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HRA Screening of the Forest Heath Site Allocations Local Plan Preferred Options Document

Prepared by LUC
March 2016

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1 Introduction

- 1.1 LUC has been contracted by Aecom on behalf of Forest Heath District Council to carry out the Habitats Regulations Assessment (HRA) Screening of the Forest Heath Single Issue Review (SIR) of Core Strategy Policy CS7 Overall Housing Provision and Distribution and of the Site Allocations Local Plan (SALP). This report documents the results of the HRA Screening at the Preferred Options third Regulation 18 Consultation stage of preparation of the SALP.

Background to the Forest Heath SIR and Site Allocations Local Plan

- 1.2 Forest Heath's Core Strategy was adopted in May 2010. Parts of Policy CS7 were, however, subsequently quashed following a successful High Court challenge (with consequential amendments also made to Policies CS1 and CS13). Essentially, the quashing of Policy CS7 removed the spatial strategy, although there remains in place a policy to deliver a certain growth quantum over the plan period. As a result, Forest Heath District Council ('the Council') has resolved to revisit those parts of the Core Strategy that were quashed by the High Court ruling in order to reconsider the most appropriate locations for housing growth across the District. The plan now in development is known as the Core Strategy SIR. As well as addressing the spatial strategy, the SIR will revisit the overall growth quantum policy, an approach that is necessary in order to ensure a holistic strategy is in place, and also necessary given the National Planning Policy Framework (NPPF) (para 47) policy on meeting full, objectively assessed housing needs.
- 1.3 A SIR 'Issues and Options' consultation document was published in July 2012 with a view to: 1) exploring alternative housing growth quanta (ranging from 351 dwellings per annum 'dpa' to 669 dpa); and 2) presenting information on the constraints/opportunities at each of the main settlements in order to gather views on the proportion of growth that should be distributed to each. The responses received were subsequently considered by Officers and Members, and were used to inform preparation of a Proposed Submission (Regulation 19) consultation document.
- 1.4 At about this time, in November 2013, the Planning Committee also approved a SALP 'Issues and Options' document for consultation. Issues and options relating to site allocations had been in development for a number of years, although no formal consultation had taken place. However, the decision was subsequently taken not to proceed with consultation on the two documents as further SA work was required. Consideration was given to progressing the two documents in the form of a single, 'new style' Local Plan.
- 1.5 In January 2015, however, a Local Development Scheme Update was published, which committed to progressing the two plan documents (SIR and SALP) separately. The Council has now decided that two Regulation 18 consultation stages will be held for each of the Plan documents, a high level 'Issues and Options' type document (which was published for consultation in early August 2015) followed by the more detailed 'Preferred Options' type document that is the subject of this HRA Report and which is being published in April 2016).
- 1.6 In addition to these strategic planning policy and site allocations documents, the Council adopted a joint development management policies Local Plan document with neighbouring St Edmundsbury District in February 2015.

The need for HRA

- 1.7 The requirement to undertake HRA of development plans was confirmed by the amendments to the "Habitats Regulations" published for England and Wales (UK Government, 2007) and subsequently updated (UK Government, 2010). Therefore, when preparing the SALP, the Council is required by law to carry out an HRA.

- 1.8 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):
- SPAs are classified under the European Council Directive 'on the conservation of wild birds' (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).
 - SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance.
- 1.9 Potential SPAs (pSPAs)¹, candidate SACs (cSACs)², Sites of Community Importance (SCIs)³ 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).
- 1.10 For ease of reference during this HRA, these designations are collectively referred to as 'European sites' (despite Ramsar designations being at the international level).
- 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 Although there is no requirement to undertake HRA at an early stage of the plan-making process when options are still being identified, the Council has decided to begin the HRA at the Issues and Options stage of the SALP so that it can help to inform selection and refinement of Plan options.

Stages of HRA

- 1.13 Table 1.1 summarises the stages and associated tasks and outcomes typically involved in carrying out a full HRA, based on various guidance documents ((European Commission, 2001) (DCLG, 2006) (RSPB, 2007).

Table 1.1 Stages in HRA

Stage	Task	Outcome
Stage 1: HRA Screening	Description of the development plan. Identification of potentially affected European sites and factors contributing to their integrity. Review of other plans and projects. Assessment of likely significant effects of the development plan alone or in-combination with other plans and projects.	Where effects are unlikely, prepare a 'finding of no significant effect report'. Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.
Stage 2: Appropriate Assessment (where Stage 1 does not rule out likely significant effects)	Information gathering (development plan and European Sites). Impact prediction. Evaluation of development plan impacts in view of conservation objectives.	Appropriate assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided through, firstly, avoidance, and secondly, mitigation including the mechanisms and timescale for

¹ Potential SPAs are sites that have been approved by Government and are currently in the process of being classified as SPAs.

² Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted.

³ SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the Government.

Stage	Task	Outcome
	Where impacts are considered to affect qualifying features, identify and assess alternative development options. If no alternatives exist, define and evaluate mitigation measures, where necessary.	these mitigation measures. If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	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.

- 1.14 In assessing the effects of a Local Plan in accordance with Regulation 102 of the Conservation of Habitats and Species Regulations, 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. 102(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 Forest Heath SIR and SALP, proceed to Step 2.
 - Step 2: Under Reg. 102(1)(a) consider whether the plan is likely to have a significant effect on the European site, either alone or in combination with other plans or projects (the 'Significance Test'). If yes, proceed to Step 3.
[Steps 1 and 2 are undertaken as part of Stage 1: HRA Screening in Table 1.1.]
 - Step 3: Under Reg. 102(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. 102(2) to consult Natural England, and optional under Reg. 102(3) to take the opinion of the general public.
[This step is undertaken during Stage 2: Appropriate Assessment shown in Table 1.1.]
 - Step 4: In accordance with Reg. 102(4), but subject to Reg. 103, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of the European site.
 - Step 5: Under Reg. 103, 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).
- 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.
- 1.16 The HRA should be undertaken by the 'competent authority', in this case Forest Heath District 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 body⁴ 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.

⁴ Regulation 5 of the Habitats Regulations 2010.

HRA work carried out previously

- 1.17 The issues surrounding the potential effects of development in Forest Heath District and neighbouring districts on European sites have been heavily studied and these studies have informed an extensive body of previous HRA work. The HRA of the Core Strategy (Forest Heath District Council, 2009) was, in turn, subject to extensive consultation with Natural England and other stakeholders (notably the RSPB) in order to reach agreement on a suitable approach. We have taken this previous body of work as the starting point in formulating the assumptions to be made in carrying out the HRA of the SALP. We have also reviewed further relevant information that has been published since that HRA was carried out and considered whether this suggests a need to amend the previously adopted approach. To date, no primary data collection (e.g. breeding bird surveys or visitor surveys) has been carried by LUC out to inform the HRA Screening.
- 1.18 An HRA Report was produced to accompany the August 2015 consultation on the 'Issues and Options' version of the SALP. A number of consultation comments were received on the HRA and these are documented in Appendix 4, along with LUC's responses to them.

Structure of the HRA report

- 1.19 This chapter has introduced the background to the production of the Forest Heath SALP and the requirement to undertake HRA. The remainder of the report is structured as follows:
- **Chapter 2: The Site Allocations Local Plan** summarises the content of the SALP Preferred Options document which is the subject of this HRA report.
 - **Chapter 3: HRA Screening methodology** outlines the approach to identifying 'likely significant effects', identifies the European sites potentially affected by the SALP (detailed information is provided in Appendix 3) and considers the other plans and projects with which the SALP could act in combination to have a significant effect on a European site..
 - **Chapter 4: Information used and assumptions made in the HRA** identifies the potential effects which the SALP could have on European sites, summarises information relevant to assessing each of them and states the assumptions made in carrying out the HRA.
 - **Chapter 5: HRA Screening of preferred options** describes the preferred development site allocations put forward by the SALP and assesses their potential to have likely significant effects on European sites, prior to consideration of mitigation.
 - **Chapter 6: Conclusions of HRA Screening and recommendations** summarises the potential likely significant effects identified and then considers the effect of any existing mitigation before reaching an HRA Screening conclusion. Where likely significant effects cannot be ruled out, recommendations are provided and the next steps described.

2 The Site Allocations Local Plan

- 2.1 This Site Allocations Preferred Options document follows on from the Site Allocations Further Issues and Options consultation which took place between August and October 2015. That consultation was carried out in parallel with the Issues and Options consultation draft of the Single Issue Review of Core Strategy Policy CS7 (a review of the quantity and distribution of new housing over the next 15 years).
- 2.2 The Preferred Options consultation version of the Site Allocations Local Plan (SALP) that is the subject of this HRA Report sets out the Council's preferred sites for housing growth in the towns, key service centres and primary villages of Forest Heath District. . The settlement boundaries of all the settlements including the secondary villages have also been reviewed and the preferred options for the amended boundaries are included with maps. There is a section on the Council's preferred options for allocating employment sites, and a section on making provision for gypsies, travellers and travelling show people.

3 HRA Screening methodology

- 3.1 The Habitats Regulations do not prescribe a particular methodology for carrying out the appraisal of a plan, or how to report the outcome. In the continuing absence of finalised Government guidance, the former DCLG's 2006 consultation paper on Appropriate Assessment of Plans (DCLG, 2006) remains the principal official guidance. We have also had regard to other guidance of relevance to the HRA of land use plans, for example: (European Commission, 2001) (ODPM, 2005) (Natural England, 2007) (Dodd A.M., 2007) (DEFRA, 2012) (David Tyldesley Associates, 2015).
- 3.2 HRA Screening of the SALP Preferred Options document has been undertaken in line with this and seeks to meet the requirements of the Habitats Regulations. The tasks that have been undertaken during the Screening stage of the HRA are described in detail below.

Assessment of 'likely significant effects' of the SALP

- 3.3 As required under Regulation 102 of the Conservation of Habitats and Species Regulations 2010⁵ an assessment has been undertaken of the 'likely significant effects' of the SALP Preferred Options document.
- 3.4 The tasks carried out as part of the HRA Screening are summarised in Table 1.1 (Stage 1) and described more fully along with their results in the remainder of this report .
- 3.5 The assumptions made and information used during the HRA Screening in reaching conclusions about likely significant effects on European sites are set out in Chapter 4.
- 3.6 A screening matrix was prepared in order to assess which components of the SALP Preferred Options document would be likely to have a significant effect on European sites. The findings of the screening assessment are summarised in Chapter 5 and the full screening matrix can be found in Appendix 1. A 'traffic light' scheme was used to record the likely effects of the site allocations on European sites, using the colour categories shown below.

Red	There are likely to be significant effects (Appropriate Assessment required).
Amber	There may be significant effects, but this is currently uncertain (Appropriate Assessment required).
Green	There are unlikely to be significant effects (Appropriate Assessment not required).

- 3.7 When carrying out the HRA Screening, particular consideration was given to the possible pathways through which effects may be transmitted to features contributing to the integrity of the European sites (e.g. via groundwater, air and river catchments).

Interpretation of 'likely significant effect'

- 3.8 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.
- 3.9 In the Waddenzee case⁶, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:
- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).

⁵ SI No. 2010/490

⁶ ECJ Case C-127/02 "Waddenzee" Jan 2004.

- 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).

3.10 Another opinion delivered to the Court of Justice of the European Union⁷ 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."

- 3.11 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or *de minimis*; referring to such cases as those "*that have no appreciable effect on the site*". In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.
- 3.12 Based on the above, a risk-based approach involving the application of the precautionary principle was adopted in the assessment, such that a conclusion of 'no significant effect' was only reached where it was considered unlikely, based on current knowledge and the information available, that a SALP preferred site allocation would have a significant effect on a European site.

European sites

- 3.13 This section identifies and describes the European sites that could be affected by the SALP Preferred Options. The sites included are consistent with those scoped into the HRA of the Core Strategy (Forest Heath District Council, 2009).
- 3.14 It is common practice in HRA screening to define a buffer around the plan area as a starting point to identifying European sites to be examined and this approach has been accepted by Natural England elsewhere. This reflects the fact that development-related activities such as water abstraction, waste water discharge, air pollution from traffic, and increased recreation can have effects well beyond the Plan area. Some of these European sites may then be scoped out or more distant ones added, depending on the pathways that exist for potentially significant effects to occur.
- 3.15 A precautionary buffer distance of 20 km has been used to reflect evidence from studies in other parts of the country that coastal sites or large tracts of semi-natural habitat can attract a relatively high proportion of residents from up to 20 km away from the site. This encompasses seven SACs, two SPAs, and four Ramsar sites that lie entirely or partly within 20 km of the Forest Heath District boundary, as follows:
- SACs: Breckland, Devil's Dyke, Rex Graham Reserve, Fenland, Norfolk Valley Fens, Ouse Washes, Waveney and Little Ouse Valley Fens.
 - SPAs: Breckland, Ouse Washes.
 - Ramsar sites: Chippenham Fen, Ouse Washes, Redgrave and South Lopham Fens, Wicken Fen.
- 3.16 The locations of these European sites in relation to the Forest Heath District boundary are shown in Figure 3.1.
- 3.17 The HRA also considers the potential for effects on the three additional, more distant European sites in the area of The Wash since the District's main rivers drain into them and their qualifying features include ones which are sensitive to deterioration in water quality. The list of sites within the 20 km buffer has been further adjusted by screening out two European sites from the list above from any further consideration for the following reasons:

⁷ Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

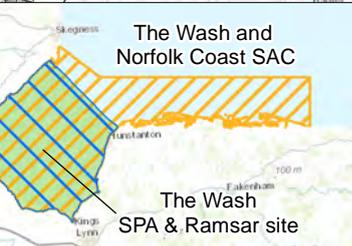
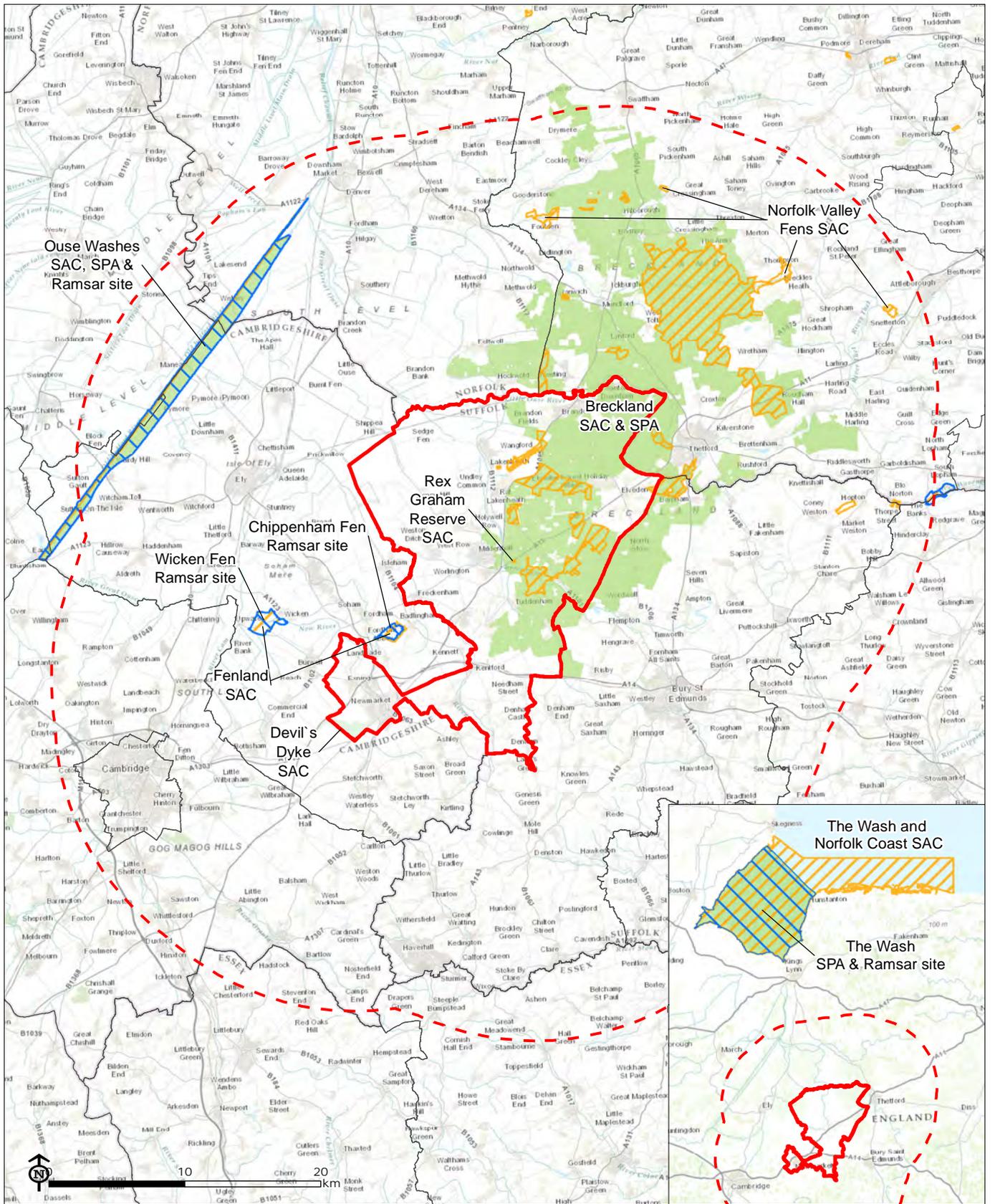
- Waveney and Little Ouse Valley Fens SAC: The three sites which make up this SAC are located right on the eastern edge of the 20 km buffer. Overall the sites are unlikely to attract significantly increased numbers of visitors due to their location. They are upstream of any development which will occur in Forest Heath and it is understood that water abstraction and wastewater discharges for developments in Forest Heath will not affect this European site.
- Redgrave and Lopham Fen Ramsar site: This site is also part of the Waveney and Little Ouse Valley Fens SAC and lies on the eastern edge of the 20 km buffer. Although the site has a visitor centre and is relatively well known, it is unlikely that development in Forest Heath will result in significantly increased visitor numbers due to the site's distance from the District, and the existence of alternative recreational areas closer to or within Forest Heath District, such as large parts of the extensive Thetford Forest. The SAC is upstream of Forest Heath and it is understood that water abstraction or discharges in Forest Heath will not affect the site.

3.18 The HRA of the SALP Preferred Options therefore consider the European sites set out in Table 3.1.

Table 3.1 European sites scoped into the HRA

SAC	SPA	Ramsar site
Sites lying wholly or partly within Forest Heath District		
Breckland Devil's Dyke Rex Graham Reserve	Breckland	-
Sites lying outside Forest Heath District but wholly or partly within 20 km of its boundary		
Fenland Norfolk Valley Fens Ouse Washes	Ouse Washes	Chippenham Fen Ouse Washes Wicken Fen
Sites lying entirely beyond 20 km of the Forest Heath District boundary but scoped into HRA due to hydrological connection		
The Wash and North Norfolk Coast	The Wash	The Wash

3.19 Appropriate information to inform HRA screening on the scoped-in European sites is set out in Appendix 3. This covers a narrative description of the site, a summary of the reasons for its designation as a European site, notes on its current condition, threats and reasons for adverse conditions, and conservation objectives.



- Forest Heath District Boundary
- 20km Buffer
- District Boundary
- Ramsar Site
- SAC
- SPA

Forest Heath Local Plan
HRA

Figure 3.1
European Sites Scoped
into the HRA

Source: JNCC, Natural England



Map Scale @ A4: 1: 400,000

Review of other plans and projects for 'in-combination' effects

Regulatory requirements and guidance

3.20 Regulation 102 of the Habitats Regulations 2010 (UK Government, 2010) requires an Appropriate Assessment of 'any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects'.

3.21 Natural England guidance on this requirement is as follows:

"The alone or in-combination requirement has been included in the Directive and Regulations in order to make sure that the effects of numerous small activities, which alone would not result in a significant effect, are assessed to determine whether their combined effect would be significant, and therefore require more detailed assessment. It is only the effects of those plans and projects that are not themselves significant alone which are added into an in combination assessment. The assessment should only include those that genuinely result in a combined effect, which impairs the ability of an interest feature to meet its conservation objectives.

In-combination assessment should include all plans or projects that have consent or authorisation but are not yet complete, and those that are the subject of an application for consent or authorisation, but are not yet determined. The following list outlines the types of plans and projects that should be considered for an in combination assessment:

- *The incomplete or non-implemented parts of plans or projects that have already commenced;*
- *Plans or projects given consent or given effect but not yet started.*
- *Plans or projects currently subject to an application for consent or proposed to be given effect;*
- *Projects that are the subject of an outstanding appeal;*
- *Ongoing plans or projects that are the subject of regular review.*
- *Any draft plans being prepared by any public body*
- *Any proposed plans or projects published for consultation prior to application."*

3.22 HRA guidance (David Tyldesley Associates, 2015) states that the testing of a plan's effects in-combination with those of other plans and projects need only consider those effects (of the plan being assessed and those of other plans or projects) which, when acting alone rather than in-combination, have been assessed as minor. There is no need to consider policies or proposals that could not have any effect on a European site. There is also no need to consider any policies or proposals that have already been assessed as likely to have a significant effect alone and therefore flagged up for Appropriate Assessment and, if necessary, for action to avoid or mitigate them. This in-combination test is, for example, relevant to plans which would have some potential effect on a European site, but that effect alone would not be likely to be significant, and there are other plans or projects that would add to the plan's effects, either by making them more likely, or more significant, or both.

Approach adopted in the HRA of the SALP

3.23 The principles described above have been applied by first identifying relevant other plans and projects for the in-combination assessment. A large number of plan and strategy documents could potentially be considered. We have focussed our attention on county and district level plans which provide for development in Forest Heath and adjacent districts, and reviewed the findings of any associated HRA work for these plans, where available. To identify other projects which could result in a significant combined effect with the SALP, we reviewed the National Infrastructure Planning website but no projects were found that should also be considered for their potential in-combination effects on the European sites scoped into this HRA. In addition, the Council was asked whether it was aware of any such projects. This revealed a number of projects which have not yet been developed but for which planning consent has been sought from FHDC or in relation to which the Council has published an EIA scoping request for consultation. These are

not included as preferred options in the SALP but are judged large enough to present a credible risk that they might have significant effects in-combination with the SALP. The plans and projects reviewed are set out in Appendix 2.

3.24 The review of other relevant projects proceeded as follows:

- Where project level HRA Screening had been unable to rule out likely significant effects, then the project could not proceed in its current form until Appropriate Assessment ruled out adverse effects on integrity. At that point, the Appropriate Assessment would need to consider the potential for the project to have effects in-combination with other plans and projects, including the Core Strategy SIR and SALP (once these reached draft plan / proposed submission stage).
- Where project level HRA Screening had been carried out and likely significant effects had been ruled out or project level Appropriate Assessment had been carried out and adverse effects on integrity had been ruled out, a check was made to determine whether any effects were identified by the project level HRA which were judged to be minor but which could combine with minor effects of the SALP and other plans and projects considered in the in-combination assessment to become significant.
- Where a project had not yet advanced sufficiently through the planning process for project level HRA Screening to have been carried out, there was insufficient publicly available information to consider them in the in-combination assessment. Once the project advances to a stage where project level HRA Screening is carried out, this will need to consider the potential for it to have effects in-combination with other plans and projects, including the Core Strategy SIR and SALP (once these reach draft plan / proposed submission stage).
- Where planning consent has been sought but the Council determined that project level HRA Screening was not required, it was assumed that the project would not contribute to in-combination effects.

4 Information used and assumptions made in the HRA

FHDC deliverability study

- 4.1 Core Strategy Policy CS2 designates development 'constraint zones' designed to protect Breckland SPA. If the SIR and SALP provide for development within these constraint zones, this could call into question the deliverability of the Plan and its ability to rely on such sites to contribute to meeting objectively assessed needs. As a separate exercise to the HRA, the Council has therefore carried out an analysis to assess whether the proposed overall housing numbers and broad distribution across settlements set out in the Core Strategy SIR are deliverable in light of land availability and the European sites within Forest Heath District. To assess the deliverability of the SIR, sites included in the preceding version of the SALP (Further Issues and Options Consultation Document August 2015) were screened against European site buffers identified in the FHDC Core Strategy Policy CS2 and other criteria as follows:
- Outside of all Breckland SPA buffers defined by Policy CS2.
 - Totally screened from the European site by built development.
 - Would not advance the line of built development towards the European site.
 - Have an extant planning permission.
 - Have already been subject to a project level HRA which has concluded no likely significant effects.
- 4.2 The overall conclusion of the deliverability study was that the total housing number and distribution of houses proposed in the Single Issue Review Preferred Options is deliverable when taking into account the HRA constraint zones identified in the Core Strategy.
- 4.3 Notwithstanding the screening assessment described above, it is still necessary for the HRA of the SALP Preferred Options document to assess the potential for likely significant effects of the allocated sites. The information used and assumptions made in carrying out the HRA Screening are set out in the remainder of this chapter.

Potential effects

- 4.4 Based on an examination of the designated features of the European sites scoped into this HRA and the nature of activities provided for by the SALP, the following types of potential effect on European sites have been considered:
- 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.
- 4.5 This section summarises information relevant to each of these potential effects, drawing on the HRA work previously undertaken in the District as well as more recent evidence. Based on this

evidence, the approach taken and assumptions made in carrying out the HRA of the SALP Preferred Options are then described.

- 4.6 As explained under each type of effect, the potential for some types of effect is most appropriately assessed by reference to the total amount of housing development being proposed, as set out in the 'Total housing provision' section of the SIR. Other types of effect, are more appropriately assessed by reference to the amount of development proposed at broad locations (as set out in the 'Housing distribution options' section of the SIR) or by reference to the specific development sites being allocated (as set out in the SALP Preferred Options document being prepared and consulted on in parallel with the SIR). In some cases, although the potential effect was most appropriately assessed at a detailed scale, it was necessary to rule out the possibility that a likely significant effect could not be avoided under any conceivable spatial distribution of the housing provision, leading to assessment of the effect at more than one scale. Table 4.1 summarises scale/ level in the planning process at which each of the types of potential effect listed above has been assessed. Should emerging evidence (for example the forthcoming update to the Water Cycle Study) reveal any spatially-specific issues, these will be dealt with in the HRA at the appropriate scale during the preparation of the Proposed Submission SALP (Regulation 19 consultation stage).

Table 4.1 Scale at which each type of potential effect has been assessed

Potential effect	HRA of SIR 'Total housing provision'	HRA of SIR 'Housing distribution options'	HRA of individual site allocations in the SALP
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		✓	
Recreation pressure	✓	✓	✓
Water quantity		✓	
Water quality		✓	
Air quality		✓	

Direct loss or physical damage due to construction

- 4.7 Direct loss of or physical damage to designated habitats or habitats on which designated species rely could result from construction of new development. Construction could also cause direct mortality of designated species.

European sites potentially affected

- 4.8 The European sites potentially affected are those located wholly or partly within the District boundary:
- Breckland SAC and SPA.
 - Devil's Dyke SAC.
 - Rex Graham Reserve SAC.

Approach to HRA Screening of Forest Heath SALP

- 4.9 Prior to consideration of mitigation, the HRA Screening assumes that it is not possible to rule out likely significant effects if a site allocation:
- overlaps any European site; or
 - overlaps Stone Curlew habitat areas functionally linked to Breckland SPA (1 km square with ≥ 5 nesting attempts 1995-2006).

Existing mitigation which could rule out likely significant effects and avoid the need for Appropriate Assessment

- 4.10 No Core Strategy policies or other existing strategic mitigation have been identified which are likely to alter the requirement for Appropriate Assessment of any site allocations for which likely significant effects are not ruled out.

Disturbance and other urban edge effects from construction or occupation of buildings

- 4.11 The construction or occupation of new buildings provided for by the SALP could result in adverse effects on sensitive, designated species due to increases in noise and vibration or light pollution, the visual presence of buildings and people within the development boundary, or increased numbers of pets and other predators.
- 4.12 Other types of potential effect on designated species and habitats associated with increased public access are considered within the 'recreation pressure' effect category below.

European sites potentially affected

- 4.13 The European sites potentially affected are:
- Breckland SPA.
- 4.14 Disturbance and other urban edge effects from construction or occupation of buildings operate over relatively short distances. Based on a review of the designated features of the scoped-in European sites and the locations of these sites in relation to Forest Heath District, the potential for disturbance and other urban edge effects from construction or occupation of buildings within the District only exists in relation to the designated bird species of Breckland SPA.

Relevant information

- 4.15 Considering the particular sensitivity of Breckland SPA's designated bird species to these types or urban edge effects, correlative studies of Stone Curlews (Sharp, et al., 2008), Nightjars (Clarke, et al., 2008) (Liley & Clarke, 2003) (Liley & Clarke, 2002) (Liley, et al., 2006) and Woodlarks (Mallord, 2005) have found lower densities of these species in areas close to housing or surrounded by high densities of housing. This avoidance is likely to be due to a range of factors, with individual ones difficult to tease apart. For example, although higher levels of recreational access may lead to harm from disturbance or increased fire occurrence, the avoidance of housing by stone curlews has been clearly demonstrated on arable land where there is limited public access (Sharp, et al., 2008). In addition, the large distances over which housing has been shown to have an effect by this research are such that increased public access and fire occurrence seem implausible explanations in isolation; these species may simply show a behavioural response to avoiding the built environment.
- 4.16 Analysis of the pattern of avoidance of housing by Stone Curlew on arable land suggests that the impact of housing on nest densities is negligible at a distance of 2.5 km from housing and that housing at 1 km has half the impact of housing immediately adjacent to potential nesting habitat (Sharp, et al., 2008).
- 4.17 Although the effect of buildings on Stone Curlew identified by research is from residential properties as opposed to commercial or other building types, that research advises caution in

relation to non-residential development types due to the small sample size of these types of buildings in the study and difficulties with reliably classifying them (Clarke & Liley, 2013).

- 4.18 Research has failed to detect any evidence that screening (such as by shelter belts or landscaping) or reduced lighting levels around buildings might reduce avoidance of built development by Stone Curlew or allow the distance at which adverse effects occur to be reduced. Many fields do have existing shelterbelts, and the avoidance of housing is still clear across suitable arable land, suggesting that screening will not work as mitigation (Sharp, et al., 2008) (Clarke & Liley, 2013).
- 4.19 In relation to predation effects, evidence shows that pet cats can roam up to 1.5 km at night (Woods, et al., 2003) (Sims, et al., 2008). As well as pets, research has shown that heathland close to urban areas can have higher densities of mammalian predators such as foxes (Taylor, 2002) and that there is an increase in the numbers of crows and magpies on sites with greater human activity (Marzluff & Netherlin, 2006).
- 4.20 For nightjars there is also evidence of avoidance of housing but the sites where this has been studied tend to have lots of housing close by and lots of houses further away, making it virtually impossible to determine the distance to which housing has an effect (Liley, et al., 2006). In relation to avoidance of the direct effects of development on Woodlark or Nightjar (particularly in relation to cat predation), a 400 m 'no build zone' has been used to mitigate the effects of housing on heathland birds of The Dorset heaths and Thames Basin Heaths SPAs. The 400 m distance was chosen to minimise additional cat predation and visitor pressure on the heathlands adjacent to development.
- 4.21 The elements of this body of research available at the time of the HRA of the Core Strategy led, with the agreement of Natural England, to the designation in Core Strategy Policy CS2 of development 'constraint zones' designed to protect Breckland SPA, as shown in the following boxed extract from the Core Strategy.

Core Strategy Policy CS2 Natural Environment (extract)

New built development will be restricted within 1,500m of components of the Breckland SPA designated for Stone Curlew. Proposals for development in these areas will require a project level Habitat Regulations Assessment (HRA) (see Figure 3). Development which is likely to lead to an adverse effect on the integrity of the SPA will not be allowed.

Where new development is proposed within 400m of components of the Breckland SPA designated for Woodlark or Nightjar a project level Habitats Regulation Assessment (HRA) will be required (see Figure 3). Development which is likely to lead to an adverse effect on the integrity of the SPA will not be allowed.

New road infrastructure or road improvements will not be allowed within 200m of sites designated as SACs in order to protect the qualifying features of these sites (see Figure 3).

New development will also be restricted within 1,500m of any 1km grid squares which has supported 5 or more nesting attempts by stone curlew since 1995. Proposals for development within these areas will require a project level HRA (see Figure 3). Development which is likely to lead to an adverse effect on the integrity of the SPA will not be allowed.

Approach to HRA Screening of Forest Heath SALP

- 4.22 Prior to consideration of mitigation, the HRA Screening assumes that it is not possible to rule out likely significant effects if a site allocation:
- overlaps, or is within 1,500 m of, SSSI components of Breckland SPA designated for Stone Curlew; or
 - overlaps, or is within 1,500 m of, Stone Curlew habitat areas functionally linked to Breckland SPA (1 km square with ≥ 5 nesting attempts 1995-2006); or
 - overlaps, or is within 400 m of, SSSI components of Breckland SPA designated for Woodlark or Nightjar.

- 4.23 These three buffer areas for disturbance and other urban effects are shown in Figure 4.1 and are consistent with the constraint zones identified in the adopted Core Strategy which have been agreed by Natural England.
- 4.24 It is noted that FHDC has commissioned a study to update the survey grid squares within which Stone Curlew nesting attempts have been recorded in the past 10 years. The results of the study were not available at the time of writing but should be used to inform HRA at the Proposed Submission stage of plan making.

Existing mitigation which could rule out likely significant effects and avoid the need for Appropriate Assessment

- 4.25 No Core Strategy policies or other existing strategic existing mitigation have been identified which are likely to alter the requirement for Appropriate Assessment of any site allocations for which likely significant effects are not ruled out.
- 4.26 It is noted that Policy CS2 of the adopted Core Strategy requires project level HRA for development proposals within 'HRA Constraint Zones' that correspond with the HRA Screening criteria listed at paragraph 4.22. It further states that development likely to lead to an adverse effect on the integrity of the SPA will not be allowed.

Disturbance from construction or operation of roads

- 4.27 The development provided for by the SALP could result in the need for construction of new roads, improvements to existing roads or increased traffic and congestion on existing roads. This could, in turn, result in adverse effects on sensitive, designated species due to increases in noise and vibration, light pollution, or the visual presence of roads and traffic.
- 4.28 Potential effects of increased road traffic on air quality are dealt with in a separate section below.
- 4.29 The potential for direct damage from road construction is judged to be adequately considered elsewhere via HRA of the Suffolk Local Transport Plan (for major schemes provided for by that plan); via the preceding assessment of the potential for site allocations to result in direct loss or physical damage due to construction (for road development within allocated development site boundaries), or via project level HRA as required (for any other road development).

Approach to HRA Screening of Forest Heath SALP

- 4.30 Potential disturbance effects from construction or operation of roads are judged to be most appropriately assessed via HRA of the housing distribution options set out in the SIR since the need for and locations of significant additions to road network capacity will require consideration of the broad pattern of development across the District. The potential disturbance effects of new access roads serving individual developments are judged unlikely to be significant in isolation and are judged to be adequately considered by the wider assessment for 'disturbance and other urban edge effects' of the housing distribution options of the SIR (see separate HRA report) and of individual site allocations, as described in the preceding section.

Recreation pressure

- 4.31 Housing development provided for by the SALP could result in increased numbers of visitors to European sites within or close to the District. This could result in adverse effects on European sites with designated features that are sensitive to recreation pressure as follows:
- *Designated species mortality or disturbance:* direct mortality of ground nesting birds' eggs or young by visitor trampling or dogs off leads; disturbance of ground nesting birds by recreational visitors and their dogs; mortality due to increased incidence of fires; mortality due to tipping/littering.
 - *Designated habitats loss or damage:* path erosion or soil compaction by walkers, cyclists, horse riders etc.; eutrophication of soils by dog faeces; increased incidence of fires; tipping/littering; illegal plant collection.

European sites potentially affected

- 4.32 Based on the relevant information reviewed below and correspondence with Natural England, the HRA assumes that no significant contribution to increased recreation pressure will occur more than 7.5 km from new housing development. The vulnerability to recreation pressure (based on designated features, current condition and pressures/threats) of European sites overlapping Forest Heath District or within 7.5 km of district boundary is as follows:
- Fenland SAC – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
 - Wicken Fen Ramsar site – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
 - Chippenham Fen Ramsar site – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
 - Devil's Dyke SAC – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
 - Rex Graham Reserve SAC – Whilst the related SSSI is in 100% favourable condition, the Site Improvement Plan notes that there is an ongoing threat to site features (military orchid) from illegal plant collection.
 - Breckland SAC – Site Improvement Plan does not list any SAC designated features as currently being under pressure from public access / disturbance but identifies potential future threat of increased recreation through eutrophication (dog fouling, unauthorised fires) and disturbance of soils.
 - Breckland SPA - Site Improvement Plan states that designated populations of Nightjar and Woodlark could be threatened by future increases in recreational visitors. Whilst not highlighted in the Site Improvement Plan, the designated population of Stone Curlew is also likely to be vulnerable to public access / disturbance since it is a ground-nesting bird and Natural England has confirmed that Stone Curlew are thought to be disturbed by people walking at a distance of 500 m from a nest.
- 4.33 The HRA will therefore consider the potential for recreation pressure on Rex Graham Reserve SAC and Breckland SAC and SPA.

Relevant information

- 4.34 There is an extensive evidence base on the effects of recreational disturbance on Stone Curlews, Nightjars and Woodlarks, the three Annex I bird species of Breckland SPA. Although national populations of all three species have generally increased in recent years, prospects for further recovery, for Nightjar and Woodlark at least, may be limited by factors including the effects of recreational disturbance (Langston, et al., 2007).
- 4.35 A study of incubating Stone Curlews on Salisbury Plain (Taylor, et al., 2007) has shown that they leave the nest in response to disturbance at considerable distances (>300 m) and that the closer a potential source of disturbance, the greater likelihood that the birds would respond by leaving the nest. Birds were more likely to respond by running or flying from a walker with a dog than from a walker without a dog, or from a motor vehicle.
- 4.36 Studies of Nightjars have shown that breeding success is lower on sites with higher levels of access, and for nests close to footpaths. Recreational disturbance, particularly from dogs, causes adults to be flushed from the nest, potentially betraying the presence of the nest to predators such as crows (Langston, et al., 2007) (Langston, et al., 2007) (Murison, 2002) (Woodfield & Langston, 2004).
- 4.37 Woodlarks have been intensively studied in conifer plantations and heathland habitats in the Dorset Heaths (Mallord, 2005). This work has shown that otherwise suitable habitat with high levels of recreational access holds lower densities of Woodlarks. Whilst breeding success in such areas is actually better, due to reduced competition between Woodlarks (Mallord, et al., 2007) (Mallord, et al., 2006), this is not sufficient to compensate for the effect of disturbance and the net effect on the Woodlark population is negative (Mallord, et al., 2006).

- 4.38 Having established that the designated bird species of Breckland SPA are sensitive to recreation pressure, it is necessary to consider existing levels of recreation in the SPA and the extent to which these are likely to increase as a result of the development provided for by the SALP.
- 4.39 Detailed analysis of recreation pressure on Breckland SPA has been carried out to inform HRA work for the neighbouring Breckland Core Strategy (Liley, et al., 2008). Parallels can be drawn with statistical modelling of increases in visitor use of paths in the Breckland SPA as a result of different housing growth scenarios for the town of Thetford (Dolman, et al., 2008). The three housing growth scenarios examined provided for different distributions of housing to Thetford's existing urban area, an urban extension to its northern boundary, and an urban extension to the south east by 2021, but all three featured total housing growth of 7,743 dwellings during 2007-2031. The fact that more housing growth was proposed for Thetford than is now being proposed for the whole of Forest Heath District (the SIR preferred option provides for 6,800 homes during 2011-2031), let alone any individual settlement in the District, means that applying the results from the HRA of the Breckland Core Strategy to understand the potential scale and likely effects of increased recreation pressure around settlements on Forest Heath represents a suitable approach, consistent with the precautionary principle that is required under the Habitats Regulations.
- 4.40 The modelling of visitor growth around Thetford allowed the RSPB⁸ to use their 'SCARE' model to explore the potential for increased flushing of Stone Curlews as a result of an increase in access levels resulting from new housing. The model predicted visitor numbers associated with baseline and future housing numbers to paths in Breckland SPA. The resulting calculation of mean number of disturbance events per hour (averaged across all path sections within each 3 km grid square) increased from a baseline range of 0.04-1.10 with current housing levels to a range of 0.06-1.80, as an average for all future housing scenarios. Although this analysis was based on proposed levels of housing growth in and around Thetford, the results are also relevant to housing growth around settlements in Forest Heath District, given the close geographical location of the two areas to each other and to Breckland SPA.
- 4.41 As a means of determining the likely scale of recreation pressure on the other two Annex I species of Breckland SPA (Woodlark and Nightjar), the HRA of the Breckland Core Strategy (Liley, et al., 2008) also analysed how visitor levels in Breckland SPA compare to two other SPAs which support Woodlark and Nightjar, namely Dorset Heaths SPA and Thames Basin Heaths SPA. This comparison is useful because the effects of recreation pressure and associated mitigation have been widely examined at these two SPAs. The comparison established that Breckland SPA represents a much larger parcel of land with public access and has far fewer houses nearby (within 500m or within 5 km) compared to Dorset Heaths SPA and Thames Basin Heaths SPA. Directly comparable visitor data were unavailable for the three European sites but very broad brush estimates suggest that visitor pressure on Breckland SPA is low relative to the other two SPAs. This is presumably because the density of population within the vicinity of both the Dorset Heaths SPA and Thames Basin Heaths SPA is much greater than for Breckland SPA. The HRA of the Breckland Core Strategy concluded that the modelled increases in visitors as a result of planned new housing in Breckland District would still not result in the same general level of recreation pressure on Breckland SPA as is currently experienced on the Dorset Heaths SPA and Thames Basin Heaths SPA.
- 4.42 The HRA also needs to consider the distance over which increases in recreation pressure associated with new housing may be significant. Work in other parts of the country (Liley, et al., 2008), (Sharp, et al., 2008) has shown that coastal sites or large tracts of semi-natural habitat will attract a relatively high proportion of residents from up to 20 km away from the site. Patterns of recreational use of the Thetford Forest and surrounding areas (mostly within Breckland SPA) established through visitor surveys (Dolman, et al., 2008) show that whilst many visitors are relatively local (43% had travelled less than 5 km from their home postcode to the interview location within the Forest), 37% had travelled more than 10 km from home. Almost all of Forest Heath District lies within 10 km of the Breckland SPA, as do all of its major settlements.
- 4.43 A more recent visitor study for Breckland SPA (Fearnley, et al., 2010) concentrates on heathland and forest ('Thetford Forest') areas of the SPA rather than farmland on the basis that these

⁸ Early draft report provided by R. Langston, RSPB, on 21/9/08

areas attract more visitors, and from further afield, since access to arable farmland is available close to home for many of the District's residents. It notes the precautionary approach taken by the HRA of the Breckland Core Strategy to potential recreational disturbance due to a lack of firm evidence to determine whether the Annex I birds of Breckland SPA are being adversely affected by recreational disturbance. Based on the new visitor survey work carried out, the study goes on to advise a continued need for a precautionary approach when considering the future growth proposals for both St Edmundsbury Borough and Forest Heath District.

- 4.44 A key finding of the research is that the majority of visitors are local residents (87%), living within a 10 km radius and using Thetford Forest as their local green space which they visit at least weekly. The research recommends that:

"Any new housing within this radius should be identified as development that would be likely to have a significant effect as a result of recreational disturbance upon the SPA, in the absence of any counteracting measures and taking a precautionary approach. It is also likely that, the closer new housing is to the Forest, the greater the additional recreational pressure will be."

- 4.45 The research notes that its findings on the relationship between visitor rates and distance from home are similar to those presented in the HRA of the Breckland Site Specific Policies and Proposals Document (Breckland District Council, 2010) from a different data set. By further analysing visitor surveys (Dolman, et al., 2008) using just the data for visitors interviewed within Thetford Forest (Annex I bird species of Breckland SPA are particularly concentrated in these), the HRA showed that visitor rates flatten out at about 7.5 km from home postcodes to the Thetford Forest boundary; (Fearnley, et al., 2010) measured distances from home postcodes to actual survey locations within the Thetford Forest). The HRA (Breckland District Council, 2010) went on to conclude that:

"...7.5km is a suitable precautionary distance, beyond which development is not likely to result in a notable increase in visitor use. The majority of visitor pressure arises from within 7.5km."

- 4.46 On this basis, Natural England has confirmed that it agrees that new development is unlikely to contribute significantly to recreation pressure on Breckland SPA where development is located more than 7.5 km from the SPA boundary (Natural England, 2016).
- 4.47 As noted in the preceding section, there is an ongoing recreational threat to Rex Graham Reserve SAC from illegal collection of the military orchid population that is the reason for the site's designation.

Approach to HRA Screening of Forest Heath SALP

- 4.48 The Forest Heath Core Strategy provides for 6,400 dwellings during 2001-2021 plus a further 3,700 during 2021-2031. The HRA of the Core Strategy concluded that the scale and broad location of housing growth proposed would increase visitor numbers to Breckland SPA, in combination with housing growth in neighbouring Breckland District. Based on the results of the modelling described above and the fact that the scale of housing growth at each of Forest Heath's settlements would be less than was planned for Thetford (7,743 dwellings during 2007-2031), the Forest Heath Core Strategy HRA concluded that the increase in recreation pressure would be small and unlikely to reach the same levels experienced by broadly comparable SPAs (Thames Basin Heaths and Dorset Heaths). This analysis remains valid for the broadly similar scale of growth now proposed by the SIR Preferred Options document (6,800 dwellings during 2011-2031). Further comfort can be taken from the fact that whilst many of the Breckland grass heaths have 'open access land' designated under the Countryside and Rights of Way Act 2000 (CRoW), restrictions are put in place each year due to the presence of Stone Curlews which will minimise disturbance effects on those sites.
- 4.49 However, the visitor modelling described above provides evidence that some areas of habitat would be less likely to be used by Stone Curlews as a result of recreational disturbance linked to new housing development. Also, uncertainty is created by the fact that bird distributions change over time, particularly those of Nightjar and Woodlark in relation to forestry management. Thus, whilst the increase in recreation associated with the Core Strategy SIR and SALP is likely to be

low, likely significant effects on Breckland SPA in relation to its Annex I birds cannot be ruled out on a precautionary basis.

- 4.50 Given the general agreement of the two Breckland SPA visitor studies discussed above, the HRA Screening of the SIR and Site Allocations Local Plan assumes that the potential for likely significant effects cannot be ruled out from housing development within 7.5 km from the development location to the edge of Breckland SAC and Breckland SPA. Development more than 7.5 km from Breckland SPA is assumed to have no effect.
- 4.51 Figure 4.2 shows that Breckland SAC and SPA is a large European site which spans a number of neighbouring districts and a 7.5 km buffer around these designations takes in a number of local population centres including Thetford in Breckland District and Bury St Edmunds in St Edmundsbury Borough. The review of the Core Strategies and corresponding HRAs for these two districts (Appendix 2) confirms that the development proposed has the potential to contribute to increased recreation pressure on Breckland SAC/SPA although mitigation has been put in place to avoid likely significant effects on European sites from the development plans for those districts.
- 4.52 Given the absence of visitor survey data specific to Rex Graham Reserve SAC, the same distance assumption is made for that European site on a precautionary basis although the small size of the site relative to nearby areas of accessible natural greenspace, including Breckland SAC/SPA, may mean that it has a smaller recreation catchment.
- 4.53 In relation to potential recreational disturbance of the designated Stone Curlew population of Breckland SPA, the zone within which the potential for likely significant effects is identified has not been extended to areas which are more than 7.5 km from the Breckland SPA boundary but are within this distance of identified Stone Curlew nesting attempts areas. This approach has been agreed with Natural England (Natural England, 2016), based on the distances from visitors at which Stone Curlew suffer an effect and the fact that any potential recreational effects caused by development proposals within the Stone Curlew nesting attempts areas would be picked up at the planning application stage due to the requirements of Core Strategy Policy CS2.
- 4.54 In summary, prior to consideration of mitigation, the HRA Screening assumes that it is not possible to rule out likely significant effects for any site allocation with a housing component:
- within 7.5 km of the boundary of Breckland SPA (potential for species mortality or disturbance); or
 - within 7.5 km of the boundary of Breckland SAC or Rex Graham Reserve SAC (potential for loss of or damage to designated habitats).
- 4.55 The 7.5 km recreation buffers around Breckland SAC, Breckland SPA and Rex Graham Reserve SAC are shown in Figure 4.2.
- 4.56 Allocations with no housing component are assumed to not give rise to recreation pressure.

Existing mitigation which could rule out likely significant effects and avoid the need for Appropriate Assessment

- 4.57 Relevant existing policies include:
- Core Strategy Policy CS2: promotion of green infrastructure on all new developments.
 - Core Strategy Policy CS13: requirement for sufficient capacity in existing local infrastructure (including for open space, sport and recreation) before land is released for development; developer contributions to improve infrastructure to the required standard. Guidance on how the Council will implement the open space requirements within this policy is provided in an SPD (Forest Heath District Council, 2011) which includes the approach to determining when developer contributions can be used to provide off site open space.
 - Development Management Policy DM12 (Forest Heath District and St Edmundsbury Borough Councils, 2015):

"All new development (excluding minor household applications) shown to contribute to recreational disturbance and visitor pressure within the Breckland SPA and SAC will be required to make appropriate contributions through S106 agreements

towards management projects and/or monitoring of visitor pressure and urban effects on key biodiversity sites.”

- Development Management Policy DM42: requirement for developers to make proposals acceptable in relation to open space provision and maintenance.
- Development Management Policy DM44: protects against the loss of existing or proposed rights of way and enables improvements to rights of way to be sought.

4.58 The effects of emerging SALP policy requirements for open space provision and enhancement alongside new development plus evidence from FHDC’s emerging Recreation Mitigation Strategy which will outline the amount and type of open space to be provided and how this addresses recreational needs are examined through the HRA Screening in Chapter 5 and conclusions and recommendations in Chapter 6.

Water quantity

4.59 Water abstraction to supply new development provided for by the SALP could result in changes to water levels or flows at hydrologically connected European sites with the potential for adverse effects on designated features sensitive to such changes.

Approach to HRA of Forest Heath SALP

4.60 The potential effects of development proposed by the SIR and SALP on water levels and flows will primarily be a function of the cumulative impact of all the proposed growth in the relevant catchments on water resources. Potential effects are therefore more appropriately assessed via HRA of the amount and broad distribution of housing growth set out in the Core Strategy SIR housing distribution options. The Council has commissioned an updated Water Cycle Study to inform the SIR and SALP and the HRA of these documents but the results of this study were not available at the time of writing. Should the Water Cycle Study reveal any site-specific issues, these will be dealt with in the HRA during the preparation of the Proposed Submission SALP (Regulation 19 consultation stage).

Water quality

4.61 New development provided for by the SALP could result in 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.

4.62 New development could also result in overloading of the combined sewer network during storm events with the potential for contamination of hydrologically connected European sites.

4.63 An 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.

Approach to HRA of Forest Heath SALP

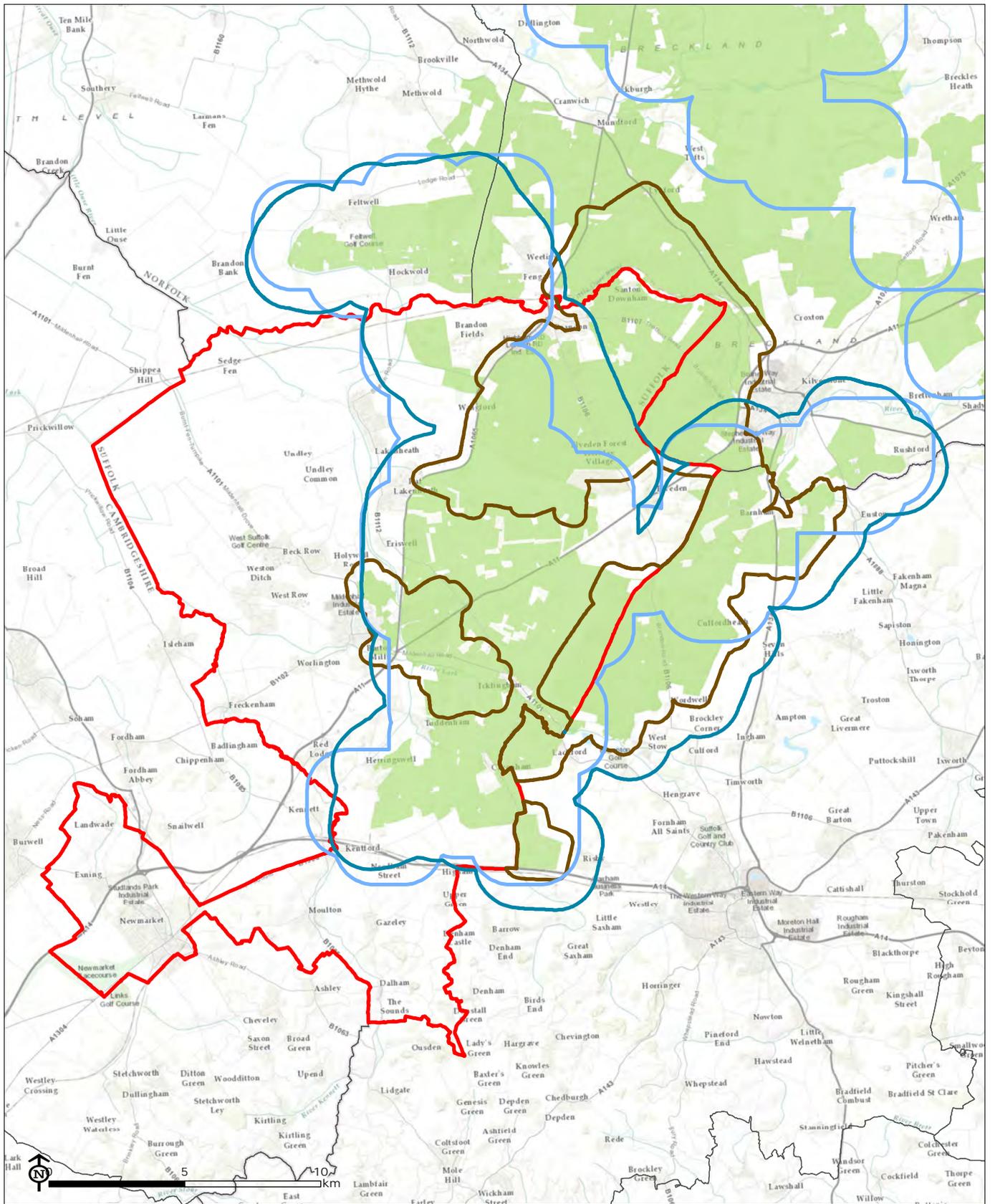
4.64 The potential effects of development proposed by the SIR and SALP on water quality will be a function of the cumulative impact of all the proposed growth in the relevant catchments on wastewater treatment and sewerage network capacity. Such effects are therefore more appropriately assessed via HRA of the amount and broad distribution of housing growth set out in the Core Strategy SIR. The Council has commissioned an updated Water Cycle Study to inform the SIR and SALP and the HRA of these documents but the results of this study were not available at the time of writing. Should the Water Cycle Study reveal any site-specific issues, these will be dealt with in the HRA of the Proposed Submission SALP (Regulation 19 consultation stage).

Air quality

- 4.65 Air pollution arising from new or more congested roads as a result of new development could result in toxic contamination or nutrient enrichment of sensitive habitats.

Approach to HRA of Forest Heath SALP

- 4.66 Likely changes in road traffic and associated air pollution as a result of the Forest Heath SIR and SALP will be a function of the cumulative impact on the road network of all of the proposed growth rather than resulting from any single allocation. Potential effects are therefore more appropriately assessed via HRA of the amount and broad distribution of housing growth set out in the Core Strategy SIR. Should the forthcoming Transport Study reveal any site-specific issues, these will be dealt with in the HRA of the Proposed Submission SALP (Regulation 19 consultation stage).



- 1,500 m buffer around SSSI components of Breckland SPA designated for Stone Curlew
- 1,500 m buffer around, Stone Curlew habitat areas functionally linked to Breckland SPA (1 km square with ≥ 5 nesting attempts 1995-2006)
- 400 m buffer around SSSI components of Breckland SPA designated for Woodlark or Nightjar
- Breckland SPA
- Forest Heath District Boundary

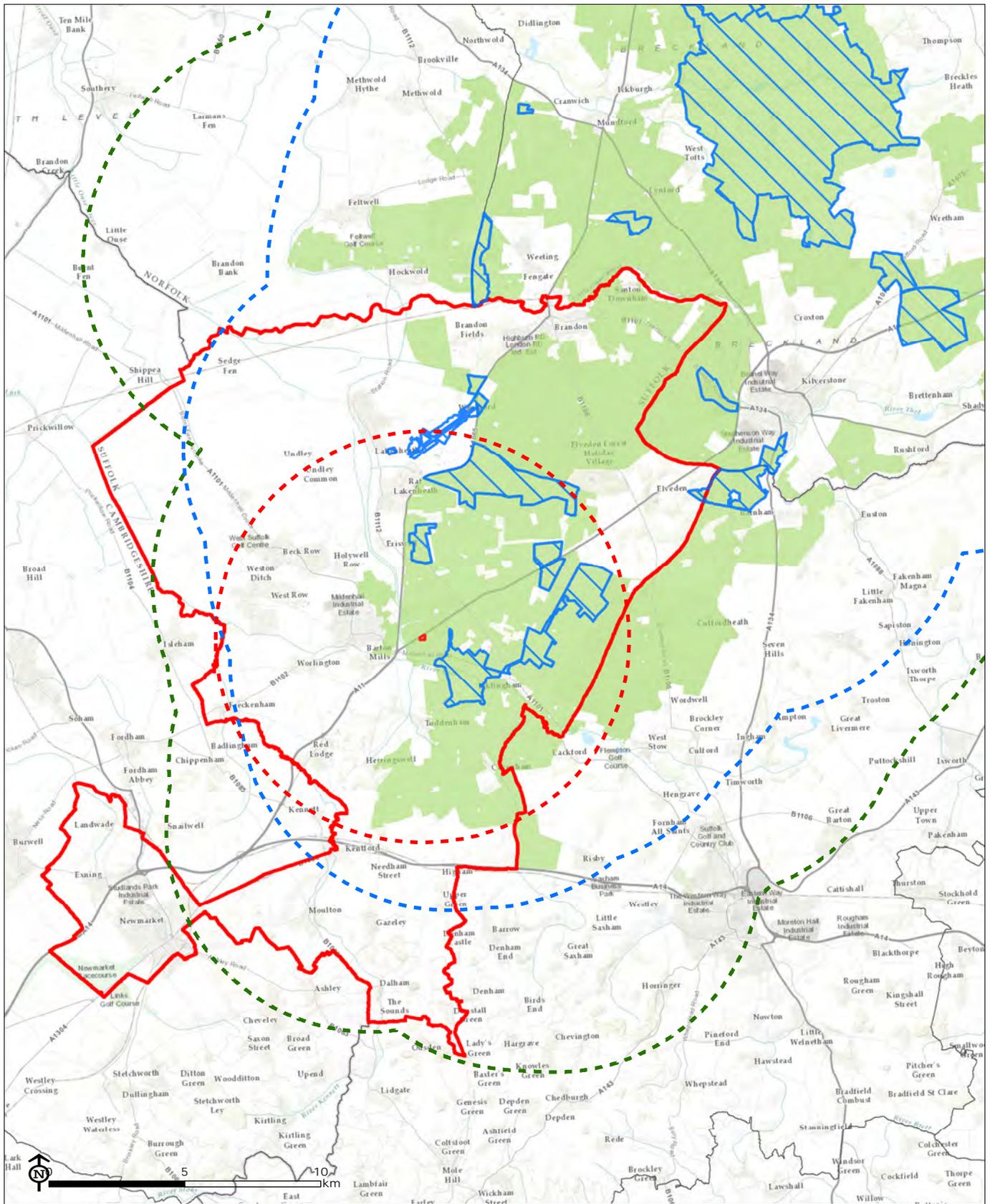
Forest Heath Local Plan
HRA

Figure 4.1
Disturbance and Other
Urban Edge Effects
Buffers
Source: JNCC, Natural England



Map Scale @ A4: 1:200,000

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
CB:Green_C EB:Green_C LUCGLA 6446-01_004_Fig4-1_Disturbance 21/03/2016



Forest Heath Local Plan
HRA

Figure 4.2
Recreation Pressure
Buffers

Source: JNCC, Natural England



- Forest Heath District Boundary
- Breckland SAC
- Rex Graham Reserve SAC
- Breckland SPA
- 7.5 km buffer around Breckland SAC
- 7.5 km buffer around Rex Graham Reserve SAC
- 7.5 km buffer around Breckland SPA

Map Scale @ A4: 1:200,000

5 HRA Screening of preferred options

- 5.1 The SALP makes allocations for housing (including provision for Gypsies and Travellers) and mixed use sites, a primary school, employment use, and retail. The preferred sites are listed in Table 5.1 and are assessed the sections below.

Table 5.1 Summary of preferred site allocations by settlement

Settlement	Housing and mixed use	Other uses
MARKET TOWNS		
Brandon	B1(a), B1(b), B1(c)	B2 - cemetery
Mildenhall	M1(a), M2(a), M2(b)	EM1(a) - employment
Newmarket	N1(a), N1(b), N1(c), N1(d), N1(e), N1(f)	EM1(b) - employment, RE1(a) - retail
KEY SERVICE CENTRES		
Lakenheath	L1(a), L1(b), L2(a), L2(b), L2(c), L2(d)	-
Red Lodge	RL1(a), RL1(b), RL1(c), RL2(a)	EM1(c) - employment
PRIMARY VILLAGES		
Beck Row	BR1(a), BR1(b), BR1(c), BR1(d), BR1(e),	-
Exning	E1(a)	-
Kentford	K1(a), K1(b)	-
West Row	WR1(a)	-
SECONDARY VILLAGES		
Moulton	-	Moulton Primary School

Preferred housing and mixed use sites for allocation in the towns, key service centres and primary villages

- 5.2 In line with the Core Strategy SIR policy options for the distribution of housing, all preferred housing site allocations in the SALP are located in or adjacent to settlements in the top three levels of the settlement hierarchy – Market Towns, Key Service Centres and Primary Villages – which are most likely to provide sustainable locations for growth.

Assessment of potential for likely significant effects

- 5.3 The screening matrix in Appendix 1 sets out the assessment of which types of effect on European sites could potentially result from each of the preferred site allocations in the SALP, applying the methodology and assumptions described in Chapter 4. Where a development site option is not likely to lead to a particular type of likely significant effect on the integrity of any European site,

the relevant cell is shaded green. Where a development site option could potentially result in a likely significant effect ('LSE' in the table) on the integrity of one or more European sites, this is shown in orange. However, the orange text is not the conclusion of the screening stage of the HRA as these potential effects are identified prior to existing mitigation.

- 5.4 Sites for which potential likely significant effects were identified are summarised in Chapter 6. The effects of existing mitigation are then discussed and the HRA screening conclusions presented.

Preferred sites for allocation in the secondary villages

- 5.5 Housing sites are not being allocated in the secondary villages. However, to cater for projected need a 0.75 ha site has been identified for the expansion of Moulton Primary School to the north of the Moulton settlement boundary.

Assessment of potential for likely significant effects

- 5.6 The screening matrix in Appendix 1 sets out the assessment of which types of effect on European sites could potentially result from the preferred site allocation, applying the methodology and assumptions described in Chapter 4.
- 5.7 Likely significant effects were ruled out for this allocation.

Settlement boundary reviews

- 5.8 The SALP proposes changes to the settlement boundaries. These changes serve to include sites proposed for allocation and planning permissions that have been built or granted since the 1995 Local Plan was prepared, or to tighten the settlement boundary to exclude undeveloped areas of forest or open land.

Assessment of potential for likely significant effects

- 5.9 Land within the extended settlement boundaries will be considered for new development, subject to various criteria. In some cases the newly enclosed areas would fall within buffer zones within which the HRA Screening assumes that likely significant effects will occur (for example parts of the newly enclosed areas at Barton Mills would fall within 1,500 m of the areas of Breckland SPA designated for Stone Curlew and within 400 m of the areas designated for Woodlark or Nightjar).
- 5.10 However, where boundaries are extended, these are tightly drawn around the new or committed developments and therefore provide little scope for further infill development within the revised boundaries. In addition, any such development would be subject to project level HRA under the requirements of Core Strategy Policy CS2.
- 5.11 Tightening of settlement boundaries would not give rise to development and in some cases should serve to provide a buffer between the settlement and European sites.
- 5.12 As such, likely significant effects from the settlement boundary reviews were ruled out.

Economy and jobs

- 5.13 Policy EM1 of the SALP proposes three employment allocations, one each at the settlements of Mildenhall, Newmarket and Red Lodge. In addition, Policy EM2 protects a number of existing employment sites for employment purposes. Four mixed use allocations with an employment component are noted in this section of the SALP but the policies proposing them are set out earlier on, alongside the other housing allocation policies.

Assessment of potential for likely significant effects

- 5.14 The screening matrix in Appendix 1 sets out the assessment of which types of effect on European sites could potentially result from the three employment-only site allocations, applying the methodology and assumptions described in Chapter 4. The one site for which potential likely significant effects were identified is described in Chapter 6. The effects of existing mitigation are then discussed and the HRA screening conclusions presented.
- 5.15 Policy EM2 does not actually propose development and is therefore not capable of likely significant effects.
- 5.16 The four mixed use allocations with an employment component are assessed within the housing and mixed use section above.

Retail

- 5.17 Policy RE1 of the SALP proposes a retail allocation at Exning Road, Newmarket. Also in this section of the SALP, Policy MP1 sets out the Council's intention to prepare masterplans to guide future town centre developments in Brandon, Mildenhall and Newmarket.

Assessment of potential for likely significant effects

- 5.18 The screening matrix in Appendix 1 sets out the assessment of which types of effect on European sites could potentially result from the retail site allocation to Newmarket, applying the methodology and assumptions described in Chapter 4. Likely significant effects were ruled out for this allocation.
- 5.19 Policy MP1 does not actually propose development and is therefore not capable of likely significant effects.

Gypsies and Travellers and Travelling Showpeople

- 5.20 Policy G1 of the SALP proposes allocations for Gypsies and Travellers within site M1(a) at Mildenhall and site RL2(a) at Red Lodge.

Assessment of potential for likely significant effects

- 5.21 The screening matrix in Appendix 1 sets out the assessment of which types of effect on European sites could potentially result from the allocations to sites M1(a) and RL2(a), applying the methodology and assumptions described in Chapter 4. The criteria for assessing the provision for Gypsies and Travellers at these two sites are the same as those for assessing the general housing provision at the same sites therefore this provision is assessed within the housing and mixed use section above.

6 Conclusions of HRA Screening and recommendations

- 6.1 This section summarises the potential likely significant effects identified earlier in this report and for each of them, considers whether any existing mitigation or readily adopted recommendations could rule out likely significant effects and avoid the need for the Appropriate Assessment stage of HRA.
- 6.2 As previously described, the HRA Screening of the SALP considers the potential for the following three types of effect:
- Direct loss or physical damage due to construction.
 - Disturbance and other urban edge effects from construction or occupation of buildings.
 - Recreation pressure.
- 6.3 Other relevant types of potential effect are considered in the HRA of the Core Strategy SIR which is being carried out in parallel with the HRA of the SALP and reported on separately.

Consideration of 'in-combination' effects

- 6.4 As described in Chapter 3, other relevant plans and projects have been reviewed for their potential to have significant effects in combination with those of the SALP.
- 6.5 The review of other relevant plans (see Appendix 2) revealed a number of potential effects on the European sites scoped into the HRA of the SALP, for example recreation pressure from the development provided for by Breckland Core Strategy on Breckland SAC/SPA. However, in each case the HRA of that plan was able to reach a conclusion of no likely significant effects after taking into account mitigation. No residual effects which required consideration in combination with those of the SALP were identified. In effect, the iterative operation of the HRA process alongside the plan-making process has ensured that each plan has mitigated any additional pressure it could place on European sites.
- 6.6 Similarly, the review of other relevant projects (see Appendix 2) revealed no residual effects which required consideration in combination with those of the SALP.

Direct loss or physical damage due to construction

- 6.7 As set out in Appendix 1, the potential for likely significant effects from direct loss or physical damage due to construction was ruled out because no site allocation proposed by the SALP overlaps any European site or any Stone Curlew habitat area functionally linked to Breckland SPA (1 km square with ≥ 5 nesting attempts 1995-2006).

HRA Screening conclusion

Likely significant effects in the form of direct loss or physical damage due to construction provided for by the SALP alone, or in combination with other plans and projects, can be ruled out.

Disturbance and other urban edge effects from construction or occupation of buildings

- 6.8 The potential for likely significant effects on Breckland SPA due to disturbance and other urban edge effects from construction or occupation of buildings was identified for a number of site allocations proposed by the SALP. As detailed in Appendix 1, this was due to the allocations being within 1,500 m of components of Breckland SPA designated for Stone Curlew, within 1,500 m of Stone Curlew habitat areas functionally linked to Breckland SPA, or within 400 m of components of Breckland SPA designated for Woodlark or Nightjar.
- 6.9 The potential for likely significant effects was identified for the following housing and mixed use allocations plus an allocation for a cemetery at site B2:
- Brandon: B1(a), B1(b), B1(c), B2.
 - Lakenheath: L2(b).
 - Red Lodge: RL1(b), RL1(c), RL2(a).
 - Kentford: K1(a), K1(b).
- 6.10 The potential for likely significant effects was also identified for the following employment allocation:
- Mildenhall: EM1(a).

Existing mitigation which could rule out likely significant effects

- 6.11 Policy CS2 of the Core Strategy requires project level HRA for development proposals within the Breckland SPA HRA constraint zones that correspond to the distances used by this HRA to assess the potential for disturbance and other urban edge effects. It further states that development likely to lead to an adverse effect on integrity will not be allowed. However, it is deemed inappropriate to rely on this policy in coming to an HRA Screening conclusion on the SALP as the outcome of the project level HRAs required by CS2 is not known at this stage for the site options listed. No other existing mitigation is judged capable of avoiding the potential effects identified.

HRA Screening conclusion

Likely significant effects on Breckland SPA in the form of disturbance and other urban edge effects from construction or occupation of buildings provided for by the SALP cannot be ruled out.

Recommendations

- 6.12 HRA of the SALP (i.e. at the Local Plan level) has been unable to rule out likely significant effects in relation to the site allocations at paragraphs 6.9 and 6.10 above. All of these sites are located within the constraint zones for Breckland SPA identified in the Forest Heath Core Strategy and it is therefore recommended that they be subject to project level HRA in line with the requirements of Core Strategy Policy CS2. This should ensure that the SALP will not have an adverse effect on the integrity of any European site.

It should be noted that since the site allocations within the SALP Preferred Options document are based on the planning situation as at 1 April 2015, some of sites included in the SALP Preferred Options have since received planning consent or are subject to a resolution to approve. In line with the requirements of Core Strategy Policy CS2, any such approved projects within the Breckland SPA constraint zones should already have been subject to project level HRA.

6.13 Table 6.1 summarises information provided by the Council as at 11 February 2016 on the planning status and project level HRA status of the site allocations at paragraphs 6.9 and 6.10 above.

Table 6.1 Status at 11 February 2016 of sites for which HRA Screening of the SALP was unable to rule out likely significant disturbance/urban edge effects on Breckland SPA

Site ref.	Planning application ref.	Site address	Planning and project level HRA status
BRANDON			
B1(a)	DC/14/2219/FUL	Fengate Drive, High Street	No likely significant effects (LSE) for current application for 64 dwellings with mitigation. Planning permission approved subject to legal agreement
B1(b)	No current application / permission		
B1(c)	No current application / permission		
B2	F/2012/0449/COU and DC/15/1198/FUL	Land off Manor Road	No LSE for planning permission (04.10.2012) for change of use from agricultural land to new municipal cemetery. Current application has not been determined but likely to be granted permission. No HRA.
LAKENHEATH			
L2(b)	C/14/2096/HYB	Land north of Station Road, Station Road	Current application is for access, outline for 375 dwellings and open space, land for ecological mitigation and new primary school. Project level HRA is ongoing.
RED LODGE			
RL1(b)	No current application / permission		
RL1(c)	F/2013/0257/HYB	Land East of Red Lodge; Land South of St Christopher's Primary School (part of Phase 4a Kings Warren); Land South of Village Centre (part of Phase 4a Kings Warren) & Land South East of Herringswell (Parishes Red Lodge & Herringswell)	No LSE for current application for up to 374 (268 in outline and 106 in Full) dwellings, public open space, access, landscaping, ancillary works on land East of Red Lodge.
RL2(a)	No current application / permission		
KENTFORD			
K1(a)	F/2013/0061/HYB	Kentford Lodge, Herringswell Road	Consent granted for 60 dwellings and garages, access, amenity space and outline for B1 employment. HRA found No LSE
K1(b)	DC/14/2203/OUT	Land adj. Cock Inn, Bury Road	Outline permission for 34 dwellings subject to legal agreement. Project level HRA found no LSE
MILDENHALL			
EM1(a)	No current application / permission		

Recreation pressure

- 6.14 The potential for likely significant effects on Breckland SAC, Breckland SPA or Rex Graham Reserve SAC due to recreation pressure was identified for a number of site allocations proposed by the SALP. As detailed in Appendix 1, this was due to the allocations being within 7.5 km of one or more of these European sites.

- 6.15 Prior to consideration of mitigation, the potential for likely significant effects was identified for the following housing and mixed use allocations:
- Brandon: B1(a), B1(b), B1(c).
 - Mildenhall: M1(a), M2(a), M2(b).
 - Newmarket: N1(c).
 - Lakenheath: L1(a), L1(b), L2(a), L2(b), L2(c), L2(d).
 - Red Lodge: RL1(a), RL1(b), RL1(c), RL2(a).
 - Beck Row: BR1(a), BR1(b), BR1(c), BR1(d), BR1(e).
 - Kentford: K1(a), K1(b).
 - West Row: WR1(a).

Existing mitigation which could rule out likely significant effects

- 6.16 Adopted local planning policies provide a general commitment to provide new or enhanced open space alongside new development and to manage and monitor recreation pressure as follows:

Core Strategy policies (Forest Heath District Council, 2010)

- 6.17 Policy CS2: Natural Environment - The policy promotes green infrastructure enhancement and/or provision on all new developments.
- 6.18 Policy CS13: Infrastructure and Developer Contributions - This requires sufficient capacity in existing local infrastructure, including for open space, sport and recreation, before land is released for development. It also provides for developer contributions to improve infrastructure to the required standard before development is occupied and to arrange for its subsequent maintenance. Guidance on how the Council will implement the open space requirements within this policy is provided in an SPD (Forest Heath District Council, 2011) which includes the approach to determining when developer contributions can be used to provide off site open space.

Development management policies (Forest Heath District and St Edmundsbury Borough Councils, 2015)

- 6.19 Policy DM12: Mitigation, Enhancement, Management and Monitoring of Biodiversity states that:

"All new development (excluding minor household applications) shown to contribute to recreational disturbance and visitor pressure within the Breckland SPA and SAC will be required to make appropriate contributions through S106 agreements towards management projects and/or monitoring of visitor pressure and urban effects on key biodiversity sites."

- 6.20 Policy DM42: Open Space, Sport and Recreation Facilities protects against the loss of existing open space as a result of development and further states that *"where necessary to the acceptability of the development, the local planning authority will require developers of new housing, office, retail and other commercial and mixed development to provide open space...or to provide land and a financial contribution towards the cost and maintenance of existing or new facilities, as appropriate."*
- 6.21 Policy DM44: Rights of Way protects against the loss of existing or proposed rights of way and enables improvements to rights of way to be sought *"in association with new development to enable new or improved links to be created within the settlement, between settlements and/or providing access to the countryside or green infrastructure sites as appropriate"*.

Policies within the Site Allocations Local Plan itself

- 6.22 It is also noted that the SALP policies which allocate development sites also require that *"...open space must be provided on all sites to address the site requirements and location."*
- 6.23 Site allocation policies for the following settlements include wording to secure measures for influencing recreation in the surrounding area to avoid a damaging increase in visitors to Breckland SPA:
- Mildenhall – Policies M1 and M2.

- Newmarket – Policy N1.
- Lakenheath - Policies L1 and L2.
- Red Lodge - Policies RL1 and RL2.
- West Row - Policy WR1.

Accessible Natural Greenspace Study

- 6.24 In addition to these general policy commitments to provision and enhancement of open space and rights of way, the Council has carried out an Accessible Natural Greenspace Study (Forest Heath District Council, 2016) to provide evidence on appropriate accessible open space that will support the planned growth in the District. The study reviews accessible natural greenspace provision at the District's main settlements, explores the opportunities for new green space and access routes that could be delivered to support the growth agenda and outlines a recreation pressure mitigation strategy for each main settlement.
- 6.25 The policy mechanisms described above should help to mitigate the potential for the housing allocations proposed by the SALP to increase recreation pressure on Breckland SAC, Breckland SPA or Rex Graham Reserve SAC. It is judged, however, that these need to be more closely linked to the findings of the Accessible Natural Greenspace Study (Forest Heath District Council, 2016) to provide sufficient certainty that significant effects can be avoided.

HRA Screening conclusion

Likely significant recreation pressure effects from the SALP on Breckland SAC, Breckland SPA and Rex Graham Reserve SAC cannot be ruled out.

Recommendations

- 6.26 To further strengthen the mitigation of recreation pressure provided by SALP policies and to ensure that the findings of the Council's Accessible Natural Greenspace Study are reflected when delivering new or enhanced open space it is recommended that:
- The outline recreation pressure mitigation strategy described in the Accessible Natural Greenspace Study (Forest Heath District Council, 2016) be agreed with Natural England and then published as an evidence document supporting the Local Plan.
 - Open space requirements within the development allocation policies for each of the District's main settlements make appropriate reference to the corresponding mitigation measures for that settlement set out in the recreation pressure mitigation strategy.
- 6.27 If these recommendations are adopted, this should ensure that the SALP will not have an adverse effect on the integrity of any European site.

Consultation and next steps

- 6.28 In line with the requirements of the Habitats Regulations, representations are being sought from Natural England on the findings of the HRA Screening of the SALP set out in this report. The Council will have regard to representations received in carrying out further HRA work at the next stage of Plan-making (Proposed Submission stage). Feedback is also being sought from the Environment Agency, the RSPB and Suffolk Wildlife Trust as they are in a strong position to help identify relevant evidence to inform the HRA. The Council has also chosen to publish the HRA Screening report alongside the Preferred Options consultation document to provide the general public with a reference point when commenting on the Plan.
- 6.29 The Preferred Options SALP will be followed by a Proposed Submission draft which is currently expected to be published for Regulation 19 consultation later in 2016. The Proposed Submission draft Local Plan document will be accompanied by an amended HRA Screening Report which will screen the proposals within the Plan and conclude whether they are likely to have a significant effect on any European site, either alone or in combination with other plans and projects. The HRA Screening at this stage will take account of any new evidence which could not readily be incorporated at the Preferred Options stage. If likely significant effects still cannot be ruled out

then it will be necessary to proceed to an Appropriate Assessment to determine whether the Local Plan proposals will have an adverse effect on the integrity of any European site and to recommend appropriate avoidance and mitigation measures. The Appropriate Assessment should be undertaken before the Proposed Submission SALP is published.

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Appendix 1

Screening matrix for preferred sites

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
	<p>Unable to rule out likely significant effects (LSE) if site allocation:</p> <ul style="list-style-type: none"> - overlaps any European site, or - overlaps Stone Curlew habitat areas functionally linked to Breckland SPA (1 km square with ≥ 5 nesting attempts 1995-2006) 	<p>Unable to rule out LSE on Breckland SPA if site allocation:</p> <ul style="list-style-type: none"> - overlaps, or is within 1,500 m of, components of Breckland SPA designated for Stone Curlew - overlaps, or is within 1,500 m of, Stone Curlew habitat areas functionally linked to Breckland SPA (≥ 5 nesting attempts 1995-2006) - overlaps, or is within 400 m of, components of Breckland SPA designated for Woodlark or Nightjar. 	<p><i>Designated species mortality or disturbance:</i> Unable to rule out LSE on Breckland SPA for any site allocations with a housing component within 7.5 km of the boundary of Breckland SPA.</p> <p><i>Designated habitats loss or damage:</i> Unable to rule out LSE on Breckland SAC or Rex Graham Reserve SAC for any site allocations with a housing component within 7.5 km of the European site boundaries.</p>
Preferred housing and mixed use sites for allocation in the towns (except site B2 which is allocated for a cemetery)			
BRANDON			
B1(a) Land at Fengate Drove (formerly B/01) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
B1(b) Land at Warren Close Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
B1(c) Land off Gas House Drove Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
B2 Cemetery Cemetery	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	LSE ruled out Allocation has no housing component.
MILDENHALL			

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
M1(a) Land West of Mildenhall (formerly M/19, M/21 & M/40) Housing, employment, schools, leisure facilities and public services, provision for Gypsies & Travellers	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
M2(a) Land at 54 Kingsway (formerly M/28) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
M2(b) District Council Offices, College Heath Road (formerly M/46) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
NEWMARKET			
N1(a) Brickfield Stud, Exning Road (formerly N/09) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Site is not within 7.5km of Breckland SAC, Breckland SPA or Rex Graham Reserve SAC.
N1(b) Land at Black Bear Lane and Rowley Drive junction (formerly N/11) Mixed use	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Site is not within 7.5km of Breckland SAC, Breckland SPA or Rex Graham Reserve SAC.

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
N1(c) Hatchfield Farm (formerly N/14) Housing, employment, school	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SPA (but more than 7.5 km from Breckland SAC and Rex Graham Reserve SAC).
Site N1(d) Grassland off Leaders Way and Sefton Way (formerly N/20) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Site is not within 7.5km of Breckland SAC, Breckland SPA or Rex Graham Reserve SAC.
Site N1(e) Former St Felix Middle School Site (formerly N/32) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Site is not within 7.5km of Breckland SAC, Breckland SPA or Rex Graham Reserve SAC.
Site N1(f) Land at Phillips Close (formerly N/33) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Site is not within 7.5km of Breckland SAC, Breckland SPA or Rex Graham Reserve SAC.
Preferred housing and mixed use sites for allocation in the key service centres			
LAKENHEATH			
Site L1(a) Matthews Nursery (formerly L/29) Housing, retail	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
Site L1(b) Land west of Eriswell Road (formerly L/26) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site L2(a) Rabbit Hill Covert, Station Road (formerly L/13) Housing, school	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
Site L2(b) Land at North Lakenheath (formerly L/36) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within 1,500 m of Stone Curlew habitat areas functionally linked to Breckland SPA	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
Site L2(c) Land off Briscoe Way (formerly L/35) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
Site L2(d) Land north of Burrow Drive and Briscoe Way (formerly L/12 & L/39) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
RED LODGE			

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
Site RL1(a) A Land off Turnpike Road and Coopers Yard Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site RL1(b) Land East of Red Lodge: north (formerly RL/06b) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site RL1(c) Land East of Red Lodge: south (formerly RL/06a) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site RL2(a) Land north of Acorn Way (formerly part RL/15, RL/16, RL/20 and RL/21) Housing, employment, school, provision for Gypsies & Travellers	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Preferred housing and mixed use sites for allocation in the primary villages			
BECK ROW			
Site BR1(a) Lamble Close (formerly BR/01) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
Site BR1(b) Land adjacent to Smoke House Inn, Skeltons Drove (formerly BR/03) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site BR1(c) Land adjacent to and south of the caravan park, Aspal Lane (formerly BR/10) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site BR1(d) Land East of Aspal Lane (formerly BR/26) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Site BR1(e) Land adjacent to Beck Lodge Farm (formerly BR/27) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
EXNING			
Site E1(a) Land south of Burwell Road Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Site is not within 7.5km of Breckland SAC, Breckland SPA or Rex Graham Reserve SAC.
KENTFORD			

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
Site K1(a) Land west of Herringswell Road (formerly K/10) Housing, B1 office uses	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
Site K1(b) Land to the rear of The Kentford (formerly K/16) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew	Potential LSE Site is within 7.5 km of Breckland SAC and Breckland SPA.
WEST ROW			
Site WR1(a) Land east of Beeches Road (formerly part of WR/07) Housing	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	Potential LSE Site is within 7.5 km of Breckland SAC, Breckland SPA and Rex Graham Reserve SAC.
Preferred site for allocation in the secondary villages			
Moulton Primary School School	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Allocation has no housing component.
Preferred employment allocations			
EM1(a) Mildenhall Academy and Dome Leisure Centre site, Mildenhall (formerly M44) Employment B1, B2 use classes	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Site is within the 1,500 m of components of Breckland SPA designated for Stone Curlew and within 400 m of components designated for Woodlark or Nightjar	LSE ruled out Allocation has no housing component.

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
EM1(b) St Leger, Newmarket Employment B8 use class	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Allocation has no housing component.
EM1(c) Red Lodge approach, Red Lodge (formerly RL13) Employment B1, B2 use classes	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Allocation has no housing component.
Preferred retail allocation			
RE1(a) Former Gas Works, Exning Road, Newmarket (formerly N/03) Convenience food store	LSE ruled out Site does not overlap any European site or Stone Curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Site is not within 1,500 m of components of Breckland SPA designated for Stone Curlew, nor within 1,500 m of functionally linked Stone Curlew nesting areas, nor within 400 m of components of Breckland SPA designated for Woodlark or Nightjar	LSE ruled out Allocation has no housing component.

Appendix 2

Review of other relevant plans and projects

County or district level plans providing for development

Breckland Core Strategy (adopted 2009)

Plan Owner/ Competent Authority: Breckland Council

Related HRA/AA: Habitat Regulation Assessment: Habitats Regulation Assessment: Breckland Council Submission Core Strategy and Development Control Policies Document (November 2008) and Habitat Regulation Assessment Breckland Council Site Specific Policies and Proposals Document Preferred options (May 2010)

Summary of Plan proposals:

Housing provision: The Core Strategy makes provision for at least 19,100 new dwellings within the period 2001-2026 (Policy CP 1).

Employment land provision: The Core Strategy (Policy CP 3) supports the delivery of at least 6,000 jobs in the District to 2021 as identified for Breckland in the Regional Spatial Strategy

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

Following on from the initial screening assessment the following potential adverse effects were identified and addressed within the appropriate assessment:

- Direct effects of built development – the HRA recommended that the Core Strategy was amended to ensure that allocations and policies do not promote housing within the 1500m Stone Curlew avoidance zone and housing within that zone will not normally be supported. In exceptional circumstances, such as where existing development completely masks the new proposal from Breckland SPA/supporting habitat, project level HRA must be able to demonstrate that adverse effects upon the Breckland SPA Stone Curlew interest feature will be prevented.
- Indirect disturbance to Annex 1 birds - Reduction in density of Breckland SPA Annex I bird species (Stone Curlew, Nightjar, Woodlark) near to new housing. The HRA recommended that amendments to the Core Strategy were made to include policy wording or supporting text to explain the council is committed to ensuring sustainable levels of recreation in and around the Breckland SPA, and work with partners including Natural England, RSPB and Forestry Commission to develop a strategy that sets out an access management and monitoring programme that provides measures to prevent increasing visitor pressure, and suitable mitigation (should monitoring indicate that the Annex I species are failing to meet conservation objectives due to recreational pressure).
- Increased levels of recreational activity resulting in increased disturbance to Breckland SPA Annex I bird species (Stone Curlew, Nightjar, Woodlark).
- Increased levels of people on and around the heaths, resulting in an increase in urban effects such as increased fire risk, fly-tipping, trampling etc. The HRA recommended amendments to the Core Strategy ensuring the council commits to developing a framework of developer contributions, secured by legal agreement, for any new development where the heaths at Thetford (Barnham Cross Common, Thetford Heath, Thetford Golf Club and Marsh), East Wretham or Brettenham are likely to be used as local greenspace by the new residents of employees. Contributions would be used of implementation of an urban heaths management plan (an individual management plan will be produced for Barnham Cross Common), with the primary purpose of achieving SPA/SAC conservation objectives.
- Increased levels of recreation to the Norfolk Coast (including the Wash), potentially resulting in disturbance to interest features to interest features and other recreational impacts. The HRA suggested supporting text of the Core Strategy should recognise that coastal competent authorities promoting visitor access will need to consider the necessary measures required to meet the requirement of the Habitats Regulations and protect the integrity of the coastal European sites, and the possibility that additional housing within the Breckland District may contribute to that visitor pressure, in-combination with new housing in other districts. The text should therefore commit to working in partnership with neighbouring authorities and other relevant partners to prevent adverse effects when monitoring indicates it could occur.
- Increased water abstraction requirements to meet the additional water supply needs. The HRA suggested that amendments to the Core Strategy should include the requirement for all new developments to install infiltration and attenuation measures to dispose of surface water in accordance with recommended SUDS and any inadequate waste water infrastructure serving new development should be upgraded as required and operational in time to meet the demands of development. Further action was also recommended in order to seek confirmation from the Environment Agency and/or AWS that existing capacity and available headroom in existing sewage systems is adequate to absorb additional discharges from new development, or that upgraded infrastructure is planned and fully committed to within the Core Strategy period.
- Water quality and waste water discharge – The HRA recommended amendments to the housing

Breckland Core Strategy (adopted 2009)

figures within the Core Strategy so that they are taken forward in three categories i.e. those immediately provided for in the plan, those that can only be taken forward with the committed works in place and operational in time to meet the demands of development, and those that cannot be taken forward prior to plan review and the revisit of the HRA. Further action to seek the necessary information from the Environment and/or AWS and the consultants commissioned to produce the Breckland Water Cycle Study to enable housing currently promoted to be taken forward under the three categories.

- Increased levels of traffic generated air pollution affecting sensitive features of SAC habitats. The HRA suggested that the Core Strategy was amended to commit to the prevention of road infrastructure improvements or new roads within 200m of the SAC.
- Potential reduction in the density of Habitats Directive Annex I bird species associated with the SPA, due to avoidance of areas close to new roads. The amendments to the Core Strategy suggested in the HRA include the commitment to the prevention of road infrastructure improvements or new roads within 1500m of Breckland SPA/supporting habitat.

In conclusion, the findings of the appropriate assessment and consideration of potential mitigation measures, the direct effects of buildings and road development, the indirect disturbance to Annex 1 birds, the effects of urbanisation and recreational pressure on the north Norfolk Coast, can all be mitigated for with the application of the avoidance/mitigation measures proposed and no further assessment is required. Also, Breckland District Council confirmed road infrastructure requirements proposed in the Core Strategy for Thetford would be focussed on the A11 only as the 1500m buffer zone would prevent any options for road improvements south and east of the town. Due to the effects of air pollution, road improvements within 200m of the Breckland SAC will also be avoided. In addition, it was concluded that further clarification and housing categorisation is required to determine if the impact of water demand, water treatment and discharge requirements, and ability of sewer systems to withstand flooding would not result in adverse effects upon European sites. It was noted that Breckland District Council would obtain necessary information from the Environment Agency and/or AWS and the consultants commissioned to produce the Breckland Water Cycle Study in order to take forward proposed measures. Any potential adverse effects upon the integrity of European sites have either been avoided or mitigated for.

Cambridgeshire and Peterborough Minerals and Waste Core Strategy (adopted 2011)

Plan Owner/ Competent Authority: Cambridgeshire County Council and Peterborough City Council

Related HRA/AA: Cambridgeshire and Peterborough Minerals & Waste LDF Habitats regulation Assessment: Full Assessment of the Core Strategy DPD Submission Plan.

Summary of Plan proposals:

The following strategic Objectives were identified for sustainable minerals development;

- to contribute to the national, regional and local mineral supply by maintaining an adequate and steady supply of minerals and to meet local requirements at a rate sufficient to enable the delivery of the planned growth in Cambridgeshire and Peterborough
- to provide for the creation and servicing of new sustainable communities and infrastructure in the plan area
- to make allocations for new sand and gravel extraction in areas outside of the Ouse and Nene river valleys to safeguard the economic mineral resource of Cambridgeshire and Peterborough through the designation of Mineral Safeguarding Areas and Mineral Consultation Areas Vision
- to minimise the use of virgin mineral by encouraging the efficient use of materials
- to contribute to meeting strategic objectives relating to sustainable flood risk management for the Cranbrook and Counter Drain catchment, and enhancement habitat creation adjacent to the Ouse Washes
- to maximise biodiversity and community benefits including additional green infrastructure
- to encourage operational practices and restoration proposals which minimise or help to address climate change
- to identify planning policy criteria by which to assess mineral proposals, ensure effective planning control and the appropriate location of mineral extraction
- to safeguard and enhance the distinct landscapes of Cambridgeshire and Peterborough including the wet fens, river valleys, chalk and limestone uplands
- to protect and enhance the biodiversity and historic environment, including designated sites, of Cambridgeshire and Peterborough

Cambridgeshire and Peterborough Minerals and Waste Core Strategy (adopted 2011)

- to protect the ground and surface water resources of Cambridgeshire and Peterborough
- to safeguard the residential amenity of new and existing communities in Cambridgeshire and Peterborough
- to ensure that potential emissions are minimised as part of minerals development
- to ensure high quality in terms of design and operation of mineral operations in Cambridgeshire and Peterborough
- to encourage and safeguard sustainable transport of minerals e.g. by rail and water
- to ensure the sustainable use of soils in Cambridgeshire and Peterborough

The following strategic Objectives were identified for sustainable waste development;

- to ensure suitable provision is made through site specific allocations for sustainable waste facilities to manage the waste of Cambridgeshire and Peterborough, London or adjoining authorities
- to develop a network of waste management facilities which will be located having regard to climate change, and key factors including the location and amount of waste arising, and minimising the of movement of waste
- to contribute to ensuring self-sufficiency of the wider area in the management of waste, and to seek self-sufficiency within the Plan area where practical and in accordance with the proximate management of waste
- to ensure that all major new developments undertake sustainable waste management practices
- to use construction and demolition waste in the creation of strategic new enhancement habitat for the internationally important Ouse Washes
- to identify planning policy criteria by which to assess waste development proposals
- to encourage waste management practices which do not incur unacceptable adverse impact on the local and global environment or endanger human health in Cambridgeshire and Peterborough
- to encourage waste management practices which minimise, counter (through off-set arrangements), or eliminate contributions to climate change, including the minimisation of greenhouse gases
- to ensure that waste management sites are resilient to the impacts of climate change at the local level
- to ensure high quality of design and operation of waste management facilities in Cambridgeshire and Peterborough
- to encourage sustainable transport of waste by alternative means e.g. rail and water
- to protect the ground and surface water resources of Cambridgeshire and Peterborough
- to safeguard and enhance the distinct landscapes of Cambridgeshire and Peterborough including the wet fens, river valleys, chalk and limestone uplands
- to protect and enhance the biodiversity and historic environment, including designated sites, of Cambridgeshire and Peterborough
- to safeguard the residential amenity of new and existing communities in Cambridgeshire and Peterborough
- to allow scope for new technology and innovation in waste management in the Plan area e.g. exemplar projects in handling and processing of waste
- to determine waste planning applications in the light of the principles for sustainable waste management and the waste hierarchy to ensure the sustainable use of soils
- to safeguard waste management sites from incompatible development that may prejudice the waste use, through the designation of Waste Consultation Areas

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The assessment of each of the minerals and waste policies found that for all proposed policies in the Core Strategy DPD submission Plan no adverse impacts were identified on European or Ramsar sites that cannot be avoided by legally enforceable measures. The assessment of the minerals and waste strategic allocations in the core strategy DPD submission Plan (Block Fen/ Longwood Fen and Addenbrookes) alone and in combination found that no adverse impacts were identified on European or Ramsar sites that cannot legally be avoided by legally enforceable measures.

Cambridgeshire Local Transport Plan 2011-2031 (adopted 2015)

Plan Owner/ Competent Authority: Cambridgeshire County Council

Related HRA/AA: HRA Stage 1 – Screening, October 2014

Summary of Plan proposals:

The key objectives identified within the Local transport Plan were

- Enabling people to thrive, achieve their potential and improve their quality of life.
- Supporting and protecting vulnerable people.
- Managing and delivering the growth and development of sustainable communities.
- Promoting improved skill levels and economic prosperity across the county, helping people into jobs and encouraging enterprise.
- Meeting the challenges of climate change and enhancing the natural environment.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

- The international sites are not likely to be affected by changes to air pollution due to their distance from the schemes or the nature of the schemes
- Significant effects from changes to hydrology are unlikely because the international sites are either not hydrologically linked to any of the proposed schemes, because they are sufficient distance from any of the schemes or because of the small scale nature of the schemes
- The schemes and strategies within the Plan will not lead to habitat loss within any of the international sites
- The schemes and strategies within the Plan will not lead to habitat loss outside of any of the international sites that could be considered of functional importance to those sites and associated qualifying populations of animals
- Significant effects from disturbance and recreation are not likely at any of the international sites either because of the distance of the sites from the schemes or, where sites lie closer to schemes, recreational effects and other types of disturbance are not listed as vulnerabilities of the site.
- To conclude, the findings of the HRA Screening are that none of the schemes, interventions or strategies contained within the LTP3 will result in likely significant effects on any of the international sites included within this assessment.

St Edmundsbury Core Strategy (adopted 2010)

Plan Owner/ Competent Authority: St Edmundsbury Borough Council

Related HRA/AA: St Edmundsbury Core Strategy Habitats Regulations Assessment: Screening September 2010

Summary of Plan proposals:

Housing provision: The Core Strategy makes provision for at least 15,631 new homes within the plan period between 2008 and 2031 (Policy CS1).

Employment land provision: Policy CS9 of the Core Strategy provides for development to support at least 13,000 additional jobs in the borough by 2026.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The HRA concluded that four of the fifteen policies in the Core Strategy would lead to development in the long term; Policies CS1 - St Edmundsbury Spatial Strategy, CS9 - Employment and the Local Economy, CS11 - Bury St Edmunds Strategic Growth and CS12 - Haverhill Strategic Growth.

A potential for significant effects on Breckland SAC/SPA was identified through increased levels of recreational activity, possibly leading to higher levels of disturbance to Breckland SPA Annex I bird species (stone curlew, nightjar and woodlark) and possible degradation of Annex I habitats within Breckland SAC (e.g. through increased levels of trampling and littering).

It identified that the Plan seeks to protect international sites through Policy CS2 (also recognised in Policy CS1). Policy CS2 puts in place a 1.5 km buffer zone around Breckland SPA for Stone Curlew and a 400 m buffer zone for Woodlark and Nightjar. It also puts in place a 1.5 km buffer zone around areas outside of the SPA which have supported five or more nesting attempts by Stone Curlew since 1995 and as such act

St Edmundsbury Core Strategy (adopted 2010)

as supporting Stone Curlew habitat. In these areas development may only take place for the re-use of existing buildings and for development which will be completely masked from the SPA by existing development or provided it is demonstrated by an Appropriate Assessment that the development will not adversely affect the integrity of the SPA.

The HRA also made reference to the lower tier Development Plan Documents (DPDs) that will arise from Policies CS1, CS9, CS11 and CS12 including Bury St Edmunds Area Action Plan (AAP), Haverhill AAP and Site Allocations DPDs (including Rural Allocation Sites and the Gypsy and Travellers sites) which will include specific details about the locations of future growth, including the exact location of allocations sites and their proposed land uses. The Plan commits to an HRA being carried out at the development control stage/lower tier development plan stage for any development arising out of these policies. If it cannot be proven that there will be no significant impacts on the international sites and/or it is not possible to mitigate/compensate for these impacts the development will not be included in the lower tier plans and/or be granted planning permission.

The assessment concluded that there will be no likely significant effects due to the proposals for development outlined in Policies CS1, CS9, CS11 and CS12 or from any of the other policies included in the Plan. It also concluded that there is no potential for in combination effects as no other current plans or projects that are likely to lead to significant effects on the Breckland SAC/SPA or the Waveney and Little Ouse Valley Fens SAC have been identified, or where impacts have been identified they have been adequately mitigated.

St Edmundsbury Vision 2031 Local Plan Documents (adopted 2014)

Plan Owner/ Competent Authority: St Edmundsbury Borough Council

Related HRA/AA: St Edmundsbury Vision 2031 HRA Screening documents

Summary of Plan proposals:

Site allocation documents for Bury St Edmunds, Haverhill, and the Rural Area.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

Bury St Edmunds: HRA Screening concludes that St Edmundsbury's Core Strategy underwent Appropriate Assessment, and was found to be sound following an Examination in Public. The Bury St Edmunds Vision 2031 Local Plan Document adds further detail, but does not increase the amount of development planned for the Bury St Edmunds area. The cumulative effect of all development has already been assessed through the Core Strategy process and does not require further assessment.

Haverhill: HRA Screening concluded that each individual site allocation or policy within the St Edmundsbury Borough Council Haverhill Vision 2031 Local Plan Document is not likely to have a significant effect on any European site, and that no individual site appropriate assessment is necessary. The scale of the allocations, and their location in relation to European sites, means that no in combination effects of individual allocations or policies occur. Concluded that the Haverhill Vision 2031 Local Plan Document would have no likely significant effect on any European site.

Rural Area: HRA Screening concludes that St Edmundsbury's Core Strategy underwent Appropriate Assessment, and was found to be sound following an Examination in Public. The Rural Vision 2031 Local Plan Document adds further detail, but generally does not increase the amount of development planned for the Rural area. The cumulative effect of all development in the Core Strategy has already been assessed and does not require further assessment. Policy RV6 'Ingham' adds a new development of leisure and recreational facilities not described in the Core Strategy. This new development on balance is likely to reduce visitor pressure on European sites and does not add an in combination negative effect upon any European site.

East Cambridgeshire Local Plan (adopted 2015)

Plan Owner/ Competent Authority: East Cambridgeshire District Council

Related HRA/AA: Habitats Directive Assessment Screening Document - updated (July 2013)

Summary of Plan proposals:

Housing provision: The Local Plan makes provision for an agreed target of 11,500 dwellings for East Cambridgeshire which represents an annual rate of 575 dwellings per year during the period 2011-2031.

East Cambridgeshire Local Plan (adopted 2015)

Employment land provision: The Local Plan aims to maximise opportunities for jobs growth in the district, with the aim of achieving a minimum of 9,200 additional jobs in East Cambridgeshire. Part of this strategy will involve making provision for a deliverable supply of at least 179 ha of employment land for B1/B2/B8 uses, and providing for home working.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The following generic vulnerabilities categories were used to assess the likely effects of the Local Plan:

- Physical Habitat Loss – land take by developments
- Physical Damage – from on-site or off-site activities e.g. change in land management, natural erosion, water abstraction, recreational pressure
- Disturbance – e.g. noise from recreation, industry or transport
- Water Quantity – changes in water quantity due to abstraction
- Contamination / Pollution – water pollution, air pollution, water quality

It was determined that Devil's Dyke is vulnerable to disturbance and contamination/pollution; both Chippenham Fen and Wicken fen are vulnerable to physical habitat loss, physical damage and water quantity; and Ouse Washes and Breckland are both vulnerable to physical habitat loss, physical damage, disturbance and water quantity.

It was concluded that the Local Plan, alone or in combination with other plans and projects, is unlikely to have any significant effects on any of the European sites.

King's Lynn and West Norfolk Core Strategy (adopted 2011)

Plan Owner/ Competent Authority: Borough Council of King's Lynn and West Norfolk

Related HRA/AA: King's Lynn and West Norfolk Borough Council's Core Strategy Regulation 25: Local Development Framework Habitats Regulations (Appropriate Assessment) Report - updated (November 2010)

Summary of Plan proposals:

Housing provision: Policy CS01 of the Core Strategy states the plan will identify sufficient land for a minimum of 16,500 new dwellings across the Borough over the period 2001 to 2026: a minimum of 7,510 new dwellings through the regeneration of brownfield land and urban expansion in King's Lynn, at least 2,710 new homes with new allocations of at least 390 house in Downham Market, at least 580 new homes with new allocations of at least 220 dwellings in Hunstanton, considers the provision of at least 550 new dwellings to the east of the town in the area adjacent to Wisbech and makes provision for at least 2,880 new homes within or adjacent to selected Key Rural Service Centres (to be defined in the Site Specific Allocations DPD) in rural and coastal areas.

Employment land provision: Policy CS10 of the Core Strategy aims to facilitate job growth in the local economy, delivering the RSS target of 5,000 additional jobs by 2021 through the provision of employment land as well as policies for tourism, leisure, retail and the rural economy.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

- Breckland SPA

Possible Mechanism(s):

- Direct Impacts – Proximity And Disturbance.

Affected Policies: CS01 Housing And Jobs, CS02 The Settlement Hierarchy, CS06 Development in Rural Areas and CS09 Housing Distribution

The HRA suggested the policy is amended to policy take into account disturbance/displacement to Stone Curlews around Breckland SPA, in line with the approach taken by neighbouring local authorities.

New built development will be restricted within 1500m of the Breckland SPA. Development will be restricted to the re-use of existing buildings or where existing development completely masks the new proposal from Breckland SPA. Beyond the SPA, a 1500m buffer will be applied to areas where the qualifying features are known to exist, or where nesting attempts have been made. In this area,

King's Lynn and West Norfolk Core Strategy (adopted 2011)

development may be acceptable where suitable alternative habitat (outside the SPA) can be secured.

- Indirect impacts - recreation (Woodlark and Nightjar).

Affected policies: CS1 Housing And Jobs, CS2 Settlement Hierarchy, CS06 Development in Rural Areas, C09 Housing Distribution and C10 The Economy

The HRA suggested the Core Strategy should be amended to stress a partnership approach to recreation management in the SPA.

It also recommended the inclusion of policy wording or supporting text to explain that the council is committed to ensuring sustainable levels of recreation in and around the Breckland SPA, and work with partners including Natural England, RSPB and Forestry Commission to develop a strategy that sets out an access management and monitoring programme that provides measures to prevent increasing visitor pressure.

Suitable mitigation to be installed should monitoring indicate that the Annex1 species are failing to meet conservation objectives due to recreational pressure.

- North Norfolk Coast SPA/Ramsar;

Possible Mechanism(s):

- Recreational disturbance impacts to SPA species, especially Ringed Plover and Little Tern.

Affected policies: CS01 Housing And Jobs, CS02 The Settlement Hierarchy, CS07 Development in Coastal Areas, CS09 Housing Distribution, CS13 Community & Culture.

The HRA suggested core strategy document could be modified to stress a partnership approach to recreation management in the SPA. It recommended that supporting text should be added that recognises that coastal competent authorities promoting visitor access will need to consider the necessary measures required to meet the requirements of the Habitats Regulations and protect the integrity of the coastal European sites, and that it is possible that additional housing within the Borough may contribute to that visitor pressure, in combination with new housing in other districts. The text should therefore commit to working in partnership with neighbouring authorities and other relevant partners to prevent adverse effects when monitoring indicates it could occur.

The assessment concluded that the amendments to the Core Strategy satisfactorily address the issues raised, and as a result the above policies will not adversely affect the integrity of the European Sites.

King's Lynn and West Norfolk Site Allocations and Development Management Policies (submitted 2015)

Plan Owner/ Competent Authority: Borough Council of King's Lynn and West Norfolk

Related HRA/AA: HRA of Proposed Submission document (September 2014)

Summary of Plan proposals:

Site allocations and DM policies.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

HRA Screening was unable to rule out likely significant effects on:

- North Norfolk Coast SPA and Ramsar site – combined effects of recreation pressure on designated birds from new housing within and outside of the borough.
- The Wash SPA and Ramsar site – combined effects of recreation pressure on designated birds from new housing within and outside of the borough.
- The Wash and North Norfolk Coast SAC - combined effects of recreation pressure on designated habitats from new housing within and outside of the borough.

In parallel to continued commitment to deliver a package of habitat protection measures specified by HRA of the Core Strategy, Appropriate Assessment of the Sites and DM Policies document required policy modifications to ensure the provision of green infrastructure plus a programme of permanent publicity aimed at occupants of the development and other residents highlighting the opportunities for recreation (especially dog-walking) in the vicinity, avoiding areas within the European sites. This was judged likely to reduce impacts to an insignificant level and avoid adverse effects on integrity but should be tested via project level

King's Lynn and West Norfolk Site Allocations and Development Management Policies (submitted 2015)

HRA Screening for larger proposals. A joint monitoring programme with adjoining district of North Norfolk was also recommended.

South Cambridgeshire Local Plan 2011-2031 (submitted 2014)

Plan Owner/ Competent Authority: South Cambridgeshire District Council

Related HRA/AA: South Cambridgeshire Local Plan Submission Habitats Regulations Assessment Screening Report (March 2014)

Summary of Plan proposals:

Housing provision: The Local Plan makes provision for 19,000 new homes, including affordable housing and 85 Gypsy & Traveller pitches.

Employment land provision: The Local Plan makes provision for 22,000 additional jobs to support the Cambridge Cluster and provide a diverse range of local jobs.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The following possible effects were identified;

- Ouse Washes – additional sewerage discharge, additional flow in sewerage drain network
- Breckland SAC/SPA – impacts on groundwater-dependent terrestrial ecosystems (GWDYE) and the species they support
- Devils Dyke - recreation; additional visitor pressure resulting in trampling and changes to vegetation structure
- Fenland – recreation; additional visitor pressure resulting in trampling and changes to vegetation structure, additional sewage discharge, impacts on water availability
- Portholme SAC – changes in water level and water quality

There are unlikely to be significant effects on the identified European sites as a consequence of the policies and allocations as worded in the South Cambridgeshire Local Plan Submission. Therefore no policies require advancement to appropriate assessment. The plan is unlikely to have significant effects on the identified European sites when considered in combination with other plans and projects.

Suffolk Minerals Core Strategy DPD (adopted 2008)

Plan Owner/ Competent Authority: Suffolk County Council

Related HRA/AA: Suffolk Minerals Core Strategy Appropriate Assessment of Potential Impacts of Minerals Policies on Natura 2000 Sites (September 2007)

Summary of Plan proposals:

The key objectives identified within the minerals Core Strategy were:

- to ensure, so far as practicable, the prudent, efficient and sustainable use of minerals and recycling of suitable materials, thereby minimising the requirement for new primary extraction;
- to conserve mineral resources through appropriate domestic provision and timing of supply;
- to safeguard mineral resources as far as possible;
- to prevent or minimise production of mineral waste;
- to secure working practices which prevent or reduce as far as possible, impacts on the environment and human health arising from the extraction, processing, management or transportation of minerals;
- to protect internationally and nationally designated areas of landscape value and nature conservation importance from minerals development, other than in the exceptional circumstances detailed in paragraph 14 of this statement;
- to secure adequate and steady supplies of minerals needed by society and the economy

Suffolk Minerals Core Strategy DPD (adopted 2008)

- within the limits set by the environment, assessed through sustainability appraisal, without irreversible damage;
- to maximise the benefits and minimise the impacts of minerals operations over their full life cycle;
 - to promote the sustainable transport of minerals by rail, sea or inland waterways;
 - to protect and seek to enhance the overall quality of the environment once extraction has ceased, through high standards of restoration, and to safeguard the long-term potential of land for a wide range of after-uses;
 - to secure closer integration of minerals planning policy with national policy on sustainable construction and waste management and other applicable environmental protection legislation; and
 - to encourage the use of high quality materials for the purposes for which they are most suitable.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The following potential sources of impact to the Natura 2000 sites that may arise from the construction or operation of these types of facility were identified within the assessment:

- Physical disturbance of sites;
- Flooding & water quality, including extraction below the water table;
- Noise from road traffic and operation of the plants;
- Air emissions from road traffic (including dust); and
- Human presence.

The assessment concluded that physical disturbance of Natura 2000 sites for the purposes of mineral extraction would not normally be acceptable. However, given that minerals development is only a temporary use of land, restoration to a very high standard, with net environmental and biodiversity gains, may mean that some development could be acceptable. Any increase in flooding caused by new mineral sites will be unlikely to be acceptable to the Environment Agency. Similarly, a decline in water quality is also likely to be unacceptable, so there should not be any adverse impacts on water-dependent SPAs and SACs in Suffolk. The assessment determined that appropriately mitigated, noise from road traffic, operation of the plants and minerals developments is unlikely to have a material adverse impact on any Natura 2000 sites. Also, disturbance to Natura 2000 sites through human presence on minerals sites is only likely to be a factor where the minerals sites are located in, or very close to, the Natura 2000 site. Policy 3: Cumulative environmental impacts and phasing of mineral workings, Policy DC2: Protection of regionally and locally recognised sites of ecological and geological interest and promotion of biodiversity and protection of priority habitats, Policy DC5: Public rights of way and Policy DC8: Progressive working and restoration would mitigate the adverse impacts of disturbance caused by humans.

In conclusion, the Minerals Core Strategy aims to have a positive impact on biodiversity in the long term through appropriate restoration schemes and beneficial after-uses. For example, the creation of new wetland habitat could go towards meeting the County's Priority Habitat Action Plan targets of at least 445 ha of new reed-bed by 2023 and the creation of new wet woodlands.

Suffolk Waste Core Strategy DPD (adopted 2011)

Plan Owner/ Competent Authority: Suffolk County Council

Related HRA/AA: Habitats Regulations Assessment : Suffolk County Council Waste Core Strategy (Minerals & Waste Development Framework); March 2010

Summary of Plan proposals:

The key objectives identified within the waste Core Strategy were:

- To provide policies and identify locations for the management of the quantities of waste apportioned to Suffolk through the East of England Plan.
- To facilitate sustainable waste management by minimising waste as a priority and encouraging communities to take responsibility for the waste they produce through better education via public consultation.
- To facilitate the efficient transportation of waste throughout Suffolk.

Suffolk Waste Core Strategy DPD (adopted 2011)

- To facilitate the driving of waste up the hierarchy through the provision of sufficient suitable waste management facilities for waste recycling, composting and transfer.
- To facilitate equality of public access to Household Waste Recycling Centres.
- To encourage waste management facilities and practices that do not endanger human health and to ensure that adverse impacts on residential amenity and the quality of life can be prevented or suitably mitigated.
- To minimise adverse impacts on air quality.
- To minimise adverse impacts on landscape quality and the built and historic environment.
- To minimise adverse ecological and geological/geomorphological impacts, and to encourage opportunities for restoration, creation and enhancement of wildlife habitats.
- To minimise adverse impacts on water quality.

To facilitate proposals and encourage waste management practices that reduce the effects of the emissions of greenhouse gases and deliver renewable energy production where feasible and appropriate and mitigate against the impacts of climate change.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The policies within the Waste Core Strategy can achieve their aims and objectives and not result in any significant impacts either alone or in combination upon any features of European Interest on any Natura 2000 Site in Suffolk or the neighbouring Counties. Because of Suffolk County Council's commitments to the conservation of Biodiversity and the explicit Objectives 9 and 10 in the Waste Core Strategy: "To minimise adverse ecological and geological/geomorphological impacts and to encourage opportunities for restoration, creation and enhancement of wildlife habitats" and "To minimise adverse impacts upon water quality" together with an on-going consultation process with the National nature conservation body (Natural England), it is considered that that any possible negative effects on the integrity of European Sites as a result of the policies within this Waste Core Strategy will be considered, mitigation sought and compensation agreed in order to reduce or negate any negative impacts.

Suffolk Local Transport Plan 2011-2031

Plan Owner/ Competent Authority: Suffolk County Council

Related HRA/AA: Regulation 61 Assessment for Suffolk Local Transport Plan 3

Summary of Plan proposals:

The plan includes a the delivery of a number of strategic transport improvements including:

- dualling of the A11 between Barton Mills and Thetford
- the Ipswich major scheme, 'Ipswich- Transport fit for the 21st Century'
- the Beccles rail loop allowing increased frequency of trains between Ipswich and Lowestoft
- the Beccles southern relief road
- the Lowestoft northern spine road to help remove through traffic from the town
- Ipswich rail chord to improve freight connections from Felixstowe
- Copdock A14/A12 junction improvements.

Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan

The matters of concern for each of the relevant European sites include:

- Breckland SPA – impacts on internationally important populations of Stone-curlew, Woodlark and Nightjar and disturbance of these Annex 1 birds
- Breckland SAC – impacts on habitats of internationally important populations of Stone-curlew, Woodlark and Nightjar and disturbance of these Annex 1 birds

The conclusion of the assessment of the draft LTP3 was that it would have a likely significant effect, alone or in combination with other plans and projects. The only scheme identified as having potential to lead to a significant effect (habitat loss, disturbance and pollution) on a European site was the Brandon relief road LTP3 scheme. In order to remove any likely significant effect on the conservation objectives of Breckland SPA, a project level HRA would be required for the Brandon Relief Road at the design stage. For Natural England to approve such a document, adequate mitigation would need to be sought and compensation agreed in order to reduce or negate any negative impacts. As a result of the HRA, revisions to the LTP3 were made to avoid

Suffolk Local Transport Plan 2011-2031

likely significant effects on any European Sites before it was adopted by SCC. The re-assessment concluded that the direct effect of road improvements and the indirect effect of disturbance to Annex I bird could be mitigated for with the application of the avoidance/mitigation measures proposed (a detailed package of mitigation and monitoring measures to ensure the LTP schemes do not result in impacts on European sites were to be considered at the project level).

Major infrastructure projects⁹

No relevant projects identified.

Other relevant projects

Planning consent has been sought from FHDC or a pre-application EIA Scoping request consulted on for a number of developments within the District which have not yet been developed and which are not included as preferred options in the SALP but which are large enough to present a credible risk that they might have significant effects in-combination with the SALP.

Each of the projects and any associated project level HRA have been reviewed for its potential to have significant effects on European sites in combination with the SALP, following the methodology described in Chapter 3.

⁹ National Infrastructure Planning website <http://infrastructure.planningportal.gov.uk/>

FHDC Local Plan ref.	Planning application/ EIA Scoping Request ref.	Site address	Outline of current proposal	Is site in a location requiring project level HRA under Core Strategy Policy CS2?	Project level HRA findings reported by FHDC and significance for the in-combination assessment
B17	DC/15/1072/OUT	Land to West of Brandon	Residential / mixed use	Yes – site is within the 1,500 m Stone Curlew constraint zone and the 400 m Woodlark / Nightjar constraint zone for Breckland SPA	<p>On the basis of information provided to date by the applicant, project level HRA Screening has been unable to screen out likely significant effects.</p> <p>Project level Appropriate Assessment will need to consider potential for in-combination effects, including with the SIR and SALP if they have reached draft plan/proposed submission stage.</p>
L15	DC/14/2042/OUT	Land North Of Broom Road, Covey Way And Maids Cross Hill, Lakenheath	132 dwellings.	No but project level HRA has been carried out in any case.	<p>On the basis of information provided to date by the applicant, project level HRA Screening has been unable to screen out likely significant effects.</p> <p>Project level Appropriate Assessment will need to consider potential for in-combination effects, including with the SIR and SALP if they have reached draft plan/proposed submission stage.</p>
L22	DC/14/2073/FUL	Land Adjacent 34 Broom Road, Lakenheath	147 dwellings, associated access, landscaping and open space.	No but project level HRA has been carried out in any case.	<p>On the basis of information provided to date by the applicant, project level HRA Screening has been unable to screen out likely significant effects.</p> <p>Project level Appropriate Assessment will need to consider potential for in-combination effects, including with the SIR and SALP if they have reached draft plan/proposed submission stage.</p>
K02	DC/14/0585/OUT – refused and appeal submitted June 2015	Meddler Stud, Kentford	20-box racehorse training establishment (with trainer's house) and up to 63 dwellings with access and open space.	Yes – site is within the 1,500 m Stone Curlew constraint zone for Breckland SPA.	<p>Project level HRA Screening has ruled out likely significant effects.</p> <p>Project level HRA Screening did not highlight any minor effects and noted that the total number of dwellings being considered in Kentford or recently approved but not started was well within the scale of development provided for by the Core Strategy.</p>

FHDC Local Plan ref.	Planning application/ EIA Scoping Request ref.	Site address	Outline of current proposal	Is site in a location requiring project level HRA under Core Strategy Policy CS2?	Project level HRA findings reported by FHDC and significance for the in-combination assessment
N/A	DC/15/1050/EIASCO	Land at Little Eriswell Road from A1065 to Norfolk county boundary, Eriswell	Scoping Opinion Under Environmental Impact Assessment Regulations 2011 - Proposed development on site area over 5 ha including residential dwelling houses alongside the provision of a primary school, allotments, play space for sports and other green spaces.	Yes – site is within the 1,500 m Stone Curlew constraint zone for Breckland SPA.	Project level HRA Screening not yet been carried out. Not considered further by in-combination assessment due to insufficient information at this stage. Project level HRA Screening will need to consider potential for in-combination effects, including with the SIR and SALP if they have reached draft plan/proposed submission stage.
N/A	DC/16/0235/EIASCO	New Gallops, Hamilton Road, Newmarket	Scoping opinion under Environmental Impact Regulations 2011 - Regulation 13(1) - Proposed redevelopment of the new gallop north west of Newmarket.	No.	Project level HRA not yet been carried out. Not considered further by in-combination assessment due to insufficient information at this stage. Project level HRA Screening will need to consider potential for in-combination effects, including with the SIR and SALP if they have reached draft plan/proposed submission stage.

Appendix 3

European sites information

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
<p>Breckland SPA</p> <p>Low rainfall and free-draining soils led to the development of dry heath and grassland communities. Much of Breckland was planted with conifers through the 20th century, and elsewhere arable farming is the predominant land use. The remnants of dry heath and grassland that have survived these changes support heathland-breeding birds, where grazing by sheep and rabbits is sufficiently intensive to create short turf and open ground. These species have also adapted to live in forestry and arable habitats.</p> <p>Component SSSIs within Forest Heath are listed below.</p>	<p>Article 4.1, Annex I species:</p> <p>Breeding populations of Stone Curlew (60.1% GB breeding population), Nightjar (12.2% GB breeding population) and Woodlark (28.7% GB breeding population).</p>	<p>Current pressures</p> <p>Lack of ground disturbance, under-grazing and inappropriate scrub and weed control.</p> <p>Planning permission: general – development, especially for housing, roads and solar farms.</p> <p>Potential future threats</p> <p>Inappropriate forestry and woodland management.</p> <p>Stone Curlew monitoring and intervention – vulnerability of nests and chicks to farming operations.</p> <p>Air pollution: impact of atmospheric nitrogen deposition.</p> <p>Public access / disturbance – does not appear to be currently significantly affecting bird populations but impacts of increased recreational activities uncertain.</p> <p>Climate change.</p> <p>Inappropriate pest control – predation on ground-nesting SPA birds.</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features; and • The distribution of the qualifying features within the site. 	<p>None.</p>
<p>Breckland SAC</p> <p>Component SSSIs within Forest Heath are listed below.</p>	<p>Annex I habitats:</p> <p>inland dunes with open <i>Corynephorus</i> and <i>Agrostis</i> grasslands; natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i>-type vegetation; European dry heaths; semi-natural dry grasslands and scrubland facies on calcareous</p>	<p>Current pressures</p> <p>Lack of ground disturbance, undergrazing, inappropriate scrub and weed control, inappropriate cutting/mowing.</p> <p>Water pollution.</p> <p>Changes in species</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>	<p>Inland dunes with open <i>Corynephorus</i> and <i>Agrostis</i> grasslands for which this is the only known outstanding locality in the UK and is considered to be rare as its total extent is estimated to be less than 1,000 hectares.</p>

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
	<p>substrates; alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>.</p> <p>Annex II species:</p> <p>Great Crested Newts <i>Triturus cristatus</i>.</p>	<p>distributions.</p> <p>Potential future threats</p> <p>Air pollution: impact of atmospheric nitrogen deposition.</p> <p>Public access / disturbance – SAC features may be affected through eutrophication (dog fouling, unauthorised fires) and disturbance of soils.</p> <p>Climate change.</p> <p>Habitat fragmentation.</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 qualifying species; • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; • The populations of qualifying species; and, • The distribution of qualifying species within the site. 	
<p>Rex Graham Reserve SAC</p> <p>This is a disused chalk pit with developing dry grassland characterised by false oat-grass <i>Arrhenatherum elatius</i>. The site has been selected as it supports the largest population of military orchid <i>Orchis militaris</i> in the UK, comprising more than 95% of the current total population.</p>	<p>Annex I habitats:</p> <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites)</p>	<p>Current pressures</p> <p>Changes in species distributions.</p> <p>Potential future threats</p> <p>Air pollution: risk of atmospheric nitrogen deposition – exceeds site-relevant critical load with risk of harmful effects.</p> <p>Habitat fragmentation.</p> <p>Deer.</p> <p>Invasive species.</p> <p>Public access / disturbance – ongoing threat to site features from illegal plant collection.</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; • The structure and function (including typical species) of qualifying natural habitats; and 	<p>Managed by Suffolk Wildlife Trust</p>

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
			<ul style="list-style-type: none"> The supporting processes on which qualifying natural habitats rely. 	
<p>Devil's Dyke SAC (on FH boundary, part in FH and part in East Cambridgeshire DC)</p> <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>Annex I habitats: Semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites)</p>	<p>Current pressures Inappropriate scrub control</p> <p>Potential future threats Air pollution: impact of atmospheric nitrogen deposition.</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; The structure and function (including typical species) of qualifying natural habitats; and The supporting processes on which qualifying natural habitats rely. 	None.
<p>Fenland SAC (outside FH)</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 (<i>Molinion caeruleae</i>)</p> <p>Annex II species: Spined Loach (<i>Cobitis taenia</i>), Great Crested Newt (<i>Triturus cristatus</i>)</p>	<p>Current pressures 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 None identified.</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 	National Trust undertaking remedial land management work.

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
			habitats; <ul style="list-style-type: none"> The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species; and, The distribution of qualifying species within the site.	
<p>Ouse Washes SAC, SPA and Ramsar site (outside FH)</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><u>SAC qualifying species</u></p> <p>Annex II: Spined loach <i>Cobitis taenia</i></p> <p><u>SPA qualifying species</u></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): Bewick's Swan <i>Cygnus columbianus bewickii</i>; Hen Harrier <i>Circus cyaneus</i>; Ruff <i>Philomachus pugnax</i>; Whooper Swan <i>Cygnus cygnus</i>,</p> <p>Article 4.2 (migratory species – breeding season):</p> <p>Black-tailed Godwit <i>Limosa limosa limosa</i>; Gadwall <i>Anas strepera</i>; Shoveler <i>Anas clypeata</i></p> <p>Article 4.2 (migratory species – over winter):</p> <p>Black-tailed Godwit <i>Limosa limosa</i></p>	<p>Current pressures</p> <p>Inappropriate water levels.</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...</p> <p>- the Favourable Conservation Status of its Qualifying Features (SAC), or</p> <p>- the aims of the Wild Birds Directive (SPA)</p> <p>...by maintaining or restoring:</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 	<p>Long term tidal strategy - regular problems summer flooding- severe siltation of Great Ouse River. Discharges into River Lark, River Little Ouse (and various other smaller watercourses in Forest Heath) 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>

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
	<p><i>islandica</i>; Gadwall <i>Anas strepera</i>; Pintail <i>Anas acuta</i>; Pochard <i>Aythya farina</i>; 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><u>Ramsar criteria</u></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 		<p>qualifying species/features rely</p> <ul style="list-style-type: none"> • The populations of qualifying species/features, and, • The distribution of qualifying species/features within the site. 	
<p>The Wash SPA/Ramsar (outside FH)</p> <p>The largest estuarine system in the UK, fed by the rivers Witham, Welland, Nene and Great Ouse that drain much of the east Midlands of England.</p> <p>The Wash comprises very extensive saltmarshes, major intertidal banks of sand and mud, shallow waters and deep channels.</p> <p>The intertidal mudflats and saltmarshes represent one of Britain's most important winter feeding areas for waders and wildfowl outside of the breeding season. The saltmarsh and shingle communities are of</p>	<p><u>SPA qualifying species</u></p> <p>Article 4.1, Annex 1 species (breeding season):</p> <p>Common Tern <i>Sterna hirundo</i>; Little Tern <i>Sterna albifrons</i>; Marsh Harrier <i>Circus aeruginosus</i></p> <p>Article 4.1, Annex 1 species (over winter):</p> <p>Avocet <i>Recurvirostra avosetta</i>; Bar-tailed Godwit <i>Limosa lapponica</i>; Golden Plover <i>Pluvialis apricaria</i>, Whooper Swan <i>Cygnus cygnus</i></p> <p>Article 4.2 (migratory):</p> <p>Ringed Plover <i>Charadrius hiaticula</i>; Sanderling <i>Calidris alba</i>; Black-tailed Godwit <i>Limosa limosa</i></p>	<p>Current pressures</p> <p>Inappropriate water level.</p> <p>Change in species distribution.</p> <p>Potential future water threats</p> <p>Public access/Disturbance – ongoing threat to site from recreational activities and low flying aircraft.</p> <p>Fisheries: Recreational marine and estuarine - potential to impact on fish stocks as a resource for designated birds.</p> <p>Inappropriate coastal management.</p> <p>Fisheries: Commercial and marine estuaries - risk to site</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely 	None.

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
considerable botanical interest and the mature saltmarsh is a valuable bird breeding zone. Also very important as a breeding ground for Common seals.	<p><i>islandica</i>; Curlew <i>Numenius arquata</i>; Dark-bellied Brent Goose <i>Branta bernicla bernicla</i>; Dunlin <i>Calidris alpina alpina</i>; Grey Plover <i>Pluvialis squatarola</i>; Knot <i>Calidris canutus</i>; Oystercatcher <i>Haematopus ostralegus</i>; Pink-footed Goose <i>Anser brachyrhynchus</i>; Pintail <i>Anas acuta</i>; Redshank <i>Tringa tetanus</i>; Shelduck <i>Tadorna tadorna</i>; Turnstone <i>Arenaria interpres</i></p> <p>Article 4.2 Assemblage qualification: regularly supports at least 20,000 waterfowl</p>	<p>features due to uncertainty of current management.</p> <p>Predation.</p> <p>Coastal squeeze.</p>	<ul style="list-style-type: none"> The population of each of the qualifying features, and, The distribution of the qualifying features within the site. 	
The Wash and North Norfolk Coast SAC (outside FH)	<p>Annex I habitats: Sandbanks slightly covered by sea water all the time; mudflats and sandflats not covered by sea water at low tide; large shallow inlets and bays; reefs; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>); Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>); coastal lagoons.</p> <p>Annex II species: Common seal (<i>Phoca vitulina</i>); otter (<i>Lutra lutra</i>)</p>	<p>Current pressures</p> <p>Change in land management</p> <p>Air Pollution: impact of atmospheric nitrogen deposition</p> <p>Potential future water threats</p> <p>Public access/Disturbance – ongoing threat to site from recreational activities and low flying aircraft</p> <p>Siltation</p> <p>Fisheries: Recreational marine and estuarine - potential to impact on fish stocks as a resource for designated birds</p> <p>Invasive species</p> <p>Inappropriate coastal management</p> <p>Fisheries: Commercial and marine estuaries - risk to site features due to uncertainty of current management. No</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 qualifying species The supporting processes on which qualifying natural habitats and the 	None.

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
		restriction on harvesting methodology Coastal squeeze	habitats of qualifying species rely <ul style="list-style-type: none"> The populations of qualifying species, and, The distribution of qualifying species within the site. 	
Chippenham Fen Ramsar (outside FH)	Criterion 1: Spring-fed calcareous basin mire with a long history of management, which is partly reflected in the diversity of present-day vegetation. Criterion 2: The invertebrate fauna is very rich, partly due to its transitional position between Fenland and Breckland. The species list is very long, including many rare and scarce invertebrates characteristic of ancient fenland sites in Britain. Criterion 3: The site supports diverse vegetation types, rare and scarce plants. The site is the stronghold of Cambridge milk parsley (<i>Selinum carvifolia</i>).	Pressures and threats documented in the Fenland Site Improvement Plan relate to the designated features of the SAC (see above) but are also likely to be relevant to the designated Ramsar features, particularly hydrological changes which are cited in the Ramsar Information Sheet.	Not applicable.	Inappropriate scrub control, cutting and mowing in several units contributing to unfavourable no change status.
Wicken Fen Ramsar (outside FH)	Criterion 1: One of the most outstanding remnants of the East Anglian peat fens. The area is one of the few which has not been drained. Traditional management has created a mosaic of habitats from open water to sedge and litter fields. Criterion 2: The site supports one species of British Red Data Book plant, fen violet (<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.	Pressures and threats documented in the Fenland Site Improvement Plan relate to the designated features of the SAC (see above) but are also likely to be relevant to the designated Ramsar features, particularly hydrological changes which are cited in the Ramsar Information Sheet.	Not applicable.	Issues caused by inappropriate water levels and scrub control in some areas. WLMP in place to address these issues.

Sources: Natural England's Site Improvement Plans for European sites and SSSI condition assessments (www.naturalengland.gov.uk) and JNCC's Natura 2000 Standard Data Forms and Ramsar Information Sheets (www.jncc.gov.uk), accessed January 2016

Appendix 4

Consultation comments on the HRA of the 'Issues and Options' SALP

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
Natural England	Natural England is broadly satisfied that the assessments have been prepared in accordance with the requirements of the Conservation (of Habitats and Species) Regulations (2010). We agree with the conclusion of the screening assessment that significant effects to European sites cannot be ruled out and therefore that an appropriate assessment is likely to be required, together with monitoring.	Noted.
Natural England	As noted in our response to the HRA screening of the Single Issue Review, we find that there are issues with the format of the HRA and a lack of information on specific issues (please see our other HRA response for further details). This is particularly reflected in Appendix 1, the screening matrix for site options, and we have therefore provided detailed recommendations on this section.	The HRA report at Issues and Options stage sought to maintain consistency with that prepared for the Forest Heath Core Strategy. In light of the detailed issues raised by Natural England, the categorisation of types of potential effect and the screening assumptions set out at Issues and Options stage have been revised for the current stage of HRA through discussion and correspondence with Natural England.
RSPB – Eastern England (Mr Mike Jones)	We support the Site Allocations HRA's conclusion that including sites within the Breckland SPA buffer zones, which rely on project level HRA to gain consent, would risk delivery of the plan. Rather than make multiple identical comments on the individual allocations, we recommend all sites identified in paragraph 6.1 of the HRA, where a Likely Significant Effect on the Breckland SPA has been identified, should be excluded. We note the West Suffolk SHLAA (para 6.1) demonstrates that there is adequate land in the district to meet housing needs to 2031 without these sites.	It is appropriate for the HRA Screening of the SALP Issues and Options document to identify where likely significant effects cannot be ruled out for any site allocation options put forward by FHDC in the SALP. Separate project-level HRA by FHDC will demonstrate whether adverse effects on the integrity of Breckland SPA can be ruled out and hence whether development can proceed at the proposed site allocations.
RSPB – Eastern England (Mr Mike Jones)	Ref. para. 4.66 of the HRA of the SALP re. the Local Transport Plan. Whilst wider trends in road traffic will not be within the plan's control, new housing supported by the plan will produce traffic increases. We therefore recommend that these are assessed in-combination as part of the HRA for the SALP, not deferred to HRA of the Local Transport Plan.	LUC agrees that population increases associated with new housing supported by the plan may produce traffic increases. This is considered to be a strategic-scale issue and has therefore been considered through the HRA of the Core Strategy SIR rather than the HRA of the SALP.
Eclipse Planning Services on behalf of Crest Nicholson (Eastern) Ltd	Contrary to paragraph 6.2, a project level HRA has been carried out in respect of site RL/06b (planning application reference F/2013/257/HYB). Likely significant effects on Breckland SPA were ruled out and identified minor effects (due to development within the 1,500 m Stone Curlew nesting attempts avoidance zone) are to be addressed via mitigation agreed with Natural England. Details of the mitigation are contained in the "Stone Curlew Habitat Restoration Site, Land South East of Herringswell, Red Lodge, Suffolk – Habitat Restoration and Management Plan", submitted with the planning application.	This error in the HRA of the SALP Issues and Options document is acknowledged. The current position is reflected in this HRA report.
Suffolk County Council	The development of a strategic approach to green infrastructure and ecological mitigation could, if implemented, assist in delivering housing and economic growth, with a planned and programmed approach to	Noted.

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
	<p>managing the cumulative pressures on habitats and species.</p> <p>The County Council is already working with authorities in East Suffolk to consider how to manage pressures on European sites. The same assistance can be provided to Forest Heath District Council (and neighbouring authorities) if helpful. In particular, improvements to the County Council's Rights of Way Network could be useful in managing recreational pressures.</p>	
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 2.9 and Appendix 3</i></p> <p>Insufficient information included on reasons for designation, threats and reasons for adverse conditions of European sites.</p>	European site information, in particular on pressures and threats, now reflects the latest information available in Natural England's Site Improvement Plans.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 3.3</i></p> <p>Other plans which should have been included are the South Cambridgeshire Local Plan, the Cambridgeshire and Suffolk Waste and Minerals Plan and any transport plan for Cambridgeshire.</p>	Review of other plans and projects has been extended in this HRA report.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.19 with implications further</i></p> <p>The condition restricting development '1500m of any 1 km grid which has supported 5 or more nesting attempts by Stone Curlew since 1995'. This condition potentially becomes more onerous as time progresses as more sites may be used for nesting. It should be taken for the last 10 years as was envisaged at the time when the 2009 HRA was in preparation. Further the use of a 1 km grid is excessively onerous. Nevertheless the need for Appropriate Assessment cannot be screened out.</p>	The spatial data on Stone Curlew nesting attempts zone used to carry out this element of the HRA Screening at Issues and Options stage related to 1995-2006 and was the same as that used for the HRA of the Core Strategy. FHDC has commissioned a study to update this spatial data but the results were not available at the time of writing. It is recommended that they be used to inform HRA at the Proposed Submission stage of plan making. An appropriate period within which to nesting attempts data will be agreed with Natural England once the new data become available.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.49</i></p> <p>No evidence has been put forward to reduce the constraint zone for disturbance from 10 km as recommended by Fearnley et al (2010) to 7.5 km; a distance of 10 km should be retained and an Appropriate Assessment undertaken with this in mind.</p>	Disagree. The 10 km distance referred to by (Fearnley, et al., 2010) is measured from home postcodes to survey locations within Thetford Forest whilst the 7.5 km distance identified by analysis in the HRA of the Breckland Site Specific Policies and Proposals Document (Breckland District Council, 2010) is measured from home postcodes to the boundary of Thetford Forest. (Fearnley, et al., 2010) state that the two sets of findings are similar. See paragraphs 4.43 to 4.46 of this HRA report for further discussion.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.68 and following</i></p> <p>Negative effects of urban development do not only affect Breckland sites and further consideration needs to be given to this topic.</p>	Categorisation of effect types and the European sites that are vulnerable to each of these have been reassessed, informed by Natural England's Site Improvement Plans.
Pegasus Group on behalf of	<p><i>HRA para 4.90</i></p> <p>The EA flood risk maps together with the site descriptions should help</p>	The Council has commissioned an updated Water Cycle Study to inform the SIR and SALP and the HRA of these documents but the results of

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
Newmarket Horsemen's Group	ascertain which sites might be affected by increased flooding. For example, Devil's Dyke is a raised chalk embankment and Rex Graham Reserve a chalk pit. This should be clarified to aid scoping.	this study were not available at the time of writing. Should the Water Cycle Study reveal any site-specific issues, these will be dealt with in the HRA of the Proposed Submission SALP (Regulation 19 consultation stage). Other water environment issues are dealt with in the HRA of the SIR.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.112 and following</i></p> <p>1. This consideration is inadequate. The position with regard to the potential effects of abstractions has been considered in detail with regard to the west of the region in detail at the recent Hatchfield Farm Inquiry and this evidence has not been considered.</p> <p>2. Important sources e.g. Reviews of Consents and Management Plans have been omitted.</p> <p>3. No consideration has been given to identifying which sites are vulnerable to changes in groundwater.</p> <p>4. There has also been no consideration of the Breckland SAC.</p>	See response to 'HRA Para 4.90' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.120</i></p> <p>Mott MacDonald assessed the scheme options, for example the effects of the pipeline routes not the water supply implications and this is not clear in the HRA. The conclusion in relation to this point is not therefore correct.</p>	See response to 'HRA Para 4.90' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.121</i></p> <p>Detailed consideration was given to the breakdown of housing in relation to the Resource Zones at the recent Hatchfield Farm Inquiry and has not been considered.</p>	See response to 'HRA Para 4.90' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.121</i></p> <p>There are already underlying problems (re. assessment of potential effects of water abstraction) which have not been addressed.</p>	See response to 'HRA Para 4.90' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.123</i></p> <p>This erroneously states that Devil's Dyke is heathland when it is in fact chalk grassland. This is repeated throughout this section and affects the conclusions.</p>	Accepted that Devil's Dyke was described as having designated heathland rather than chalk grassland plant species and this has been corrected in the current stage of HRA (air pollution issues are now dealt with in the HRA of the SIR). Both types of habitat are sensitive to air pollution from roads (nutrient build-up from nitrogen deposition), therefore broad conclusions were unaffected.
Pegasus Group on behalf of Newmarket	<p><i>HRA Para 5.3</i></p> <p>Flood risk, water quality and water supply should be considered as it should be possible to identify sufficient spatial information to inform</p>	See response to 'HRA Para 4.90' above.

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
Horsemen's Group	allocations - see comments above and made for the SIR.	
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Section 6</i></p> <p>In the light of the comments above, the conclusions and recommendations have failed to fully consider the issues raised by the allocations and the potential for LSE for any site has not been fully explored. Thus the overall potential for an LSE arising from any allocation is not documented.</p>	See response to individual comments above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Paras. 6.4 and 6.7</i></p> <p>Given the comments in para 4.49 the disturbance within 7.5 km is not appropriate and should be extended to 10 km.</p>	See response to 'HRA Para 4.49' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para. 6.8</i></p> <p>See comments under para 6.48. On this basis the potential for LSE on sites other than Breckland SPA and SAC have not been addressed. This would include Chippenham Fen, Devil's Dyke and the Rex Graham Reserve.</p>	It is assumed that this comment is intended to refer to 'HRA Para 4.68 and following'. See response to that comment above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA 6.12 and Appendix 2</i></p> <p>As the conclusions relating to potential LSE have not been adequately documented then it is not possible to conclude that the full in-combination effects have been appropriately considered. Further, the East Cambs Local Plan will be subject to review and some Plans have not been considered. (see comment on para 3.3).</p>	See response to individual comments above.
Suffolk Wildlife Trust	Ensure that potential effects from allocations within Breckland SPA buffer zones are fully assessed prior to allocation, including potential cumulative/in-combination effects. Carry out further assessment where HRA Screening is unable to rule out likely significant effects before allocating sites.	Screening assessment for all sites is contained within this HRA report. Recommendations are made to the Council re. further action required (including further assessment, if appropriate) before Plan adoption to ensure that the requirements of the Habitats Regulations are met.