

South Cambridgeshire District Council and Cambridge City Council
North East Cambridge Area Action Plan

HRA Report

Final report

Prepared by LUC

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South Cambridgeshire District Council and Cambridge City Council

North East Cambridge Area Action Plan

HRA Report

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Chapter 1 - Introduction

Background

1.1 LUC has been commissioned by South Cambridgeshire District Council and Cambridge City Council (the Councils) to carry out a Habitats Regulations Assessment (HRA) of the North East Cambridge Area Action Plan (NECAAP). This iteration of the HRA report assesses the impacts of the draft NECAAP.

Context for the North East Cambridge Area Action Plan

1.2 North East Cambridge Area Action Plan is located at the north eastern fringe of Cambridge and contains one of the last substantial brownfield sites in the City and Cambridge Science Park. The area is situated between the A14 in the north, Kings Hedges and Orchard Park Wards in the south and south-west and Cambridge – Kings Lynn Railway line in the east.

1.3 The area in question straddles the administrative boundaries of Cambridge City Council and South Cambridgeshire District Council who are taking a coordinated approach to development through providing a joint AAP for the site. The NECAAP seeks the wider regeneration of this part of Cambridge with the creation of a revitalised, employment focussed area centred on the new transport interchange created by Cambridge North Station.

1.4 The Councils' have previously prepared Issues and Options consultation documents in 2014 and 2019 which formed an important early stage in developing the NECAAP and set out the blueprint for a comprehensive and co-ordinated regeneration of the area. The 2019 Issues and Options document identified key issues, challenges and opportunities facing the area and set out different options the Councils could take to address these. The consultation of this Issues and Options document took place in February and March 2019 and assisted in the preparation of the Draft NECAAP. The preparation of the NECAAP has been informed by both adopted and emerging plans.

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 2007¹; the currently applicable version is the Conservation of Habitats and Species Regulations 2017² (as amended). When preparing the North East Cambridge Area Action Plan, the Councils are required by law to carry out an HRA. The Councils can commission consultants to undertake HRA work on its behalf and this (the work documented in this report) is then reported to and considered by the Councils as the 'competent authority'. The Councils will consider this work and may only progress the NECAAP if it considers that the Plan will not adversely affect the integrity of any European site. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is also noted in the Government's online planning practice guidance.

¹ The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (2007) SI No. 2007/1843. TSO (The Stationery Office), London.

² The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, TSO (The Stationery Office), London.

1.6 HRA refers to the assessment of the potential effects of a development plan on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs):

- SACs are designated under the European Habitats Directive and target particular habitat types (Annex 1) and species (Annex II). The listed habitat types and species (excluding birds) are those considered to be most in need of conservation at a European level.
- SPAs are classified in accordance with Article 4(1) of the European Union Birds Directive³ for rare and vulnerable birds (as listed in Annex I of the Directive), and under Article 4(2) for regularly occurring migratory species not listed in Annex I.

1.7 Potential SPAs (pSPAs)⁴, candidate SACs (cSACs)⁵, Sites of Community Importance (SCIs)⁶ and Ramsar sites should also be included in the assessment.

- Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).

1.8 For ease of reference during HRA, these designations can be collectively referred to as European sites⁷ despite Ramsar designations being at the international level.

1.9 The overall purpose of the HRA is to conclude whether a proposal or policy, or the whole development plan, would adversely affect the integrity of the European site in question either alone or in combination with other plans and projects. This is judged in terms of the implications of the plan for the 'qualifying features' for which the European site was designated, i.e.:

- SACs – Annex I habitat types and Annex II species⁸;
- SPAs – Annex I birds and regularly occurring migratory species not listed in Annex I⁹;
- Ramsar sites – the reasons for listing the site under the Convention¹⁰.

1.10 Significantly, HRA is based on the precautionary principle meaning that where uncertainty or doubt remains, an adverse impact should be assumed.

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

⁴ Potential SPAs are sites that have been approved by the Minister for formal consultation but not yet proposed to the European Commission, as listed on the GOV.UK website.

⁵ Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted, as listed on the JNCC's SAC list.

⁶ SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the UK Government.

⁷ The term 'Natura 2000 sites' can also be used interchangeably with 'European sites' in the context of HRA, although the latter term is used throughout this report.

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

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

¹⁰ As set out in section 14 of the relevant 'Information Sheet on Ramsar Wetlands' available on the JNCC website.

Stages of HRA

1.11 The HRA of development plans is undertaken in stages (as described below) and should conclude whether or not a proposal would adversely affect the integrity of the European site in question.

1.12 The HRA should be undertaken by the 'competent authority', in this case South Cambridgeshire District Council and Cambridge City Council, and LUC has been commissioned to do this on the Council's behalf. The HRA also requires close working with Natural England as the statutory nature conservation body¹¹ in order to obtain the necessary information, agree the process, outcomes and mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

Requirements of the Habitat Regulations Assessment

1.13 In assessing the effects of a Plan in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which would inform the 'Integrity Test'. The relevant sequence of questions is as follows:

- Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not, as is the case for the Greater Cambridge, proceed to Step 2.
- Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or projects (the 'Significance Test'). If yes, proceed to Step 3.
- Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the European site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public.
- Step 4: In accordance with Reg. 105(4), but subject to Reg. 107, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of a European site.
- Step 5: Under Reg. 107, if Step 4 is unable to rule out adverse effects on the integrity of a European site and no alternative solutions exist then the competent authority may nevertheless agree to the plan or project if it must be carried out for 'imperative reasons of overriding public interest' (IROPI).

¹¹ Regulation 5 of the Habitats Regulations 2017.

Stages of HRA

1.14 Table 1.1 summarises the stages and associated tasks and outcomes typically involved in carrying out a full HRA, based on various guidance documents^{12, 13, 14}.

Table 1. 1 Stages of HRA

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

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

¹³ DCLG (2006) Planning for the Protection of European Sites: Appropriate Assessment

¹⁴ RSPB (2007) The Appropriate Assessment of Spatial Plans in England. A guide to why, when and how to do it.

| Stage | Task | Outcome |
|---|---|---|
| Stage 3: Assessment where no alternatives exist, and adverse impacts remain taking into account mitigation | Identify ‘imperative reasons of overriding public interest’ (IROPI). Demonstrate no alternatives exist. Identify potential compensatory measures. | This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous. |

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

Recent case law changes

1.16 This HRA will be prepared in accordance with recent case law, including most notably the ‘People over Wind’ and ‘Holohan’ rulings from the Court of Justice for the European Union (CJEU).

1.17 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 taken into account at the screening stage. The precise wording of the ruling is as follows:

“Article 6(3)must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site.”

1.18 In light of the above, the HRA screening stage will not rely upon avoidance or mitigation measures to draw conclusions as to whether the Strategic Plan could result in likely significant effects on European sites, with any such measures being considered at the Appropriate Assessment stage as relevant.

1.19 The HRA will also fully consider the recent Holohan v An Bord Pleanala (November 2018) judgement which stated that:

“Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an ‘appropriate assessment’ must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the

construction compound and haul routes, only if that authority is certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the ‘appropriate assessment’ must include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned.”

1.20 LUC will fully consider the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of European sites, including the potential for complex interactions and dependencies. In addition, the potential for offsite impacts, such as through impacts to functionally linked land, and or species and habitats located beyond the boundaries of European site, but which may be important in supporting the ecological processes of the qualifying features, has also been fully considered in this HRA.

1.21 In addition to this, the HRA will take into consideration of the ‘Wealden’ judgement and the ‘Dutch Nitrogen Case’ judgement¹⁵ from the Court of Justice for the European Union.

1.22 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 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.

1.23 In light of this judgement, the HRA will therefore consider traffic growth based on the effects of development provided for by the Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

1.24 The ‘Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu (Dutch Nitrogen)’ judgement stated that “May 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”

1.25 The judgement 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”

1.26 The HRA will therefore only consider the existence of conservation and/or preventative measures if the expected benefits of those measures are certain at the time of the assessment. The HRA will also ensure that if a threshold approach is applied it will consider the risk of significant effects being produced even if below the threshold values to ensure that there are no adverse effects on integrity of the European sites.

¹⁵ Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu Case C 293/17, C 294/17 CJEU 7.11.18

Structure of the HRA Report

1.28 This chapter has introduced the requirement to undertake HRA of the NECAAP. The remainder of the report is structured as follows:

- Chapter 2: The North East Area Action Plan summarises the content of the North East Area Action Plan which is the subject of this report.
- Chapter 3: HRA Screening sets out the approach used, and the specific tasks undertaken during the screening stage of the HRA including the assumptions used to inform the screening assessment.
- Chapter 4: Appropriate Assessment describes the work undertaken during the Appropriate Assessment stage of the HRA and summarises the findings.
- Chapter 5: Conclusions summarises the overall HRA conclusions for the Local Plan and describes the next steps to be undertaken.

Chapter 2 – North East Cambridge Area Action Plan

Vision

2.1 North East Cambridge – A socially and economically inclusive, thriving, and low carbon place for innovative living and working; inherently walkable where everything is on your doorstep

How the vision will be delivered:

2.2 North East Cambridge will become a new City District that sustains the current Research & Development Businesses that are an essential ingredient in the ‘Cambridge Phenomenon’.

2.3 However, to make best use of the land available and to maximise the possibility of creating a self-supporting new neighbourhood, North East Cambridge needs to provide a mix of uses and at a density that creates the best conditions for this to happen, and that creates an excellent and improved gateway to the City.

2.4 A design led approach is needed to maximise the opportunities provided by the area and to successfully integrate it into the surrounding existing residential and business areas to create a cohesive community where everyone shares in the benefits of the new development. ‘Placemaking’ best defines this approach, with the Area Action Plan forming the first layer in the establishment of an overall framework to guide the successful and high-quality redevelopment of the area.

2.5 The ability to move around easily on foot, by bike or on public transport is central to making the area a well-connected place that reduces the need to travel by car. A high-quality route that supports sustainable transport modes will improve connections from the Cambridge North Station to the Cambridge Science Park and reduce the barrier currently formed by Milton Road.

2.6 The concept of ‘walkable neighbourhoods’ helps guide where new centres of activity should be placed, providing local services, cultural opportunities and amenities that are easily accessed on foot and by bicycle. The locations of these centres will optimise accessibility in relation to sustainable movement networks and to create the kind of vitality and footfall needed to support a range of uses and activities that a self-sustaining new City District needs.

2.7 The intensification and potential diversification of the range of uses on the Cambridge Science Park will create a genuine opportunity to bring additional businesses to the area and strengthen the Cambridge Phenomenon. Development in areas to the east of Milton Road will be predominately residential led with land allocated to support business uses including the relocation of existing industrial uses where these are suitable for co-location.

2.8 New green infrastructure will capitalise on the network of green and blue infrastructure including existing trees, waterways and landscape but will also be extended to create an overall framework for improving biodiversity and linkages to the wider countryside. It is proposed that the water management network be embedded into this framework, improving the amenity of the First Drain and adding richness to the landscape. A larger multifunctional space, that is so typical of Cambridge and central to public life, will be included to help reinforce the identity of the new district. As a city edge location, development will also need to maintain and enhance the overall character and qualities of the skyline, including taking account of the prevailing context and more distant views.

2.9 Measures to reduce the dominance of Milton Road by creating one or more green bridges over the road, putting it in a cutting to limit its visual impact, or changing the nature of the road

itself by prioritising non car modes and rationalising junctions. Regeneration of areas facing Milton Road, to create a high-quality frontage with a new urban character.

2.10 A high-quality internal movement network that seamlessly links with existing and proposed external sustainable transport modes will be provided and will help people access and move around the area without relying on cars. Significantly reduced car parking provision as part of new development proposals and a reduction or redistribution in the existing number of car parking spaces found in the employment areas across the entire NEC area will support a low car dependent district.

2.11 A radical rethink of car use patterns to create opportunities to consider creatively how and where private cars should be stored and to help reduce the visual and practical impact of car parking on the area. It is referred to as car storage, as cars would not be needed for day-to-day use. The introduction of 'car barns' on the periphery of development areas will allow streets and spaces to be rebalanced in favour of walking and cycling.

2.12 Four Strategic Objectives to guide redevelopment at NEC are set out below:

- NEC will deliver a low environmental impact urban district;
- NEC will be placemaking led to create urban living within an innovation district;
- NEC will help meet the strategic needs of Cambridge and the sub-region; and
- NEC will be a healthy new City District.

Chapter 3 – Method

3.1 The HRA of the NEECAP comprises of two stages:

- Screening
- Appropriate Assessment.

3.2 The methods undertaken for each of these stages is provided in more detail below.

HRA Screening

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

3.4 The purpose of the screening stage is to:

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

Identification of European sites which may be affected by the Plan

3.5 In order to initiate the search of European sites that could potentially be affected by the NECAAP, it is established practice in HRAs to consider European sites within the local planning authority areas covered by a Plan, and also within a buffer distance from the boundary of the Plan area.

3.6 A distance of 15km was used to identify European sites likely to be affected by impacts relating to development in North East Cambridge. In addition to this, consideration was also given to European sites connected to the plan area beyond this distance, for example through hydrological pathways or recreational visits by residents of North East Cambridge.

3.7 European sites identified for inclusion in the HRA are listed below in Table 2.1 and Figure 2.1 in Appendix A. Detailed information about each site is provided in Appendix B.

Table 3. 1 European sites within North East Cambridge and within 15km of the North East Cambridge boundary

| European Site | Closest Distance / Location from NEC |
|--------------------------------|--------------------------------------|
| SACs | |
| Eversden and Wimpole Woods SAC | 14km / South-west |
| Ouse Washes SAC | 14km / North |

| European Site | Closest Distance / Location from NEC |
|-----------------------|--------------------------------------|
| Devil's Dyke SAC | 12km / East |
| Fenland SAC | 10km / North-east |
| SPAs | |
| Ouse Washes SPA | 14km / North |
| Ramsar Sites | |
| Ouse Washes Ramsar | 14km / North |
| Wicken Fen Ramsar | 10km / North-east |
| Chippenham Fen Ramsar | 17km / North-east |

3.8 The designated features and conservation objectives of the European sites, together with current pressures on and potential threats, was established using Data Forms for SACs and SPAs¹⁶ and Information Sheets for Ramsar Wetlands published on the JNCC website¹⁷, as well as Natural England's Site Improvement Plans¹⁸, Supplementary Advice Notes¹⁹ and the most recent conservation objectives published on the Natural England website (most were published in 2014)²⁰. This analysis enabled European site interest features to be identified, along with the features of each European site which determine site integrity and the specific sensitivities and threats facing the site. This information was then used to inform an assessment of how the potential impacts of the NECAAP may result in likely significant effects on each of the European sites in question, either alone or in-combination.

Assessment of 'Likely Significant Effect'

3.9 As required under Regulation 105 of The Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'), an assessment has been undertaken of the 'likely significant effects' of the Plan. The assessment has been prepared in order to identify which policies or site allocations would be likely to have a significant effect on European sites. The screening assessment has been conducted without taking pre-embedded mitigation into account, in accordance with the 'People over Wind' judgment.

3.10 Consideration will be given to the potential for the development proposed to result in significant effects associated with:

- Physical loss of/damage to habitat;
- Non-physical disturbance (noise, vibration and light);

¹⁶ These were obtained from the Joint Nature Conservation Committee and Natural England websites (www.jncc.gov.uk and www.naturalengland.org.uk)

¹⁷ www.jncc.defra.gov.uk

¹⁸ Natural England is in the process of compiling Site Improvement Plans for all Natura 2000 sites in England as part of the Improvement programme for England's Natura 2000 sites (IPENS).

¹⁹ Supplementary Advice Notes, Natural England, <http://publications.naturalengland.org.uk/category/6490068894089216>

²⁰ <http://publications.naturalengland.org.uk/category/6490068894089216>

- Non-toxic contamination;
- Air pollution;
- Recreation pressure; and
- Changes to hydrology including water quality and quantity.

3.11 This approach also allows for consideration to be given to the cumulative effects of the site allocations rather than focussing exclusively on individual developments provided for by the NECAAP.

3.12 A risk-based approach involving the application of the precautionary principle is adopted in the assessment, such that a conclusion of ‘no significant effect’ will only be reached where it is considered very unlikely, based on current knowledge and the information available, that a proposal in the NECAAP would have a significant effect on the integrity of a European site.

3.13 The below section identifies assumptions that have been applied to enable specific impacts on European sites to either be scoped in or out.

Interpretation of ‘Likely Significant Effect’

3.14 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.

3.15 In the Waddenzee case²¹, 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:

3.16 An effect should be considered ‘likely’, “if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site” (para 44). An effect should be considered ‘significant’, “if it undermines the conservation objectives” (para 48). Where a plan or project has an effect on a site “but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned” (para 47).

3.17 An opinion delivered to the Court of Justice of the European Union²² commented that:

“The requirement that an effect in question be ‘significant’ exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.”

3.18 This opinion (the ‘Sweetman’ case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered ‘trivial’ or de minimis; referring to such cases as those “which have no appreciable effect on the site”. In practice such effects could be screened out as having no Likely Significant Effect; they would be ‘insignificant’.

Mitigation provided by the NECAAP

3.19 Some of the potential effects of the NECAAP could be mitigated through the implementation of other policies in the plan itself, such as the provision of green infrastructure

²¹ ECJ Case C-127/02 “Waddenzee” Jan 2004.

²² Advocate General’s Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

within new developments (which could help mitigate increased pressure from recreation activities at European sites). Nevertheless, in accordance with the recent 'People over Wind' judgement, 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, cannot be ruled out.

In-combination Effects

3.20 Regulation 102 of the Amended Habitats Regulations 2017 requires an Appropriate Assessment where “a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site”. Therefore, it will be necessary to consider whether any impacts identified from the NECAAP may combine with other plans or projects to give rise to significant effects in combination.

3.21 This exercise will be carried out as part of the screening stage of the HRA. The potential for in-combination effects will only be considered for those Plan components identified as unlikely to have a significant effect alone, but which could act in combination with other plans and projects to produce a significant effect. This approach accords with recent guidance on HRA.

3.22 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the NECAAP may affect the European sites that will be the focus of this assessment. This exercise will seek to identify those components of nearby plans that could have an impact on the European sites considered as part of this HRA, e.g. areas or towns where additional housing or employment development is proposed near to the same European sites (as there could be effects from the transport, water use, infrastructure and recreation pressures associated with the new developments).

3.23 The NECAAP falls within South Cambridge and City of Cambridge administrative boundaries. Therefore, the potential for in-combination impacts has been focussed on these authorities and any authorities that overlap with European sites considered within this HRA. The findings of any associated HRA work for those plans will be reviewed where available. With help from the Councils, any strategic projects in the area that could have in-combination effects with the NECAAP will also be identified and reviewed, if applicable.

3.24 Should any other plans or projects be identified throughout the HRA process that could lead to in-combination effects on European sites with the NECAAP, they will be included in the review.

3.25 The HRA Screening will identify and review other plans and projects for consideration of in-combination effects and will outline the components of each plan or project that could have an impact on nearby European sites and considering the findings of the accompanying HRA work (where available). This information will be updated as the HRA work for the NECAAP progresses. The local plans and associated HRAs of the following authorities will be included as a minimum:

- South Cambridgeshire;
- Cambridge City;
- East Cambridgeshire;
- Huntingdonshire;

- Fenland;
- East Cambridgeshire; and
- West Suffolk.

3.26 In addition, the following key plans will be included as they are developed further:

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

3.27 The Government's National Infrastructure Planning website²³ will also be reviewed for major projects that could have significant effects in combination with those of the NECAAP.

Appropriate Assessment

3.28 The Appropriate Assessment stage of HRA focuses on those policies and related impacts judged likely to have a significant effect at the Screening stage, and seeks to conclude whether, in light of mitigation and avoidance measures, they would result in an adverse effect on the on the integrity of the qualifying features of a European site(s), or where insufficient certainty regarding this remains. The integrity of a site depends on the site being able to sustain its 'qualifying features' across the whole of the site and ensure their continued viability.

²³ <https://infrastructure.planninginspectorate.gov.uk/projects/south-east/>

Chapter 4 – Screening Assessment

4.1 As described in Chapter 3, a screening assessment was carried out in order to identify the likely significant effects of the NECAAP on the European sites within 15km. The full screening matrix, which sets out the decision-making process used for this assessment can be found in Appendix C and the findings are summarised below.

HRA Screening of Policies

No 'Likely Significant Effect' Predicted

4.2 The majority of the policies are not expected to result in development and therefore will not result in significant effects on European sites.

- Policy 1: A comprehensive approach at North East Cambridge
- Policy 3: Energy and associated infrastructure
- Policy 6a: Distinctive design for North East Cambridge
- Policy 6b: Design of mixed-use buildings
- Policy 7: Legible streets and spaces
- Policy 9: Density, heights, scale and massing
- Policy 10a: North east Cambridge Centres
- Policy 11: Housing design standards
- Policy 13b: Affordable Housing
- Policy 13c: Housing for local workers
- Policy 13d: Build to rent
- Policy 13e: Custom build
- Policy 21: Street hierarchy
- Policy 22: Managing motorised vehicles
- Policy 23: Comprehensive and coordinated development
- Policy 24a: Land assembly
- Policy 26: Aggregates and waste sites
- Policy 27: Planning contributions
- Policy 29: Employment and training
- Policy 30: Digital Infrastructure and Open Innovation

4.3 A number of the policies would not result in development and include avoidance measures which could avoid the potential effects of development proposed elsewhere in the plan as follows:

- Policy 2: Designing for climate emergency
- Policy 4a: Water Efficiency
- Policy 4b: Water quality and ensuring supply
- Policy 4c: Flood risk and sustainable drainage

- Policy 5: Biodiversity and net gain
- Policy 8: Open spaces for recreation and sport
- Policy 16: Sustainable connectivity
- Policy 17: Connection to the wider network
- Policy 18: Cycle parking
- Policy 19: Safeguarding for Cambridge autonomous metro and public transport
- Policy 25: Environmental protection

Policies resulting in development or with potential pathways to European Sites where the scale and location of the impact is negligible, or the effect is trivial.

4.4 The following policies could result in some development, but the development arising would be either located away from sensitive European sites within the urban area or would be small in scale so would not be expected to contribute significantly to increased vehicle traffic, recreation pressure or changes to water quantity and quality:

- Policy 13e: Short term/corporate lets and visitor accommodation
- Policy 14: Social, community and cultural infrastructure
- Policy 15: Shops and local services
- Policy 28: Meanwhile uses
- Policy 19: Safeguarding for Cambridge autonomous metro and public transport
- Policy 20: Land mile deliveries

Likely Significant Effects predicted

4.5 The following policies are highlighted as having pathways to European sites and Likely Significant Effects cannot be ruled out:

- Policy 10b: District Centre
- Policy 10c: Science Park Local Centre
- Policy 10d: Station Approach
- Policy 10e: Cowley Road Neighbourhood Centre
- Policy 12a: Business
- Policy 12b: Industry
- Policy 13a: Housing

HRA Screening of Impacts

4.6 For some types of impacts, screening for likely significant effects has been determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, during the screening stage a number of assumptions have been applied in relation to assessing the likely significant effects on European sites that may result from the plan, as described below. In addition to this, specific

consideration has been given to certain sites, which lie beyond the distance threshold following consultation comments from Natural England of the Greater Cambridge Local Plan HRA.

Physical Damage and Loss

4.7 Any development resulting from the NECAAP would take place within the boundary of North East Cambridge; therefore, only European sites within the boundary could be affected direct by physical damage or loss of habitat within the site boundaries. No European sites are recorded within the boundary of North East Cambridge (NEC) and therefore no likely significant effects are considered in relation to direct physical damage and loss of habitat.

4.8 Habitat loss from development in areas outside of the European site boundaries may result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the European site is designated. This includes land which may provide offsite movement corridors or feeding and sheltering habitat for mobile species such as bats, birds and fish.

Eversden and Wimpole SAC

4.9 Eversden and Wimpole SAC supports barbastelle, which is a qualifying feature of the site. This is a mobile species, which relies on habitat within the SAC and functionally linked habitat in the wider area, which provides important foraging habitat for this species. It is known that barbastelle can forage up to 20km from their roost site²⁴. In line with a precautionary approach, a buffer of 20km was therefore applied. Given that the SAC lies within 14km of the NEC, there is potential for likely significant effects to occur in relation physical damage and loss of offsite functional habitats, either alone or in-combination with other plans and policies.

Ouse Washes SAC

4.10 The Ouse Washes SAC is designated for supporting populations of spined loach. This species occurs patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches. Due to the distance of the NEC of 14km from the SAC and the limited dispersal of this species, it was considered unlikely for impacts from NECAAP as a result of physical damage and loss to functionally linked land upon which this species may depend will occur. No likely significant effect is predicted as a result of physical damage and loss either alone or in-combination with other plans and projects.

Ouse Washes SPA and Ramsar

4.11 The Ouse Washes SPA and Ramsar supports a range of wetland bird species, which may rely on land which is functionally linked to the SPA and Ramsar, but outside the site boundaries. Natural England has advised that their recognised distance for the consideration of offsite functionally linked land is generally 2km, but for certain species, including most notably golden plover and lapwing, a greater distance of 15km may be appropriate. As the SPA and Ramsar do not support either golden plover or lapwing, a distance of 2km was applied. Given the European sites lies 14km from the NEC, no likely significant effect was predicted from physical damage and loss of functionally linked land, either alone or in-combination with other plans and projects.

²⁴ English Nature Research Reports, (2004), Advice for the management of flightlines and foraging habitats of the barbastelle bat *Barbastella barbastellus*

4.12 Other sites have been screened out from further assessment on the basis of distance from NEC and/or because their qualifying features are unlikely to be dependent upon habitats occurring within the NEC area.

Likely significant effects relating to physical damage and loss could not be screened out in relation to Eversden and Wimpole SAC and will require further consideration at the Appropriate Assessment stage.

Non-physical Disturbance

4.13 Noise and vibration effects, e.g. during the construction of new housing or employment development, are most likely to disturb bird and bat species and are thus a key consideration with respect to European sites where these species are the qualifying features. Artificial lighting at night (e.g. from streetlamps, flood lighting and security lights) has the potential to affect species where it occurs in close proximity to key habitat areas, such as key roosting sites of SPA birds and movement or feeding areas of SAC bats.

4.14 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 noise²⁵; however, it has been assumed (on a precautionary basis) that the effects of noise, vibration and light pollution are capable of causing an adverse effect if development takes place within 500 metres of a European site with qualifying features sensitive to these disturbances.

Eversden and Wimpole SAC

4.15 Eversden and Wimpole SAC lies 14km from the NEC and therefore likely significant effect is not predicted to habitat within the SAC itself as a result of non-physical disturbance from the NEC.

4.16 However, there is potential for non-physical disturbance to occur in relation to offsite functional habitat, which the qualifying barbastelle bat species relies on to disperse and forage. As detailed, in the section above on physical damage and loss, a buffer of 20km was applied in this assessment. As the SAC lies 14km from the NEC, there is potential for likely significant effects to occur in relation to non-physical disturbance.

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

4.18 Likely significant effects relating to non-physical disturbance could not be ruled out in relation to Eversden and Wimpole SAC and will require further consideration at the Appropriate Assessment.

Air Pollution

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

²⁵ British Wildlife Magazine. October 2007

4.19 In terms of vehicle traffic, nitrogen oxides (NO_x, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and No_x can cause eutrophication of soils and water.

4.20 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 114 (which was produced to provide advice regarding the design, assessment and operation of trunk roads including motorways), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.

4.21 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the Screening Stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more; or
- Road alignment will change by 5 m or more.

4.22 Where significant increases in traffic are possible on roads within 200m of European sites, traffic forecast data may be needed to determine if increases in vehicle traffic are likely to be significant. In line with the Wealden judgment²⁶, the traffic growth considered by the HRA should be based on the effects of development provided for by the Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

4.23 It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) are likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT). As such, where a site is within 200m of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.

4.24 The key commuting corridor for new housing and employment development will likely include the A14, A10, A11, A1309, A1428, A603, A1309 and A1307, which are highlighted in Figure 4.1 in Appendix A.

4.25 The following European sites within 15km of North East Cambridge and within 200m of a strategic road include:

- Devil's Dyke SAC (A14, A1034); and
- Ouse Washes SAC, SPA and Ramsar (A1123).

²⁶ Wealden v SSCLG [2017] EWHC 351 (Admin)

Devil's Dyke SAC

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

4.27 Habitats present within 200m of the strategic roads comprised entirely of lowland calcareous grassland, which is the qualifying feature of the SAC. This habitat has been identified from the corresponding SSSI units to be in favourable condition and based on APIS data is currently exceeding critical level loads with critical level loads ranging between 15-25 kg N/ha/yr and the average critical level load being 15.6 kg N/ha/yr at the SAC. As advised by Natural England "for the purpose of assessing air quality impacts to designated sites the lower critical load limit of the APIS range should be applied." It can therefore be concluded that existing levels exceed critical levels. There is potential that these air pollutants will modify the chemical status of the habitat's substrate, accelerating or damaging plant growth, altering vegetation structure and composition and causing the loss of sensitive typical species associated with it.

4.28 Air pollution has been identified as key threat to the SAC and given the extent of the SAC, which lies within 200m of a strategic road, there is potential for likely significant effects to occur as a result of increased air pollution in relation to the NECAAP alone and in-combination with other plans and projects. Further consideration of the impacts from air pollution on this SAC is required at the Appropriate Assessment.

4.29 In addition to this, it was advised by Natural England as part of consultation of the Greater Cambridgeshire Local Plan that "the HRA should provide sufficient evidence to demonstrate that there is no credible risk of air pollution beyond the 200m threshold that could potentially result in an adverse effect to" Wicken Fen Ramsar, which is a component of Fenland SAC. In line with a precautionary approach, Wicken Fen Ramsar and Fenland SAC will be considered further in relation to air pollution.

Ouse Washes SAC, SPA and Ramsar

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

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

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

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

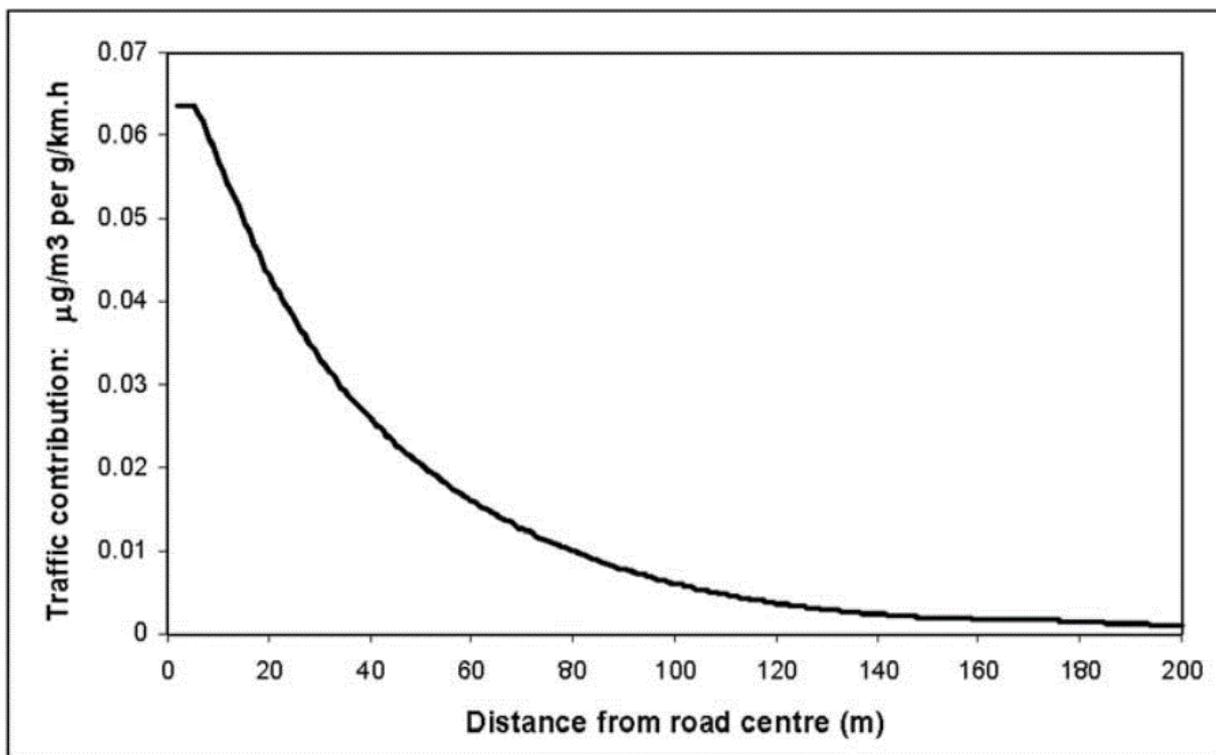
4.34 As there are not critical level loads specifically identified in relation to the Ramsar site, the data provided for the SPA was applied the Ramsar site.

4.35 There is potential for likely significant effects to occur in relation to the Ouse Washes SAC, SPA and Ramsar as a result of increased air pollution from development in the NECAAP.

Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC

4.36 Wicken Fen Ramsar and part of Fenland SAC lie 300m from the A1123 at the nearest point and Chippenham Fen Ramsar and part of Fenland SAC lie 460m from the A142. As these European sites fall beyond the 200m threshold where significant effects might occur, no likely significant effects are predicted. This is supported by data provided within the DRMB, which shows that the effects of nitrogen deposition from traffic is reduced dramatically with distance from the road. Reference should be made to Figure 4.1 below, which shows traffic contribution to pollutant concentration at different distances from the road centre.

Figure 4. 1 Traffic Contribution to Pollutant Concentration at Different Distances from the Road Centre²⁷



4.37 In light of the information detailed above, no likely significant effect is predicted in relation to Wicken Fen Ramsar and Fenland SAC and therefore can be screened out of the assessment.

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

²⁷ Figure C1 from Design Manual for Roads and Bridges (May 2007) Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques. Part 1 HA207/7 Air Quality

4.39 Likely significant effects relating to air pollution could not be screened out in relation to Devil's Dyke SAC and Ouse Washes SAC, SPA and Ramsar and will require further consideration at the Appropriate Assessment stage.

Recreation

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

4.41 The NECAAP will result in housing growth, and associated population increase within North East Cambridge. Where increases in population are likely to result in significant increases in recreation at a European site, either alone or in-combination, the potential for likely significant effects will require assessment.

4.42 European sites with qualifying bird species are likely to be particularly susceptible to recreational disturbances from walking, dog walking, angling, illegal use of off-road vehicles and motorbikes, wildfowling, and water sports. An increase in recreational pressure from development therefore has the potential to disturb bird populations of SPA and Ramsar sites as a result of both terrestrial and water-based recreation.

4.43 In addition, recreation can physically damage habitat as a result of trampling and also through erosion associated with boat wash and terrestrial activities such as use of vehicles.

4.44 Following advice provided by Natural England on the draft HRA Scoping Report for the Greater Cambridgeshire Local Plan, a 'zone of potential risk' for recreational pressure of 2km and 5km, which has been derived from the Impact Risk Zones (IRZ) has been applied to inform initial impacts to recreation on European sites. IRZs have been developed by Natural England as a tool to define zones of key sensitivities, including recreational pressure to SSSIs from proposed development. Given the overlap between SSSI and European sites, this zone of potential influence can therefore be used to appropriately identify the potential risks to European sites from the Local Plan in this assessment. Table 4.1 below outlines the zones of potential of risk for each European site, which are considered to be at significant risk from recreational pressure.

Table 4. 1 Cambridgeshire Recreational Pressure IRZ Component SSSIs

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

4.45 Due to the distance of Eversden and Wimpole Woods SAC, Ouse Washes SAC, SPA and Ramsar and Devil's Dyke SAC over 2-5km from the North East Cambridge area, no likely significant effects are predicted as a result of recreation at these European sites.

Wicken Fen Ramsar

4.46 No zone of potential risk was identified for Wicken Fen Ramsar. However, in line with a precautionary approach and following the completion of the visitor surveys within Wicken Fen

Vision Area, a Zone of Influence has been applied. The survey data that was collected at the Wicken Fen Main Entrance and found that the majority of visitors travelled between 10km and 20km to visit these sites. Based on these findings and in line with a precautionary approach a ZOI of 20km was applied in this assessment.

4.47 Wicken Fen Ramsar lies 10km from the boundary of North East Cambridge and as a result there is potential for likely significant effects to occur in relation to increased recreational pressure from the NECAAP alone and in-combination with other plans and projects.

Chippenham Fen Ramsar

4.48 No zone of potential risk was identified for Chippenham Fen Ramsar. To ensure that a precautionary approach is taken, this assessment has applied a 5km zone of potential risk, which is the higher zone of potential risk outlined in Table 4.1. More specific Zone of Influence (ZOI) may be defined following targeted visitor surveys and discussions with land managers, as it is not always appropriate to apply a generic ZOI. It may also for example be possible to extrapolate appropriate ZOIs from studies and approaches used for similarly comparable sites elsewhere in the UK.

4.49 This approach is precautionary and broadly consistent with the approach that was established for the Thames Basin Heath Delivery Framework²⁸, which identified a ZOI of 7km from the European site.

4.50 The Ramsar site lies over 5km from the NEC and is therefore not considered to be affected by increased recreation from proposal within the NECAAP. No likely significant effect is predicted in relation to recreational pressure and therefore can be screened from the assessment.

Fenland SAC

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

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

Water Quantity and Quality

4.53 An increase in demand for water abstraction and treatment resulting from the growth proposed in the Strategic Plan could result in changes in hydrology at European sites. Depending on the qualifying features and particular vulnerabilities of the European sites, this could result in likely significant effects; for example, due to changes in environmental or biotic conditions, water chemistry and the extent and distribution of preferred habitat conditions. To fully understand the potential impacts of proposed development on European sites a review of relevant Water Cycle Studies (WCS) and liaison with the Environment Agency and relevant water companies will be required.

²⁸ Thames Basin Heaths Joint Strategic Partnership Board, (2009), Thames Basin Heaths Special Protection Area Delivery Framework

Ouse Washes SAC, SPA and Ramsar

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

4.55 Although, the European sites are located 14.2m from the NEC, there is potential for changes in the flow and volume of water entering the River Cam and Ely Ouse associated with the proposed development to result in reduced flow downstream of the Denver, which may exacerbate existing siltation problems. This is known to have a knock-on effect onto the Hundred Foot River, which has a significant effect on increased and prolonged flooding at the Ouse Washes SAC, SPA and Ramsar.

4.56 Therefore, there is potential for likely significant effect to occur in relation to Ouse Washes SAC, SPA and Ramsar from changes in demand and water treatment is considered as a result of development within the NECAAP.

Devil's Dyke SAC

4.57 Devil's Dyke SAC supports qualifying semi-natural dry grassland habitat. This habitat is not considered to be susceptible to impacts from water and due to a lack of hydrological connectivity to waterbodies linked with North East Cambridge boundary, no likely significant effect is predicted in relation to changes in water quantity and quality to Devil's Dyke SAC.

Wicken Fen Ramsar

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

4.59 Due to this hydrological connectivity of this Ramsar site to the River Cam, which is linked to the North East Cambridge area, there is potential for increases in development in this NECAAP alone and in-combination with other plans and projects to result in likely significant effects in relation to water quantity and quality.

Chippenham Fen Ramsar

4.60 Chippenham Fen Ramsar supports fenland and grassland habitat and associated invertebrate species, which is dependent upon an adequate supply of high-quality water from a chalk aquifer. Although the European site is situated beyond 15km from the NEC, this Ramsar site is reliant on the same chalk aquifer, which serves the wider area, including the area the NECAAP relates to. There is potential for increases in development in the NECAAP alone and in-combination with other plans and projects to result in a likely significant effect in relation to water quantity and quality.

Fenland SAC

4.61 A component part of Fenland SAC is situated within 15km of the NECAAP and overlaps the same area as Wicken Fen Ramsar and Chippenham Fen Ramsar, which is discussed above.

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

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

4.64 Water issues at the SAC was not highlighted as a key threat in the Standard Data Form or in the Natural England Site Improvement Plan. However, due to the hydrological connectivity between this European site and the North East Cambridge Area via the River Cam, there is potential for likely significant effects to occur in relation to water quantity and quality as a result of proposed development within the NECAAP, either alone or in-combination with other plans and policies.

Eversden and Wimpole Woods SAC

4.65 Eversden and Wimpole Woods SAC supports woodland habitat, which is key important to barbastelle for which the site is designated for. This habitat within the SAC and the wider area, which the qualifying species relies is not considered susceptible or hydrologically connected to water resources which could be affected by development within the NECAAP. Therefore, no likely significant effect is predicted in relation to changes in water quantity and quality to Eversden and Wimpole Woods SAC.

4.66 Likely significant effects relating to water quantity and quality could not be screened out in relation to Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC and will require further consideration at the Appropriate Assessment. This will need to be informed by relevant evidence emerging from the Integrated Water Study, which incorporates a Water Cycle Study for Greater Cambridge Local Plan and NECAAP.

Summary of Screening Assessment

4.67 A summary of the screening assessment has been provided in Table 4.2 below.

Table 4. 2 Summary of Screening Assessment

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

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

Chapter 5 – Appropriate Assessment

5.1 Following the screening stage, the plan-making authority is required under Regulation 102 of the Habitats Regulations 2017 (as amended) to make an ‘Appropriate Assessment’ of the implications of the plan for European sites, in view of their conservation objectives.

5.2 European Commission Guidance²⁹ states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of European sites with respect to their conservation objectives and to their structure and function.

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

5.4 A European site’s integrity depends on it being able to sustain its ‘qualifying features’ (i.e. those Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a European site’s conservation objectives is realised and where the European site is capable of self-repair and renewal with a minimum of external management support. Appropriate Assessment therefore needs to focus on those impacts judged likely to have an effect on the qualifying features of European sites, or where insufficient certainty regarding this remained at the screening stage.

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

- Eversden and Wimpole SAC – in relation to physical damage and loss and non-physical disturbance.
- Devil’s Dyke SAC – in relation to air pollution.
- Ouse Washes SAC, SPA and Ramsar – in relation to air pollution and water quantity.
- Fenland SAC – in relation to recreation and water quality and quantity.
- Wicken Fen Ramsar – in relation to recreation and water quality and quantity.
- Chippenham Fen Ramsar – in relation to water quantity and quality.

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

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

²⁹ Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

whether the predicted impacts of the proposals (either alone or in combination) have the potential to:

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

5.8 The conservation objectives for the above European sites are to ensure that the integrity of the site is maintained or restored as appropriate, and to ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

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

Physical Damage and Loss

Eversden and Wimpole SAC

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

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

5.11 Following a review of data sources, it was identified that this species travels within a Core Sustenance Zone (CSZ) of 6km³⁰. This CSZ was determined by an extensive literature review and refers to the area surrounding a bat roost for barbastelle bats within which habitat availability and quality will have a significant influence on the resilience and conservation of the bat colony using the roost. It is however understood that this species will travel up to 20km providing there are suitable commuting corridors, such as woodland edges, hedgerows and rivers, are present and that the habitats present provide sufficient foraging resources to make the longer distance worthwhile.

5.12 Proposed development within the NECAAP is focussed with areas of existing developed land which has limited value for barbastelle bat species to forage and commute. Due to this and

³⁰ Collins, J. (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

given the distance of the SAC at 14km from the NEC it is considered unlikely that development proposals within the NECAAP will result in adverse effect on the qualifying species of the SAC.

5.13 However, to ensure that no adverse effects occur and in line with Natural England's advice, it is recommended that there is a policy requirement within the NECAAP for development to confirm that there are no adverse effects on functional offsite habitat used by the qualifying barbastelle species of the SAC.

5.14 Providing the recommended measures outlined above are applied by it can be concluded that no AEoI will result from physical damage and loss to functional offsite habitat in relation to Eversden and Wimpole SAC from the NECAAP either alone or in-combination.

Non-physical Disturbance

Eversden and Wimpole SAC

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

5.16 As this SAC lies within 14km of the NEC, there is potential for adverse effects to occur in relation to offsite functional habitat used by this qualifying species, as a result of non-physical disturbance from proposed development within the NECAAP. In particular, impacts are considered likely to occur in relation to noise and vibration during construction and artificial lighting on key habitats implemented during construction and operation of development. In line with a precautionary approach, it is assumed that these effects have potential to adversely affect habitats within 500m of a development.

5.17 A review of habitats within the area of proposed development and the surrounding 500m buffer identified the following habitats:

- Developed land within the NEC boundary;
- Arable farmland and grassland to the north and east; and
- A small area of woodland and wetlands associated with Milton Country Park and the River Cam to the east.

5.18 As detailed above in paragraphs 5.9-5.13, this species has been identified to travel within a CSZ of 6km from a known roost. However, if there are suitable commuting corridors and sufficient foraging habitat for this species to exploit, they are known to travel up to 20km from their roost. Given the distance of the SAC at 14km from the NEC, impacts to habitat that will adversely affect the viability of this species are likely to be limited. However, to ensure that no adverse effects occur and in line with Natural England's advice, it is recommended that there is a policy requirement within the NECAAP for development to confirm that there are no adverse effects on functional offsite habitat used by the qualifying barbastelle species of the SAC.

5.19 Providing the recommended measures outlined above are applied it can be concluded that no AEoI will result from non-physical disturbance to functional offsite habitat in relation to Eversden and Wimpole SAC from the NECAAP either alone or in-combination.

Air Pollution

Devil's Dykes SAC

5.20 The standard data form for the SAC and Natural England's Site Improvement Plan for Devil's Dyke SAC identify air pollution as a key threat and Natural England's 2015 Atmospheric Nitrogen Theme Plan identifies the site as being of sensitive to nitrogen and to have moderate levels of critical loads exceedance for nitrogen.

5.21 The SAC lies immediately adjacent to the A14 and A1304. These roads are key strategic roads between Cambridge and several market towns to the east, including Newmarket and Bury St Edmunds. In particular, the A14 is already subject to high levels of traffic from long-distance heavy goods vehicles and is known to be a key commuting corridor for people travelling to and from Cambridge. An increase in traffic as a result of the NECAAP has potential to result in further high levels of traffic on the A14, which is likely to filter out onto nearby A roads, including the A1304, which lies adjacent to the SAC in the south.

5.22 A review of the SSSI condition units of habitats within the SAC and within 200m of the A14 and A1304 indicate that the semi-natural dry grassland, which the SAC is designated for and is within 200m of the strategic roads is in favourable condition. In addition to this, APIS data shows that nitrogen levels currently exceed the lower half of the critical load range between 15 and 25 Kg N/ha/year at 15.6 Kg N/ha/year. Exceedance of these critical values for air pollutants may modify the chemical status of the habitat's substrate, accelerating or damaging plant growth, altering vegetation structure and composition and causing the loss of sensitive typical species associated with it, including the qualifying orchid species.

Ouse Washes SAC, SPA and Ramsar

5.23 Ouse Washes SAC, SPA and Ramsar lies within 200m of the A1123. Air pollution has not been highlighted as a key threat to these European sites within the Natural England Site Improvement Plans. However, the habitats present within 200m of the A1123 included river habitat, which the qualifying species of the SAC, SPA and Ramsar are reliant on, and rough grassland and wet pasture, which the qualifying species of the SPA and Ramsar depend on. Therefore, changes in these habitats as a result of air pollution has the potential to adversely affect the qualifying species of the SAC, SPA and Ramsar.

5.24 A review of APIS data found that the qualifying features of the SPA were close to exceeding critical level loads between 20-30 kg N/ha/year for bird species (excluding hen harrier) with the maximum nitrogen level recorded at 19.6 kg N/ha/year. There is therefore potential for small increases in nitrogen deposition as a result of air pollution from vehicle traffic to cause nitrogen levels to exceed the lower critical load threshold. No data is available in relation to the Ramsar site, however where data was available for the same bird species of the SPA, the same critical load level were applied.

5.25 Whilst there are no critical level loads determined in relation to the qualifying feature of the SAC, the maximum nitrogen deposition level was recorded at 9.2 kg N/ha/year for spined loach. This species is also known to be sensitive to changes in nitrogen as detailed in the Natural England Supplementary Advice Note and is therefore likely to be affected by any increases in air pollution.

5.26 Exceedance of critical level loads is likely to alter the chemical status of substrates and as a result accelerate and damage plant growth, which would change the vegetation structure and composition and reduce the quality of habitat, which qualifying species of the SAC, SPA and Ramsar rely on.

5.27 A review of SSSI condition units of habitats within the European sites, which lie within 200m of the A1123 identified the river habitat to be in unfavourable but recovering condition whilst the rough grassland and wetland pasture habitat was in unfavourable condition with no change. This is largely as a result of impacts from diffuse water pollution and inappropriate water levels. No adverse effects were identified in relation to air pollution from the SSSI condition assessments or within the Site Improvement Plan. However, given the sensitivities of the European sites features to changes in nitrogen levels, there is potential for adverse effects to occur in relation to increased traffic from proposed development within the NECAAP, either alone or in-combination with other plans and projects.

5.28 Policies detailed within the NECAAP will provide, to some degree, a level of mitigation, particularly through Policy 14: Sustainable Connectivity, which will provide networks for sustainable modes of transport and will encourage active transport. However, to fully understand the impacts of increased development within the NECAAP in-combination with other plans and projects, AADT traffic modelling data, which calculates the change in trips that would result from the NECAAP, over the plan period to 2036 is required to inform the Appropriate Assessment. If AADT exceeds the threshold of 1,000 AADT, air quality modelling will be required to understand whether the Plan will result in AEoI and whether avoidance and mitigation measures can be applied which would prevent AEoI.

5.29 In light of the above and in accordance with the precautionary principle, a conclusion of no AEoI cannot be reached in relation to the effect of air pollution on Devil's Dyke SAC and Ouse Washes SAC, SPA and Ramsar either alone or in-combination and further traffic modelling is required to inform the assessment.

Recreation

Wicken Fen Ramsar / Fenland SAC

5.30 Wicken Fen Ramsar and a component part of Fenland SAC are located 10km to the north-east of North East Cambridge boundary and is subject to high levels of recreation every year. The National Trust records over 65,000 visitors to at their visitor centre with more people using the access network in the Wicken Fen Vision Area each year³¹. Following a recent visitor study of the Wicken Fen Vision Area, visitors to the European sites comprised of first-time visitors travelling a greater distance in the wider area and visitors from the local area who visit the site two to three times a month.

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

5.32 Although, the Information Sheet on Ramsar Wetlands for Wicken Fen Ramsar and the Standard Data Form and Natural England Site Improvement Plan for Fenland SAC do not

³¹ <https://rewildingeurope.com/wp-content/uploads/2019/12/wickenfenvisionbooklet2018final.pdf>

highlight recreation as a key threat, due to the high levels of visitors to this site there is potential for impacts to the qualifying feature of the Ramsar site from recreational pressure to occur. Given the NECAAP will result in the provision of an additional 8,500 dwellings within the 20km ZOI for these sites, there is potential for AEoI to occur alone and in-combination with the Greater Cambridgeshire Local Plan and other surrounding local authorities without any mitigation measures.

5.33 The Ramsar site and overlapping SAC are well managed by the National Trust. Existing management measures are expected to provide some level of mitigation for increased recreational pressure to the sites. These measures include controlling access to the site by requiring permits before entry, zoning remote areas away from the central hub to protect habitats from damage and disturbance and engaging with visitors at their visitor centre. However, it is recommended that discussions are undertaken with the National Trust to determine exact measures that will be required to mitigate for impacts to Wicken Fen Ramsar and Fenland SAC. This will be undertaken alongside the development of the NECAAP and will be outlined at a later iteration of this report.

5.34 In addition to this, policies within the NECAAP will provide safeguards and mitigation from recreational impacts. This includes Policy 23: Open Space, Sport and Recreation Standards in NEC, which provides alternative places for residents within North East Cambridge to undertake recreational activities.

5.35 To ensure that the policies within the NECAAP sufficiently mitigate for impacts from increased recreational pressure, it is recommended that policy wording for Policy 23 is strengthened to include a commitment for development of 8,500 housing within North East Cambridge, which lies within 20km of the European site to provide alternative natural greenspace that is specifically designed and managed to alleviate visitor pressure on the European sites. In addition to this, it is recommended that the policy outlines the quantity and quality of open space provision and how delivery and management in-perpetuity will be secured.

5.36 Following consultation with Natural England of the Issues and Options NECAAP, it was advised “that the extent of accessible natural greenspace provision should be proportionate to the scale of development”. This should include the provision of the following:

- Provision of 8ha/1000 population, which is advocated through the Suitable Alternative Green Space (SANGS) Guidance³²;
- Provision of green infrastructure that seeks to achieve the Natural England Accessible Natural Greenspace Standards³³, which includes for a minimum standard of 2ha informal open space within 300m of everyone’s home.
- Green infrastructure provision within the NECAAP should seek to contribute towards the delivery of the objectives of the Cambridgeshire Green Infrastructure Strategy³⁴ for habitat enhancement and improved connectivity;
- The provision of green infrastructure should not rely on existing green spaces, such as Milton Park but should seek to provide additional open spaces that complement and connect to the Country Park.

³² SANGS Guidance: <https://data.gov.uk/dataset/30ca5949-7997-4efb-8bee-df41dcf37571/suitable-alternative-natural-green-spaces>

³³ Natural England, (2010), Nature Nearby Accessible Natural Greenspace Guidance

³⁴ LDA Design, (2011), Cambridge Infrastructure Strategy

5.37 It is recommended that these measures are implemented to ensure that increased demand for recreation is focussed away from Wicken Fen Ramsar and Fenland SAC.

5.38 In light of the above and in accordance with the precautionary principle, a conclusion of no AEoI cannot be reached in relation to the effect of recreational disturbance on Wicken Fen Ramsar, and Fenland SAC either alone or in-combination until exact mitigation measures are discussed with the National Trust, to determine whether measures can be secured which would ensure that AEoI are avoided.

Water Quantity

5.39 North East Cambridge potable water is entirely supplied by Cambridge Water. Water companies have a statutory duty to establish how planned development in their area can be serviced. These plans are set out in their Water Resources Management Plan (WRMP). Investments to deliver the plans are based on five-year planning cycles known as Asset Management Periods (AMP) so the water company programme for water infrastructure upgrades may constrain the rate at which residential growth can be supported.

5.40 In 2019, Cambridge Water published its latest WRMP in December 2019 for the period 2020 to 2045. This plan outlines how they will continue to meet the demand for water in the Cambridge region. This WRMP shows that Cambridge Water supply a single Water Resource Zone (WRZ), which comprises of 5 supply zones. The Cambridge Zone, which is the largest, was highlighted to “supply water direct into this zone provide more water than is needed there to meet demand”. The water resources supplied to development within the WRZ is supplied by groundwater, mainly abstracted from the chalk aquifer in the southern and eastern part of the supply area, with a small percentage of greensand aquifer sources.

Catchment Abstraction Licencing Strategy (CALs)

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

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

5.42 The entirety of the NECAAP is located within the Cam and Ely Ouse abstraction area for which the most recent CALs was published in 2017³⁵. The CALs identify that the main water resources pressures are extensive water supply abstraction along with river support schemes and water transfers.

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

- The relative balance between the environmental requirements for water and how much is licensed for abstraction.

- Whether water is available for further abstraction.
- Areas where abstraction may need to be reduced.

5.44 In terms of surface water, water is restricted during high flows (Q30) and is not available during medium to low flows (Q50, 70 and 95).

5.45 In terms of groundwater, the entirety of NECAPP lies on a chalk aquifer classified as:

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

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

Ouse Washes SAC, SPA and Ramsar

5.48 Ouse Washes SAC, SPA and Ramsar support qualifying features, which are reliant on water resources associated with the Ouse Washes. Increased and prolonged flooding as a result of changes to the volume and flow of water entering the River Cam and Ely Ouse as detailed in the Screening Assessment has the potential to have an adverse effect of these European sites. To fully understand the impacts of the NEC on this European site, a Water Cycle Study (WCS) is required. In addition to this, any relevant mitigation measures should be guided by the WCS.

Wicken Fen Ramsar / Fenland SAC

5.49 Wicken Fen Ramsar and Fenland SAC are hydrologically connected to the River Cam and as a result any increases to abstraction within the catchment of this river has the potential to result in adverse effects on these European sites.

Chippenham Fen Ramsar / Fenland SAC

5.50 Chippenham Fen Ramsar and Fenland SAC support habitats and species, which are dependent on the chalk aquifer. This aquifer is under significant pressure from current abstraction rates and therefore an increased in demand for abstraction within the NEC has potential to have an adverse effect in the integrity of these European sites in-combination with other development plans in the wider area.

5.51 Policies within the NECAAP will provide mitigation, particularly through Policy 5: Water Efficiency, which requires development to achieve a minimum level of water efficiency, Policy 24: Water Quality, Demand and Efficiency in North East Cambridge, which outline measures to ensure high levels of water efficiency are achieved in new developments and Policy 25: Flood Risk and Sustainable Urban Drainage Systems, which provides mitigation measures for flood risk that is associated with development. As advised by Natural England, policy wording should be guided by a WCS and should include specific detail on mitigation measures, including the mechanism and timescale for delivery.

5.52 To fully understand and determine the impacts of increased water demand as a result of proposed development within the AAP in-combination with other plans and policies, a water

cycle study will need to be conducted. This will need to identify how growth requirements can be met and consideration of alternative options to limit and if possible, reduce levels of abstraction, to ensure no further impact to the natural environment and deterioration in condition of European sites. It is understood that development in the NECAAP will be considered as part of the wider Water Cycle Study undertaken for the Greater Cambridge Local Plan.

5.53 In light of the above and in accordance with the precautionary principle, a conclusion of no AEoI cannot be reached in relation to the effect of water quantity on Ouse Washes SAC, SPA and Ramsar, Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC either alone or in-combination until a WCS is completed to determine whether measures can be secured which would ensure that AEoI are avoided.

Water Quality

5.54 The NECAAP proposes development in the North East of Cambridge, which will replace an existing Water Recycling Centre (WRC). This WRC is run by Anglian Water and treats water in Cambridge and the surrounding villages.

5.55 New development proposed as part of the NEC AAP will therefore result in the loss of essential infrastructure, which is used to treat wastewater discharges in the local area. This will need to be replaced with a new facility or alternative facilities where sufficient capacity is available.

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

- Increased volumes of treated wastewater discharges, resulting in nutrient enrichment of water and potential lowering of dissolved oxygen as well as increased water velocities and levels downstream of Water Recycling Centres (WRC) outfalls.
- Overloading of the combined sewer network during storm events with the potential for flooding and contamination of hydrologically connected European sites to the River Cam.
- Increase in the area of urban surfaces and roads could increase the potential for contaminated surface runoff and the contamination of hydrologically connected European sites to the River Cam.

Wicken Fen Ramsar / Fenland SAC

5.57 Wicken Fen Ramsar and Fenland SAC are hydrologically connected to the River Cam. There is potential that an increase in wastewater discharges from the NECAAP will result in the pollution of water in the River Cam and in turn alter the quality of habitat, which Wicken Fen Ramsar and Fenland SAC are designated for or for which their qualifying species rely on. In addition to this, any increases in water pollution in the River Cam has the potential to be exacerbated by low flow rates that are currently being experienced at this waterbody.

Chippenham Fen Ramsar / Fenland SAC

5.58 Chippenham Fen Ramsar and Fenland SAC are hydrologically connected to the NEC via the chalk aquifer, which is the primary source that feeds into the Ramsar and SAC. An increase in demand for water from the NEC alone and in combination with neighbouring development plans will put unsustainable pressure on the aquifer. Lower volumes of water associated with over-abstraction has the potential to result in adverse effects from water quality on the European sites.

5.59 Policies within the NECAAP will provide mitigation, particularly through Policy 24: Water Quality, Demand and Efficiency in North East Cambridge, which provides measures that development needs to comply with to protect waterbodies in the catchment.

5.60 It is recommended that policy wording is strengthened to provide the following commitments:

- The NECAAP commits to the provision of a new WRC and that there is provision for appropriate upgrades and improvements to ensure that there is sufficient sewage treatment works and wastewater capacity to cope with the additional demand that will arise from development from the plan.
- The new WRC and improvements to the water infrastructure network ensures that higher standard is met to ensure that there is improved water quality within the River Cam.
- There is wording within Policy 21, which provides a commitment to protect and enhance European sites, which are hydrologically connected to the AAP, through improved water quality.

5.61 As advised by Natural England, policy wording should be guided by a WCS and should include specific detail on mitigation measures, including the mechanism and timescale for delivery.

5.62 However, to fully understand and determine the impacts of increased demand for wastewater treatment as a result of proposed development within the AAP, a water cycle study and water quality assessment will need to be conducted, as well as further detail on how Anglian Water will manage the transition from the existing WRC to a new facility. It is understood that development in the NECAAP will be considered as part of the wider Water Cycle Study undertaken for the Greater Cambridge Local Plan.

5.63 In light of the above and in accordance with the precautionary principle, a conclusion of no AEol cannot be reached in relation to the effect of water quality on Wicken Fen Ramsar, Chippenham Fen Ramsar and Fenland SAC either alone or in-combination until a WCS is completed to determine whether measures can be secured which would ensure that AEol are avoided.

Chapter 6 – Conclusion and Next Steps

6.1 At the Screening stage, Likely Significant Effects (LSEs) on European sites, either alone or in combination with other policies and proposals, were identified for NECAAP policies:

- Policy 6: Business
- Policy 7: Industry
- Policy 8a: Housing
- Policy 32: District Centre Sub-Area
- Policy 33: Science Park Local Centre Sub-Area
- Policy 34: Station Approach Sub-Area
- Policy 35: Cowley Road Neighbourhood Centre Sub-Area

6.2 The findings of the HRA screening determined that impacts from air pollution, recreation and water quantity and quality could result in a LSE in relation to:

- Devil's Dyke SAC (air pollution)
- Wicken Fen Ramsar (recreation, water quantity and quality)
- Fenland SAC (recreation, water quantity and quality)

6.3 The Appropriate Assessment stage identified whether the above LSE's will, in light of mitigation and avoidance measures, result in adverse effects on the integrity of the European sites either alone or in-combination with other plans or projects. The findings from the Appropriate Assessment concluded the following:

- Eversden and Wimpole SAC
 - Physical damage and loss: Providing the NECAAP makes provision for the requirement for development to confirm that no adverse effect to offsite function habitat used by qualifying bat species of the SAC in relation to physical damage and loss, it can be concluded that no AEol will result either alone or in-combination with other plans and policies.
 - Non-physical disturbance: Providing the NECAAP makes provision for the requirement for development to confirm that no adverse effect to offsite function habitat used by qualifying bat species of the SAC in relation to non-physical disturbance, it can be concluded that no AEol will result either alone or in-combination with other plans and policies.
- Devil's Dyke SAC
 - Air pollution: At this stage it cannot be concluded that the NECAPP will not result in AEol either alone and in-combination with other plans and projects. Further information is required to inform this assessment, as detailed below.
- Ouse Washes SAC, SPA and Ramsar
 - Air pollution: At this stage it cannot be concluded that the NECAPP will not result in AEol either alone and in-combination with other plans and projects. Further information is required to inform this assessment, as detailed below.

- Water Quantity: at this stage, it cannot be concluded that the NECAPP will not result in AEoI either alone and in-combination with other plans and projects. A detailed water cycle study is required to inform this assessment, as detailed below.
- Wicken Fen Ramsar / Fenland SAC
 - Recreation: at this stage, it will be necessary to undertaken discussions with National Trust to determine how increased impacts from recreation will be mitigated at these European sites. In addition to this, it is recommended that policy wording is strengthened as detailed below in relation to Policy 23, to ensure that no AEoI can be concluded in relation to these European sites as a result of the plan either alone or in-combination with other plans and projects.
 - Water Quantity and Quality: at this stage, it cannot be concluded that the NECAPP will not result in AEoI either alone and in-combination with other plans and projects. A detailed water cycle study is required to inform this assessment, as detailed below.

Key Steps and Recommendations

6.4 Following the HRA of the NECAAP, the following key steps and recommendations were identified:

- Physical damage and loss – it is recommended that the NECAAP makes provision of a policy, which requires development to confirm that no adverse effect to offsite functional habitat used by qualifying bat species of the SAC in relation to physical damage and loss will occur.
- Non-physical disturbance – it is recommended that the NECAAP makes provision of a policy, which requires development to confirm that no adverse effect to offsite functional habitat used by qualifying bat species of the SAC in relation to non-physical disturbance will occur.
- Air quality – road traffic AADT calculations are required along the A14 and A1304, which lie adjacent to Devil's Dyke SAC to determine whether thresholds are exceeded in-combination with other plans and projects as a result of the NECAAP. If AADT thresholds are exceeded air quality modelling will be required to understand whether the Plan will result in AEoI and whether avoidance and mitigation measures can be applied which would prevent AEoI.
 - Recreation – it is recommended that policy wording is strengthened in relation to Policy 23 to include a commitment for the development of 8,500 houses in North East Cambridge, which lies within 20km of the European site to provide alternative natural greenspace that is specifically designed and managed to alleviate visitor pressure on Wicken Fen Ramsar and Fenland SAC. In addition to this, it is recommended that discussions are undertaken with the National Trust to determine exact measures that will be required to mitigate for impacts from increased recreation.
 - Following consultation with Natural England of the Issues and Options NECAAP, it was advised “that the extent of accessible natural greenspace provision should be proportionate to the scale of development”. This should include the provision of the following:
 - Provision of 8ha/1000 population, which is advocated through the Suitable Alternative Green Space (SANGS) Guidance;

- Provision of green infrastructure that seeks to achieve the Natural England Accessible Natural Greenspace Standards, which includes for a minimum standard of 2ha informal open space within 300m of everyone’s home.
 - Green infrastructure provision within the NECAAP should seek to contribute towards the delivery of the objectives of the Cambridgeshire Green Infrastructure Strategy for habitat enhancement and improved connectivity;
 - The provision of green infrastructure should not rely on existing green spaces, such as Milton Park but should seek to provide additional open spaces that complement and connect to the Country Park.
- Water Quantity and Quality – It is recommended that policy wording is strengthened to provide the following commitments:
- The NECAAP commits to the provision of a new WRC and that there is provision for appropriate upgrades and improvements to ensure that there is sufficient sewage treatment works and wastewater capacity to cope with the additional demand that will arise from development from the plan.
 - The new WRC and improvements to the water infrastructure network ensures that higher standard is met to ensure that there is improved water quality within the River Cam.
 - There is wording within Policy 21, which provides a commitment to protect and enhance European sites, which are hydrologically connected to the AAP, through improved water quality.

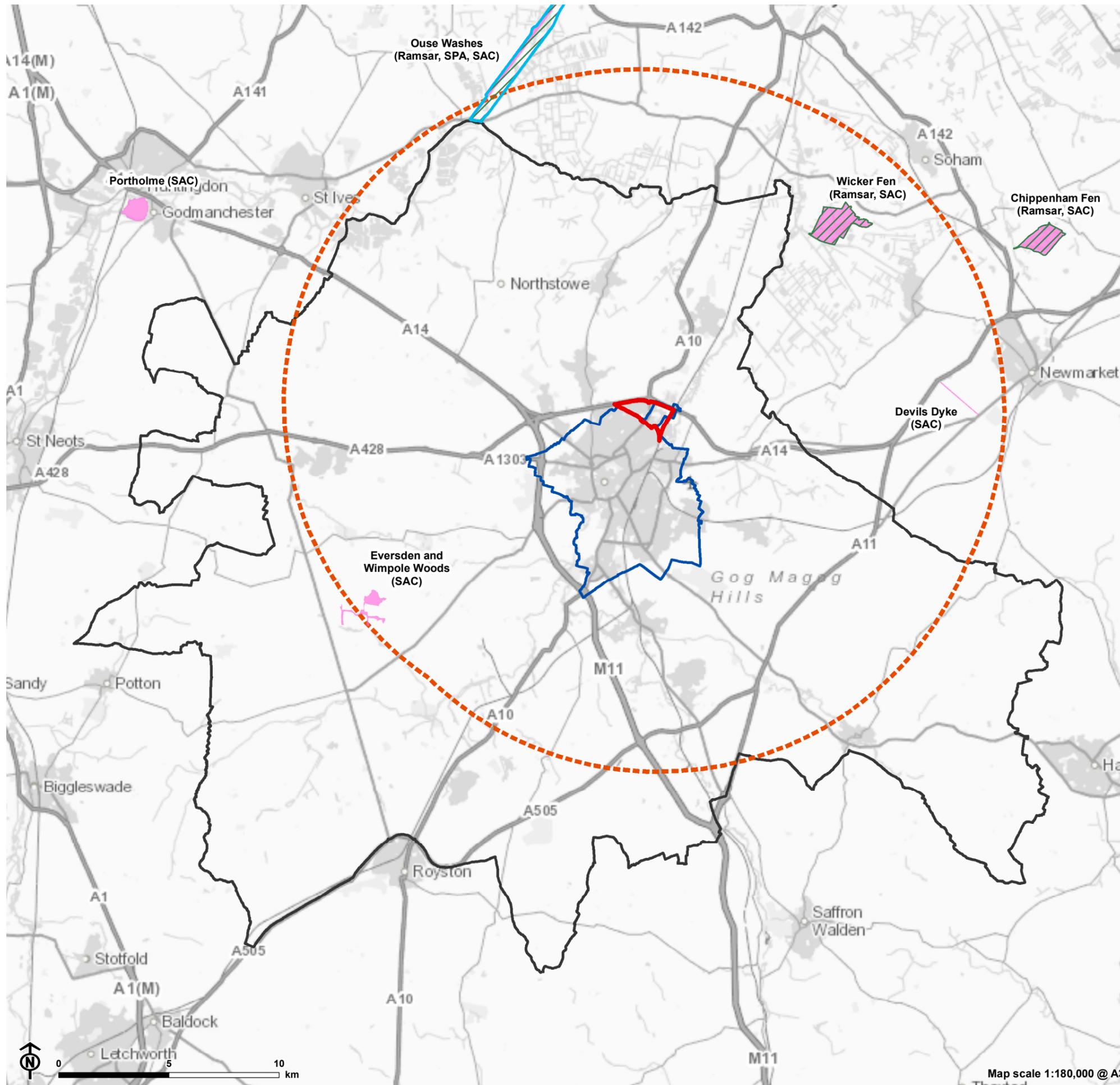
6.5 As advised by Natural England, policy wording should be guided by a WCS and should include specific detail on mitigation measures, including the mechanism and timescale for delivery.

6.6 In addition to this, to fully understand and determine the impacts of increased demand for abstraction and wastewater treatment alone and in-combination with other plans and policies, a water cycle study (WCS) will be required. This will need to identify how growth requirements can be met and consideration of alternative options to limit and if possible, reduce levels of abstraction, to ensure no further impact to the natural environment and deterioration in condition of European sites. It is understood that this will be provided as part of the WCS for Greater Cambridge Local Plan.

6.7 HRA is an iterative process and as such is expected to be updated in light of newly available evidence and comments from key consultees.

Appendix A – Figures

Appendix 1: European Sites within 15km of North East Cambridge AAP



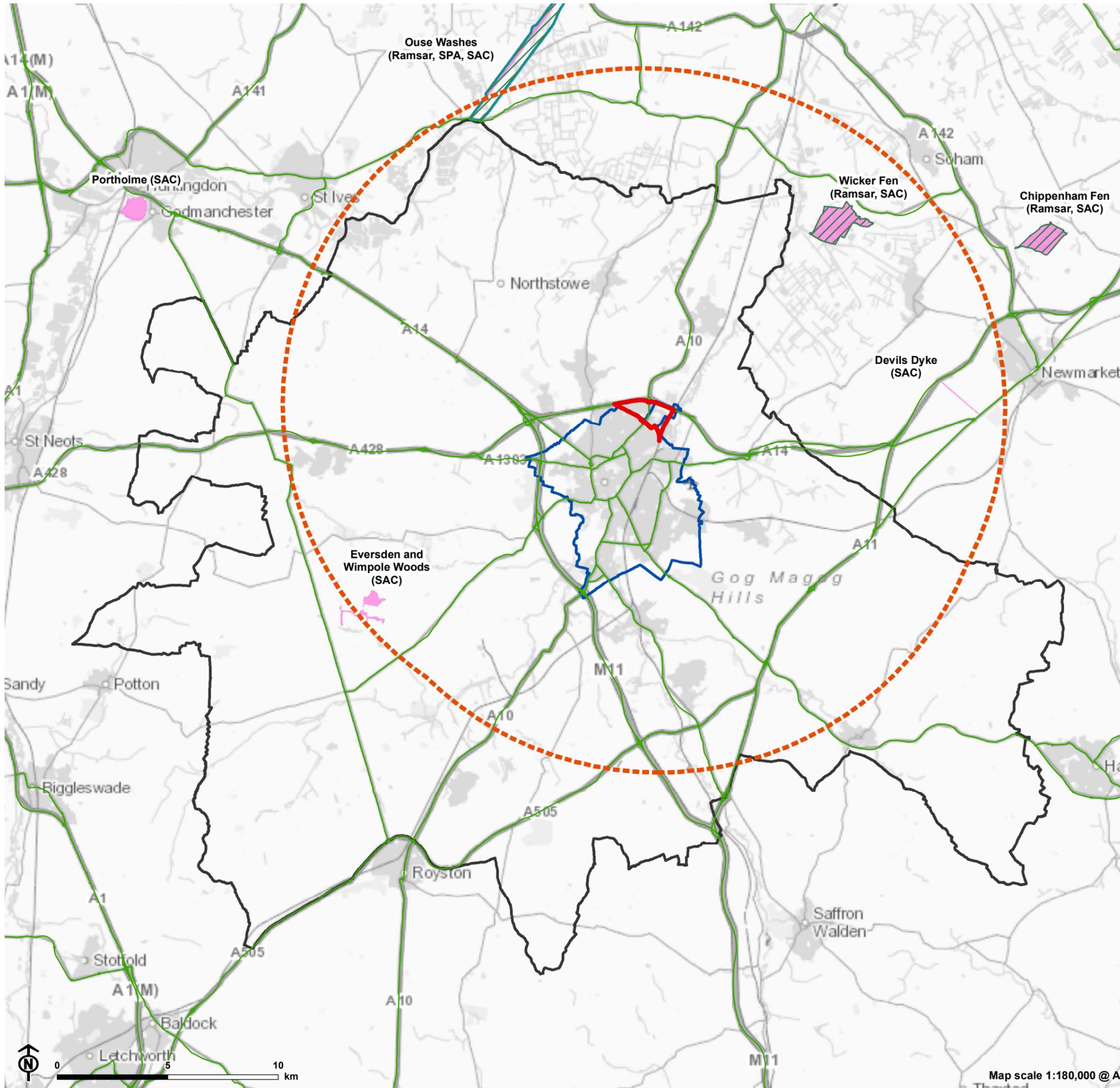
- North East Cambridge Boundary
- North East Cambridge Boundary 15km Buffer
- South Cambridgeshire
- Cambridge City
- Special Area of Conservation
- Special Protection Area
- Ramsar Sites



Map scale 1:180,000 @ A3



Appendix 3: Strategic Roads within North East Cambridge



-  North East Cambridge Boundary
-  North East Cambridge Boundary 15km Buffer
-  South Cambridgeshire
-  Cambridge City
-  Strategic Road
-  Special Area of Conservation
-  Special Protection Area
-  Ramsar Sites



Map scale 1:180,000 @ A3



Appendix B – Attributes of European Sites

This appendix contains information about the European sites scoped into the HRA. Information about each site's area, the site descriptions, qualifying features and pressures and threats are drawn from Natural England's Site Improvement Plans (SIPs)³⁶, Standard Data Forms or Ramsar Information Sheets available from the JNCC website³⁷ and Supplementary Advice Notes³⁸, which advise on the sites features and how to implement the conservation objectives. Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs³⁹.

³⁶ Site Improvement Plans: East of England, Natural England,
<http://publications.naturalengland.org.uk/category/4873023563759616>

³⁷ JNCC Data Forms <http://jncc.defra.gov.uk/default.aspx?page=4>

³⁸ Supplementary Advice Notes, Natural England,
<http://publications.naturalengland.org.uk/category/6490068894089216>

³⁹ European Site Conservation Objectives, Natural England,
<http://www.naturalengland.org.uk/ourwork/conservation/designations/sac/conservationobjectives.aspx>

| European Site | Summary of reasons for designation | European site pressures and threats | Conservation objectives | Non-qualifying habitats and species on which the qualifying habitats and/or species depend | Other Comments |
|--------------------------------|---|--|--|---|----------------|
| Eversden and Wimpole Woods SAC | <p>S1308 Barbastelle Barbastella barbastellus which is a medium sized species of bat and is one of the UK's rarest mammals. Breeding season for Barbastelle bat is between April and September⁴⁰.</p> <p>The site is ancient woodland of ash-maple type which is now localised and in lowland England as a whole. Eversden and Wimpole Woods is one of the largest remaining woods of its type on the chalky boulder clay in</p> | <p>Feature Location/ Extent/ Condition Unknown.</p> <p>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.</p> <p>Offsite Habitat Availability</p> <p>The bats have a limited area to roost</p> | <p>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;</p> <ul style="list-style-type: none"> ■ The extent and distribution of the habitats of qualifying species; ■ The structure and function of the habitats of | <p>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.</p> | None |

⁴⁰ European Site Conservation Objectives: supplementary advice on conserving and restoring site features. Available at: <http://publications.naturalengland.org.uk/publication/6736081810620416> Accessed 17/09/2019

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| | <p>Cambridge and contains a rich assemblage of woodland plants including some uncommon species such as the Barbastelle bat <i>Barbastella barbastellus</i>. 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 site⁴¹.</p> | <p>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.</p> <p>Forestry and Woodland Management</p> <p>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.</p> | <p>qualifying species;</p> <ul style="list-style-type: none"> ■ 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 | | |
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⁴¹ Improvement Programme for England's Natura 2000 Sites (IPENS). Site Improvement Plan Eversden and Wimpole Wood. Available at: file:///C:/Users/Buck_J/Downloads/SIP150512FINALv1.0%20Eversden%20&%20Wimpole%20Woods.pdf Accessed 18/09/2019

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| | | <p>Air Pollution: Impact of Atmospheric Nitrogen Deposition</p> <p>Nitrogen deposition exceeds site-relevant critical loads in the ancient woodland used by Barbastelle bats as a summer maternity roost where female bats given birth and for foraging therefore, there is a risk of harmful effects on the bats.</p> | | | |
| <p>Ouse Washes SAC, SPA and Ramsar site</p> <p>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.</p> | <p>SAC qualifying species</p> <p>Annex II: Spined loach <i>Cobitis taenia</i></p> <p>SPA qualifying species</p> <p>Article 4.1, Annex 1 species (breeding season):</p> <p>Ruff <i>Philomachus pugnax</i>; Spotted Crake <i>Porzana porzana</i></p> <p>Annex I species (over winter):</p> | <p>Current pressures</p> <p>Inappropriate water levels – interest features are being adversely affected by increased flooding.</p> <p>Potential future threats</p> <p>Water pollution.</p> | <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features (SAC), or the aims of the Wild Birds Directive (SPA) by maintaining or restoring:</p> | <p>In general, the qualifying species of the SAC, SPA and Ramsar rely on:</p> <ul style="list-style-type: none"> ■ 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 | <p>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.</p> |

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| | <p>Bewick's Swan Cygnus columbianus bewickii;</p> <p>Hen Harrier Circus cyaneus;</p> <p>Ruff Philomachus pugnax; Whooper Swan Cygnus cygnus,</p> <p>Article 4.2 (migratory species – breeding season):</p> <p>Black-tailed Godwit Limosa limosa;</p> <p>Gadwall Anas strepera;</p> <p>Shoveler Anas clypeata</p> <p>Article 4.2 (migratory species – over winter):</p> <p>Black-tailed Godwit Limosa limosa islandica;</p> <p>Gadwall Anas strepera;</p> <p>Pintail Anas acuta;</p> <p>Pochard Aythya farina;</p> | | <ul style="list-style-type: none"> ■ The extent and distribution of the habitats of qualifying species/features ■ The structure and function of the habitats of the qualifying species/features ■ The supporting processes on which the habitats of qualifying species/features rely ■ The populations of qualifying species/features, and, ■ The distribution of qualifying species/features within the site. | <p>species population.</p> <ul style="list-style-type: none"> ■ 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. <p>In general, the qualifying bird species of the SAC, SPA and Ramsar rely on:</p> <ul style="list-style-type: none"> ■ 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). | |
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| | <p>Shoveler <i>Anas clypeata</i>; Wigeon <i>Anas penelope</i></p> <p>Article 4.2 Assemblage qualification: regularly supports at least 20,000 waterfowl</p> <p>Ramsar criteria</p> <ol style="list-style-type: none"> 1. Extensive area of seasonally-flooding washland 2. Nationally scarce aquatic plants, relict invertebrates, assemblage of nationally rare breeding waterfowl. 5. Bird assemblages of international importance. 6. Water birds for potential future consideration | | | <ul style="list-style-type: none"> ■ Off-site habitat, which provide foraging habitat for these species. ■ Open landscape with unobstructed line of sight within nesting, foraging or roosting habitat. <p>Ruff</p> <ul style="list-style-type: none"> ■ Habitat preferences – grassy tundra, lakes, farmland, on migration mudflat. ■ Diet – invertebrates, especially insects, some plant material <p>Spotted Crake</p> <ul style="list-style-type: none"> ■ Habitat preferences – swamps and marsh. ■ Diet – small aquatic invertebrates, parts of aquatic plants. | |
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| | | | | <p>Bewick's Swan</p> <ul style="list-style-type: none">■ Habitat preferences – lakes, ponds and rivers, also estuaries on migration.■ Diet – plant material in water and flooded pasture. <p>Hen Harrier</p> <ul style="list-style-type: none">■ Habitat preferences – moor, marsh, steppe and fields.■ Diet – mostly, small birds, nestlings and small rodents. <p>Whooper Swan</p> <ul style="list-style-type: none">■ Habitat preferences – lakes, marshes & rivers.■ Diet – aquatic vegetation also grazes on land. <p>Black-tailed Godwit</p> <ul style="list-style-type: none">■ Habitat preferences – | |
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| | | | | <p>marshy grassland and steppe, on migration mudflats.</p> <ul style="list-style-type: none">■ Diet – invertebrates, some plant material. <p>Gadwall</p> <ul style="list-style-type: none">■ Habitat preferences – marshes, lakes, on migration also rivers, estuaries.■ Diet – Leaves, shoots. <p>Pintail</p> <ul style="list-style-type: none">■ Habitat preferences – lakes, rivers and marsh.■ Diet – omnivorous, feeds on mud bottom at depths of 10-30cm. <p>Pochard</p> <ul style="list-style-type: none">■ Habitat preferences – lakes and slow rivers on | |
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| | | | | <p>migration also estuaries.</p> <ul style="list-style-type: none"> ■ Diet – mostly plant material, also small animals. <p>Shoveler</p> <ul style="list-style-type: none"> ■ Habitat preferences – shallow lakes, marsh, reedbed and wet meadow. ■ Diet – omnivorous, especially small insects, crustaceans, molluscs and seeds. <p>Wigeon</p> <ul style="list-style-type: none"> ■ Habitat preferences – marsh, lakes, open moor, on migration also estuaries. ■ Diet – mostly leaves, shoots, rhizomes and some seeds. | |
| Devil's Dyke SAC | Annex I habitats: | Current pressures | Ensure that the integrity of the site is | The SAC's qualifying habitat relies on: | None |

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| <p>Devil's Dyke consists of a mosaic of CG3 <i>Bromus erectus</i> and CG5 <i>Bromus erectus</i> – <i>Brachypodium pinnatum</i> calcareous grasslands. It is the only known UK semi-natural dry grassland site for lizard orchid <i>Himantoglossum hircinum</i>.</p> | <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites)</p> | <p>Inappropriate scrub control</p> <p>Potential future threats</p> <p>Air pollution: impact of atmospheric nitrogen deposition.</p> <p>Natural England: supplementary advice on conserving and restoring site features</p> <p>In addition to the above, the supplementary advice expands on the European site's vulnerabilities as follows:</p> <ul style="list-style-type: none"> ■ 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 | <p>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:</p> <ul style="list-style-type: none"> ■ 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. | <ul style="list-style-type: none"> ■ 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, <i>Himantoglossum hircinum</i>. ■ Active and ongoing | |
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| | | <p>environmental changes.</p> <ul style="list-style-type: none">■ 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 | | <p>conservation management is needed to protect, maintain or restore this habitat.</p> | |
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| | | present in these habitats. | | | |
| <p>Fenland SAC</p> <p>The Fenland SAC is comprised of three fenland Sites of Special Scientific Interest: Woodwalton Fen, Wicken Fen and Chippenham Fen.</p> <p>Each site generally consists of standing water bodies, ditch systems, bogs, marshes and broad-leaved woodland carr..</p> | <p>Annex I habitats: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)</p> <p>Annex II species: Spined Loach (Cobitis taenia), Great Crested Newt (Triturus cristatus)</p> | <p>Current pressures</p> <p>Water pollution – nutrient enrichment of Chippenham Fen component, fed from a mixture of groundwater, rainfall and surface runoff.</p> <p>Hydrological changes related to public water supply abstraction.</p> <p>Air pollution: impact of atmospheric nitrogen deposition</p> <p>Potential future threats</p> <p>None identified.</p> <p>Natural England: supplementary advice on conserving and restoring site features</p> <p>In addition to the above, the supplementary advice expands on the European site's vulnerabilities as follows:</p> | <p>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;</p> <ul style="list-style-type: none"> ■ 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 | <p>In general, qualifying habitats of the SAC rely on:</p> <ul style="list-style-type: none"> ■ 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. ■ <input type="checkbox"/> Active and ongoing conservation management is needed to protect, maintain or restore this habitat. | <p>National Trust undertaking remedial land management work.</p> |

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| | | <ul style="list-style-type: none"> ■ 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. | <p>qualifying species;</p> <ul style="list-style-type: none"> ■ 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. | <p>For each habitat, more specific examples have been provided.</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>); Purple moor-grass meadows</p> <ul style="list-style-type: none"> ■ Upwellings and springs from the aquifer provide water to the site. ■ Natural hydrological processes to provide the conditions necessary to sustain this habitat. <p>Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>; Calcium-rich fen dominated by great fen sedge (saw sedge)</p> <ul style="list-style-type: none"> ■ Upwellings and springs from the | |
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| | | <ul style="list-style-type: none"> ■ 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. | | <p>aquifer provide water to the site.</p> <ul style="list-style-type: none"> ■ Natural hydrological processes to provide the conditions necessary to sustain this habitat. <p>In general, the qualifying species of the SAC rely on:</p> <ul style="list-style-type: none"> ■ 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. <p>Spined loach</p> <ul style="list-style-type: none"> ■ Habitat preferences – small streams, | |
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| | | <ul style="list-style-type: none"> ■ 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. | | <p>large rivers and both large and small drainage ditches with patchy cover of submerged (and possibly emergent) macrophytes.</p> <ul style="list-style-type: none"> ■ Diet – food particles extracted from fine sediment. <p>Great Crested Newts</p> <ul style="list-style-type: none"> ■ 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. | |
| Wicken Fen Ramsar | Criterion 1: One of the most outstanding remnants of the East Anglian peat fens. The area is one of the | Pressures and threats documented in the Fenland Site Improvement Plan relate to the | Not applicable. | In general, the qualifying habitats of the Ramsar rely on: | Issues caused by inappropriate water levels and scrub control in some areas. WLMP in place |

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| | <p>few which has not been drained.</p> <p>Traditional management has created a mosaic of habitats from open water to sedge and litter fields.</p> <p>Criterion 2: The site supports one species of British Red Data Book plant, fen violet (<i>Viola persicifolia</i>), which survives at only two other sites in Britain. It also contains eight nationally scarce plants and 121 British Red Data Book invertebrates.</p> | <p>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.</p> | | <ul style="list-style-type: none"> ■ 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. <p>In general, the qualifying habitats of the Ramsar rely on:</p> <p>Invertebrates</p> | <p>to address these issues.</p> |
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| | | | | <ul style="list-style-type: none"> ■ Diets – flowering plants, organic matter and other invertebrate species for food resources. | |
| Chippenham Fen Ramsar | <p>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.</p> <p>Criterion 3: The site supports diverse vegetation types, rare and scarce plants. The site is the stronghold of</p> | <p>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.</p> | Not applicable. | <p>In general, the qualifying habitats of the Ramsar rely on:</p> <ul style="list-style-type: none"> ■ 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. | <p>Inappropriate scrub control, cutting and mowing in several units contributing to unfavourable no change status.</p> |

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| | Cambridge milk parsley (<i>Selinum carvifolia</i>). | | | <ul style="list-style-type: none">■ Management of habitats to protect, maintain and restore it. <p>In general, the qualifying species of the Ramsar rely on:</p> <p>Invertebrates</p> <ul style="list-style-type: none">■ Diets – flowering plants, organic matter and other invertebrate species for food resources. | |
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Appendix C – Screening Matrix

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|--|--|--|--------------------------------------|--|
| Policy 1: A comprehensive approach at North East Cambridge | None – this policy sets out the overarching principles for the provision of 8,000 new homes and 20,000 new jobs but will not directly result in development. | N/A | N/A | No |
| Policy 2: Designing for Climate Emergency | None – this policy promotes the sustainable design and construction with the NEC and will not directly result in development. | N/A | N/A | No |
| Policy 3: Energy and associated infrastructure | None – this policy supports the transition to net zero and energy efficiency and will not directly result in development. | N/A | N/A | No |
| Policy 4a: Water Efficiency | None – this policy relates to water efficiency and will not result in development. | N/A | N/A | No |
| Policy 4b: Water quality and ensuring supply | None – this policy ensures that there is sufficient infrastructure and supply to ensure that there is no | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|--|--|--|--------------------------------------|--|
| | deterioration of water quality and will not result in development. | | | |
| Policy 4c: Flood risk and sustainable drainage | None – this policy relates to requirements to mitigate for flood risk as part of development and will not directly result in development. | N/A | N/A | No |
| Policy 5: Biodiversity and net gain | None – this policy sets out the requirement to deliver biodiversity net gain as part of a development. | N/A | N/A | No |
| Policy 6a: Distinctive design for North East Cambridge | None – this policy sets out the criteria for distinctive, high-quality and contemporary design within a development and will not directly result in development. | N/A | N/A | No |
| Policy 6b: Design of mixed-use buildings | None – this policy sets out the criteria for mixed-use development design and will not result in development and will not | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|--|---|--|--------------------------------------|--|
| | directly result in development. | | | |
| Policy 7: Legible streets and spaces | None – this policy relates to the design of streets and spaces and will not directly result in development. | N/A | N/A | No |
| Policy 8: Open spaces for recreation and sport | None – this policy relates to the provision of open space and recreation site/facilities as part of residential development. | N/A | N/A | No |
| Policy 9: Density, heights, scale and massing | None – this policy sets out the criteria for density, heights, scale and massing for buildings and will not directly result in development. | N/A | N/A | No |
| Policy 10a: North east Cambridge Centres | None – this policy relates to the design of centres and the criteria with which development should follow. This policy will not directly result in development. | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
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| Policy 10b: District Centre | <p>This policy will result in the provision of mixed-use development, including residential (250 units), employment (20,000 sqm), retail (5,000 sqm) and community and cultural uses (5,700 sqm).</p> <p>Increase in vehicle use</p> <p>Increase in recreational activities</p> <p>Increase in demand for water abstraction and treatment</p> | <p>Increased air pollution</p> <p>Disturbance from recreation.</p> <p>Change in water quantity and increased water pollution.</p> | <p>Eversden and Wimpole Woods SAC</p> <p>Ouse Washes SAC, SPA and Ramsar</p> <p>Devil's Dyke SAC</p> <p>Fenland SAC</p> <p>Wicken Fen SAC</p> <p>Chippenham Fen SAC</p> | Uncertain |
| Policy 10c: Science Park Local Centre | <p>This policy will result in the provision of mixed-use development, including employment (4,800 sqm), retail (1,000 sqm) and community use (100 sqm)</p> <p>Increase in vehicle use</p> <p>Increase in demand for water abstraction and treatment</p> | <p>Increased air pollution</p> <p>Change in water quantity and increased water pollution.</p> | <p>Eversden and Wimpole Woods SAC</p> <p>Ouse Washes SAC, SPA and Ramsar</p> <p>Devil's Dyke SAC</p> <p>Fenland SAC</p> <p>Wicken Fen SAC</p> | Uncertain |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|--|---|---|---|--|
| Policy 10d: Station Approach | <p>This policy will result in the provision of mixed-use development, including residential (500 units), employment (15,000 sqm), retail (1,000 sqm) and community use (100 sqm).</p> <p>Increase in vehicle use</p> <p>Increase in recreational activities</p> <p>Increase in demand for water abstraction and treatment</p> | <p>Increased air pollution</p> <p>Disturbance from recreation.</p> <p>Change in water quantity and increased water pollution.</p> | <p>Eversden and Wimpole Woods SAC</p> <p>Ouse Washes SAC, SPA and Ramsar</p> <p>Devil's Dyke SAC</p> <p>Fenland SAC</p> <p>Wicken Fen SAC</p> | Uncertain |
| Policy 10e: Cowley Road Neighbourhood Centre | <p>This policy will result in the provision of mixed-use development, including residential (100 units), employment (3,000 sqm) and retail (300 sqm).</p> <p>Increase in vehicle use</p> <p>Increase in recreational activities</p> <p>Increase in demand for water abstraction and treatment</p> | <p>Increased air pollution</p> <p>Disturbance from recreation.</p> <p>Change in water quantity and increased water pollution.</p> | <p>Eversden and Wimpole Woods SAC</p> <p>Ouse Washes SAC, SPA and Ramsar</p> <p>Devil's Dyke SAC</p> <p>Fenland SAC</p> <p>Wicken Fen SAC</p> <p>Chippenham Fen SAC</p> | Uncertain |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|-------------------------------------|---|---|---|--|
| Policy 11: Housing design standards | None – this policy sets out the standards for housing design and will not directly result in development. | N/A | N/A | No |
| Policy 12a: Business | Development of 234,500m ² of employment land. Increased vehicle traffic Increased demand for water abstraction and treatment | Increased air pollution. Change in water quantity and increased water pollution. | Eversden and Wimpole Woods SAC Ouse Washes SAC, SPA and Ramsar Devil's Dyke SAC Fenland SAC Wicken Fen Ramsar SAC Chippenham Fen SAC | Uncertain |
| Policy 12b: Industry | This policy outlines the requirements for industrial development and encourages industrial development at specific locations within the NEC. This includes B2 (9,300 sqm) and B8 (18,150 sqm) | Increased air pollution. Change in water quantity and increased water pollution. | Eversden and Wimpole Woods SAC Ouse Washes SAC, SPA and Ramsar Devil's Dyke SAC Fenland SAC Wicken Fen Ramsar SAC Chippenham Fen SAC | Uncertain |
| Policy 13a: Housing | Development of 8,000 new dwellings. | Increased air pollution | Eversden and Wimpole Woods SAC | Uncertain |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|---------------------------------------|--|---|--|--|
| | Increase in vehicle use Increase in recreational activities Increase in demand for water abstraction and treatment | Disturbance from recreation. Change in water quantity and increased water pollution. | Ouse Washes SAC, SPA and Ramsar Devil's Dyke SAC Fenland SAC Wicken Fen SAC Chippenham Fen SAC | |
| Policy 13b: Affordable Housing | None – This policy supports the development of affordable housing but will not directly result in development. | N/A | N/A | N/A |
| Policy 13c: Housing for local workers | None – This policy supports the provision of housing for key workers in the area of the plan. | N/A | N/A | N/A |
| Policy 13d: Build to rent | None – this policy supports the delivery of built to rent schemes and outlines criteria to qualify under this scheme. This policy does not directly result in development. | N/A | N/A | No |
| Policy 13e: Custom build | None – this policy relates to custom built units and | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|---|---|--|--------------------------------------|--|
| | will not directly result in development. | | | |
| Policy 13e: Short term/corporate lets and visitor accommodation | None - This policy supports and sets out criteria for the provision of new visitor accommodation but will not directly result in development. | N/A | N/A | No – this policy will result in small scale changes to the use of existing buildings and will not result in LSE on European sites. |
| Policy 14: Social, community and cultural infrastructure | None – This policy supports the provision of new community, cultural and leisure facilities. | N/A | N/A | No – this policy will result in small scale development that will not result in LSE on European sites. |
| Policy 15: Shops and local services | None – This policy supports the provision of retail within town centres and will not directly result in development. | N/A | N/A | No |
| Policy 16: Sustainable connectivity | None – This policy relates to the provision of sustainable travel within the district and will not directly result in development. | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|---|---|--|--------------------------------------|--|
| Policy 17: Connection to the wider network | None – this policy relates to the improvement of existing infrastructure for non-motorised users and will not directly result in development. | N/A | N/A | No |
| Policy 18: Cycle parking | None – this policy relates to the provision of cycle parking and will not directly result in development. | N/A | N/A | No |
| Policy 19: Safeguarding for Cambridge autonomous metro and public transport | None - This policy will result in the improvement of existing public transport infrastructure, including the provision of mobility hubs. | N/A | N/A | No – this policy will result in small scale development that will not result in LSE on European sites. |
| Policy 20: Last mile deliveries | This policy will result in the development of a 1,500 sqm of delivery hubs. | N/A | N/A | No – this policy will result in small scale development that will not result in LSE on European sites. |
| Policy 21: Street hierarchy | None – This policy sets out the road hierarchy within the NEC. | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|--|--|--|--------------------------------------|--|
| Policy 22: Managing motorised vehicles | None – this policy sets out vehicular trip budgets and parking criteria as part of employment and residential development. | N/A | N/A | No |
| Policy 23: Comprehensive and coordinated development | None – This policy sets our criteria for development within the NEC. | N/A | N/A | No |
| Policy 24a: Land assembly | None – this policy supports the need for compulsory purchase within the plan. | N/A | N/A | No |
| Policy 25: Environmental Protection | None – this policy ensures that environmental impacts are fully considered in relation to development and will therefore not directly result in development. | N/A | N/A | No |
| Policy 26: Aggregates and waste sites | None – this policy relates to the relocation of aggregates and waste facilities off-site and will | N/A | N/A | No |

| Plan Policy | Likely activities (operations) to result as a consequence of the proposal | Likely effect if proposal is implemented | European site/s potentially affected | Could the proposal have likely significant effects |
|---|--|--|--------------------------------------|---|
| | not result development as part of the AAP. | | | |
| Policy 27: Planning contributions | None – this policy sets out the requirements of contributions to mitigate the impact of development. | N/A | N/A | No |
| Policy 28: Meanwhile uses | None – this policy supports the provision of temporary consent of services and facilities on sites, which will not come forward in the short term. | N/A | N/A | No – this policy will result in the temporary provision of development that will not result in LSE on European sites. |
| Policy 29: Employment and training | None – this policy relates to providing support to local residents and the Greater Cambridge economy through training and employment. | N/A | N/A | No |
| Policy 30: Digital infrastructure and open innovation | None – this policy relates to the development design and will not directly result in development. | N/A | N/A | No |

Appendix D – Other Plans and Projects

District level Local Plans (strategic issues/'core strategies') providing for development

| South Cambridgeshire Local Plan ⁴² | |
|--|---|
| Plan Owner/Competent Authority | South Cambridgeshire District Council |
| Related work HRA/AA | South Cambridgeshire Local Plan Submission Sustainability Appraisal Report and Habitats Regulations Screening Assessment (2014) ⁴³ |
| Notes on Plan documents | <p>The South Cambridgeshire Local Plan was adopted on September 2018 and continues to be effective until 2031.</p> <p>The Local Plan proposes the creation of 19,500 homes and the provision of 22,000 new jobs during the 2011-2031 time period,</p> |
| <p>Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan</p> <p>The HRA of the South Cambridgeshire Local Plan 2014 considered the following European Sites within the assessment:</p> <ul style="list-style-type: none"> - Eversden and Wimpole Woods SAC (within the District) - Ouse Washes SAC, SPA and RAMSAR (within a neighbouring District) - Devil's Dyke SAC (within a neighbouring District) <p>The potential impacts on the designated sites were summarised as: physical habitat loss; impacts on migratory species; physical disturbance (through recreational pressures and improved transport infrastructure); changes in water quality and quantity, and atmospheric pollution.</p> <p>The HRA concluded that the proposed policies and allocations as worded within the Local Plan were unlikely to result in significant effects on the listed European Sites, in isolation or in combination with neighbouring plans or infrastructure projects. Therefore, there was no requirement for an appropriate assessment.</p> | |

| Cambridge City Local Plan ⁴⁴ | |
|---|------------------------|
| Plan Owner/Competent Authority | Cambridge City Council |

⁴² https://www.scambs.gov.uk/media/12740/south-cambridgeshire-adopted-local-plan-270918_sml.pdf

⁴³ <https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/the-adopted-development-plan/south-cambridgeshire-local-plan-2018/>

⁴⁴ <https://www.cambridge.gov.uk/media/6890/local-plan-2018.pdf>

| Cambridge City Local Plan ⁴⁴ | |
|--|---|
| Related work HRA/AA | Habitat Regulations Assessment: Screening Report for the Draft Cambridge Local Plan 2014 (2013) ⁴⁵⁴⁶ |
| Notes on Plan documents | <p>The Local Plan sets out the vision, policies and proposals for the future development and land use in Cambridge between 2018 and 2031.</p> <p>The Plan proposes the provision of 35,773 homes and 22,100 new jobs.</p> |
| <p>Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan</p> <p>There are no European Sites within Cambridge itself, but the following designated sites within the wider area were considered as part of the assessment given their close proximity to the district boundary and/or due to their conservation objectives or interests:</p> <ul style="list-style-type: none"> - Eversden and Wimpole Woods SAC - Ouse Washes SAC, SPA and RAMSAR - Devil's Dyke SAC <p>Potential impacts considered included:</p> <ul style="list-style-type: none"> - Physical habitat loss - Recreational pressure and disturbance - Impact on protected species outside the protected sites - Water quantity and quality - Air pollution <p>The Cambridge Local Plan 2014 - Towards 2031 is unlikely to have significant impacts on the conservation objectives of: Devil's Dyke SAC; Ouse Washes SAC, SPA and Ramsar; Eversden and Wimpole Woods SAC; or Fenland SAC and Ramsar sites. With regards to the possible impacts resulting from policies and allocations contained within the adopted Cambridgeshire and Peterborough Minerals and Waste LDF documents no adverse effects were identified on the listed European Sites.</p> | |

| Huntingdonshire Local Plan ⁴⁷ | |
|--|----------------------------------|
| Plan Owner/Competent Authority | Huntingdonshire District Council |

⁴⁵ https://www.cambridge.gov.uk/media/1789/appropriate-assessment-part-1-final_0.pdf

⁴⁶ <https://www.cambridge.gov.uk/media/1790/appropriate-assessment-part-2-final.pdf>

⁴⁷ <https://www.huntingdonshire.gov.uk/media/3872/190516-final-adopted-local-plan-to-2036.pdf>

| Huntingdonshire Local Plan ⁴⁷ | |
|--|---|
| Related work HRA/AA | Huntingdonshire Local Plan to 2036: Proposed Main Modifications 2018 Habitats Regulations Assessment ⁴⁸ . |
| Notes on Plan documents | <p>The Local Plan was adopted in 2019 which outlines all policies and proposals until 2036. This replaces the 2009 Core Strategy, 2011 Huntingdon West Area Action Plan 2011, and saved policies from the Local Plan 1995 and Local Plan Alteration 2002.</p> <p>The Local Plan proposes the delivery of 20,100 new homes and the provision of 14,400 new job between 2011-2036</p> |
| <p>Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan</p> <p>European Sites assessed</p> <ul style="list-style-type: none"> - Ouse Washes SAC, SPA - Eversden and Wimpole Woods SAC <p>Potential impacts considered</p> <ul style="list-style-type: none"> - Air pollution - Recreational pressures - Hydraulic conditions (drought and flooding) - Non-native species - Groundwater pollution - Water quality <p>The HRA concluded that the Local Plan would not result in any significant effects on the integrity of the any designated sites included within the assessment, as a consequence of the proposed policies or allocations as currently worded. The Local Plan was also not considered to result in any significant effects as a result of in combination effects in conjunction with neighbouring authorities' local plans.</p> | |

| East Cambridgeshire Local Plan ⁴⁹ | |
|--|--------------------------------------|
| Plan Owner/Competent Authority | East Cambridgeshire District Council |

⁴⁸<https://www.huntingdonshire.gov.uk/media/3672/proposed-main-modifications-2018-habitats-regulations-assessment.pdf>

⁴⁹ <https://www.eastcambs.gov.uk/local-development-framework/east-cambridgeshire-local-plan-2015>

| East Cambridgeshire Local Plan ⁴⁹ | |
|--|---|
| Related work HRA/AA | Habitats Regulation Assessment: East Cambridgeshire Local Plan (2018) ⁵⁰ |
| Notes on Plan documents | <p>The East Cambridgeshire Local Plan 2015 was formally withdrawn in February 2019, however the Plan will remain adopted as the Local Plan for the district until a new Local Plan is formed.</p> <p>This Plan will inform policies and allocations up to 2031. The Plan will facilitate the need for 10,835 dwellings, and the creation of 6,000 new jobs between 2011 and 2031.</p> |
| <p>Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan</p> <p>The HRA scoped in the following designated sites at the screening stage:</p> <ul style="list-style-type: none"> - Fenland SAC, - Wicken Fen RAMSAR - Ouse Washes SAC, SPA, RAMSAR - Devil's Dyke SAC <p>European Sites assessed</p> <p>Devil's Dyke SAC: Not screened out – taken to appropriate assessment (AA). Assumed potential impacts:</p> <ul style="list-style-type: none"> - Physical habitat loss - Physical damage - Disturbance/recreational pressure - Atmospheric pollution <p>Wicken Fen SAC, RAMSAR: Not screened out – taken to appropriate assessment (AA). Assumed potential impacts:</p> <ul style="list-style-type: none"> - Physical habitat loss - Physical damage - Disturbance/recreational pressure - Water quantity - Water quality - Atmospheric pollution | |

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<https://www.eastcambs.gov.uk/sites/default/files/HRA%20Appropriate%20Assessment%20Post%20Submission%20Local%20Plan%20-%20published%2015.6.18.pdf>

Ouse Washes SAC, SPA, RAMSAR: Not screened out – taken to appropriate assessment (AA). Assumed potential impacts:

- Physical habitat loss
- Physical damage
- Disturbance/recreational pressure
- Water quality
- Water quantity

Conclusion of the HRA

The East Cambridgeshire Local Plan was found to be compliant with the Habitats Regulations, and provided that the proposed recommendations within the report are followed, the proposed policies and allocations will not result in likely significant effects on designated sites.

The recommendations below are as stated within the report:

- The Local Plan adopts a precautionary approach and includes a requirement for applicable allocation site policies (i.e. site allocations in Ely and Littleport that fall within the Goose and Swan Functional Land IRZ) to include a requirement for a project-level HRA screening to demonstrate that proposed development will not have any adverse effect on Ouse Washes functional land.
- An additional paragraph to the supporting text of LP30 should be added which explains how land beyond the site boundary of a European site may also provide important functional habitat for qualifying bird species and to ensure that any ‘windfall’ greenfield sites that fall within the Goose and Swan Functional Land IRZ also demonstrate no adverse effects on the qualifying species of the Ouse Washes.
- Strengthening of policy Littleport6 to require a new Country Park that is “of a scale and quality to attract residents from the whole of Littleport, thereby creating a significant area of strategic open space”. This would provide an open space for recreation, for both new and existing residents, which is a suitable alternative to the Ouse Washes. The policy could be further strengthened to clarify that the provision of a well-connected Green Infrastructure Network should include both internal connections as well as connections to the wider Green Infrastructure Network beyond the site allocation boundary.
- The Local Plan is strengthened at Policy LP21 Open Space, Sport and Recreational Facilities to ensure no likely significant effects on the Breckland and Devil’s Dyke Natura 2000 sites as a result of increased recreational pressure arising from new residential development.
- Policy Isleham4 should include the requirement for project level HRA that should consider the effects of increased recreational pressure on Natura 2000 sites. Where there are risks, appropriate mitigation measures should be proposed.
- It will be important that all new residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan.

| | |
|---|--|
| Fenland Local Plan ⁵¹ | |
| Plan Owner/Competent Authority | Fenland District Council |
| Related work HRA/AA | Fenland Core Strategy (Further Consultation Draft) Habitats Regulations Assessment Screening Report (2012) |
| Notes on Plan documents | <p>The council is currently preparing a new Local Plan which will replace the current Fenland Local Plan 2014.</p> <p>The current Local Plan proposes the provision of 11,000 new homes and the creation of 40,000 new jobs.</p> |
| <p>Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan</p> <p>European Sites assessed</p> <ul style="list-style-type: none"> - Fenland SAC, - Wicken Fen RAMSAR - Ouse Washes SAC, SPA, RAMSAR <p>Potential impacts considered</p> <ul style="list-style-type: none"> - Physical habitat loss - Physical damage - Non-physical disturbance - Contamination/pollution - Water quantity - Biological disturbance <p>Conclusion of the HRA</p> <p>The HRA concluded that the Local Plan would not result in any significant effects on the integrity of the any designated sites included within the assessment, as a consequence of the proposed policies or allocations as currently worded. The Local Plan was also not considered to result in any significant effects as a result of in combination effects in conjunction with neighbouring authorities' local plans.</p> | |

⁵¹https://www.fenland.gov.uk/media/12064/Fenland-Local-Plan---Adopted-2014/pdf/Fenland_Local_Plan-Adopted_2014.pdf

| | |
|--|---|
| Fenland Local Plan | |
| West Suffolk: Forest Heath and St Edmundsbury Local Plan ⁵² | |
| Plan Owner/Competent Authority | West Suffolk Council |
| Related work HRA/AA | Habitats Regulations Assessment of the Forest Heath Allocations Local Plan (2019) |
| Notes on Plan documents | <p>The West Suffolk Local Plan consists of the former Forest Heath and St Edmundsbury areas. It is comprised of the following documents:</p> <ul style="list-style-type: none"> - Core Strategy (2010) former FHDC area - Core Strategy Single Issue Review (SIR) (2019) - Core Strategy (2010) Former SEBC area - Joint Development Management Policies Document 2015 - Forest Heath Site Allocations Local Plan <p>The Joint Development Management Policies Document outlined that the 15km buffer radiating from the North Cambridgeshire boundary encompasses a small section of the former Forest Heath area. Therefore the Core Strategy (2010) former FHDC area will be reviewed in relation to proposed policies and allocations that may have an adverse effect on designated sites.</p> <p>The Core Strategy SIR states that the Forest Heath area has quantified a total of 6800 homes are needed between 2011 and 2031, and a target of creating 7,300 additional jobs.</p> |
| <p>Conclusions on potential effects of relevance to European sites within scope of HRA of Greater Cambridge Local Plan and North East Cambridge Area Action Plan</p> <p>European Sites assessed</p> <ul style="list-style-type: none"> - Devil's Dyke SAC - Ouse Washes SAC, SPA and RAMSAR - Wicken Fen RAMSAR | |

Fenland Local Plan

West Suffolk: Forest Heath and St Edmundsbury Local Plan⁵²

Potential effects to be considered during the assessment:

- Direct loss or physical damage due to construction
- Disturbance and other urban edge effects from construction or occupation of buildings
- Disturbance from construction or operation of roads
- Recreational pressure
- Water quantity
- Water quality
- Air quality

Conclusions from the HRA

The HRA screening assessment could not rule out likely significant effects from the plan, either alone or in combination with other plan and projects, in relation to the following types of effects:

- Direct loss or physical damage due to construction
- Disturbance and other urban edge effects from construction or occupation of buildings
- Disturbance from construction or operation of roads
- Recreational pressure
- Water quantity
- Water quality
- Air quality

Therefore, an Appropriate Assessment (AA) was required to identify if any adverse effects on the integrity of any European sites would occur as a result of the list potential impacts. The Appropriate Assessment was able to rule out an adverse effect of the integrity of any European site either alone or in combination with other plans and projects.

Other Relevant Development Plans

| Cambridgeshire and Peterborough Minerals and Waste Local Plan ⁵³ | |
|---|---|
| Plan Owner/Competent Authority | Cambridgeshire County Council and Peterborough City Council |
| Related work HRA/AA | Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, Proposed Submission Draft, Habitats Regulations Assessment (2019)13 |

⁵³ <https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/emerging-minerals-and-waste-local-plan>

Notes on Plan documents

Cambridgeshire County Council and Peterborough City Council are in the process of reviewing the joint Minerals and Waste Development Plan. The councils have consulted on a Preliminary Draft Local Plan (May 2018); a Further Draft Local Plan (March 2019) and, more recently, a Proposed Submission Local Plan (November 2019). It is anticipated that the final plan will be adopted in November 2020.

The current Core Strategy Development Plan Document (DPD) was adopted in 2011 and the Site Specific Proposals DPD was adopted in 2012. These two plans are being reviewed and a single joint Minerals and Waste Local Plan (MWLP) covering the two authority areas is being produced to replace them.

Conclusions on potential effects of relevance to European sites within scope of HRA of Cambridgeshire and Peterborough Minerals and Waste Local Plan

European Sites assessed

- Ouse Washes SAC, SPA and RAMSAR
- Eversden and Wimpole Woods SAC
- Fenland SAC and Wicken Fen RAMSAR
- Devils Dyke SAC

Potential impacts considered

- Physical loss/damage off-site habitat
- Changes in surface/groundwater hydrology
- Water quality
- Indirect disturbance - noise, vibration, lighting disturbance
- Dust contamination
- Air pollution

The HRA scoped in the following designated sites at the screening stage:

Wicken Fen RAMSAR and Fenland SAC: Not screened out – taken to appropriate assessment (AA) - assumed potential impacts:

- Changes in water quantity and/or quality
- Introduction of invasive species

Cambridgeshire and Peterborough Minerals and Waste Local Plan⁵³

Ouse Wash SAC, SPA and RAMSAR: Not screened out – taken to appropriate assessment (AA) - assumed potential impacts:

- Physical loss or damage of habitat (off-site, functionally connected)
- Noise, vibration and light pollution
- Changes in water quantity and/or quality

The HRA scoped out the following designated sites at the screening stage:

- Eversden and Wimpole Woods SAC
- Devils Dyke SAC

Conclusion from the HRA:

Following Stage 1 HRA Screening, it was not possible to screen out physical loss/damage to off-site habitat, changes in surface/groundwater hydrology, changes in water quality, disturbance from noise, vibration and/or light pollution, dust contamination or air pollution impacts arising from policies and sites. Subsequently, a Stage 2 Appropriate Assessment was carried out to assess these effects on the Ouse Washes, Nene Washes and Fenland (Wicken Fen) European sites.

The Appropriate Assessment concluded that the MWLP will not result in significant adverse effects as a result of physical loss of off-site habitat, changes in surface/groundwater hydrology, changes in water quality, disturbance from noise, vibration and/or light pollution, dust contamination or air pollution impacts arising from policies and sites. For development coming forward on either the allocated sites or non-allocated sites, it is considered that there are sufficient mitigation measures set out in the MWLP itself, or elsewhere, such as via regulatory requirements managed by the Environment Agency.

To conclude, provided the recommendations made in this Report are (where applicable) incorporated into the Local Plan, it is possible to conclude that the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036, Proposed Submission Draft, is compliant with the Habitats Regulations and will not result in likely significant effects on any of the European sites identified, either alone or in combination with other plans and projects.

Cambridgeshire and Peterborough Strategic Spatial Framework⁵⁴

| | |
|--------------------------------|---|
| Plan Owner/Competent Authority | Cambridgeshire and Peterborough Combined Authority |
| Related work HRA/AA | - |
| Notes on Plan documents | The devolution deal is centred around achieving ambitious levels of growth across Cambridgeshire and Peterborough for the |

⁵⁴ <https://cambridgeshirepeterborough-ca.gov.uk/assets/Combined-Authority/NSSF-Phase-1-final.pdf>

| Cambridgeshire and Peterborough Strategic Spatial Framework ⁵⁴ | |
|---|---|
| | <p>benefit of all our communities – namely over 100,000 new homes and 90,000 new jobs by 2036.</p> <p>The devolution deal between all Cambridgeshire and Peterborough Authorities and Government established that the Combined Authority will:</p> <p>Create a non-statutory spatial framework, which will act as a framework for planning across the Combined Authority area, and for the future development of Local Plans.</p> |
| No HRA has been carried out to date. | |

| Cambridgeshire and Peterborough Combined Authority Local Transport Plan ⁵⁵ | |
|---|--|
| Plan Owner/Competent Authority | Cambridgeshire and Peterborough Combined Authority |
| Related work HRA/AA | Cambridgeshire and Peterborough Combined Authority Local Transport Plan, Habitats Regulation Assessment Task 1 Screening (2019) ⁵⁶ |
| Notes on Plan documents | <p>This is the first Local Transport Plan for Cambridgeshire and Peterborough. It replaces the Interim Local Transport Plan, which was published in June 2017 and which was based upon the existing Local Transport Plans for Cambridgeshire (Local Transport Plan 3) and Peterborough (Local Transport Plan 4).</p> <p>The current Local Transport Plan does not fully reflect the aspirations of the CPCA as set out by the Mayor and in the wider CPCA 2030 Strategy and so a new LTP is being developed. Details of projects still pending.</p> <p>The draft Local Transport Plan was launched on 17th June.</p> |

⁵⁵ <https://cambridgeshirepeterborough-ca.gov.uk/assets/Transport/Draft-LTP.pdf>

⁵⁶ <https://cambridgeshirepeterborough-ca.gov.uk/assets/Transport/Cambridgeshire-and-Peterborough-LTP-Strategic-HRA-Rev-C.pdf>

Cambridgeshire and Peterborough Combined Authority Local Transport Plan⁵⁵

Conclusions on potential effects of relevance to European sites within scope of HRA of Cambridgeshire and Peterborough Combined Authority Local Transport Plan

European Sites assessed

- Ouse Washes SAC, SPA and RAMSAR
- Eversden and Wimpole Woods SAC
- Fenland SAC & Wicken Fen RAMSAR
- Devils Dyke SAC

Potential impacts considered

Direct impacts:

- Habitat loss (including loss of breeding and resting sites)
- Habitat fragmentation (including changes to habitat structure and function)
- Wildlife casualties (due to increased frequency of traffic)
- Disturbance and/or displacement of species due to increased frequency of transport

Indirect impacts:

- Air pollution for designated sites within 200m (DMRB Vol 11 Section 3 Part 1)
- Noise and vibration
- Artificial lighting
- Water pollution
- Contamination

Conclusions from the HRA:

This HRA Task 1 screening considers that the proposed Local Transport Plan, either alone or in-combination, is not likely to have a significant effect on any European site or their associated features.

Major Infrastructure Projects

The Oxford-Cambridge Arc⁵⁷

Plan Owner/Competent Authority

Government, local authorities across the Oxford to Cambridge Arc, Cambridgeshire and Peterborough Combined Authority, the Arc's four local enterprise partnerships (LEPs), and England's Economic Heartland.

⁵⁷

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799993/OxCam_Arc_Ambition.pdf

| The Oxford-Cambridge Arc ⁵⁷ | |
|--|---|
| Related work HRA/AA | - |
| Notes on Plan documents | <p>The project is still in it's early development and in March 2019 a document was produced by the government which provides an early update on the work to develop a robust economic evidence base for the Arc</p> <p>The overarching ambition is to strengthen the corridor connecting Cambridge, Milton Keynes and Oxford by infrastructure and connectivity. Central to achieving this vision are completion of the new East-West Rail line connecting Oxford and Cambridge by 2030 and accelerating the development and construction of the Oxford-Cambridge Expressway. In addition to infrastructure, there is an ambition to build one million new homes by 2050.</p> |
| No HRA has been carried out to date. | |