 homes, 0.5ha employment.
S/C/SCL: Land South of Coldham's Lane, Cambridge	Employment	86,000m^2 commercial & laboratory; 900m^2 community use; plus shop/retail and industrial

Site reference and title	Proposed use	Capacity
S/C/BRN: Land at Barnwell Road and Newmarket Road	Mixed use	154 homes (net); 500m^2 commercial incl retail and services
S/C/TRP: Travis Perkins, Devonshire Road	Mixed use	70 homes; 14,000m^2 office and R&D
S/C/OPK: Parcel Com4, Orchard Park	Mixed use	80 aparthotel rooms; 140 hotel rooms; 1,100m^2 gym; 600m^2 office.
S/C/BFS: Brookfields	Mixed use	3,400m^2 medical / healthcare
S/C/SRW: Station Road West	Employment	11,300m^2 office & R&D; car parking
S/C/BJH: Betjeman House	Mixed use	37,000m^2 commercial, business & service (1.17ha)
S/C/OPM: Old Press/Mill Lane	Mixed use	243 student rooms, education, commercial business & service (0.85ha)
S/C/NMD: New Museums, Downing Street	Mixed use, education	Mixed use redevelopment / refurbishment for University uses (1.97ha)
S/EOC/NWO: Land North of Worts' Causeway	Housing	200 homes
S/EOC/SWO: Land South of Worts' Causeway	Mixed use	230 homes and 400m^2 community / commercial
S/EOC/BS: Bell School , Babraham Road	Student housing	100 student bedrooms
S/EOC/FRE: Fulbourn Road East	Employment	56,000m^2 office / R&D / light industrial / storage or distribution (6.92ha)
S/RSC/MF: Land at Maarnford Farm, Hunts Road, Duxford	Housing	60 homes

Site reference and title	Proposed use	Capacity
S/RSC/SBR: Land South of Babraham Road, Sawston	Housing	280 homes
S/RSC/FSS: Former Spicers Site, Sawston Business Park, Sawston	Employment	40,000m^2 R&D
S/RSC/CC: Comfort Café, Fourwentways	Employment	3,000m^2 R&D and office
S/RRA/ML: The Moor, Moor Lane, Melbourn	Housing	20 homes
S/RRA/H: Land at Highfields (Phase 2), Caldecote	Housing	65 homes
S/RRA/SCS: Land to the south of Cambridge Services, A14	Employment	90,000m^2 general industrial or storage/ distribution; parking (24.58ha)
S/RRA/BBP: Land at Buckingway Business Park, Swavesey	Employment	10,000m^2 general industrial or storage/ distribution
S/RRA/SNR: Land to the north of St Neots Road, Hardwick	Employment	5,000m^2 office; R&D; industrial
S/RRA/OHD: Old Highways Depot, Twenty Pence Road, Cottenham	Employment	1,500m^2 offices; light industrial; storage / distribution.
S/RRA/NW: Norman Way, Over	Employment	6,100m^2 office; R&D; light industrial; general industrial; storage/ distribution.
S/RRA/CRH: Land Adjacent to Cambridge Road (A10) and Mill Lane, Hauxton	Employment	2,000m^2 office; R&D; light industrial.
S/RRA/CH: Land at Compass House, Chivers Way, Histon and Impington	Employment	Office; R&D (1.7ha)
S/RRA/CR: Land to the west of Cambridge Road, Melbourn	Residential	125 homes
S/RRA/IDH: Ida Darwin Hospital	Housing	200 homes

Table 3 Local Plan policy areas

Site reference and title	Purpose / use
Policy areas – General Policy Areas	
S/PA/CC: City Centre	General redevelopment / improvement
S/PA/LN: South of A1307, Linton	No development (screened out): Specifies no windfall development.
S/C/AMC: Cambridge Areas of Major Change	No development (screened out): General design principles for AMCs in Cambridge (S/AMC/AS, S/AMC/EB, S/AMC/BC, S/AMC/FBG, S/AMC/SCL)
Policy areas – Areas of Major Change	
S/AMC/BC: Beehive Centre	General redevelopment / improvement
S/AMC/EB: East Barnwell	General redevelopment / improvement
S/AMC/FBG: Fitzroy/Burleigh Street/Grafton Area of Major Change	General redevelopment / improvement Retail
S/AMC/SCL: South of Coldham's Lane	General redevelopment / improvement
S/AMC/AS: Abbey Stadium	General redevelopment / improvement
S/AMC/NEC: North East Cambridge	Mixed use / innovation
S/AMC/FH: Fulbourn Hospital	Healthcare
S/AMC/WHD: Whittlesford Parkway Station Area, Whittlesford Bridge	Transport and complementary uses
S/AMC/GP: Granta Park	General redevelopment / improvement
S/AMC/WGC: Wellcome Genome Campus, Hinxton	General redevelopment / improvement
S/AMC/IWM: Imperial War Museum, Duxford	Tourism / cultural
S/AMC/PH: Papworth Hospital, Papworth Everard	Healthcare
S/AMC/FD: Fen Drayton Former Land Settlement Association Estate	General redevelopment / improvement
S/AMC/HIS: Mixed Use Development in Histon & Impington Station Area	Mixed use commercial / residential
S/AMC/GT: Optimisation of Gypsy and Traveller Sites	Layout and enhancement of Gypsy and Traveller pitches

Site reference and title	Purpose / use
Policy areas – Public Realm Improvement Areas	
S/PRIA: Public Realm Improvement Areas (PRIA) in Cambridge	No development (screened out): General design principles for PRIAs in Cambridge (S/PRIA/MC, S/PRIA/EG, S/PRIA/CRP, S/PRIA/MR, S/PRIA/HRRS, S/PRIA/OPML)
S/PRIA/CRP: Cambridge Retail Park	Public realm improvements
S/PRIA/MC: Mitcham's Corner	Public realm improvements
S/PRIA/EG: Eastern Gate	Public realm improvements
S/PRIA/MR: Mill Road	Public realm improvements
S/PRIA/HRRS: Hills Road and Regent Street Corridor	Public realm improvements
S/PRIA/OPML: Old Press/Mill Lane	Public realm improvements

C.2 Of the sites allocated in the Local Plan, the following are sites that have been carried forward from the previous plan:

- S/BA: Bourn Airfield New Village;
- S/C/OPK: Parcel Com4, Orchard Park;
- S/C/SRW: Station Road West, Cambridge;
- S/EOC/BS: Bell School, Babraham Road, Cambridge;
- S/EOC/NWO: Land north of Worts' Causeway, Cambridge;
- S/EOC/SWO: Land south of Worts' Causeway, Cambridge;
- S/HHR: Land between Huntingdon Road and Histon Road;
- S/NS: Northstowe;
- S/RRA/IDH: Ida Darwin Hospitals;
- S/WGC: Wellcome Genome Campus, Hinxton; and
- S/WNT: Waterbeach New Town.

C.3 The carried forward sites and the following have current planning permissions on all or part of the site:

- S/AMC/NEC: North East Cambridge;
- S/CB: Cambourne;
- S/CBC: Cambridge Biomedical Campus;

- S/CE: Cambridge East;
- S/ED: Eddington;
- S/RSC/BRC: Babraham Research Campus;
- S/WC: West Cambridge;
- S/C/BJH: Betjeman House;
- S/C/BRN: Land at Barnwell Road and Newmarket Road;
- S/C/HTR: 137-143 Histon Road;
- S/C/NCA: North Cambridge Academy;
- S/C/PDC: Cambridge Professional Development Centre, Foster Road;
- S/C/SCL: Land South of Coldham's Lane, Cambridge;
- S/C/SH: 1-33 Stanton House, Christchurch Street;
- S/C/SRW: Station Road West;
- S/C/TRP: Travis Perkins, Devonshire Road;
- S/EOC/FRE: Fulbourn Road East;
- S/RRA/H: Land at Highfields (Phase 2), Caldecote;
- S/RRA/OHD: Old Highways Depot, Twenty Pence Lane, Cottenham; and
- S/RSC/SBR: Land South of Babraham Road, Sawston.

Appendix D
Screening assessment

A.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 19 GCLP. Where uncertain or likely significant effects are identified, these are required to be considered further via Appropriate Assessment

Policies

Development Strategy

Policy S/JH: New jobs and homes

D.1 Likely activities (operation) to result as a consequence of the proposal:

- Yes - This policy includes for the provision of 73,300 additional jobs and at least 48,195 new houses for the total population including for affordable housing and the needs of specific groups (159 pitches for Gypsies and Travellers; 20 plots for Traveling Showpeople; 4,081 units/beds for supported house, care and residential care; and 2,042 units of student housing) .

D.2 Potential impacts if policy is implemented:

- Physical damage/loss of habitat (offsite)
- Non-physical disturbance (offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Recreation pressure
- Changes to hydrology, including water quantity and quality.

D.3 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 and employment development that will be proposed as part of the plan and therefore will contribute to effects such as loss of offsite functional habitat, non-physical

disturbance, air pollution (vehicle emissions), recreation and water abstraction/treatment.

Policy S/DS: Development strategy

D.4 Likely activities (operation) to result as a consequence of the proposal:

- Yes - This policy will deliver new houses and employment land in Greater Cambridge and defines the quantum of development (total and over the plan period) for the strategic and other site allocations in this area (see Appendix C).

D.5 Potential impacts if policy is implemented:

- Physical damage/loss of habitat (offsite)
- Non-physical disturbance (offsite)
- Non-toxic contamination
- Air pollution - vehicle emissions
- Recreation pressure
- Changes to hydrology, including water quantity and quality.

D.6 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 and employment development as part of the plan and therefore will contribute to effects, including loss of offsite functional habitat, non-physical disturbance, air pollution (vehicle emissions), recreation and water abstraction/treatment.

Policy S/SH: Settlement hierarchy

D.7 Likely activities (operation) to result as a consequence of the proposal:

- No - 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, but will not itself result in development.

D.8 Potential impacts if policy is implemented:

- N/A

D.9 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – this policy defines the settlement hierarchy, but the development in those settlements is assessed in relation to other policies.

Policy S/DE: Defined Development Extents

D.10 Likely activities (operation) to result as a consequence of the proposal:

- Yes - This policy defines the boundaries of settlements within the Policies Map for planning purposes and also identifies the circumstances in which development outside the development extents (windfall development) would be permitted.

D.11 Potential impacts if policy is implemented:

- Physical damage/loss of habitat (offsite)
- Non physical disturbance (offsite)
- Air pollution – dust and sediment
- Air pollution – vehicle emissions
- Recreation pressure
- Changes to hydrology, including water quantity and quality

D.12 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes – this policy defines where windfall development could be permitted, outside of allocated sites and existing settlements.

Policy S/GB: The Cambridge Green Belt

D.13 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.

D.14 Potential impacts if policy is implemented:

- N/A

D.15 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

D.16 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.

D.17 Potential impacts if policy is implemented:

- N/A

D.18 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

D.19 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.

D.20 Potential impacts if policy is implemented:

- N/A

D.21 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, including sustainable travel, water management, and nature-based design. This will provide mitigation for some of the negative effects associated with development (e.g. water quality / quantity, air pollution from vehicle emissions).

Policy CC/DC: Designing for a Changing Climate

D.22 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.

D.23 Potential impacts if policy is implemented:

- N/A

D.24 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/NZ: Net zero carbon new buildings

D.25 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.

D.26 Potential impacts if policy is implemented:

- N/A

D.27 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy will not result in development.

Policy CC/WE: Water efficiency in new developments

D.28 Likely activities (operation) to result as a consequence of the proposal

- No - This policy sets 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.

D.29 Potential impacts if policy is implemented:

- N/A

D.30 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, by setting efficiency standards and therefore reducing water demand (and therefore a need for wastewater treatment) and 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

D.31 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.

D.32 Potential impacts if policy is implemented:

- N/A

D.33 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) and nature-based solutions to water management.

Policy CC/FM: Flood Risk Management

D.34 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.

D.35 Potential impacts if policy is implemented:

- N/A

D.36 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 Energy Projects and Infrastructure

D.37 Likely activities (operation) to result as a consequence of the proposal:

- Yes - This policy provides requirements for the development of renewable and low-carbon energy infrastructure, encourages community-led renewable and low-carbon schemes. 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; and requires commercially-led renewable energy schemes over 10MW to have a community benefit fund / ownership option.

D.38 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Direct surface water run-off

D.39 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes – This policy permits renewable and low-carbon energy infrastructure. It also 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

D.40 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.

D.41 Potential impacts if policy is implemented:

- N/A

D.42 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy relates to the effects of construction activities on waste and carbon emissions.

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

D.43 Likely activities (operation) to result as a consequence of the proposal:

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

D.44 Potential impacts if policy is implemented:

- N/A

D.45 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 and may be associated with supporting habitats. It will also support developments that seek to enhance and create new carbon sinks through the provision of green infrastructure.

Policy CC/SR: Sustainable Retrofit

D.46 Likely activities (operation) to result as a consequence of the proposal:

- Yes – small scale refurbishment and extensions to single buildings, which will improve energy efficiency.

D.47 A.46 Potential impacts if policy is implemented:

- Non-physical disturbance.
- Air pollution - dust and sediment.

D.48 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – although the policy permits some small scale development which could have temporary construction impacts, this is at existing properties and the scale is such that there will not be significant effects.

Theme 2: Biodiversity and Green Spaces

Policy BG/BG: Biodiversity and geodiversity

D.49 Likely activities (operation) to result as a consequence of the proposal:

- No - This policy provides mitigation for 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 provides safeguards that prevent development from affecting sites and species of biodiversity and geodiversity importance.

D.50 Potential impacts if policy is implemented:

- N/A

D.51 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy mainly sets out requirements for biodiversity net gain and will not result in development. This policy requires development that could affect ‘sites of biodiversity importance’ to provide (ecological) surveys and site assessments; provides some general protection for biodiversity sites; and requires development near Eversden and Wimpole Woods SAC (or being of moderate / high suitability for barbastelles) to undertake bat surveys and mitigate effects.

Policy BG/GI: Green and Blue infrastructure

D.52 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.

D.53 Potential impacts if policy is implemented:

- N/A

D.54 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy will contribute to 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/UGF: Urban Greening Factor

D.55 Likely activities (operation) to result as a consequence of the proposal:

- No – this policy requires major development to meet urban greening standards and will not result in new development.

D.56 Potential impacts in policy is implemented:

- N/A

D.57 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy relates to the urban greening factor and will not result in development.

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

D.58 Likely activities (operation) to result as a consequence of the proposal:

- No – This policy provides guidance on managing development impacts on tree canopy cover, the tree population, and protected trees and hedgerows.

D.59 Potential impacts if policy is implemented:

- N/A

D.60 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 contribute to mitigation for loss of habitat (e.g. used by bats).

Policy BG/RC: River Corridors

D.61 Likely activities (operation) to result as a consequence of the proposal:

- No - This policy sets out measures to protect river corridors in Greater Cambridge, including in particular the River Cam and River Ouse and their tributaries.

D.62 Potential impacts if policy is implemented:

- N/A

D.63 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

D.64 Likely activities (operation) to result as a consequence of the proposal:

- No – This policy safeguards open spaces from development.

D.65 Potential impacts if policy is implemented:

- N/A

D.66 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy protects existing open spaces, which will help to support mitigation for recreation pressure.

Policy BG/EO: Providing and enhancing open spaces

D.67 Likely activities (operation) to result as a consequence of the proposal:

- No – This policy defines quantity standards for new and enhanced open space on- or off-site, for new development to meet the needs it generates.

D.68 Potential impacts if policy is implemented:

- N/A

D.69 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – This policy will contribute to mitigation for the effects of recreation upon Habitats sites that result from housing developments through creating new and enhanced accessible open space.

Theme 3: Wellbeing and Social Inclusion

Policy WS/HD: Creating healthy new developments

D.70 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.

D.71 Potential impacts if policy is implemented:

- N/A

D.72 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/NC: Meeting the Needs of New and Growing Communities

D.73 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.

D.74 Potential impacts if policy is implemented:

- N/A

D.75 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/CF: Community, Sports, and Leisure Facilities

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

D.76 Yes – This policy protects and permits new community, sports and leisure facilities.

D.77 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.78 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale; it is unlikely to result in significant effects.

Policy WS/CH: Cultural and Creative Hubs

D.79 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits new cultural / creative hubs and districts in new and existing designated centres.

D.80 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.81 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale; it is unlikely to result in significant effects

Policy WS/MU: Meanwhile uses during long term redevelopments

D.82 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits temporary use of sites and vacant buildings.

D.83 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.84 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale and temporary; it is unlikely to result in significant effects.

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

D.85 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.

D.86 Potential impacts if policy is implemented:

- N/A

D.87 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

D.88 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.

D.89 Potential impacts if policy is implemented:

- N/A

D.90 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 will contribute to mitigation for the effects of development by ensuring that new and existing developments will not significantly contribute to light, noise, vibration, air, water or soil pollution within Greater Cambridge.

Policy WS/PH: Public houses

D.91 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits new and enhanced public houses.

D.92 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.93 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale; it is unlikely to result in significant effects

Theme 4: Great Places

Policy GP/PP: People and place responsive design

D.94 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.

D.95 Potential impacts if policy is implemented:

- N/A

D.96 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/QD: Achieving high quality development

D.97 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.

D.98 Potential impacts if policy is implemented:

- N/A

D.99 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, and requires designs that minimise artificial lighting, noise, vibration and other forms of pollution.

Policy GP/HD: Housing density

D.100 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.

D.101 Potential impacts if policy is implemented:

- N/A

D.102 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. The policy also requires high density developments to provide fewer car parking spaces and more cycle parking than the adopted standards; this may encourage sustainable travel and reduce air pollution impacts.

Policy GP/ST: Skyline and tall buildings

D.103 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.

D.104 Potential impacts if policy is implemented:

- N/A

D.105 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

D.106 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.

D.107 Potential impacts if policy is implemented:

- N/A

D.108 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 and provide open spaces for a range of users, which may reduce recreation pressure at more sensitive sites. 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/LC: Protection, Conservation and Enhancement of landscape character

D.109 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.

D.110 Potential impacts if policy is implemented:

- N/A

D.111 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/HE: Historic Environment

D.112 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.

D.113 Potential impacts if policy is implemented:

- N/A

D.114 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

D.115 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.

D.116 Potential impacts if policy is implemented:

- N/A

D.117 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

D.118 Likely activities (operation) to result as a consequence of the proposal:

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

D.119 Potential impacts if policy is implemented:

- N/A

D.120 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/CC: Adapting heritage assets to climate change

D.121 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.

D.122 Potential impacts if policy is implemented:

- N/A

D.123 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 GP/AR: Archaeology

D.124 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.

D.125 Potential impacts if policy is implemented:

- N/A

D.126 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/SF: Shopfronts

D.127 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.

D.128 Potential impacts if policy is implemented:

- N/A

D.129 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

D.130 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.

D.131 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.132 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

D.133 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits the re-use and replacement of rural buildings, and proposals related to land-based enterprises.

D.134 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.135 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale; it is unlikely to result in significant effects.

Policy J/AL: Protecting the best agricultural land

D.136 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.

D.137 Potential impacts if policy is implemented:

- N/A

D.138 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

D.139 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.

D.140 Potential impacts if policy is implemented:

- N/A

D.141 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

D.142 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.

D.143 Potential impacts if policy is implemented:

- N/A

D.144 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

D.145 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy supports proposals for ancillary uses in employment parks and campuses.

D.146 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.147 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale; it is unlikely to result in significant effects.

Policy J/MS: Markets and street trading

D.148 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.

D.149 Potential impacts if policy is implemented:

- N/A

D.150 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/RC: Retail and other complementary town centre uses

D.151 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.

D.152 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment

D.153 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

D.154 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.

D.155 Potential impacts if policy is implemented:

- N/A

D.156 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/VA: Visitor accommodation, attractions and facilities

D.157 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.

D.158 Potential impacts if policy is implemented:

- Physical damage/loss of habitat (on and offsite)
- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Recreation and urban impacts

- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.159 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 recreation pressure and increased water abstraction.

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

D.160 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.

D.161 Potential impacts if policy is implemented:

- Physical damage/loss of habitat (on and offsite)
- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.162 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

D.163 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.

D.164 Potential impacts if policy is implemented:

- N/A

D.165 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

D.166 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits small scale development outside of allocated sites, in some circumstances (e.g. affordable housing where there is a need that cannot be met in another way; and where the development is adjoining an existing settlement).

D.167 Potential impacts if policy is implemented:

- Physical damage/loss of habitat (on and offsite)
- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions

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

D.168 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale and located adjacent to existing settlements; it is unlikely to result in significant effects.

Policy H/HM: Housing Mix

D.169 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.

D.170 Potential impacts if policy is implemented:

- N/A

D.171 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

D.172 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits small scale development (annexes and single dwellings) in gardens and existing residential plots.

D.173 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment

- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.174 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale and located within the boundaries of existing residential plots; it is unlikely to result in significant effects..

Policy H/SS: Residential Space Standards and accessible homes

D.175 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.

D.176 Potential impacts if policy is implemented:

- N/A

D.177 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

D.178 Likely activities (operation) to result as a consequence of the proposal:

- No – This policy guides proposals for specialist housing (within residential development coming forward as a result of other policies), that is 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.

D.179 Potential impacts if policy is implemented:

- N/A

D.180 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

D.181 Likely activities (operation) to result as a consequence of the proposal:

- No – This policy sets out how self and custom build homes (within residential development coming forward as a result of other policies) 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.

D.182 Potential impacts if policy is implemented:

- N/A

D.183 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

D.184 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 (within residential development coming forward as a result of other policies) will be supported.

D.185 Potential impacts if policy is implemented:

- N/A

D.186 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/CO: Co-living

D.187 Likely activities (operation) to result as a consequence of the proposal:

- Yes – this policy permits Co-living homes.

D.188 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment

D.189 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No - Although this policy will result in development, it will be small scale and within existing residences; it is unlikely to result in significant effects.

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

D.190 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits the conversion of dwellings to houses in multiple occupation (HMOs), resulting in small scale increases in population within residential area.

D.191 Potential impacts if policy is implemented:

- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction

- Increased water treatment

D.192 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale and within existing residences; it is unlikely to result in significant effects..

Policy H/SA: Student Accommodation

D.193 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits new student and academic staff accommodation for higher education institutions.

D.194 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.195 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, there is no specified quantum of development and it is assumed that it will be small scale and within existing residential areas; it is unlikely to result in significant effects..

Policy H/DC: Dwellings in the Countryside

D.196 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits small scale change of use or adaptation of buildings in the countryside outside of defined development extents (previously known as settlement boundaries or development framework boundaries).

D.197 Potential impacts if policy is implemented:

- Loss or damage to habitats (on and offsite)
- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.198 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes – Although this policy will result in small scale (e.g. single dwelling) development, it permits new development in rural areas, which could result in loss of habitat (on or off site).

Policy H/RM: Residential Moorings

D.199 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits new residential moorings in Cambridge and South Cambridgeshire.

D.200 Potential impacts if policy is implemented:

- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment

D.201 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- No – Although this policy will result in development, it will be small scale (moorings within canals/rivers, which require minimal infrastructure); it is unlikely to result in significant effects.

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

D.202 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy permits new Gypsy and Traveller pitches or Travelling Showpeople plots, outside of allocated sites.

D.203 Potential impacts if policy is implemented:

- Non-physical disturbance (on and offsite)
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Recreation and urban impacts
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.204 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes – Although this policy will result in small-scale development, it could occur in rural areas, near to sensitive habitats.

Theme 7: Infrastructure

Policy I/ST: Sustainable transport and connectivity

D.205 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 designed and connected to the transport network to enable travel by sustainable modes.

D.206 Potential impacts if policy is implemented:

- N/A

D.207 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/community 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/MH: Mobility hub facilities

D.208 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy supports proposals of new mobility hub sites e.g. park and ride sites; bus and railway stations and interchanges.

D.209 Potential impacts if policy is implemented:

- Physical damage/loss of habitat
- Non-physical disturbance
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Direct surface water run-off

D.210 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes – This policy supports new transport development. Depending on the location, this could result in habitat loss, disturbance and construction-related effects e.g. dust or pollution.

Policy I/CV: Cycle and vehicle parking

D.211 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.

D.212 Potential impacts if policy is implemented:

- N/A

D.213 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

D.214 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.

D.215 Potential impacts if policy is implemented:

- N/A

D.216 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

D.217 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.

D.218 Potential impacts if policy is implemented:

- N/A

D.219 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

D.220 Likely activities (operation) to result as a consequence of the proposal:

- Yes – This policy new airfields or flying sites, and the expansion or intensification of existing sites.

D.221 Potential impacts if policy is implemented:

- Physical damage/loss of habitat
- Non-physical disturbance
- Air pollution - dust and sediment
- Air pollution - vehicle emissions
- Increased water abstraction
- Increased water treatment
- Direct surface water run-off

D.222 Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

- Yes – This policy permits new airfield development and development at existing sites. Depending on the location and nature of the development, proposals could result in loss of habitat or disturbance; construction effects e.g. dust, water pollution; and operational effects e.g. air pollution (vehicles, aeroplanes), water abstraction and treatment.

Policy I/EI: Energy infrastructure masterplanning

D.223 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 or new data centres, to help facilitate decarbonisation and make best use of grid infrastructure.

D.224 Potential impacts if policy is implemented:

- N/A

D.225 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

D.226 Likely activities (operation) to result as a consequence of the proposal:

- No – This policy seeks to ensure there is sufficient physical and social 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.

D.227 Potential impacts if policy is implemented:

- N/A

D.228 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, water supply and wastewater treatment. This policy may therefore contribute towards mitigation for impacts associated with wastewater treatment or abstraction.

Policy I/DT: Digital and Telecommunications Infrastructure

D.229 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.

D.230 Potential impacts if policy is implemented:

- N/A

D.231 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

D.232 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.

D.233 Potential impacts if policy is implemented:

- N/A

D.234 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. This policy will therefore contribute to mitigation for impacts related to construction e.g. dust and sediment, non-physical disturbance and direct water pollution.

Site allocations

Physical damage and loss of habitat

Screening criteria

- Site allocation is within or immediately adjacent to a Habitats site; or
- Site allocation is within or immediately adjacent to habitats which may be functionally linked habitat used by:
  - birds from Ouse Washes SPA/Ramsar (within 10km for Bewick's/whooper swan; within 2km for other species); or
  - spined loach from Ouse Washes SAC (watercourses near to and connected to the SAC); or
  - great crested newts from Fenland SAC (within 1.3km of the SAC); or
  - barbastelle bats from Eversden and Wimpole Woods SAC (6km core sustenance zone and 10.2km landscape connectivity zone).

Site allocations meeting these criteria

- Direct impacts - no allocations within or immediately adjacent to a Habitats site.
- Bird FLL – within 2km of Ouse Washes SPA/Ramsar: none.
- Bird FLL – within 10km of Ouse Washes SPA/Ramsar: S/AMC/FD, S/NS, S/SEA/NS, C/CBN, S/SEA/CBN.
- Fish FLL – adjacent to watercourses near to and connected to the SAC: none.
- Amphibian FLL – within 1.3km of Fenland SAC: none.
- Bat FLL -within 6km of Eversden and Wimpole Woods SAC: S/BA, S/SEA/BA, S/CB, S/RRA/H.
- Bat FLL - within 6-10.2km of Eversden and Wimpole Woods SAC: S/CBN, S/SEA/CBN, S/C/PDC, S/ED, S/WC, S/RRA/CR, S/RRA/CRH, S/RRA/ML, S/RRA/SNR

Non-physical disturbance

Screening criteria

- Site allocation that could cause noise/light/vibration is within 500m of a Habitats site; or
- Site allocation that could cause noise/light/vibrations within 500m of habitats which may be functionally linked habitat used by:
  - birds from Ouse Washes SPA/Ramsar (within 10km for Bewick's/whooper swan; within 2km for other species); or
  - spined loach from Ouse Washes SAC (watercourses near to and connected to the SAC); or
  - great crested newts from Fenland SAC (within 1.3km of the SAC); or
  - barbastelle bats from Eversden and Wimpole Woods SAC (6km core sustenance zone and 10.2km landscape connectivity zone).

Site allocations meeting these criteria

- Direct impacts - no allocations within 500m of a Habitats site.
- Bird FLL – within 2.5km of Ouse Washes SPA/Ramsar: none.

- Bird FLL – within 10.5km of Ouse Washes SPA/Ramsar: S/AMC/FD, S/NS, S/SEA/NS, C/CBN, S/SEA/CBN.
- Fish FLL – within 500m of watercourses near to and connected to the SAC: none.
- Amphibian FLL – within 1.8km of Fenland SAC: none.
- Bat FLL – within 6.5km of Eversden and Wimpole Woods SAC: S/BA, S/SEA/BA, S/CB, S/CBN, S/SEA/CBN, S/RRA/H.
- Bat FLL – within 6.5-10.7km of Eversden and Wimpole Woods SAC: S/C/PDC, S/ED, S/WC, S/RRA/CR, S/RRA/CRH, S/RRA/ML, S/RRA/SNR.

Air pollution – vehicle emissions

Screening criteria

- Site allocation contributes to increase in traffic flows (+1,000 AADT or 200 for HDV) on the following roads within 10km of the plan area and within 200m of a Habitats site:
  - Devil's Dyke SAC: A14, A1304;
  - Ouse Washes SAC/SPA/Ramsar: A1123, A142; or
  - Portholme SAC: A1307.

Site allocations meeting these criteria

- All site allocations.

Air pollution – aviation and industrial emissions

Screening criteria

- Site allocation is allocated for new/expanded airfields.
- Site allocation is allocated for industrial development.

Site allocations meeting these criteria

- Airfields: none.

- Industry: S/RRA/SCS, S/RRA/BBP, S/RRA/SNR, SS/RRA/OHD, S/RRA/NW, S/RRA/CRH.

Air pollution – dust and sediment

Screening criteria

- Site allocation is within 500 metres of a watercourse that is hydrologically connected downstream to a sensitive Habitats site (Portholme SAC and Ouse Washes SAC/Ramsar).

Site allocations meeting these criteria

- Upstream of Portholme SAC: none.
- Upstream of Ouse Washes SAC/Ramsar: S/AMC/FD, S/NS, S/SEA/NS, C/CBN, C/SEA/CBN.

Recreation pressure

Screening criteria

- Site allocation is allocated for residential development and is within the following zones of influence:
  - Devil's Dyke SAC – 5.5km;
  - Eversden and Wimpole Woods SAC – 5km;
  - Portholme SAC – 5km;
  - Ouse Washes SAC/SPA/Ramsar – 2km;
  - Wicken Fen Ramsar (and the Wicken Fen component of Fenland SAC) – 10.7km; and
  - Chippenham Fen Ramsar (and the Chippenham Fen component of Fenland SAC) – 5km.

Site allocations meeting these criteria

- Devil's Dyke SAC: none.

- Eversden and Wimpole Woods SAC: S/BA.
- Portholme SAC: none.
- Ouse Washes SAC/SPA/Ramsar: none.
- Wicken Fen Ramsar (and the Wicken Fen component of Fenland SAC) – S/AMC/NEC, S/WNT.
- Chippenham Fen Ramsar (and the Chippenham Fen component of Fenland SAC): none.

Water quantity

Screening criteria

- Site allocation would increase demand for water supply, from aquifers within the Cambridge Water supply area.

Site allocations meeting these criteria

- All site allocations.

Water quality – wastewater treatment

Screening criteria

- Site allocation would increase demand for wastewater treatment in the Cam or Great Ouse catchment (at Anglian Water wastewater treatment works)

Site allocations meeting these criteria

- All site allocations.

Water quality – direct pollution / run-off

Screening criteria

- Site allocation is within 500 metres of a watercourse that is hydrologically connected downstream to a sensitive Habitats site (Portholme SAC and Ouse Washes SAC/Ramsar).
- Site allocation is within 500 metres of habitats which may be functionally linked habitat used by birds or fish from Ouse Washes SAC/SPA/Ramsar and are hydrologically connected downstream.

Site allocations meeting these criteria

- Upstream of Portholme SAC: none.
- Upstream of Ouse Washes SAC/Ramsar and fish/bird FLL: S/AMC/FD, S/NS, S/SEA/NS, C/CBN, C/SEA/CBN.

Appendix E

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

Method

E.1 All site allocations and policy areas within 10.7 kilometres of Eversden and Wimpole Woods SAC have been subject to a detailed assessment to determine their suitability support this qualifying species. The 10.7 kilometres is based on the 10.5 kilometre zone within which core habitats for barbastelles may occur, plus the 500 metres within which non-physical disturbance may be significant.

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

- A review of aerial imagery and Magic mapping 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.

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

High habitat suitability

E.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.

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

Moderate habitat suitability

E.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.

E.7 Within 6 kilometres Core Sustenance Zone or 10.2 kilometres Landscape Connectivity Zone of the SAC.

Low habitat suitability

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

E.9 Within 6 kilometres Core Sustenance Zone or 10.2 kilometres Landscape Connectivity Zone of the SAC.

Negligible habitat suitability

E.10 Unsuitable habitats such as built environments and developed land. Within 6 kilometres Core Sustenance Zone or 10.2 kilometres Landscape Connectivity Zone of the SAC.

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

S/BA: Bourn Airfield New Village

Review of site parameters

- Distance from Habitats site: 4.9 kilometres north
- Size: 171.8 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 81]**. In addition, the Site sits within the 6 kilometres Core Sustenance Zone of the SAC.

Assessment of suitability for barbastelle bats

- Moderate

S/CB: Cambourne

Review of site parameters

- Distance from Habitats site: 5.1 kilometres north
- Size: 549.8ha
- Habitats present: The majority of this site area is an existing urban area, which has negligible habitat for barbastelle bats. However, between the urban areas, there are belts of deciduous woodland, grassland, small lakes, and hedgerows; these areas include Cambourne Nature Reserve, and areas of meadows, ponds and woodlands managed by the Wildlife Trust.
- Functional connectivity: The woodland and grassland provide connectivity to the wider area to the south. The woodland and hedgerows in the southeast of the site provide connectivity to Bucket Hill Plantation (as for S/BA, above). The site is within the 6 kilometre Core Sustenance Zone.

Assessment of suitability for barbastelle bats

- Moderate.

S/CBN: Cambourne North

Review of site parameters

- Distance from Habitats site: 6.4 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 SSSI 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/C/PDC: Cambridge Professional Development Centre, Foster Road

Review of site parameters

- Distance from Habitats site: 10 kilometres east
- Size: 1.5ha
- Habitats present: The site is within an urban area with amenity grassland and buildings. It has negligible habitat for barbastelle bats.
- Functional connectivity: Negligible, as no green corridors or watercourses are present.

Assessment of suitability for barbastelle bats

- Negligible

S/ED: Eddington

Review of site parameters

- Distance from Habitats site: 9.9 kilometres northeast.

- Size: 90.9ha
- Habitats present: The site is partially developed and is being delivered in phases. The remaining undeveloped areas are currently grassland with hedgerows and small areas of deciduous woodland. The Environmental Impact Assessment **[See reference** 82**]** for the outline planning application refers to records of brown long-eared bats, but not barbastelles.
- Functional connectivity: Connectivity to the wider area is limited by the presence of the M11 motorway, which borders the western edge of the site. Nonetheless, the site has limited connectivity to Madingley Wood (c.2 kilometres west) via small pockets of woodland and hedgerows, where barbastelle bats have been recorded **[See reference** 83**]**.

Assessment of suitability for barbastelle bats

- Low.

S/WC: West Cambridge (M13 designated site)

Review of site parameters

- Distance from Habitats site: 8.9 kilometres northeast
- Size: 66.9ha
- Habitats present: The site is on the edge of the urban area and largely comprises buildings and amenity grassland with negligible habitats for barbastelle bats; however, narrow strips of woodland and hedgerows are present around the site perimeter. The band of woodland to the west – either side of the M11 motorway – is broader and is deciduous woodland.
- Functional connectivity: The deciduous woodland to the west of the site provides some connectivity to the wider area, towards Madingley Wood (as S/ED, above), although the M11 motorway limits connectivity.

Assessment of suitability for barbastelle bats

- Low.

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: 6.7 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/CRH: Bayer Crop Science Site, Hauxton

Review of site parameters

- Distance from Habitats site: 8.19 kilometres east
- Size: 0.4 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/RRA/H: Highfields

Review of site parameters

- Distance from Habitats site: 5.46 kilometres north

- Size: 6 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/ML: The Moor, Moor Lane, Melbourn

Review of site parameters

- Distance from Habitats site: 7.6 kilometres
- Size: 1.1 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

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

Review of site parameters

- Distance from Habitats site: 6.32 kilometres north
- Size:4.6 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/SEA/BA: Non-development area adjacent to Bourn Airfield (Strategic Enhancement Area)

Review of site parameters

- Distance from Habitats site: 4.4 kilometres north.
- Size: 111.2ha
- Habitats present: The site contains 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 S/BA, above). The remainder of the site is arable fields, bordered with hedgerows.
- Functional connectivity: The hedgerows and woodland within S/SEA/BA provide good connectivity to the wider area, such as Hardwick Wood to the southeast of the Bourn Airfield site, which consultees have noted supports its own barbastelle maternity colony. The site S/SEA/BA is within the 6 kilometre Core Sustenance Zone. Therefore, barbastelle bats are likely to use the hedgerows and woodland within the Strategic Enhancement Area.

Assessment of suitability for barbastelle bats

- High.

S/SEA/CBN: Non-development area adjacent to Cambourne North (Strategic Enhancement Area)

Review of site parameters

- Distance from Habitats site: 6.3 kilometres north
- Size: 640ha
- Habitats present: The site is predominantly arable fields, separated by hedgerows and narrow fragments of deciduous woodland.

- Functional connectivity: The trees and hedgerows within the site provide good connectivity to woodlands in the wider area, such as Overhall Grove SSSI and Papworth Wood SSSI.

Assessment of suitability for barbastelle bats

- Moderate.

Appendix F
Air Quality Assessment

Appendix G
Record of consultation

G.1 Comments received on previous iterations of the HRA and during direct consultation are set out below, and how those have been addressed in this version of the HRA Report.

Regulation 18 Consultation (December 2025 – January 2026)

Natural England

Excerpts of response that are relevant to the HRA

G.2 Comments on the HRA of the Draft Local Plan (October 2025):

- **Water quality:** "We advise that the Habitats Regulations Assessment (HRA) and Appropriate Assessment (AA) should assess water quality impacts to protected sites in greater detail (4.117 onwards), and consider protected sites on an individual basis (as has been done for water quantity at 4.110 onwards). The impacts to sites will vary based on their current condition and capacity to cope with changes. We acknowledge that the HRA necessarily has to be at a fairly high level, but it still needs to be robust. Our main concerns are in relation to Portholme SAC and the Ouse Washes.

  Additionally, from 5.71 onwards, we advise that the HRA requires more detail and separation of water pollution impacts to the Upper Ouse catchment and the Cam and Ely Ouse catchment. Development that depends on a Sewage Treatment Works that drains into the Upper Ouse catchment will affect the Ouse Washes, which is currently failing its water quality targets.

  The HRA references the Stantec report (Greater Cambridge Integrated Water Management Study (IWMS) from Stantec) but it is not clear which Sewage Treatment Works / Water Recycling Centres (StW / WRC) are in scope here. For example, Utton's Drove StW effluent drains into the Ouse and so will flow into the Ouse Washes. Uttons Drove WRC serves significant growth areas including Cambourne and Northstowe and currently has considerable issues, according to the IWMS.

We do however broadly agree with the conclusion (5.77) that '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'.

The Non-Toxic Contamination (which can contribute to nutrient enrichment) (4.41 onwards), and Direct pollution / run-off section of the HRA (4.123) both use '500m from a Habitats site' as the screening distance. We do not agree with this methodology, and strongly recommend that the screening is reviewed with the criteria '500m from any waterway that is hydrologically connected to a Habitats site'. This may bring some sites into consideration, particularly in relation to Portholme SAC and the Ouse Washes which are already suffering from pollution and nutrient issues."

- **Functionally linked habitats:** "Also, regarding Functionally Linked Habitat (FLL) (4.18 onwards and 4.29 onwards) for the Ouse Washes SPA/Ramsar, this site is designated for swans which have a 10km IRZ so a 2km buffer screening limit is insufficient.

  We agree that Eversden and Wimpole Woods SAC should be included in the AA, particularly in relation to 'Physical Damage and Loss of Habitat – Functionally Linked Habitat' and 'Non-Physical Disturbance – Functionally Linked Habitat'. We note however that a 10km screening distance has currently been used (pages 32, 36). As mentioned in our recent discussions, Natural England's Impact Risk Zone (IRZ) for this SAC is about to be updated to a 6km core sustenance zone (CSZ) and a 10.2km landscape connectivity zone (LCZ) for barbastelle bats. We will share the final IRZ wording with you, once it has been confirmed for the next IRZ update, and will arrange further discussions about this with the Natural Environment team shortly. The HRA should be updated to reflect this change, and we advise that additional larger sites within this distance would be West Cambridge (S/WC) and Eddington (S/ED). The small site Cambridge Professional Development Centre, Foster Road (S/C/PDC) would also be within the 10.2km zone, but we expect this will not meet the IRZ criteria as it is within an existing urban area and should not impact barbastelle commuting and foraging habitat."
- **Recreation pressure:** "We are aware that the National Trust have recently commissioned a recreational impact assessment to update the Zone of Influence for Wicken Fen Ramsar and Fenland SAC and encourage your authority to engage as soon as possible with the National Trust about this. This may mean that the Local Plan HRA will need to be amended should there be an

alteration from the 10.3km zone currently used, and the findings should inform the LPA's Appropriate Assessment."

- **Air quality:** "Please also see Natural England's new Standard Advice for Air Quality Impacts for Local Plans in Appendix 2 of this letter."

G.3 Comments on policies in the draft plan:

- **Policy S/CBN Cambourne North:** "We note that part 32 refers specifically to the provision of Suitable Alternative Natural Greenspace (SANG). We advise that this term has a specific definition and set of criteria associated with it, including the requirement for 8ha/1000 new population of accessible semi-natural greenspace, discounting for noises, smells, narrow corridors etc. Currently the Cambourne Green and Blue Infrastructure (GBI) Framework (page 25) mentions an overall metric of 3ha/1000 new pop of accessible greenspace, but of this, only 1.6ha/1000 new population will be semi-natural Green Infrastructure (GI), i.e. SANG-type semi-natural GI that would provide a realistic alternative to recreating within the SSSIs. The Cambourne GBI Framework currently proposes 60ha of semi-natural greenspace, but to meet 3ha/1000, 93.6ha would be required. Therefore, to meet the official SANG standard of 8ha/1000, 249.6ha semi-natural greenspace would be required. We advise that 3ha/1000 greenspace which meets the Natural England GI Framework Standards criteria should be an absolute minimum, particularly where mitigation for recreation pressure is needed, and that more should ideally be required. We do recommend however, that your authority carefully considers whether to use the very prescriptive term 'SANG', or whether an alternative Green Infrastructure phrase should instead be used to allow for a more bespoke approach. You could use 'SANG-like' if these principles are still aspired to but not necessary to meet in full. We will be happy to work with you on this, to identify something that will be effective, deliverable and compatible with your own GI standards."
- **Policy S/CB Cambourne:** "We would encourage your authority to add wording to the Nature sections of this policy about sensitive lighting strategies and providing dark habitats/corridors where possible, particularly if these can link with those planned in Policy S/CBN, and around the outer edge of the settlement."
- **Policy CC/IW Integrating water management, sustainable drainage and water quality:** "This policy is welcomed, particularly the requirements around Water quality, which will be necessary to avoid impacts to various protected sites including the Ouse Washes. The part 1d requirement for water management to be 'designed in such a way that makes use of nature-based solutions wherever practicable' is also strongly supported."

- **Policy BG/BG Biodiversity and geodiversity:** "Natural England welcomes this policy. We would however like to have further discussions with you about part 9 in particular, to agree on a suitable approach to the recreation pressure issue. See Policy BG/GI *[comments related to SSSIs]* and Policy S/CBN for further related comment."
- **Policy WS/HS Pollution, health and safety:** "We advise that your authority should include wording within this Policy about assessing environmental impacts, particularly in relation to Air Pollution. Your authority should follow Natural England's new Air Quality standard advice for guidance on this matter (see Appendix 2). Additionally, the Cambourne Green and Blue Infrastructure document (page 13) refers to a buffer of 100m between Woodlands and Major Roads. Please note however that Habitats Sites and SSSIs (and woodland) at risk from local impacts are those within 200m of a road with increased traffic, which feature habitats that are vulnerable to nitrogen deposition and/or acidification. The HRA includes an assessment of air pollution in relation to Habitats Sites (using a 200m buffer), but SSSIs should also be assessed by your authority as part of the Local Plan. The Light Pollution section of this Policy could also specifically mention the Eversden and Wimpole Wood SAC Impact Risk Zone (IRZ) and have requirements specific to this area, for example to follow the Institute of Lighting Professionals GN08 Bats and Artificial Lighting. The proposed requirements in Policy S/CBN parts 23 to 26 could also provide some useful wording. Please see our comments about the Habitats Regulations Assessment (HRA) below for more about the imminent changes to this IRZ."

How these comments have been addressed

G.4 Water quality:

- Further detail has been added to the HRA to confirm the water quality impact pathways, including the wastewater treatment works and the Habitats Sites they are hydrologically linked to (paragraphs 4.152 & 4.153).
- The agreements with Anglian Water to the capacity of wastewater treatment works, from the Statement of Common Ground, have been set out in the Appropriate Assessment (paragraphs 5.104).
- The screening criteria for impacts relating to dust and sediment (previously referred to as 'non-toxic contamination') and direct pollution has been updated from 'within 500m' to 'within 500m of any waterway that is hydrologically connected to a Habitats Site' (paragraphs 4.101 & 4.157), and the assessment of these impacts updated accordingly.

G.5 Functionally linked habitats:

- Birds – the areas within which functionally linked habitats used by birds could occur have been updated to reflect the further distances that some species (e.g. swans) utilise habitats (see paragraphs 3.17, 3.18 & 4.21).
- Bats – the area within which functionally linked habitats used by bats could occur have been updated to reflect the revised impact risk zones in the draft 'bat protocol' (50m, 6km and 10.2km; as set out in paragraphs 3.21 & 3.22)

G.6 Recreation pressure, Policy S/CBN and Policy BG/BG:

- The zone of influence for Wicken Fen Ramsar (and its component part of Fenland SAC) has been updated to 10.7km, in line with the most recent visitor survey work (see paragraph 4.116).
- Policy S/CBN has been updated to include a requirement to "Provide adequate green infrastructure on site to provide publicly accessible natural and semi-natural open spaces comparable to the standards required of Suitable Alternative Natural Greenspace (SANGs) (including the 'Cambourne Forest'), to compensate for any additional recreation pressure created by the expansion of Cambourne on SSSIs within and adjacent to the site". This site allocation does not fall within the zones of influence for Habitats Sites, and therefore the comments about recreation pressure and updates to the policy are relevant to SSSIs but not Habitats sites.
- Further discussions with Natural England (see paragraph F.15, below) have resulted in Policy BG/BG and BG/EO being updated in relation to accessible greenspace provision. The HRA has assessed these changes (for example at paragraphs 5.57-5.61).

G.7 Air quality:

- Air quality assessment has not yet been carried out. This will be undertaken and the findings documented in a HRA addendum, in line with Natural England's standing advice (see paragraphs 6.8-6.11).

G.8 Policy S/CB:

- The policy has been updated to state that development must "Retain existing woods, hedges, unimproved grassland areas and water features, contributing to the character and amenity of Cambourne West. These must be: […] Planned with sensitive lighting strategies and provide dark habitats and/or corridors where possible." The HRA has assessed this change, for example at paragraph 5.22.

G.9 Policy CC/IW:

- Noted; no action required.

G.10 Policy WS/HS:

- The supporting text of this policy has been updated to refer to the recommended guidance on lighting and specifically references barbastelle bats, and the policy itself refers to requirements to assess air quality. The HRA assesses the latest version of this policy.

Other consultees

Excerpts of response that are relevant to the HRA

G.11 Comments on the October 2025 HRA and/or the Draft Local Plan:

- **National Trust:** "With regards to Recreational Pressure, Section 6 of the Council's HRA states that 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. However, this commitment has not been explicitly included in the draft Local Plan. The wording of policy BG/BG should be amended to include the wording and updated Zone of Influence: "Any development within 10.7 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"."
- **Haslingfield Parish Council:** Text from the Councils' summary of representations - "The Local Plan's reliance on East West Rail (EWR) for development north of the A428 lacks an assessment of EWR's impacts on the Eversden Woods and Wimpole Special Area of Conservation (SAC), raising concerns about environmental constraints being overlooked. Other HRAs prepared elsewhere (e.g. Oxfordshire) have included the cumulative effects of EWR. The proposed EWR route risks habitat fragmentation for the barbastelle bat population, with existing evidence suggesting that limited mitigation measures like bat bridges may not be effective in preserving the integrity of the SAC. The Local Plan assumes that effective mitigation solutions for EWR will be developed later, without evidence of their feasibility or cost, which undermines the plan's effectiveness. EWR Co and GCSP have not demonstrated compliance with the Habitats Regulations, as EWR's impacts have not been

adequately assessed in the Local Plan, contradicting national policy requirements and going against the precautionary principle."

- **Cambridge Approaches**: "The Local Plan fails to comply with the Habitats Regulations 2017 and UK law in that the HRA for Eversden and Wimpole Woods SAC does not list or consider all the relevant development proposals which, in combination and cumulatively with those in the GCLP, pose threats which may adversely affect the integrity of the SAC and its CSZ. Major infrastructure transport plans and projects are serious omissions, including EWR which alone could extinguish the SAC's Barbastelle bats. We consider that the HRA undertaken by LUC for the GCLP is lacking in the evidence necessary to inform a robust Appropriate Assessment."
- **Ms Annabel Sykes:** Text from the Councils' summary of representations - "The respondent believes the Habitats Regulations Assessment is incomplete, particularly in its failure to consider the in combination effects of the East West Rail project, which could significantly impact the Eversden and Wimpole Woods SAC. Concerns have been raised by both South Cambridgeshire District Council and Cambridgeshire County Council regarding the potential adverse effects of East West Rail on the maternity roost of rare barbastelle bats. The respondent references a 2012 paper indicating that barbastelle bats do not rely on linear landscape features for commuting, suggesting that proposed bat bridges and viaducts may be ineffective. The respondent advocates for a tunnel solution for East West Rail to protect the bats' habitat during construction."
- **JMS Planning & Development for Guilden Morden Developments Ltd:** "Should a Local Plan be likely to have significant effects on European habitats or species, the LPA should undertake a Habitats Regulation Assessment as per the Conservation of Habitats and Species Regulations 2010 (as amended). The Sustainability Appraisal should also take the findings of the HRA into account (as per the PPG, paragraph 11, ID11-011 20140306)."
- **Great Shelford Parish Council:** "We have looked at the HRA, although it acknowledges that it is important to consider "in-combination effects" (its paragraph 3.24) it does not consider the EWR project, a strategic project on which the development at North Cambourne is said to depend, which has the potential to impact significantly the Eversden and Wimpole Woods SAC. This deficiency must be remedied. In responding to EWR's 2024 non-statutory consultation, both SCDC and Cambridgeshire County Council expressed significant concerns about EWR's proposals and their potential adverse impact on the maternity roost of rare barbastelle bats at the SAC. We are assuming that neither GCSP nor its constituent local authorities want to see this rare

population wiped out - there is no evidence that captive breeding is possible and the bats cannot be moved."

How these comments have been addressed

G.12 Recreation pressure at Wicken Fen:

- The HRA has ruled out adverse effects at Wicken Fen Ramsar due to Policy BG/EO and existing management of visitors to the site (see paragraph 5.60). No amendments to policy BG/BG are required.

G.13 In combination effects:

- As set out in paragraph 3.38 & 3.39, if the Local Plan has the potential for likely significant effects alone, this is sufficient to require Appropriate Assessment. This is why, in some cases, in-combination impacts were not referred to in the HRA Screening. Clarification has been added, where this is the case (e.g. at paragraph 4.16).
- The HRA has added further explanation of in-combination effects, clarifying the plans or projects that could contribute to in-combination effects, where those have been identified (e.g. at paragraph 4.24).

G.14 Functionally linked habitats and East-West Rail:

- Consultation has been undertaken with the East-West Rail team (see paragraph F.18) to understand the approach that they have taken in the HRA of the scheme; and further clarification has been provided in the HRA where there are in-combination effects with East-West Rail (e.g. at paragraph 4.16).
- Any mitigation required of policies in the Local Plan in relation to loss of (or disturbance of species at) functionally linked habitats is intended to mitigate the contribution of the Local Plan to in-combination effects, not to mitigate the effects of East-West Rail.

Regulation 19 Consultation (August – September 2026)

Natural England

Excerpts of response that are relevant to the HRA

G.15 Comments on the HRA of the Proposed Submission Local Plan (July 2026):

G.16 "Regarding the Habitats Regulations Assessment, wording about residual in-combination effects and mitigation for these should be included before we can agree with the conclusion of no adverse effect on integrity on Eversden and Wimpole Woods SAC. Additional consideration of water issues is also needed. We anticipate these HRA matters will be able to be resolved however and believe the Plan itself to be sound."

G.17 "We do not consider the points raised below to be soundness issues on the basis that HRA is an iterative process. Addressing these matters will however ensure the plan is more robustly compliant with the Habitats Regulations."

- **Air Quality: "**Paragraph 6.8 – Natural England welcomes that an air quality assessment will be carried out and presented in an addendum to the HRA."
- **Eversden and Wimpole Woods SAC:** "Paragraphs 4.16, F.13 and F.14 - We advise that further written explanation and more detailed consideration and assessment of residual in-combination effects following mitigation measures proposed in the Local Plan, particularly regarding East West Rail (EWR), should be added to the HRA. The HRA should specify the need to ensure there is coordination with EWR (and other transport schemes) so that mitigation measures align across projects, and that proposed habitats, such as the Bourn Airfield and Cambourne North dark corridors, Strategic Enhancement Areas and 'Cambourne Forest', all guide bats to safer crossing points of the rail line rather than towards potential danger zones.

  Paragraph 5.22 – We have recommended wording additions to some of the policies listed here to help resolve these HRA points.

  Paragraphs 5.23 and 6.3 – 5.23 needs to make clear whether it is referring to both alone and in-combination impacts. Currently Natural England cannot agree with the conclusion ruling out Adverse Effects on Integrity (AEOI) in relation to Eversden and Wimpole Woods SAC without evidence of a clear and robust in-combination assessment which considers the potential for residual effects. As

above, this should have a particular focus on areas where the EWR route interacts with allocations and their associated Strategic Enhancement Areas. We understand that full details of EWR's potential impacts are not yet available, but urge the need to specify collaboration and joined up design between schemes and allocations within the HRA and policy. This is to ensure mitigation is appropriately designed and coherent to maintain Barbastelle commuting flightlines, and to identify priority areas for the creation of additional foraging habitat where bats may be delayed in commuting (for instance due to construction impacts and residual operational impacts such as lighting and disturbance)."

- **Water quantity – onsite:** "The Supplementary Advice on Conservation Objectives for the Ouse Washes SPA and Portholme SAC provide information about the negative effects of high water levels and prolonged flood events on the designated features. This does not appear to have been considered in the HRA, despite developments having the potential to exacerbate flooding and the rate of runoff if urbanisation effects are not mitigated. Paragraphs 4.142 and 4.146 should therefore also mention the issues of excessive and prolonged floodwater on the Ouse Washes and Portholme. This should then be covered in the Appropriate Assessment, specifying the need for the water management, sustainable drainage and flood risk policies (CC/IW and CC/FM) to be adhered to."
- **Water quality – wastewater treatment:** "Paragraphs 4.153 and 5.100 state 'Portholme SAC: downstream of WwTWs in the Great Ouse catchment (south of Huntington). The SAC habitats could be affected directly.' However, Table 4.8 (page 79) states there is 'no impact pathway' from wastewater treatment for Portholme SAC. As Portholme is considered at Appropriate Assessment stage, we assume Table 4.8 contains a typing error. If not, clarification should be provided to explain the discrepancies within the HRA regarding Portholme.

  We find paragraphs 5.100 to 5.109 to be too generalised, without quantifying impacts or taking into account the current site condition when assessing the adequacy of mitigation. We understand, however, that further work on a supplementary report to the Water Cycle Study will be carried out in response to the Environment Agency's recommendation of a more detailed assessment of environmental risk (as stated in the Proposed Submission Plan Draft Statement of Common Ground Appendix 1 Sup SoCG (v): Delivery of growth – wastewater treatment). We agree with this and advise that the site specific water quality targets for each relevant Habitats Site, provided in their Conservation Advice documents, should be used. These are often more stringent than Water Framework Directive (WFD) targets, and achieving WFD targets is not always

sufficient to achieve favourable status of designated sites' features. This should be considered in the HRA.

We also expect any actions resulting from the Environment Agency's comments (in Appendix 1 of the Greater Cambridge Integrated Water Management Study - Detailed Water Cycle Study Wastewater Addendum (2026)) to be carried out, and would like to see confirmation from the EA that they are satisfied that these points have been addressed. To add to comments EA8 and EA9 in the above document, we recommend that, within the planned supplementary report, it should also be established whether the required permit limits are technically feasible, whether upgrades are funded and programmed, and the consequences for planned growth if a wastewater treatment works cannot achieve the assumed limit.

Once the planned supplementary report is available, the HRA (and Sustainability Appraisal) should be updated accordingly."

- **HRA correction suggestions:**
- "Paragraphs 3.5, 4.138 and 4.153 refer to The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site being downstream of the River Cam, however it should be noted that they are also downstream of the River Great Ouse which receives water from catchments and wastewater treatment works serving Greater Cambridge."
- "Paragraph 4.153 – the wording in these bullet points differs from the direct/indirect conclusions in Table 4.8 – suggested amendments to paragraph 4.153:
- "Habitats sites downstream of these are:
  - Ouse Washes SAC, SPA and Ramsar: downstream of WwTWs in the Great Ouse catchment. The SAC fish and SAC/Ramsar habitats and plant species could be affected ~~indirectly~~ directly, and the SPA and Ramsar bird species indirectly.
  - Portholme SAC: downstream of WwTWs in the Great Ouse catchment (south of Huntington). The SAC habitats could be affected directly.
  - The Wash and North Norfolk Coast SAC and The Wash SPA and Ramsar site: downstream of WwTWs in the River Cam catchment. The SAC and Ramsar habitats and plant species could be affected ~~indirectly~~ directly, and the SAC mammals and SPA and Ramsar bird species indirectly."
- "Paragraphs 4.153 and 5.100 make reference to 'Huntington' – this should be corrected to Huntingdon."

- "Within HRA Appendix D, Site Allocations (both in 'Physical damage and loss of habitat' p.203 and 'Non-physical disturbance' p.204, under 'Site allocations meeting these criteria') there appears to be an error relating to the Bird FLL bullet points – the 'within 2km' and 'within 10km' labels should be the other way around, as there are no allocations within 2km of the Ouse Washes SPA/Ramsar, and those sites listed are actually within 10km."

G.18 In addition, a number of recommended policy amendments were made in the Natural England response, which relate to effects on Habitats sites:

G.19 Policy S/CBN: Cambourne North:

- "Suggested edit to S/CBN part 26:
  - Positively plan for and deliver a network of dark corridors to ensure nocturnal and crepuscular species can forage with minimum disturbance. The development must:
  - a. Incorporate dark corridors as part of the masterplan for the site, ensuring they are a minimum of 60m in width. The dark corridors must link Knapwell Wood, Elsworth Wood and Papworth Wood as well as form part of a wider dark landscape network beyond the site to Overhall Grove, Hardwick Wood and the Eversden and Wimpole Woods SAC. There must be collaboration and joined up design between the Cambourne North masterplan, Strategic Enhancement Area (S/SEA/CBN), and neighbouring schemes and allocations, such as East West Rail, Cambourne (S/CB) and Bourn Airfield (S/BA), to ensure coherent ecological connectivity is achieved;
  - Justification:
  - The landscape around this allocation is of known importance to barbastelle bats (as summarised in the Cambourne to Cambridge statement to inform Habitats Regulations Assessment section 6) with potential functional links to the Eversden and Wimpole Woods SAC. It is therefore imperative that habitat and connectivity is maintained and enhanced for the resilience of the SAC population and its future generations."

G.20 Policy S/BA: Bourn Airfield New Village:

- "Suggested edits to S/BA part 17:
  - Balance the need for sensitive ecological assets to be protected and enhanced, with the opportunities provided by the rural setting to promote access to the natural environment, by: […]
  - d. Through ~~Bat Surveys~~ desk study and surveys, determine the individual and cumulate impacts of development associated recreational pressures on

nearby sensitive sites, such as Hardwick Wood SSSI, to identify and implement necessary mitigation measures;

- e. Providing a Sensitive Lighting Strategy and dark habitats/corridors ~~where~~ wherever possible, ensuring links are made ~~linking~~ to those being delivered as part of Cambourne North (Policy S/CBN), and around the outer edge of the settlement. Habitat permeability for barbastelle bats, including commuting flightlines and foraging habitat, must be provided and maintained; and
- f. Providing orchards in appropriate locations, managed for both community and ecological value, including some locally relevant and heritage fruit/nut tree varieties. ~~where their ecological value can be demonstrated.~~
- Justification:
- d. Bat surveys are not very relevant to the assessment of recreational pressures, so this may be a typing error. The term 'sensitive sites' is recommended, as the assessment of recreational pressures should consider vulnerable non-SSSI locations as well as designated Sites of Special Scientific Interest (SSSIs). We advise mentioning Hardwick Wood SSSI specifically as it is close to the proposed allocation and is already known to be impacted by recreation.
- e. The landscape around this allocation is of known importance to barbastelle bats (as summarised in the Cambourne to Cambridge statement to inform Habitats Regulations Assessment section 6) with potential functional links to the Eversden and Wimpole Woods SAC. It is therefore imperative that habitat and connectivity is maintained and enhanced for the resilience of the SAC population and its future generations.
- f. We recommend the focus should be on creating orchards that are managed beneficially in appropriate locations, rather than needing to demonstrate the ecological value of orchards."

G.21 Policy CC/IW: Integrated water management, sustainable drainage and water quality:

- "Suggested edit to CC/IW part 6:
  - To protect and enhance water quality, all development proposals must demonstrate that:
  - a. There is guaranteed sufficient hydraulic and environmental capacity for wastewater flows and 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, to the required standard, prior to the occupation of the development (where development is being phased, this must be demonstrated for each phase before first occupation);

- Justification:
- It should be recognised that capacity of wastewater treatment infrastructure is different to the environmental capacity of water courses receiving additional flows and nutrients. Upgrades to wastewater plants which otherwise have infrastructural capacity may be required in order to avoid environmental deterioration. This is particularly important where there is hydrological connectivity with designated sites. Habitats Sites also often have more stringent water quality targets than the Water Framework Directive targets – these are provided within the Conservation Advice documents for relevant sites and should be considered within Habitats Regulations Assessments."

G.22 Policy BG/BG: Biodiversity and geodiversity:

- "Paragraph 5.24 – we request that the reference to 'DEFRA' is changed to 'Natural England' regarding the (currently still draft) Eversden and Wimpole Woods SAC Barbastelle Bat Protocol.
- Paragraph 5.25 – we advise making amendments to the following bullet points:
  - Ouse Washes SAC, ~~and~~ SPA and Ramsar site (and associated functionally linked land)
  - Fenland SAC and corresponding Ramsar sites (Woodwalton Fen, Chippenham Fen, Wicken Fen)
  - Breckland SAC and SPA (and associated functionally linked land)."

G.23 Proposed Submission Policies Map:

- "Wind Turbine Zone – We understand the Wind Turbine Zone map layers do not form part of the Policies Map, however, as they are shown on the interactive map portal we wish to comment as they may be used by applicants to inform the suitability of areas before putting forward proposals. The 'Wimpole Chalk Hills' area surrounding Eversden and Wimpole Woods SAC (area 7E in Figure 1.1 of the Greater Cambridge Landscape Sensitivity Assessment Part 2 – Renewable Energy Development) has been given a Medium sensitivity rating, and adjacent 'Bourn Tributaries Lowland Farmlands' area to the east of the SAC (area 3B) given a Medium to Low rating on the map for Small Scale Wind Farms and Large Single Wind Turbines. We understand that the map's ratings are based on visual Landscape considerations, however, as these areas are within the Landscape Connectivity Zone (LCZ), and some areas within the Core

Sustenance Zone (CSZ) for Eversden and Wimpole Woods SAC barbastelle bats, which rely on functionally linked land outside of the SAC and may be impacted by wind turbines, we advise that these ratings should be reviewed to avoid encouraging wind turbine applications in these areas."

How these comments have been addressed

G.24 Air quality:

- The air quality assessment has now been undertaken and the findings are included in detail in Appendix F, and summarised in Chapter 5.

G.25 Eversden and Wimpole Woods SAC:

- More detailed consideration and assessment of residual in-combination effects regarding East West Rail have been added to Chapter 5. Information from the EWR Environmental Update Report published in 2024 **[See reference** 84**]** has been added to set out the potential impacts the EWR scheme could also have on physical damage and loss of functionally linked habitat and non-physical disturbance of bats using such habitats for foraging and commuting routes.

G.26 Water quantity – onsite:

- The negative effects of high water levels and prolonged flood events on the designated features of Ouse Washes SPA and Portholme SAC have now been included in the Screening assessment (Chapter 4) and Appropriate Assessment (Chapter 5), along with reference to the relevant policies in the Local Plan that provide sufficient mitigation.

G.27 Water quality – wastewater treatment:

- Reference to more specific water quality targets (where available) from the Supplementary Advice on Conservation Objectives has been added to Chapter 5. Relevant sections of the Environment Agency's Regulation 19 consultation response have also been included to demonstrate the EA is satisfied that the Water Cycle Study evidence base, as it pertains to wastewater, can be considered sound on the basis that there are strong policy and future infrastructure planning measures in place to manage potential risks.

G.28 HRA correction suggestions:

- These corrections have all been made in this revised version of the HRA Report (October 2026).

G.29 Recommended policy amendments:

- GCSP will consider the policy recommendations and will respond to the recommendations of the appointed Examiner as to whether any modifications are necessary during the Examination of the Local Plan.

G.30 Recommended amendment to Proposals Map:

- As noted, the Wind Turbine Zone map layers do not form part of the Policies Map. They are based on a technical evidence study which considers the visual landscape sensitivity of wind turbines. Therefore, it is not possible to change the ratings. However, Policy CC/RE: Renewable Energy Projects and Infrastructure in the Local plan is a criteria-based policy that supports renewable energy projects (e.g. wind turbines) "provided they do not cause unacceptable impacts that cannot be mitigated and are reversible, including cumulative and cross-boundary impacts, on: […] b. Biodiversity and geodiversity, including irreplaceable habitats and peat soils, protected habitats and species, and ecological networks; […]". The supporting text to the policy then states that the Local Planning Authority will expect applicants to submit an Ecological Impact Assessment (EcIA) to satisfy the ecological requirements of this policy, and this should include "An assessment of the potential impact on all protected habitats, protected ecological sites, and any irreplaceable habitats" as well as "An appraisal of potential impacts on protected species, including commuting and foraging bats".

Other consultees

Summary of responses that are relevant to the HRA

G.31 Comments on the HRA of the Proposed Submission Local Plan (July 2026). Members of the public have been identified only by their initials:

- **DL:** "The AA for the Eversden and Wimpole Woods Special Area of Conservation fails to address the in combination effects with East West Rail's Appropriate Assessment, which is a misinterpretation of H&SR §105(1).

  The scope of the AA should encompass in combination effects with other plans or projects, not just the local plan, to avoid rendering the H&SR meaningless.

  The SAC is significantly impacted by the cumulative effects of individual assessments, indicating that the current HRA is potentially illegal.

  A proper legal and meaningful HRA necessitates the integration of East West Rail's Appropriate Assessment with the current one."

- **MS:** “The Eversden and Wimpole Woods Special Area of Conservation is designated for its maternity roost of Barbastelle Bats and is protected by the Habitats and Species Regulations 2017 (H&SR). It is also a ‘European site’. East West Rail has to prove that it will not adversely affect the European site and cannot do this. EWR's draft Habitats Regulations Assessment (HRA) makes no reference to the effects its plans for combined rail and housing will have on this European Site. They have failed to do this after six years of working on it.”
- **SM:** “This concerns the Eversden Woods SAC. I believe the authority has the obligation to consider the cumulative effects of development on the SAC, including those caused by East West Rail, and I believe your legal obligation is to do it now, and not wait for EWRCo's own Appropriate Assessment (the timing and quality of which you have no control over.) In other words, you cannot offload the responsibility to EWRCo. On the one hand you are assuming EWR will happen, but on the other you have no AA for the Eversden Woods SAC. The plan is therefore legally defective.”
- **JM:** “In my opinion the chosen route for EWR southern approach to Cambridge will have a detrimental effect on the environment along the route from Camborne to Cambridge South station. The lands along the route have a strong community presence and the fauna and flora have found a unique balance that a rail operation will destroy.”
- **FH:** “Regulation 105 of the H&SR 2017 (amended) requires GCSP to perform an "Appropriate Assessment" (AA) before approving any land use plan that could significantly affect a protected European wildlife site. The Eversden & Wimpole Woods SAC is a designated European site for its maternity roost of the Barbastelle Bat. The site and its functionally linked land are protected by the H&SR.

  GCSP must therefore produce an AA of the potential in-combination environmental damage of East-West Rail’s proposed southern route and associated developments in South Cambridgeshire. As both GCSP and EWRCo. have failed to produce an in-combination AA the local plan is illegal.”
- **RW:** “It is my understanding that the HRA requires an appropriate assessment of the implications for Eversden and Wimpole Woods Special Area of Conservation (E&WW SAC) arising from the combined effect of the housing development and the new railway, EWR.

  Unfortunately an assessment of these combined effects has not been made.”
- **WA:** “The Habitats Regulations Assessment of Greater Cambridge Local Plan recognizes the likely impact of development at Cambourne and Bourn Airfield

sites on the Barbastelle bat roost within the Eversden & Wimpole Woods SAC (para 4.13). It is recognised that there could be additional in-combination impacts resulting from East-West Rail (para 4.16), whose economic case depends on the houses to be built at Cambourne and Bourn. However these in-combination environmental impacts are not addressed in the Local Plan (and have not yet been addressed by East-West Rail).

Without them the GCLP HRA does not meet legal requirements."

- **TR:** "The Habitats Regulations Assessment must not rely on surveys or mitigation deferred to the application stage. Legal compliance with the Conservation of Habitats and Species Regulations 2017, regulations 63 and 64. A competent authority cannot conclude no adverse effect on site integrity by relying on measures that are uncertain or will only be secured later (Ashdown ... In particular, Para 3.3.24 records that the site may be functionally linked habitat to the Ouse Washes Special Protection Area and Ramsar site for Bewick's swan and whooper swan, and that survey is required to confirm suitability. I ask that the Councils confirm in writing that the HRA conclusion for this allocation does not depend on surveys or mitigation deferred to a later stage, and that any land functionally linked to the SPA is protected at the plan stage."
- **TW:** "The safeguards for environmental protection are not sufficiently policed by the council who should outsource the outcomes of the policy to a more neutral observer."
- **GT:** "The Council treats EWR as a growth enabler yet defers in-combination cumulative environmental, carbon, and Habitats Regulations Assessment (HRA) impacts to a separate 2027 DCO process. By analogy, the same principle of Wealden apply. The evidence base omits EWR's macro-construction carbon footprint, rendering the Plan in breach of the Climate Change Act 2008. The Local Plan disregards Planning Advisory Service Local Plan Soundness Guidance: The IDP should transparently set out assumptions, limitations, and delivery risks' by failing to delineate where the Council's plan-making jurisdiction ends and where the East West Rail Development Consent Order process takes over."
- **GT:** "The Local Plan is Unsound due to a structural infrastructure failure consequent to EWR bypassing the Cambridge North employment hub (~27,000 future jobs), causing a "double-interchange penalty" forcing commuters at that site into vehicles to reach planned housing in Cambourne North. The C2C Guided Bus route does not serve Cambridge North business area. The induced car dependency increases NOx emissions, failing Habitats Regulations in-combination tests by impacting protected habitats (Devil's Dyke Special Area of Conservation (SAC)) and the Eversden and Wimpole Woods SAC."

- **GT:** “Cambridge East strategic allocation is Unsound: it is incompatible with national rail strategies routing more diesel rail freight along the Newmarket Line. The Plan fails to account for necessary acoustic setbacks, buffer zones, and public health protections required under NPPF artificially inflating the site's safely developable land area. The Habitats Regulations Assessment is legally flawed under Wealden; it fails to model the cumulative, "in-combination" air quality degradation (NOx) and Particulate Matter alongside the plan's wider housing allocations and impacts on protected habitats (Devil’s Dyke Special Area of Conservation (SAC), Fenland SAC (Wicken Fen) and the Eversden and Wimpole Woods SAC.)”
- **GT:** “The conjunction between the Cambridge East strategic allocation and the Newmarket Line diesel freight corridor introduces significant public health and air quality compliance risks. The localized increase in fine particulate matter PM2.5 and PM_{10} and Nitrogen Dioxide (NO_2) runs directly counter to local Air Quality Management Area (AQMA) reduction mandates and NPPF Paragraph 180. Furthermore, the Habitats Regulations Assessment (HRA) is legally flawed under the principles of Wealden DC v SSCLG [2017] EWHC 351 (Admin). The HRA fails to run an integrated, "in-combination" model evaluating how the localized atmospheric deposition from diesel freight path expansions interacts with the baseline air quality degradation caused by the plan’s wider strategic housing allocations. The plan cannot rationally treat the forthcoming Nationally Significant Infrastructure Project (NSIP) freight growth as an independent externality to bypass its current plan-making environmental baseline duties. The Plan fails the Habitats Regulations in-combination tests by impacting protected habitats (Devil’s Dyke Special Area of Conservation (SAC), Fenland SAC (Wicken Fen component) and the Eversden and Wimpole Woods SAC.)”
- **Cambridge Approaches Limited**: “This representation objects to the Local Plan's HRA, which omits EWR's in-combination effects on Eversden and Wimpole Woods SAC's barbastelle bat colony, despite the Councils' screening chapter saying this would be examined at Appropriate Assessment stage. Citing Regulation 105, the Habitats Directive and case law including Waddenzee, Moorburg and Caffyn, Cambridge Approaches argues this omission makes the Plan legally non-compliant, unjustified and ineffective, and should not be adopted until resolved.”
- **Cambridge Approaches Limited:** “This representation objects to the Greater Cambridge Local Plan's HRA on a separate ground from the East West Rail In combination submission: it fails to identify that Hardwick Wood supports its own barbastelle maternity colony sharing a foraging resource with Eversden and Wimpole Woods SAC, as confirmed by EWR Company's 2022 radio-tracking survey. The Councils' HRA Appendix E records functional connectivity to

Hardwick Wood but never follows this through to the shared foraging resource or assesses recreation/visitor pressure on it from planned housing growth. Cambridge Approaches asks the Inspector to treat this as a soundness matter requiring further HRA work before adoption, and to update the functionally-linked-habitat baseline and Appendix E's Bourn Airfield review accordingly."

- **Haslingfield Parish Council**: "This representation objects to the Local Plan's HRA, which omits EWR's in-combination effects on Eversden and Wimpole Woods SAC's barbastelle bat colony, despite the Councils' screening chapter saying this would be examined at Appropriate Assessment stage. Citing Regulation 105, the Habitats Directive and case law including Waddenzee, Moorburg and Caffyn, Cambridge Approaches argues this omission makes the Plan legally non-compliant, unjustified and ineffective, and should not be adopted until resolved."
- **Haslingfield Parish Council:** "HPC objects to the Plan because its HRA does not appear to have adequately considered the barbastelle foraging resource shared between Hardwick Wood and Eversden and Wimpole Woods SAC. EWRCo.'s 2022 radio-tracking survey identifies shared foraging resources between the Hardwick Wood, Madingley Wood and SAC populations, while the HRA itself records functional connectivity towards Hardwick Wood but does not follow this evidence through to the SAC's qualifying population. HPC considers that this gap in the evidence base undermines confidence in the HRA's assessment of cumulative effects and the conclusion that the Plan will have no adverse effect on the SAC."
- **Great Shelford Parish Council:** "The Habitats Regulations Assessment is not legally compliant because it does not include an in-combination assessment of the effects of the Local Plan and the East West Rail project on the Eversden and Wimpole Woods Special Area of Conservation. The Habitats Regulations Assessment must be revised to include an in-combination assessment of the effects of the Local Plan and the East West Rail project on the Eversden and Wimpole Woods Special Area of Conservation."

How these comments have been addressed

G.32 The potential interrelationship of the Local Plan and EWR has been assessed in the revised HRA. The reference to radio tracking surveys undertaken in association with EWR is noted but it is not necessary or proportionate to consider this evidence in detail in the Local Plan HRA. The Local Plan HRA assesses potential impacts on the SAC and functionally linked habitat and considers the provision of mitigation for the potential effects; the EWR scheme will need to do the same. The potential need for this to be undertaken on a collaborative and coordinated basis is

recognised in the revised HRA. Local Plan policies ensure that there will not be adverse effects on the SAC and the same is expected and can be relied on with the EWR scheme.

G.33 The unconfirmed increase in freight on the Newmarket rail line has not been assessed in the HRA as the HRA only assesses committed or reasonably certain plans or projects. There is no certainty about an increase in rail freight and there are no applications, permissions or licenses to consider.

Direct consultation

Natural England

G.34 Direct consultation has been undertaken with Natural England on various issues, as follows:

- September 2019 – Natural England was sent the Sustainability Appraisal and HRA Scoping Reports, for comment. They responded in a letter, stating that they agreed with the proposed approach to the HRA and recommended that:
  - Long distance effects on Habitats sites beyond 15km should be considered (e.g. in relation to hydrological effects and recreation pressure).
  - Justification should be provided as to why air pollution effects would not be considered significant beyond 200m from a road.
  - Zones of influence for recreation pressure should be defined with reference to visitor surveys or, where those are not available, Natural England's 'Impact Risk Zones' (IRZs) for recreation pressure.
  - The sensitivity of sites should be determined with reference to Natural England's Supplementary Advice packages and IRZs, not just Site Improvement Plans.
  - Hydrological connectivity (or lack of) between the plan area and Chippenham Fen should be evidenced.
- May 2026 – Natural England shared the emerging 'Eversden & Wimpole Woods SAC bat protocol' with LUC, which confirms the Bat Consultation Bands referred to in their Regulation 18 response as: 6km core sustenance zone, and a 6-10.2km landscape connectivity zone. The two consultation bands reflect the densities at which barbastelles originating from the SAC are likely to be encountered, and the relative importance of habitats to the SAC bats with increasing distance from the maternity roosts within the SAC.

- May 2026 – Natural England indicated that they think the main issue for the HRA is water quality (capacity at wastewater treatment works), but they are happy with the proposed approach to consult with the Environment Agency and Anglian Water, to seek agreement on available capacity through a Statement of Common Ground.
- January-May 2026 – the Councils and Natural England discussed emerging open space standards for semi-natural greenspace and whether additional mitigation is required for recreational pressure on Habitats sites.
- June 2026 – The Councils and Natural England agreed a Statement of Common Ground which included that "there is not a clear case for including policy within the Plan seeking to specifically mitigate recreational impacts on European sites, noting that the Eversden and Wimpole Woods SAC itself is not currently significantly impacted by recreational impacts, and that there is not currently a strategic recreational mitigation project associated with Wicken Fen SAC and Ramsar site".
- June 2026 – The Council asked whether Waterbeach New Town would need to contribute to SAMM funds at Breckland SAC/SPA. Natural England replied that local authorities cannot require other local authorities to make a payment into their SAMM; and that the Council should decide on the most appropriate way to mitigate potential recreation impact, for example whether existing policies are sufficient, or if additional policy wording around green infrastructure is required.
- October 2026 – Natural England was consulted informally on the draft revisions to the HRA that had been made following the Reg.19 consultation. Their comments have informed the final draft of this report.

G.35 How this has been addressed:

- Habitats Sites beyond 15km: 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, have been screened in due to their hydrological connectivity downstream to the River Cam (paragraph 3.5). Although the Impact Risk Zones indicate that there are no additional recreation pressure zones of influence that extend into the plan area from beyond 15km, a recent (2025) study has established a zone of influence for Breckland SPA and SAC of 26.3km, which extends into the plan area. This site has been screened in, in relation to recreation pressure.
- Significance of air pollution beyond 200m from road: additional evidence has been provided, e.g. Figure 4.1.

- Zones of influence for recreation pressure: ZOIs have been derived from visitor survey data where available and IRZs where not (paragraphs 4.114-4.118).
- Sensitivities of Habitats sites: the sensitivities of each Habitats site have been derived from a range of sources, see Appendix B.
- Hydrological connectivity to Chippenham Fen Ramsar: This site has been screened in, in relation to abstraction (paragraphs 4.144). An explanation of why screened the Ramsar has been screened out in relation to wastewater and direct pollution is provided in paragraphs 4.152-4.160.
- The HRA has been updated to refer to the latest bat consultation bands, in the assessment of impacts on functionally linked habitats associated with Eversden & Wimpole Woods SAC (see paragraphs 3.21-3.22).
- The HRA reflects the latest discussions on wastewater treatment capacity and the need to formalise agreement through a SOCG with Anglian Water (paragraphs 5.100-5.104).
- The HRA considers the open space provision in the Local Plan policies, in the assessment of recreation pressure (e.g. at paragraphs 5.57-5.59).
- The air quality assessment has been finalised and incorporated into the HRA (Appendix F and paragraphs 5.55-5.59).

East-West Rail

G.36 The Council and LUC met with the team undertaking the HRA of the East-West Rail proposals (including Mott MacDonald and WSP), in April 2026. The approach taken to assessing in combination effects was discussed; in particular, the assessment of loss of functionally linked habitats used by barbastelle bats from Eversden and Wimpole Woods SAC.

G.37 How this has been addressed:

- The HRA has added further explanation of the method for determining in combination effects and clarifying the plans or projects that could contribute to in combination effects, where those have been identified in Chapter 4 (e.g. at paragraph 4.16).
- The HRA has also referred in Chapter 5 to the most recent information published by EWR (https://eastwestrail.co.uk/previous-consultations/consultation2026 and https://eastwestrail.co.uk/previous-consultations/consultation2024/environmental-update-report) relating to the potential impacts of the scheme and how they might be mitigated.

- In relation to functionally linked habitats used by bats, the HRA has followed Natural England's latest guidance on Bat Consultation Bands (see paragraph G.32).

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