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HRA of the Forest Heath Site Allocations Local Plan (Modification stage)

Prepared by LUC
April 2018

Project Title: HRA of the Forest Heath Site Allocations Local Plan (Modification stage)

Client: AECOM on behalf of Forest Heath District Council

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Planning & EIA
Design
Landscape Planning
Landscape Management
Ecology
Mapping & Visualisation

LUC LONDON
43 Chalton Street
London
NW1 1JD
T +44 (0)20 7383 5784
london@landuse.co.uk

Offices also in:
Bristol
Glasgow
Edinburgh



Land Use Consultants Ltd
Registered in England
Registered number: 2549296
Registered Office:
43 Chalton Street
London NW1 1JD
LUC uses 100% recycled paper

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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) of the Single Issue Review (SIR) of Core Strategy Policy CS7 Overall Housing Provision and Distribution ('the SIR') and of the Site Allocations Local Plan ('the SALP'). This report documents the results of the HRA of the modification version of the SALP.

Background to the Forest Heath SIR and SALP

- 1.2 The Site Allocations Local Plan (SALP) is part of Forest Heath's Development Plan, a suite of planning documents that will (once adopted) replace the council's Local Plan (1995) saved policies, in accordance with the National Planning Policy Framework (NPPF (2012)).
- 1.3 The first document in the suite of planning documents that the council produced was the Core Strategy. This is the strategic document which provides an overall vision and framework for the growth of Forest Heath underpinned by the principle of sustainability. The Core Strategy was adopted in May 2010. A successful High Court challenge resulted in the majority of Policy CS7, along with elements of CS1, CS13 and para 3.12.2, being revoked. Policy CS7 is the policy that set out the amount and distribution of housing that was planned for the district to 2031. Consequently, a Single Issue Review (SIR) of Core Strategy Policy CS7 has been prepared, and the Site Allocations Local Plan has developed alongside the SIR.
- 1.4 Forest Heath District and St Edmundsbury Borough Councils, working together as West Suffolk, produced a Joint Development Management Policies Document that was adopted in 2015. This document provides policies that guide and inform development proposals in both authorities' areas.
- 1.5 The SIR of Policy CS7 and the SALP will complete the council's suite of Local Plan documents that will form the Development Plan for the area, and as such these documents must be read as a whole. In accordance with NPPF, planning permission must be determined in accordance with the development plan, unless material considerations indicate otherwise.
- 1.6 Once the SIR and SALP are adopted, Forest Heath's Development Plan will therefore comprise the documents set out in Figure 1.1.

Figure 1.1 Forest Heath's Development Plan



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 in 2007 (1); the currently applicable version of the Habitats Regulations came into force in November 2017 (2). When preparing its Local Plan, FHDC is therefore required by law to carry out an HRA although consultants can undertake the HRA on its behalf. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is also noted in the Government's online planning practice guidance.
- 1.8 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):
- SACs are designated under the European Habitats Directive (3) and target particular habitat types (Annex 1) and species (Annex II). The listed habitat types and species (excluding birds) are those considered to be most in need of conservation at a European level.
 - SPAs are classified in accordance with Article 4(1) of the European Union Birds Directive for rare and vulnerable birds (as listed in Annex I of the Directive), and under Article 4(2) for regularly occurring migratory species not listed in Annex I.
- 1.9 Potential SPAs (pSPAs)¹, candidate SACs (cSACs)², Sites of Community Importance (SCIs)³ and Ramsar sites should also be included in the assessment.

¹ Potential SPAs are sites that have been approved by the Minister for formal consultation but not yet proposed to the European Commission, as listed on the [GOV.UK website](https://www.gov.uk/government/collections/special-protection-areas).

² Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted, as listed on the JNCC's [SAC list](https://www.jncc.gov.uk/information-and-advice/special-areas-of-conservation).

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

- 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 HRA, these designations can be collectively referred to as European sites⁴ despite Ramsar designations being at the international level.

Stages of HRA

- 1.11 The HRA of development plans is undertaken in stages (as described below) and should conclude whether or not a proposal would adversely affect the integrity of the European site in question.
- 1.12 The HRA should be undertaken by the 'competent authority', in this case Forest Heath District Council, and LUC has been commissioned by AECOM to do this on the Council's behalf. The HRA also requires close working with Natural England as the statutory nature conservation body⁵ in order to obtain the necessary information, agree the process, outcomes and mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

Requirements of the Habitats Regulations

- 1.13 In assessing the effects of a Local Plan in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which would inform the 'Integrity Test'. The relevant sequence of questions is as follows:
- 1.14 Step 1: Under Reg. 105(1) (b), consider whether the plan is directly connected with or necessary to the management of the sites. If not, as is the case for the Forest Heath SIR and SALP, proceed to Step 2.
- 1.15 Step 2: Under Reg. 105(1) (a) consider whether the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or projects (the 'Significance Test'). If yes, proceed to Step 3.

[Steps 1 and 2 are undertaken as part of Stage 1: HRA Screening in Table 1.1.]

- 1.16 Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the European site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public.

[This step is undertaken during Stage 2: Appropriate Assessment shown in Table 1.1.]

- 1.17 Step 4: In accordance with Reg. 105(4), but subject to Reg. 107, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of a European site.
- 1.18 Step 5: Under Reg. 107, if Step 4 is unable to rule out adverse effects on the integrity of a European site and no alternative solutions exist then the competent authority may nevertheless agree to the plan or project if it must be carried out for 'imperative reasons of overriding public interest' (IROPI).

Typical stages

- 1.19 Table 1.1 summarises the stages and associated tasks and outcomes typically involved in carrying out a full HRA, based on various guidance documents (4) (5) (6).

⁴ The term 'Natura 2000 sites' can also be used interchangeably with 'European sites' in the context of HRA, although the latter term is used throughout this report.

⁵ Regulation 5 of the Habitats Regulations 2017.

Table 1.1 Stages of 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. Where impacts are considered to affect qualifying features, identify how these effects will be avoided through avoidance or mitigation.	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 avoidance or mitigation, including the mechanisms and timescale for these mitigation measures. If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	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.

- 1.20 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help to 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.

HRA work carried out previously

- 1.21 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 including the HRA of the Forest Heath Core Strategy (7). That HRA was 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, in consultation with Natural England, whether this suggests a need to amend the previously adopted approach.
- 1.22 HRA reports were produced to accompany the August-October 2015 consultation on the 'Issues and Options' version of the SALP, the April-July 2016 consultation on the 'Preferred Options' version, and the January-March 2017 consultation on the 'Proposed Submission' version. A number of consultation comments were received on the HRA during each of these stages of consultation and these are documented in Appendix 4, along with LUC's responses to them.

- 1.23 The main changes to the HRA since the Proposed Submission version are summarised in Table 1.2.

Table 1.2 Main changes to HRA of SALP vs. Proposed Submission version dated 5/1/2017

Summary of change	Reason for change
Added site SA6(g) in Newmarket, deleted site SA8(d) in Lakenheath and amended uses and housing provision numbers for a few other sites	To reflect post-submission modifications
Ruled out potential for adverse effects on the integrity of Breckland SPA from allocation of site SA9(c) Land east of Red Lodge (south), due to disturbance and other urban edge effects	To reflect safeguards added to Policy 9 to implement HRA recommendation at Proposed Submission stage
In addition to the 7.5 km zone of influence around non-farmland areas of Breckland SPA for recreation pressure, added a 1.5 km zone of influence around farmland areas of Breckland SPA and stone curlew nesting attempts areas	To respond to Natural England's consultation comments and recognise that most recreational visits to farmland areas of the SPA are likely to be on foot
Added 'in-combination effects section to each screening assessment in Chapter 6 (these include consideration of effects from Forest Heath Core Strategy that was described in the Examination paper on this subject) and added review of Forest Heath Core Strategy to Appendix 1	To make explicit how potential in-combination effects have been taken into account in assessing each type of potential effect of the SALP
Added table of responses to representations on Reg. 19 stage HRA	To provide audit trail of responses to consultation comments
Updated review of other plans and projects	To ensure in combination assessment is as up to date as possible

Structure of the HRA report

- 1.24 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 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 (detailed in Appendix 2).
 - **Chapter 4: Information used and assumptions made in the HRA** identifies the types of effects which the SALP could potentially have on European sites, summarises information relevant to assessing each of them, and states the assumptions made in carrying out the HRA.
 - **Chapter 5: Results of initial screening** describes the development site allocation and other policies 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** summarises the potential likely significant effects of SALP policies and then considers the effect of any existing mitigation before reaching an HRA Screening conclusion.
 - **Chapter 7: Appropriate Assessment** considers whether any of the SALP policies for which potential likely significant effects were identified in the HRA Screening exercise could have an adverse effect on the integrity of a European site, either alone or in-combination with other plans or projects .
 - **Chapter 8: Conclusions** sets out the overall conclusions of the HRA of the SALP.

2 The Site Allocations Local Plan

2.1 The SALP document that is the subject of this HRA Report contains policies on the following:

- revised settlement boundaries for housing growth in the District's three market towns, key service centres and primary villages (Policy SA1);
- allocation of sites for new housing, mixed use development and a new cemetery in the market towns, key service centres and primary villages (Policies SA2-SA14);
- allocation of a site for expansion of a primary school in the secondary village of Moulton (Policy SA15);
- identification of existing employment areas and their protection for employment purposes (Policy SA16);
- allocation of sites for new employment development (Policy SA17);
- allocation of a site for new retail development (Policy SA18); and
- preparation of masterplans for the town centres of the market towns (Policy SA19).

2.2 The new development sites allocated by the Proposed Submission SALP are listed in Table 2.1 in the order in which they appear in the plan document.

Table 2.1 Summary of site allocations by settlement

Site ID	Site address	Use
Housing and mixed use site allocations in the market towns (incl. allocation for new cemetery)		
BRANDON		
SA2(a)	Land at Warren Close	Housing
SA2(b)	Land off Gas House Drove	Housing
SA3	Brandon Cemetery	New cemetery site
MILDENHALL		
SA4(a)	Land west of Mildenhall	Housing, employment (B1, B2 and B8), schools, leisure facilities and public services
SA5(a)	Land at 54 Kingsway	Housing
SA5(b)	District Council Offices, College Heath Road	Housing
NEWMARKET		
SA6(a)	Brickfield Stud, Exning Road	Housing
SA6(b)	Land at Black Bear Lane and Rowley Drive junction	Housing, racehorse training yard and paddock
SA6(c)	Land at Phillips Close and grassland south-west of Leaders Way and Sefton Way	Housing
SA6(d)	Former St Felix Middle School site	Housing
SA6(e)	Land adjacent to Jim Joel Court	Housing
SA6(f)	Land at 146a High Street	Housing
SA6(g)	Land at Hatchfield Farm	Housing, employment (B1, B2 and B8), school
Housing and mixed use site allocations in the key service centres		
LAKENHEATH		
SA7(a)	Matthews Nursery	Housing and retail
SA7(b)	Land west of Eriswell Road	Housing
SA8(a)	Rabbit Hill Covert, Station Road	Housing
SA8(b)	Land north of Station Road	Housing and primary school
SA8(c)	Land off Briscoe Way	Housing
RED LODGE		
SA9(a)	Land off Turnpike Road and Coopers Yard	Housing
SA9(b)	Land east of Red Lodge (north)	Housing
SA9(c)	Land east of Red Lodge (south)	Housing
SA9(d)	Land west of Newmarket Road and north of Elms Road	Housing
SA10(a)	Land north of Acorn Way	Housing, employment (B1, B2 and B8), and primary school
Housing and mixed use site allocations in the primary villages		
BECK ROW		
SA11(a)	Land adjacent to St Johns Street	Housing
SA11(b)	Land adjacent to and south of the caravan park, Aspal Lane	Housing
SA11(c)	Land east of Aspal Lane	Housing
SA11(d)	Land adjacent to Beck Lodge Farm	Housing
EXNING		
SA12(a)	Land south of Burwell Road and west of Queens View	Housing
KENTFORD		
SA13(a)	Land to the rear of The Kentford	Housing
SA13(b)	Land at Meddler Stud	Housing and racehorse training establishment
WEST ROW		
SA14(a)	Land east of Beeches Road	Housing
Site for allocation in the secondary villages		
SA15	Moulton Primary School	Expansion of primary school
Employment allocations		
SA17(a)	Mildenhall Academy and Dome Leisure Centre site, Mildenhall	Employment (B1)
SA17(b)	St Leger, Newmarket	Employment (B2 and B8)
Retail allocation		
SA18(a)	Former Gas Works, Exning Road, Newmarket	Convenience food store (A1)

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 (5) remains the principal official guidance. We have also had regard to other guidance of relevance to the HRA of land use plans, for example: (4) (8) (9) (10) (11) (12).
- 3.2 HRA Screening of the SALP 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 105 of the Conservation of Habitats and Species Regulations 2017, an assessment has been undertaken of the 'likely significant effects' of the SALP.
- 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 site allocations had the potential for likely significant effects on European sites, prior to consideration of existing mitigation. The findings of the initial screening assessment are summarised in Chapter 5 and the full screening matrix can be found in Appendix 1. The following colour scheme was used to record the potential for likely significant effects, prior to mitigation:

Amber	The potential for likely significant effects from the allocation cannot be ruled out – consider existing mitigation and proceed to Appropriate Assessment if likely significant effects remain
Green	Likely significant effects from the allocation can be ruled out – consideration of existing mitigation and 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 (transposed by Reg. 102 in the Habitats Regulations), including that:
- an effect should be considered 'likely', *"if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site"* (para 44);
 - an effect should be considered 'significant', *"if it undermines the conservation objectives"* (para 48); and

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

- 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 likely significant effect' was only reached where it was considered unlikely, based on current knowledge and the information available, that a SALP policy 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.

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 was 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; and
- 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.

3.18 The list of sites within the 20 km buffer has been further adjusted by screening out 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.

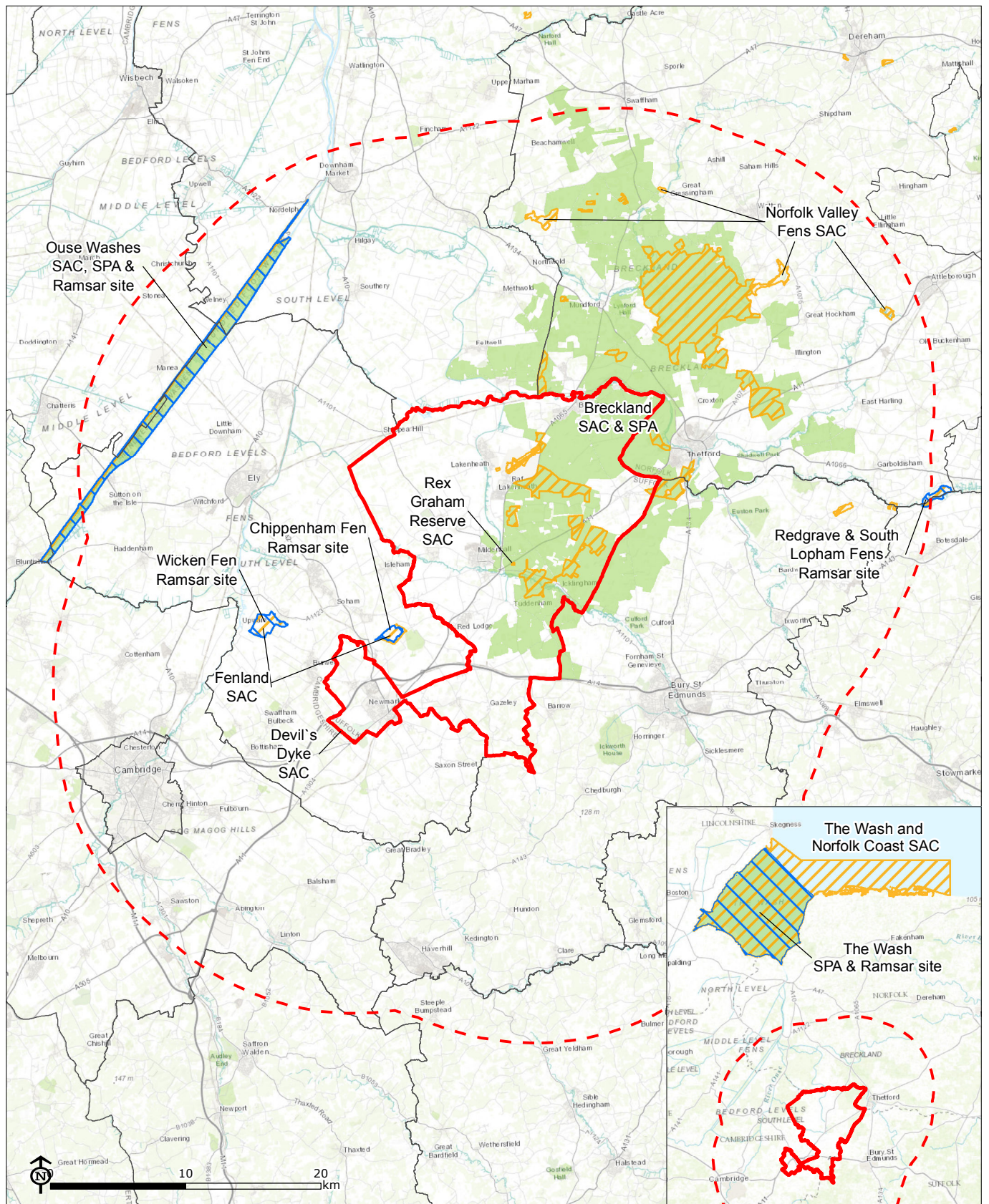
⁷ Advocate General's Opinion to CJEU in Case C-258/11 *Sweetman and others v An Bord Pleanála* 22nd Nov 2012.

- 3.19 Redgrave and South Lopham Fens Ramsar site was also screened out at earlier stages of HRA. This site overlies 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. Whilst the SAC is upstream of Forest Heath it was screened in for the HRA of the SIR because it was identified by the latest Forest Heath Water Cycle Strategy as being potentially impacted by water quantity or water quality (including sewer flooding) issues.
- 3.20 The HRA of the SALP 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 Redgrave and South Lopham Fens 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

- 3.21 Appropriate information to inform HRA Screening of 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

- 3.22 Regulation 105 of the Habitats Regulations 2017 (13) 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".
- 3.23 Natural England provided the Council with the following guidance on this requirement:

"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; and*
- any proposed plans or projects published for consultation prior to application."*

Approach adopted in the HRA of the SALP

- 3.24 The principles described above have been applied by first identifying relevant other plans for the in combination assessment. A large number of plan and strategy documents could potentially be considered. We focussed our attention on the SIR being developed in parallel with the SALP plus county and district level strategic plans which provide for development in Forest Heath and adjacent districts (including the policies of the adopted Forest Heath Core Strategy that are not being reviewed by the SIR), and reviewed the findings of any associated HRA work for these plans, where available.
- 3.25 To identify other projects which could result in a significant combined effect with the SALP, we reviewed the National Infrastructure Planning website. In addition, the Council was asked whether it was aware of any such projects. This revealed a number of projects which had not yet been developed but for which planning consent had been sought from FHDC or in relation to which the Council has published an EIA scoping request for consultation. These were not included as allocations in the SALP but were 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 with the exception of the emerging SIR, the provisions of which are summarised in the separate HRA report being produced in parallel with this one and which have been referenced where relevant throughout the HRA of the SALP.
- 3.26 The review of other relevant projects proceeded as follows.
- 3.27 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 SIR and SALP.

- 3.28 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 assessed as 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.
- 3.29 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 it in the in combination assessment. Once the project advances to a stage where project level HRA Screening is carried out, that HRA will need to consider the potential for the project to have effects in combination with other plans and projects, including the SIR and SALP.
- 3.30 Where planning consent had 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

Potential effects

- 4.1 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 were 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; and
 - air quality.
- 4.2 This chapter 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 Screening of the SALP (prior to consideration of mitigation) are then described. Note that the approach to Appropriate Assessment is described alongside the results of that assessment in Chapter 7.
- 4.3 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 'Provision' section of the SIR being prepared and consulted on in parallel with the SALP. Other types of effect, are more appropriately assessed by reference to the amount of development proposed at broad locations (as set out in the 'Broad Distribution' section of the SIR) or by reference to the specific development sites being allocated (as set out in the SALP). In some cases, although the potential effect was most appropriately assessed at a detailed scale in HRA of the SALP, it was necessary for HRA of the SIR 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.
- 4.4 Table 4.1 summarises the scale/ level in the planning process at which each of the types of potential effect listed above was assessed. If detailed examination of evidence during HRA of the SIR revealed any site-specific issues, these were dealt with in the HRA of the SALP on an exception basis.

Table 4.1 Scale at which each type of potential effect was 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

- 4.5 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

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

Approach to HRA Screening of Forest Heath SALP

- 4.7 Prior to consideration of mitigation, the HRA Screening assumed that it is not possible to rule out likely significant effects if a site allocation:
- overlaps any European site; or
 - overlaps a 1 km grid square with ≥ 5 stone curlew nesting attempts during 2011-2015 associated with Breckland SPA.

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

- 4.8 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 associated with urban areas.

- 4.9 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

- 4.10 The European sites potentially affected are:
- Breckland SPA.
- 4.11 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

- 4.12 Considering the particular sensitivity of Breckland SPA's designated bird species to these types or urban edge effects, correlative studies of stone curlews (14), nightjars (15) (16) (17) (18) and woodlarks (19) 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 (14). 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.
- 4.13 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 (14).
- 4.14 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 (20).
- 4.15 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 (14) (20).
- 4.16 In relation to predation effects, evidence shows that pet cats can roam up to 1.5 km at night (21) (22). As well as pets, research has shown that heathland close to urban areas can have higher densities of mammalian predators such as foxes (23) and that there is an increase in the numbers of crows and magpies on sites with greater human activity (24).
- 4.17 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 (18). 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.
- 4.18 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

- 4.19 Prior to consideration of mitigation, the HRA Screening assumed that it is not possible to rule out likely significant effects if a site allocation for built development:
- 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 a 1 km grid square with ≥ 5 stone curlew nesting attempts during 2011-2015 associated with Breckland SPA; or
 - overlaps, or is within 400 m of, SSSI components of Breckland SPA designated for woodlark or nightjar.
- 4.20 These three screening distances for disturbance and other urban effects are shown in Figure 4.1 and are consistent with the distances used to define the constraint zones in the adopted Core Strategy which have been agreed by Natural England. In relation to stone curlew nesting attempts areas outside of but functionally linked to Breckland SPA, the HRA of the SALP relies on updated data covering the period 2011-2015 rather than the 1995-2006 data that is referred to in Core Strategy policy CS2 and which informed HRA of the Core Strategy and of the SALP prior to the current stage of plan making. This data better reflects the areas of the SPA used by Stone Curlews and the areas outside the SPA that are also important. This is consistent with informal advice from Natural England and its comments on the HRA of the Preferred Options SALP.

Disturbance from construction or operation of roads

- 4.21 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.
- 4.22 Potential effects of increased road traffic on air quality are dealt with in a separate section below.
- 4.23 The potential for direct damage from road construction was adequately considered elsewhere via HRA of the Suffolk Local Transport Plan (for major schemes provided for by that plan); via the assessment in this document 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

- 4.24 Potential disturbance effects from construction or operation of roads were 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 distribution of development across the District. It was judged inappropriate to the level of detail of the SALP to attempt to separately assess the potential disturbance effects of new access roads serving individual developments from 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 of the SALP.

Recreation pressure

- 4.25 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:
- 4.26 *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.
- 4.27 *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

- 4.28 Based on the relevant information reviewed below and correspondence with Natural England, the HRA assumed that no significant contribution to increased recreation pressure could occur more than 7.5 km from new housing development and that the vulnerability to recreation pressure of other European sites was as follows:
- 4.29 *Fenland SAC* – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
- 4.30 *Wicken Fen Ramsar site* – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
- 4.31 *Chippenham Fen Ramsar site* – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
- 4.32 *Devil's Dyke SAC* – no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in Site Improvement Plan.
- 4.33 *Rex Graham Reserve SAC* – Whilst the Site Improvement Plan notes that there is an ongoing threat to site features (military orchid) from illegal plant collection, Natural England report that the site is generally closed to the public and the plant collection is organised theft rather than linked to recreation. In addition, the related SSSI is in 100% favourable condition. Natural England has confirmed that an assumption of cumulative recreation pressure from all housing allocations within 7.5 km is not necessary.
- 4.34 *Breckland SAC* – Whilst the Site Improvement Plan identifies a *potential* future threat of increased recreation through eutrophication (dog fouling, unauthorised fires) and disturbance of soils, it does not list any SAC designated features as currently being under pressure from public access / disturbance. Natural England has confirmed that it does not consider recreation pressure is currently affecting any specific interest features on site and that an assumption of cumulative recreation pressure from all housing allocations within 7.5 km is not necessary.
- 4.35 *Breckland SPA* – the 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.

- 4.36 The HRA therefore considered the potential for recreation pressure on Breckland SPA only.

Relevant information

- 4.37 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 (25).
- 4.38 A study of incubating stone curlews on Salisbury Plain (26) showed 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 found to be 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.
- 4.39 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 (27) (28) (29) (30).
- 4.40 Woodlarks have been intensively studied in conifer plantations and heathland habitats in the Dorset Heaths (19). 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 (31) (32), this is not sufficient to compensate for the effect of disturbance and the net effect on the woodlark population is negative (32).
- 4.41 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.
- 4.42 Detailed analysis of recreation pressure on Breckland SPA has been carried out to inform HRA work for the neighbouring Breckland Core Strategy (33). 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 (34). 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 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 when applying the Habitats Regulations.
- 4.43 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 the 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.

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

- 4.44 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 (33) 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 500 m or within 5 km) compared to Dorset Heaths SPA or Thames Basin Heaths SPA. Directly comparable visitor data were unavailable for the three European sites but very broad brush estimates suggested that visitor pressure on Breckland SPA is low relative to the other two SPAs. This was 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.
- 4.45 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 (33), (35) 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 (34) indicate 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.
- 4.46 A more recent visitor study for Breckland SPA (36) concentrated on heathland and forest ('Thetford Forest') areas of the SPA rather than farmland on the basis that these 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 noted 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 went 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.
- 4.47 A key finding of the research was 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 recommended 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."*
- 4.48 The research noted that its findings on the relationship between visitor rates and distance from home were similar to those presented in the HRA of the Breckland Site Specific Policies and Proposals Document (37) from a different data set. By further analysing visitor surveys (34) 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; this contrasts with the approach used by (36), which measured distances from home postcodes to actual survey locations within the Thetford Forest). The HRA (37) 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."*

- 4.49 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 (38).
- 4.50 In formal comments on the HRA of the Draft SALP (see Appendix 4) Natural England confirmed that the 7.5 km recreation zone of influence does not apply to farmland areas of Breckland SPA because farmland is widely available across the District and residents can therefore be assumed to use farmland near to home (for example for walking dogs) rather than travelling up to 7.5 km, as they might to access woodland or heathland areas. All studies on visitor behaviour at Breckland SPA of which LUC is aware are based on visitors to the forest and heathland areas of the SPA rather than farmland areas so there is no definitive data which can be used to define a recreation buffer for the farmland areas of Breckland SPA. In the absence of data specific to visits to farmland areas of the SPA, reference was made to information on walking distances to the SPA more generally (36).

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- 4.51 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 (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.
- 4.52 Nevertheless, 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. Thus, whilst the increase in recreation associated with the 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. The need for a precautionary approach is also indicated by the additional uncertainty created by the fact that Breckland SPA bird distributions change over time, particularly those of nightjar and woodlark in relation to forestry management.
- 4.53 Given the general agreement of the two Breckland SPA visitor studies discussed above, the HRA Screening of the SIR and SALP assumed that the potential for likely significant effects could not be ruled out from housing development within 7.5 km of non-farmland (see discussion above) areas of Breckland SPA. The farmland parts of Breckland SPA were identified as those overlain by SSSI units which the Natural England website (39) identifies as having an 'Arable and horticulture' habitat type. Development more than 7.5 km from Breckland SPA is assumed to have no effect.
- 4.54 Because of the relatively large size of the zone of influence for recreation pressure (7.5 km from non-farmland components of Breckland SPA), recreation pressure from housing development acts at a strategic scale such that while recreation pressure from a single new dwelling would not be significant, it is not possible to rule out the possibility that the total recreation pressure from multiple housing developments within the 7.5 km zone of influence would be significant in combination.
- 4.55 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 (38), based on the distances 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.

- 4.56 Footprint Ecology's 2010 report (36) indicates that 75% of visitors on foot travelled up to 1.3 km from home to the survey point and none travelled more than 1.6 km⁹. Bearing in mind that the HRA Screening of site allocations is concerned with the distance from home to the habitat boundary rather than a point within it, a farmland recreation zone of influence of 1.5 km should capture practically all visits on foot. This zone of influence was also drawn around stone curlew nesting attempts areas. Although mapping was not available to show whether all stone curlew nesting attempts areas are on farmland it is precautionary and consistent with known habitat preferences of stone curlew to assume that they are.

In summary, prior to consideration of mitigation, the HRA Screening assumed that it is not possible to rule out likely significant effects for any housing development (potential for species mortality or disturbance):

- within 7.5 km of the boundary of non-farmland parts of Breckland SPA, or
- within 1.5 km of the boundary of farmland parts of Breckland SPA or of stone curlew nesting attempts areas.

The resulting recreation zones of influence are shown in Figure 4.2. Development with no housing component was assumed to not give rise to recreation pressure.

Water quantity

- 4.57 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

- 4.58 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 each of the relevant catchments/RZs on water resources. The potential effects of the amount and distribution of growth proposed by the SIR and SALP were assessed by the Water Cycle Strategy (40) (41) (42), making reference to its findings on whether the growth can be supplied without increasing existing abstraction licences and whether changes to existing licences are being proposed by the Environment Agency to avoid harm to European sites or component SSSIs. The results of that assessment are presented in the HRA of the SIR rather than the HRA of the SALP since the assessment of the SIR broad distribution of housing did not highlight any water quantity effects that required more detailed assessment in relation to any individual site allocation. The HRA of the SIR was able to rule out adverse effects on the integrity of any European site in relation to water quantity.

Water quality

- 4.59 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.
- 4.60 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.
- 4.61 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.

⁹ More recent studies such as Footprint Ecology's 2016 report 'Visitor surveys at European protected sites across Norfolk during 2015 and 2016' do not appear to provide a more accurate distance to use

Approach to HRA of Forest Heath SALP

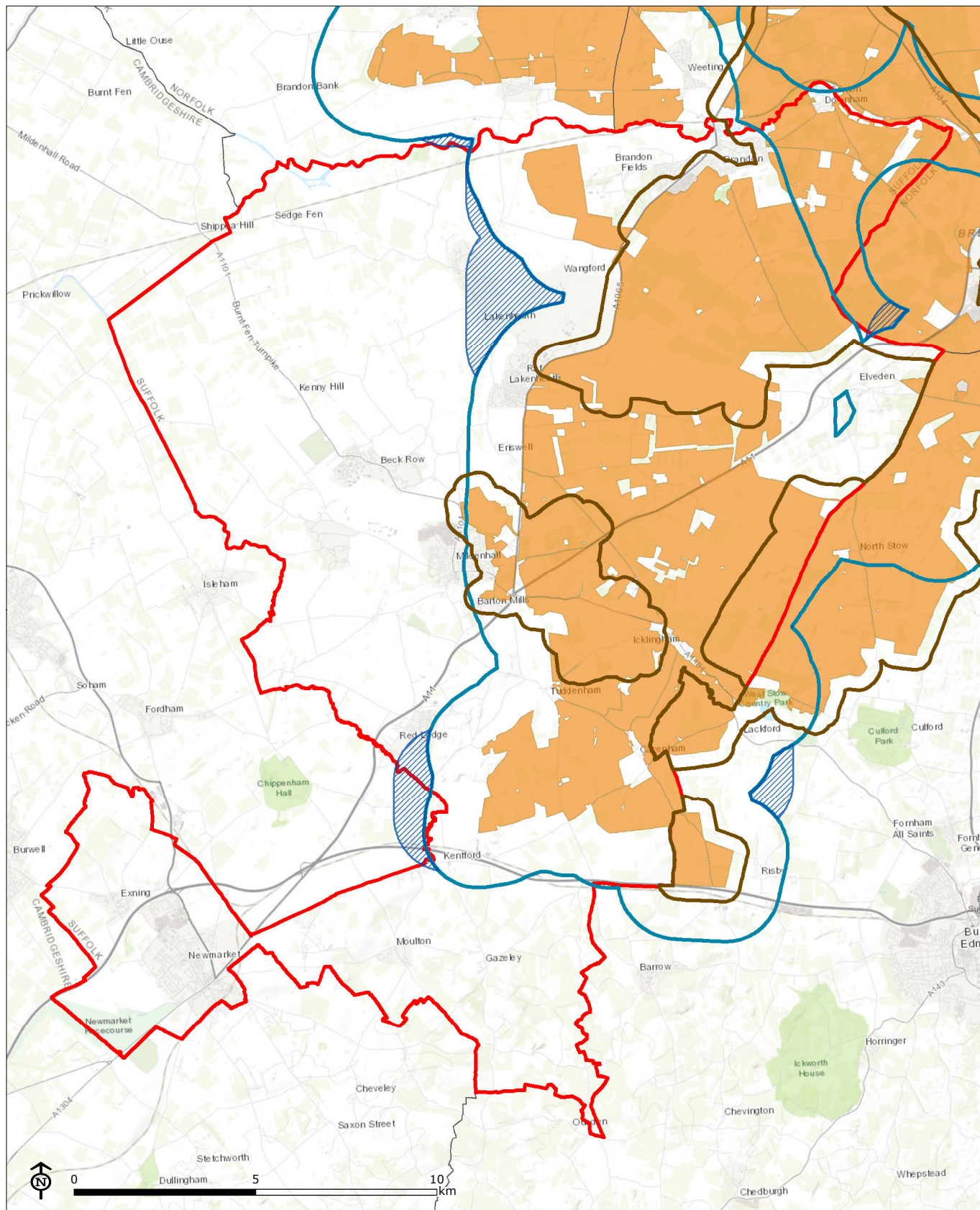
- 4.62 The potential effects of the amount and distribution of growth proposed by the SIR and SALP were assessed by the Water Cycle Strategy (40) (41) (42), making reference to its findings (summarised above) on whether the growth can be accommodated within existing WRC discharge consents and sewer network capacity. The results of that assessment are presented in the HRA of the SIR since the assessment of the SIR broad distribution of housing did not highlight any water quality effects that required more detailed assessment in relation to any individual site allocation. The HRA of the SIR was able to rule out adverse effects on the integrity of any European site in relation to water quality.

Air quality

- 4.63 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

- 4.64 Although the Council's Transport Study took account of the allocations proposed by the SALP, its findings on likely changes in road traffic are a function of the cumulative impact on the road network of all of the proposed growth and it was not possible to determine from the study report the impact on traffic of any individual allocation. Potential effects of traffic growth on air quality were therefore most appropriately addressed in the HRA of the amount and broad distribution of housing growth set out in the SIR rather than the HRA of individual allocations in the HRA of the SALP.
- 4.65 An initial screening exercise for potential air quality effects is presented in the HRA of the SIR. This revealed the need for further HRA work in relation to air quality effects and this is presented in a separate report prepared by AECOM (43).



- 1,500 m zone of influence around SSSI components of Breckland SPA designated for Stone Curlew
- 1,500 m zone of influence around 1km grid squares with ≥ 5 Stone Curlew nesting attempts 2011-2015
- 400 m zone of influence around SSSI components of Breckland SPA designated for Woodlark or Nightjar
- Breckland SPA
- Forest Heath District Boundary

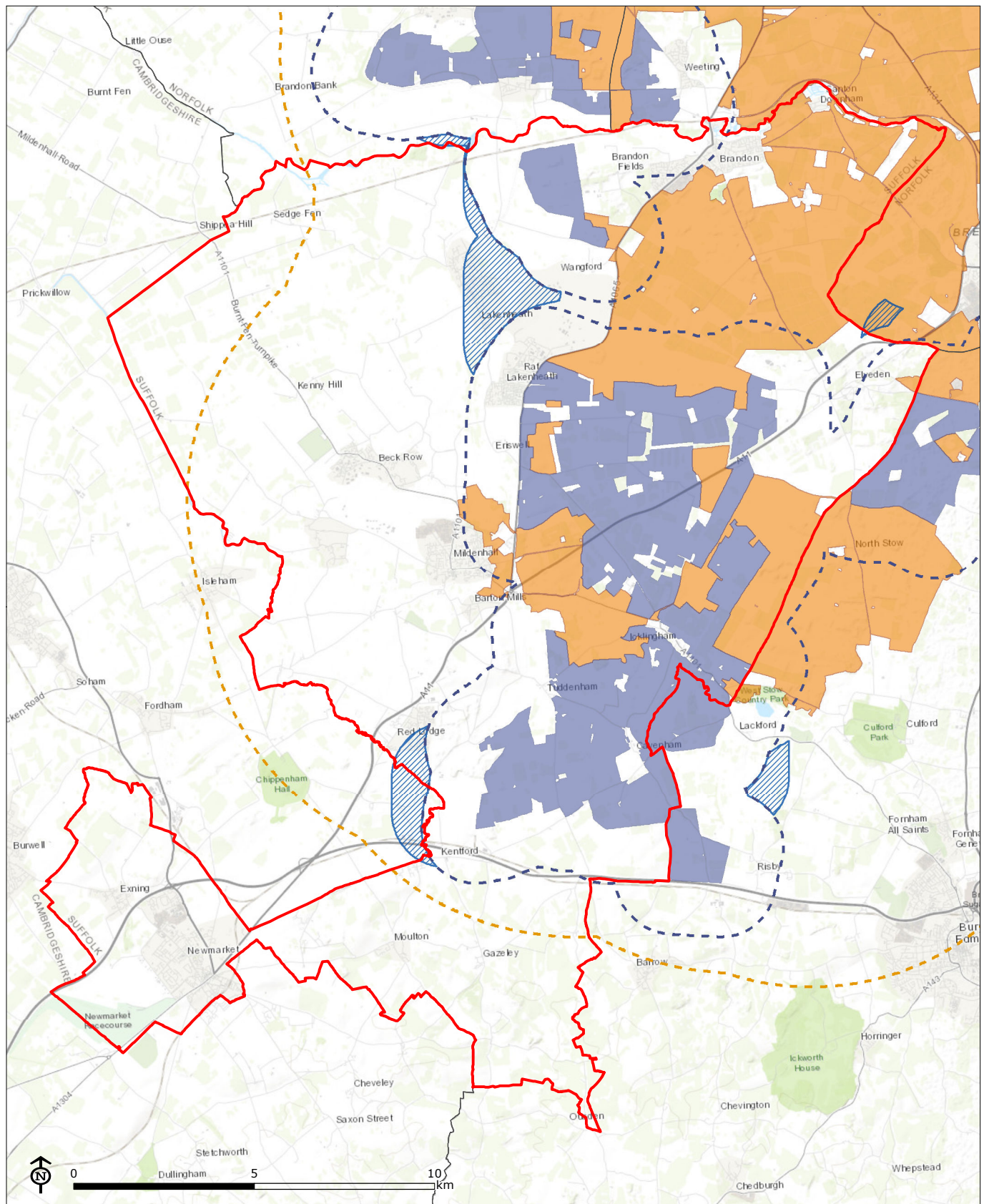
Map Scale @ A4: 1:150,000

Forest Heath Local Plan
HRA

Figure 4.1
Disturbance & other
urban edge effects
zones of influence

Source: JNCC, Natural England

LUC



- Forest Heath District Boundary
- Farmland areas of Breckland SPA
- 1.5km zone of influence around farmland areas of Breckland SPA
- 1.5km zone of influence around 1km grid squares with ≥ 5 Stone Curlew nesting attempts 2011-2015
- Non-farmland areas of Breckland SPA
- 7.5 km zone of influence around non-farmland areas of Breckland SPA

Map Scale @ A4: 1:150,000

Forest Heath Local Plan HRA

Figure 4.2: Recreation pressure zone of influence around Breckland SPA

Source: JNCC, Natural England



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

CB:VG EB:Goosen_V LUCGLA 6446-01_001_ADOPT_Fig4-2_Recreation_Buffers 16/03/2018

5 Results of initial screening

- 5.1 This chapter summarises the results of an initial screening of each component of the SALP for the potential to have likely significant effects on European sites, prior to consideration of mitigation provided by the SALP itself, by other Development Plan documents, or by other relevant regulatory mechanisms. Site allocations or other plan policies for which potential likely significant effects were identified by the initial screening are considered further in Chapter 6 and the HRA screening conclusions are then presented.

Settlement boundary reviews

- 5.2 SALP Policy SA1 and supporting text explain that settlement boundaries have been reviewed to encompass new allocations and planning permissions that have been built or granted since the 1995 Local Plan was prepared and to remove sensitive or protected areas. The new boundaries are depicted on the Policies Map and boundary changes are described in a separate evidence report (44).

Assessment of potential for likely significant effects

- 5.3 Residential development will be permitted within the settlement boundaries where it is consistent with other planning policies.
- 5.4 In some cases the newly enclosed areas would fall within zones of influence within which the HRA Screening assumes that likely significant effects will occur (for example parts of the newly enclosed areas at Land north of Station Road, Lakenheath would fall within 1,500 m of stone curlew nesting attempts grid squares associated with Breckland SPA). 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.
- 5.5 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, or exclude areas which are currently part of Breckland SPA, as at the boundary revision along the southern edge of Brandon.
- 5.6 As such, likely significant effects from the settlement boundary reviews were ruled out.

Housing and mixed use allocations in the market towns, key service centres and primary villages

- 5.7 In line with the SIR policy options for the distribution of housing, all housing and mixed use 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. The site allocations are made by Policies SA2-SA14 and have already been listed in Table 2.1.

Assessment of potential for likely significant effects prior to mitigation

- 5.8 The matrix in Appendix 1 sets out the initial screening assessment of which types of effect on European sites could potentially result from each of the 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 an allocation 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 amber. It is emphasised that the initial screening assessment in Appendix 1 and this chapter do not represent the conclusion of the screening stage of the HRA as these potential effects are identified prior to consideration of mitigation (considered in Chapter 6).

5.9 The results of the initial screening assessment are summarised below.

Direct loss or physical damage due to construction

5.10 None of the housing and mixed use allocations overlapped any European site or stone curlew nesting attempts grid squares functionally linked to Breckland SPA. The potential for likely significant effects due to direct loss / physical damage was therefore ruled out for all of these allocations.

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

5.11 A number of the housing and mixed use allocations were within 1,500 m of components of Breckland SPA designated for stone curlew, or within 1,500 m of stone curlew nesting attempts grid squares functionally linked to Breckland SPA, or within 400 m of components of Breckland SPA designated for woodlark or nightjar. As such it was not possible to rule out the potential for likely significant disturbance or other urban edge effects on Breckland SPA for the following housing and mixed use allocations:

- Brandon: SA2(a), SA2(b);
- Mildenhall: SA5(a), SA5(b);
- Lakenheath: SA7(b), SA8(a), SA8(b);
- Red Lodge: SA9(b), SA9(c), SA10(a); and
- Kentford: SA13(a), SA13(b).

Recreation pressure

5.12 The initial screening was unable to rule out the potential for recreation pressure to contribute to mortality or disturbance of Breckland SPA designated species, prior to consideration of mitigation, for any site allocations with a housing component within 7.5 km of the non-farmland components of Breckland SPA, within 1.5 km of the farmland components of Breckland SPA, or within 1.5 km of stone curlew nesting attempts areas. As such it was not possible to rule out the potential for likely significant recreation effects on Breckland SPA for the following housing and mixed use allocations:

- Brandon: SA2(a), SA2(b);
- Mildenhall: SA4(a), SA5(a), SA5(b);
- Lakenheath: SA7(a), SA7(b), SA8(a), SA8(b), SA8(c);
- Red Lodge: SA9(a), SA9(b), SA9(c), SA9(d), SA10(a);
- Beck Row: SA11(a), SA11(b), SA11(c), SA11(d);
- Kentford: SA13(a), SA13(b); and
- West Row: SA14(a).

Site for allocation in the secondary villages

5.13 Housing sites are not being allocated in the secondary villages. However, to cater for projected need, Policy SA15 allocates a 0.75 ha site for the expansion of Moulton Primary School to the north of the Moulton settlement boundary.

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 preferred site allocation, applying the methodology and assumptions described in Chapter 4.

- 5.15 The location of the site in Moulton rules out the possibility of direct loss or physical damage due to construction and of disturbance and other urban edge effects from construction or occupation of buildings. Likely significant effects due to recreation pressure were ruled out as the allocation does not include housing and in any event, the site is not within the recreation pressure zone of influence of Breckland SPA.

Economy and jobs

- 5.16 Policy SA17 of the SALP proposes two employment allocations, one at Mildenhall and the other at Newmarket. In addition, Policy SA16 protects a number of existing employment sites for employment purposes. Three 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

- 5.17 The screening matrix in Appendix 1 sets out the assessment of which types of effect on European sites could potentially result from the two employment-only site allocations, applying the methodology and assumptions described in Chapter 4. It was not possible to rule out the potential for likely significant disturbance or other urban edge effects on Breckland SPA from employment allocation SA17(a) at Mildenhall as the 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.
- 5.18 Policy SA16 does not propose development and is therefore not capable of likely significant effects.
- 5.19 The mixed use allocations with an employment component are assessed within the housing and mixed use section above.

Retail and town centres

- 5.20 Policy SA18 of the SALP proposes a retail allocation at Exning Road, Newmarket.
- 5.21 Also in this section of the SALP, Policy SA19 sets out the Council's intention to prepare masterplans to guide future town centre development in Brandon, Mildenhall and Newmarket.

Assessment of potential for likely significant effects

- 5.22 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. The potential for likely significant effects was ruled out for this allocation.
- 5.23 Policy SA19 does not actually propose development and is therefore not capable of likely significant effects.

6 Conclusions of HRA Screening

- 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 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; and
 - recreation pressure.
- 6.3 Other relevant types of potential effect are considered in the HRA of the SIR which has been 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 since the iterative operation of the HRA process alongside the plan-making process ensured that each plan mitigated any additional pressure it could place on European sites.
- 6.6 The review of other relevant projects (see Appendix 2) revealed some potential residual minor effects on the stone curlew population of Breckland SPA from development proposals at Lakenheath. However, as discussed in Appendix 2 and Chapter 7, Natural England has already ruled out the possibility of significant in combination effects on Breckland SPA from the developments allocated by the SALP and those listed in the in combination assessment.

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 1 km grid square functionally linked to Breckland SPA with five or more stone curlew nesting attempts during 2011-2015.

HRA Screening conclusion

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

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 1 km grid square functionally linked to Breckland SPA with five or more stone curlew nesting attempts during 2011-2015, 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:
- Brandon: SA2(a), SA2(b);
 - Mildenhall: SA5(a), SA5(b);
 - Lakenheath: SA7(b), SA8(a), SA8(b);
 - Red Lodge: SA9(b), SA9(c), SA10(a); and
 - Kentford: SA13(a), SA13(b).
- 6.10 The potential for likely significant effects was also identified for the following employment allocation:
- Mildenhall: SA17(a).

In-combination effects

- 6.11 Figure 4.1 shows that Breckland SPA is a large European site which spans a number of neighbouring districts and the stone curlew and woodlark or nightjar zones of influence take in a number of neighbouring settlements, the main relevant focus for growth being Thetford in Breckland District. A review of the HRA for Breckland Core Strategy (Appendix 2) confirmed that the development proposed has the potential to contribute to increased disturbance and other urban edge effects from construction or occupation of buildings on Breckland SPA. As reported in the HRAs for neighbouring development plans, mitigation has been put in place to avoid likely significant recreation pressure effects on European sites from the development plans for those districts, either alone or in-combination. It is therefore assumed that the residual (post-mitigation) effect from development in neighbouring districts is negligible and need not be considered further in this HRA.
- 6.12 The review of other relevant plans and projects (Appendix 2) also highlights the potential for economic and tourism development provided by Policy CS 6 of the adopted Forest Heath Core Strategy to contribute to disturbance and other urban edge effects on Breckland SPA. The HRA Screening of the SALP therefore considers the potential effects of the housing provided by the SALP in-combination with the development provided by the Core Strategy and the SIR.

Existing mitigation which could rule out likely significant effects

- 6.13 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 was deemed inappropriate to rely on this policy in coming to an HRA Screening conclusion on the SALP allocations within the constraint buffers as this would pre-empt the findings of any project level HRA, and the required mitigation may not be deliverable. Instead, the extent to which reliance can be placed on any completed project level HRAs and the extent to which the findings of those HRAs are reflected in the corresponding site allocation policies was considered as part of an Appropriate Assessment in Chapter 7.

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 cannot be ruled out for the SALP site allocations at paragraphs 6.9 to 6.10 and an Appropriate Assessment is therefore required.

Recreation pressure

- 6.14 The potential for likely significant effects on Breckland SPA due to recreation pressure was identified for a number of site allocations with a housing component proposed by the SALP. As detailed in Appendix 1, this was due to the allocations being within 7.5 km of the non-farmland components of Breckland SPA, or within 1.5 km of the farmland parts of Breckland SPA, or within 1.5 km of stone curlew nesting attempts areas associated providing supporting habitat to Breckland SPA.
- 6.15 Prior to consideration of mitigation, the potential for likely significant effects was identified for the following housing and mixed use allocations:
- Brandon: SA2(a), SA2(b);
 - Mildenhall: SA4(a), SA5(a), SA5(b);
 - Lakenheath: SA7(a), SA7(b), SA8(a), SA8(b), SA8(c);
 - Red Lodge: SA9(a), SA9(b), SA9(c), SA9(d), SA10(a);
 - Beck Row: SA11(a), SA11(b), SA11(c), SA11(d);
 - Kentford: SA13(a), SA13(b); and
 - West Row: SA14(a).

In-combination effects

- 6.16 Because of the relatively large size of the zone of influence for recreation pressure (7.5 km from non-farmland components of Breckland SPA), recreation pressure from housing development acts at a strategic scale. This means that while recreation pressure from a single new dwelling would be unlikely to be significant, it is not possible to rule out the possibility that the total recreation pressure from multiple housing developments within the 7.5 km zone of influence would be significant in-combination.
- 6.17 Figure 4.2 shows that Breckland SPA is a large European site which spans a number of neighbouring districts and the 7.5 km zone of influence around its non-farmland components takes in a number of local population centres including Thetford in Breckland District and Bury St Edmunds in St Edmundsbury Borough. A review of the Core Strategies and corresponding HRAs for these two districts (Appendix 2) confirmed that the development proposed in them has the potential to contribute to increased recreation pressure on Breckland SPA. As reported in the HRAs for these development plans, mitigation has been put in place to avoid likely significant recreation pressure effects on European sites from the development plans for those districts, either alone or in-combination. It is therefore assumed that the residual (post-mitigation) recreation pressure from development in neighbouring districts is negligible and need not be considered further in the HRA of Forest Heath's Local Plan documents. The review of other relevant plans and projects (Appendix 2) also highlights the potential for economic and tourism development provided by Policy CS 6 of the adopted Forest Heath Core Strategy to contribute to recreation pressure on Breckland SPA. The HRA Screening of the SALP therefore considers the potential effects of the housing provided by the SALP in-combination with the development provided by the Core Strategy and SIR.

Existing mitigation which could rule out likely significant effects

- 6.18 Adopted Local Plan policies in the Core Strategy and Development Management Policies document 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 (45)

- 6.19 Policy CS2: Natural Environment - The policy promotes green infrastructure enhancement and/or provision on all new developments.
- 6.20 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 (46) which includes the approach to determining when developer contributions can be used to provide off site open space.

Development management policies (47)

- 6.21 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."
- 6.22 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."*
- 6.23 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"*.

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 (48) to provide evidence on appropriate accessible natural greenspace 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 greenspace 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 FHDC's study updates an assessment, first presented in the Core Strategy, of the availability of natural greenspace at each main settlement in the District and its capacity for additional visitors.
- 6.26 Drawing on the Council's Supplementary Planning Document (SPD) for Open Space, Sport and Recreation Facilities (46), the Accessible Natural Greenspace Study sets a minimum provision standard of 2.3 ha of accessible natural greenspace per 1,000 population. Population growth in the District is currently estimated to be 17,000 over the Local Plan period (49), so this provision standard equates to a total accessible natural greenspace requirement of at least 39 ha. The Accessible Natural Greenspace Study then goes on to determine the minimum amount of accessible natural greenspace that should be provided at each of the District's settlements by applying the 2.3 ha per 1,000 population standard and an assumption of 2.34 persons per household to the number of homes to be provided at each settlement by the SIR and SALP.
- 6.27 In discussing the design of Suitable Accessible Natural Greenspace (SANG) to most effectively mitigate recreation pressure on Breckland SPA, the Accessible Natural Greenspace Study makes reference to Natural England guidance. It adapts this guidance in light of the Forest Heath District context, in particular the fact that the large proportion of the District that is designated for biodiversity means that in some areas there is very little space to provide SANGs at settlements. It therefore proposes some flexibility in applying the guidance, for example by providing

greenspace which may be smaller than 2 ha where space does not allow larger SANGs but ensuring it is connected to other greenspace by attractive walking and cycling routes.

- 6.28 Discussion between the Council and Natural England has highlighted two SSSIs, Maidscross Hill SSSI at Lakenheath and Red Lodge SSSI at Red Lodge, which are in close proximity to and act as the main areas of natural greenspace for these settlements. These SSSIs are already subject to significant recreation pressure and the Accessible Natural Greenspace Study documents that the Council has agreed with Natural England the need for a wardening service at these two sites. This element of mitigation is not directly relevant to the HRA as the SSSIs in question are not part of European sites but demonstrates the potential role for measures other than SANG provision to mitigate recreation pressure.
- 6.29 The Accessible Natural Greenspace Study also notes that to avoid potential adverse effects on populations of Breckland SPA designated species before they occur, monitoring of visitor levels and activities and of the effectiveness of mitigation measures such as Suitable Accessible Natural Greenspace (SANG) provision is likely to be required.
- 6.30 Drawing all of this information together, the Accessible Natural Greenspace Study proposes a recreation mitigation strategy, the key principles of which are set out in the Box 1. The document then further develops these via specific proposals for each settlement.

Box 1: FHDC Recreation Mitigation and Monitoring Strategy: Key Features

- Provide at least the level of open space set out in the SPD for Open Space, Sport and Recreation Facilities on all development sites.
- Where there is already a sports pitch and formal provision available within the community that is easily accessible, take a flexible approach to increase the natural open space through the SPD provision.
- In those settlements shown through the ANGSt study to be deficient in a 2-20 ha local green space, aim to create new open space of this size in association with new development. This should be located within 300 m of the new dwellings to ensure easy access for the new residents, and the design should, as much as is practicable, follow the (adapted) Natural England guidelines.
- Secure the provision of a large SANG area, at least 10 ha, such as a country park with adequate car parking facilities and natural areas which fulfil many of the requirements of the Natural England SANG design.
- New green space should be connected to the existing GI network through the retention of existing and creation of new features such as tree belts, hedges, grasslands, and river corridors.
- For development sites in settlements that are within 7.5 km of the heathland and forest components of Breckland SPA, improve and connect the wider green infrastructure network to provide access and walking routes of approximately 2.5 km in length.
- A warden service should be established where development could lead to recreational pressure that could damage the interest features of the existing sensitive open spaces that are designated nationally and/or locally. These sites include Maidscross Hill SSSI and LNR, Red Lodge Heath SSSI and Aspal Close LNR.
- Where appropriate and proportionate to the scale and location of development, monitoring should be secured. Consultation with Natural England will be necessary to agree the level of monitoring.

- 6.31 In commenting on a draft of the Accessible Natural Greenspace Study during Preferred Options consultation on the SIR and SALP, Natural England stated that the study *"...has correctly identified the areas which are lacking natural greenspace"* and accepted the need to *"increase greenspace and green networks in a flexible way as suggested"*, given the limited, undesignated space available at the District's settlements. Where Natural England made suggestions to strengthen the mitigation offered by the study, such as inclusion of a large SANG area (at least 10 ha) and to focus on improvements to the wider green infrastructure network on development at settlements

within 7.5 km distance of the heathland and forest areas of Breckland SPA, FHDC has given consideration to these and reflected them in latest (January 2017) version of the study.

Policies within the Site Allocations Local Plan itself

- 6.32 In discussing the natural environment and biodiversity context, the SALP confirms that:
- "the Council will continue to work with Natural England and developers to secure and implement mitigation measures to influence recreation in the region. These will be either onsite or offsite, proportionate to the type, scale, and location of development in the plan such that these measures contribute to the strategy set out in the natural greenspace study".*
- 6.33 Links are also provided in the SALP's allocation policies to the general principles and various specific features of the mitigation and monitoring strategy set out in the Accessible Natural Greenspace Study. These are summarised in Table 6.1 for policies which allocate residential development to settlements falling within 7.5 km of the non-farmland areas of Breckland SPA.
- 6.34 There is also mitigation within the SALP to address site-specific pressure on farmland areas of Breckland SPA adjacent to the relevant allocated sites. This is also summarised in Table 6.1.
- 6.35 It is judged that the mitigation offered by policies to provide and enhance open space and rights of ways networks and the linkage of these to a coherent Recreation Mitigation and Monitoring Strategy set out in the Accessible Natural Greenspace study is sufficient to avoid likely significant effects due to recreation pressure on any European site, including Breckland SPA.

HRA Screening conclusion

Likely significant recreation pressure effects from the SALP on Breckland SPA can be ruled out both alone and in combination with other relevant plans and projects.

Table 6.1 Mitigation of recreation pressure by SALP policies allocating residential development within recreation pressure zone of influence of Breckland SPA

Settlement and SALP policy	Summary of recreation mitigation relevant to the HRA
Brandon – Policy SA2	<i>"open space must be provided to address the individual site requirements and location"</i>
Mildenhall – Policy SA4 Land west of Mildenhall	<p><i>"All development must provide measures for influencing recreation in the surrounding area, to avoid a damaging increase in visitors to Breckland SPA. An approach developed as part of the masterplan for the site is required so that smaller sites coming forward independently can contribute to this approach. Measures should include the provision of suitable alternative natural greenspace (SANGS) of at least 10ha in size which is well connected and the enhancement and promotion of dog friendly facilities and access routes in the immediate vicinity of the development and/or other agreed measures;"</i></p> <p><i>"connection to the River Lark corridor and the wider landscape providing a framework of interconnecting green corridors for people and wildlife"</i></p> <p><i>"A substantial buffer should be retained adjacent to the River Lark to maintain the amenity and allow enhancement of the important blue/green corridor which could be the focus of the SANGS"</i></p> <p><i>"open space must be provided to address the individual site requirements and location"</i></p>
Mildenhall – Policy SA5 Housing allocations in Mildenhall	<p><i>"All development must provide measures for influencing recreation in the surrounding area to avoid a damaging increase in visitors to the Breckland SPA. Measures should include the enhancement and promotion of dog friendly access routes in the immediate vicinity of the development and/or other agreed measures"</i></p> <p><i>"open space must be provided on all sites to address the individual site requirements and locations"</i></p>
Lakenheath - Policy SA7 Housing and mixed use allocations in Lakenheath	<p><i>"Any development must provide measures for influencing recreation in the surrounding area, to avoid a damaging increase in visitors to Maudsland Hill SSSI and Breckland SPA. Measures should include the enhancement and promotion of dog friendly access routes in the immediate vicinity of the development and/or other agreed measures"</i></p> <p><i>"open space must be provided to address the individual site requirements and location"</i></p> <p><i>"substantial buffer next to the Cut Off Channel, providing semi-natural habitat adjacent to the water course, should be provided where possible in relation to current or future applications"</i></p>
Lakenheath - Policy SA8 North Lakenheath	<p><i>"Any development must provide measures for influencing recreation in the surrounding area, to avoid a damaging increase in visitors to Maudsland Hill SSSI and Breckland SPA. Measures should include the provision of well connected and linked suitable alternative natural greenspace and enhancement and promotion of a dog friendly access route in the immediate vicinity of the development and/or other agreed measures"</i></p> <p><i>"open space must be provided on all sites to address the individual site requirements and location"</i></p> <p><i>"substantial buffer next to the Cut Off Channel, as shown on the Policies Map, providing semi-natural habitat adjacent to the water course should be provided where possible in relation to current or future applications"</i></p> <p><i>"If any of these sites come forward individually they will need to contribute to a strategic approach to the provision of suitable alternative natural greenspace and access linking to the wider network across the north of Lakenheath."</i></p>
Red Lodge - Policy SA9 Housing allocations in Red Lodge	<i>"Development on all sites must provide measures for influencing recreation in the surrounding area, to avoid a damaging increase in visitors to Breckland SPA. Measures should include the enhancement and promotion of dog friendly access routes in the immediate vicinity of the development(s), and/or other agreed measures. Measures to avoid an increase in recreational activity in adjacent farmland, such as barriers to access, should also be considered for sites SA9 (b) and (c)."</i>

Settlement and SALP policy	Summary of recreation mitigation relevant to the HRA
	<p><i>"open space must be provided to address the individual site requirements and locations;</i></p> <p><i>"Cycle and pedestrian links should be provided within the sites and where appropriate connections to the existing network"</i></p> <p><i>"Site (b) Land east of Red Lodge – north; irrespective of the mitigation measures approved in association with site (c), any future proposals or planning application will require a project level HRA."</i></p> <p><i>"Any future amendments, reserved matters or new planning application to site (c) would require a project level Habitats Regulation Assessment."</i></p>
Red Lodge - Policy SA10 North Red Lodge	<p><i>"The masterplan and any future planning applications will require a project level Habitats Regulations Assessment. The development must also provide measures for influencing recreation in the surrounding area, to avoid a damaging increase in visitors to Breckland SPA and an increase in recreational activity in adjacent farmland. Measures should include the provision of suitable alternative natural greenspace which is well connected and the enhancement, and promotion of dog friendly access routes in the immediate vicinity of the development, barriers to access and/or other agreed measures."</i></p> <p><i>"open space must be provided to address the individual site requirements and location"</i></p> <p><i>"Cycle and pedestrian links should be created within the site and where appropriate connections to the existing network"</i></p>
Beck Row – Policy SA11	<p><i>"open space must be provided on all sites to address the individual site requirements and locations"</i></p> <p><i>"Site (a) must provide good connectivity between the development site and Aspal Close local nature reserve"</i></p>
Kentford – Policy SA13	<i>"recreational open space must be provided to address the individual site requirements and locations"</i>
West Row - Policy SA14	<p><i>"The development must provide measures for influencing recreation in the surrounding area, to avoid a damaging increase in visitors to the Breckland SPA. Measures should include provision of suitable alternative natural greenspace and the enhancement and promotion of a dog friendly access route in the immediate vicinity of the development and/or other agreed measures;"</i></p> <p><i>"open space must be provided to address the individual site requirements and location"</i></p>

7 Appropriate Assessment

Scope of the Appropriate Assessment

- 7.1 The Screening stage of the HRA of the SALP was unable to rule out likely significant effects from the following SALP site allocations:
- Brandon: SA2(a), SA2(b);
 - Mildenhall: SA5(a), SA5(b), SA17(a);
 - Lakenheath: SA7(b), SA8(a), SA8(b);
 - Red Lodge: SA9(b), SA9(c), SA10(a); and
 - Kentford: SA13(a), SA13(b).
- 7.2 The type of effect of concern was disturbance and other urban edge effects from construction or occupation of buildings in relation to the stone curlew and the woodlark and nightjar designated populations of Breckland SPA. This Chapter therefore sets out an Appropriate Assessment in relation to this potential effect.

Reliance on project level HRA

- 7.3 Development proposals have already come forward on some of the sites allocated by the SALP and Core Strategy Policy CS2 requires project level HRA for all proposals within the Breckland SPA constraint zones. In the first instance, a check was therefore made as to whether project level HRA had been completed. If a project level HRA had been completed for the allocated site and concluded that adverse effects on the integrity of Breckland SPA could be ruled out, the HRA of the SALP relied on this conclusion provided that:
- the proposed development that had been subject to project level HRA was substantially the same as that allocated by the SALP; and
 - Natural England had confirmed its acceptance of the HRA conclusions; and
 - any mitigation provided by the proposal, specified by the HRA, or specified by Natural England's comments on the proposal was reflected in the SALP site allocation policy to ensure that these requirements remain in place even if the current proposal is not implemented.
- 7.4 For the remaining site allocations, an Appropriate Assessment was carried out as described below.

Approach to Appropriate Assessment of disturbance and other urban edge effects from construction or occupation of buildings

- 7.5 The review of relevant information at paragraphs 4.12 to 4.18 indicates that there is evidence of avoidance of housing by stone curlew, and woodlark or nightjar, and that effects from non-residential built development cannot reliably be discounted.

Range of effect

- 7.6 By reference to the available evidence and to the distances previously agreed with Natural England to identify the zones of influence used in Core Strategy Policy CS2 and the HRA Screening distances used in earlier stages of the HRA of the SIR and SALP, the Appropriate Assessment assumes that disturbance and other urban edge effects operate over the following distances:
- within 1,500 m of SSSI components of Breckland SPA designated for stone curlew; or

- within 1,500 m of a 1 km grid square functionally linked to Breckland SPA with ≥ 5 stone curlew nesting attempts during 2011-2015; or
- within 400 m of SSSI components of Breckland SPA designated for woodlark or nightjar.

Nature of effect

7.7 The evidence discussed in Chapter 4 shows that avoidance of built development is likely to be due to a range of direct and indirect factors, with individual ones difficult to tease apart. Recreation pressure from residential development has been considered separately in the HRA. The remaining types of disturbance and other urban edge effect considered to have the potential for adverse effects on the integrity of Breckland SPA in relation to development within the zones of influence listed in the preceding section are:

- visual presence of and light pollution from buildings – potentially significant alone or in combination where development is within the line of sight of the component of Breckland SPA habitat giving rise to the 1500 m or 400 m zone(s) of influence for which the site was screened in;
- domestic cat predation – potentially significant alone or in combination if cats are likely to be able to move between the development and the component of Breckland SPA habitat giving rise to the 1500 m or 400 m zone(s) of influence for which the site was screened in;
- noise pollution – potentially significant alone or in combination unless additional noise generated by the development is unlikely to be perceptible at the component of Breckland SPA habitat giving rise to the 1500 m or 400 m zone(s) of influence for which the site was screened in because of more significant noise sources between the development site and the SPA habitat.

Approach to Appropriate Assessment

7.8 In light of the evidence on the nature of effects and informed by discussion with Natural England, the Appropriate Assessment of site allocations considered three broad categories of disturbance and other urban edge effects, assessing the potential for adverse effects on integrity as follows:

- *Visual presence of and light pollution from buildings*: rule out if the allocated site is screened from Breckland SPA by existing built development or other permanent features that prevent inter-visibility.
- *Domestic cat predation*: rule out if significant physical barriers exist between the allocated site and Breckland SPA, for example major roads or water courses.
- *Noise pollution*: rule out if noise from development is unlikely to be perceptible at Breckland SPA because of more significant noise sources between the development site and the SPA habitat; judgement will depend on the size of the development, the allocated use, and the nature of the intervening noise sources, for example major roads and existing development.

Effects in combination

7.9 Consideration was given to whether any minor effects identified would be likely to be capable of a significant effect, in combination with other allocations to the settlement and with any effects at that settlement from other plans and projects reviewed in Appendix 2.

Mitigation

7.10 In coming to a conclusion on the effects of each allocation, the assessment also took account of any relevant site-specific mitigation provided by the site allocation policy.

Results

Review of existing project level HRAs

- 7.11 Allocations that have associated project level HRAs are set out in Table 7.1, along with the results of the review and a conclusion on whether the HRA of the SALP can rely on the project level HRA.
- 7.12 The review found that for all of the allocations for which project level HRA was reviewed, the HRA of the SALP could rely on the project level HRA and that adverse effects on the integrity of Breckland SPA could be ruled out, both alone and in combination.

Assessment of allocations for which no project level HRA relied upon

- 7.13 The remaining site allocations for which reliance could not be placed on project level HRA are assessed in Table 7.2.
- 7.14 The assessment of the remaining allocations found that none of them would result in significant disturbance and other urban edge effects (visual presence and light pollution from buildings; domestic cat predation; or noise pollution) and that adverse effects on the integrity of Breckland SPA could be ruled out, both alone and in combination.

Table 7.1 Reliance on project level HRA to rule out disturbance and other urban edge effects

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Review of project level HRA and related Natural England comments	Conclusion
Brandon				
SA2(a) Land at Warren Close – 23 units housing	N/A – assessed in Table 7.2			
SA2(b) Land off Gas House Drove – 10 units housing	N/A – assessed in Table 7.2			
Mildenhall				
SA5(a) Land at 54 Kingsway – 23 units housing	N/A – assessed in Table 7.2			
SA5(b) District Council Offices, College Heath Road – 89 units housing	N/A – assessed in Table 7.2			
SA17(a) Mildenhall Academy and Dome Leisure Centre site – B1 employment	N/A – assessed in Table 7.2			
Lakenheath				
SA7(b) Land west of Eriswell Road – 140 units housing	N/A – assessed in Table 7.2			
SA8(a) Rabbit Hill Covert, Station Road – 81 units housing	Approximately two thirds of site (the eastern part) is within 1,500 m of functionally linked stone curlew nesting areas.	Resolution to approve proposal F/2013/0345/OUT Project level HRA updated 19/08/2016	Project level HRA by FHDC ruled out LSE on any European site provided that the following measures are implemented: <ul style="list-style-type: none"> "the layout of the site must provide public open space that will give opportunities for dog walkers potentially within and adjacent to the peripheral woodland belts which are 	HRA of SALP can rely on project level HRA; adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Review of project level HRA and related Natural England comments	Conclusion
			<p><i>to be retained</i></p> <ul style="list-style-type: none"> <i>the site is well connected to the village facilitated by highway improvements to provide a public footpath</i> <i>proportionate contribute to securing public access along and over the Cut-off Channel for recreational purposes"</i> <p>Natural England comments on the original HRA (letter to FHDC dated 19/12/2013) confirmed its conclusion that likely significant effects could be ruled out. Whilst this pre-dated the updated stone curlew nesting attempts buffer, Natural England subsequently confirmed (email to FHDC dated 22/7/2016) that it assessed the application using actual Stone curlew records and the latest buffer therefore did not affect their conclusions.</p> <p>Site specific mitigation provided in Policy SA8 is broadly equivalent to that specified in the project level HRA.</p>	
SA8(b) Land north of Station Road – 375 units housing and primary school	Approximately two thirds of site (the eastern part) is within 1,500 m of functionally linked stone curlew nesting attempts areas.	Proposal DC/14/2096/HYB Project level 05/07/2016	<p>Project level HRA for applicant (dated 26/11/2015) ruled out LSE on any European site. This was confirmed by FHDC's HRA (5/7/2016) subject to the following measures being implemented (although these relate more to recreation pressure than to disturbance and other urban edge effects in any case):</p> <ul style="list-style-type: none"> <i>High quality and well connected ecology buffer in north and east of site.</i> <i>Walking route to the village.</i> <i>Footpath along Station Road to the Cut Off Channel.</i> <i>Monitoring the success of the ecology buffer as SANGS.</i> <p>Natural England letter to FHDC (received by FHDC January 2016, incorrectly dated 18/10/2015) confirms that all concerns have been addressed by the HRA, that its conclusions are based on</p>	HRA of SALP can rely on project level HRA; adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Review of project level HRA and related Natural England comments	Conclusion
			<p>actual stone curlew records (as opposed to the 1995-2006 buffer), and that LSE on Breckland SPA can be ruled out.</p> <p>No mitigation measures for disturbance and other urban edge effects were specified in the HRA or Natural England comments.</p>	
Red Lodge				
SA9(b) Land east of Red Lodge (north) – 140 units housing	Approximately two thirds of site (southern part) is within the 1,500 m of components of Breckland SPA designated for stone curlew.	<p>Project level HRA dated May 2013 prepared on behalf of developer, covering this site and adjacent SA9(c).</p> <p>This part of the site was removed from the planning submission so does not benefit from planning permission.</p>	<p>A project level HRA covering sites SA9(b) and SA9(c) ruled out an adverse effect on Breckland SPA, on the basis that the nearest part of the SPA (to the east) was found sub-optimal for stone curlew given the existing environmental factors.</p> <p>The project level HRA also relied on mitigation included within development proposals to restore an area outside of but directly adjacent to Breckland SPA. This mitigation land is intended to offset the development's potential to result in minor avoidance effects on stone curlew nesting on functionally linked habitat outside of the SPA by providing new habitat that could support nesting attempts outside the SPA but functionally linked to it. However, the northern part of the jointly assessed site now covered by allocation SA9(b) is not within 1,500 m of a 1 km grid square having 5 or more stone curlew nesting attempts during 2011-2015 (or during 1996-2005) so this mitigation may not be required for allocation SA9(b) in any case.</p> <p>Natural England (letter to FHDC dated 11/7/2013) confirmed that the proposal is not likely to have a significant effect on Breckland SPA and stipulated certain conditions (email to FHDC dated 13/12/2013) for the proposed habitat restoration scheme to benefit stone curlew, namely that if the mitigation site is not used for additional stone curlew nesting on average 4 years in 10 then additional mitigation measures must be delivered, e.g. a nest plot on arable land on suitable soils outside the SPA.</p>	Project level HRA has ruled out adverse effects on stone curlew within Breckland SPA and the site is not within the 1,500 m buffer around functionally linked nesting attempts grid squares outside of Breckland SPA. HRA of SALP can therefore rely on project level HRA; adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Review of project level HRA and related Natural England comments	Conclusion
SA9(c) Land east of Red Lodge (south) – 382 units housing	Within 1,500 m of components of Breckland SPA designated for stone curlew and within 1,500 m of functionally linked stone curlew nesting attempts areas.	<p>Proposal F/2013/0257/HYB has planning permission.</p> <p>Project level HRA dated May 2013 prepared on behalf of developer, covering this site and adjacent SA9(b).</p>	<p>A project level HRA covering sites SA9(b) and SA9(c) ruled out an adverse effect on Breckland SPA, on the basis that the nearest part of the SPA (to the east) was found sub-optimal for stone curlew given the existing environmental factors.</p> <p>It further relied on mitigation included within development proposals (to restore an area outside of but directly adjacent to Breckland SPA) to offset the development's potential to result in minor avoidance effects on stone curlew nesting on functionally linked habitat outside of the SPA by providing new habitat that could support nesting attempts outside the SPA but functionally linked to it.</p> <p>Natural England (letter to FHDC dated 11/7/2013) confirmed that the proposal is not likely to have a significant effect on Breckland SPA and stipulated certain conditions (email to FHDC dated 13/12/2013) for the proposed habitat restoration scheme to benefit stone curlew, namely that if the mitigation site is not used for additional stone curlew nesting on average 4 years in 10 then additional mitigation measures must be delivered, e.g. a nest plot on a arable land on suitable soils outside the SPA.</p> <p>In order to ensure that any future amendments to the current proposals for this site or any new planning application (if the current planning permission is not implemented) can be required to provide appropriate mitigation (similar to that being required for the current proposal, i.e. provision of mitigation land; monitoring for stone curlew nesting over 10 years; additional mitigation if nesting rate inadequate) for the effects on stone curlew nest attempts outside of Breckland SPA it was recommended that the requirement for project level HRA originally described at para. 5.8.20 of the supporting text to Policy SA9 (Submission version of SALP) be included in the policy itself since supporting text can only aid interpretation of the policy and there</p>	HRA of SALP can rely on project level HRA; adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Review of project level HRA and related Natural England comments	Conclusion
			does not appear to be anything in the policy itself to ensure delivery of appropriate mitigation for these effects. This recommendation was implemented via a modification to Policy SA9.	
SA10(a) Land north of Acorn Way – 350 units housing	N/A – assessed in Table 7.2			
Kentford				
SA13(a) Land to the rear of The Kentford – 34 units housing	Within 1,500 m of components of Breckland SPA designated for stone curlew and within 1,500 m of functionally linked stone curlew nesting attempts areas	Proposal DC/14/2203/OUT Project level HRA updated 2/9/2015	Project level HRA by FHDC ruled out LSE alone or in combination. Natural England (letter dated 2/1/15) confirmed no objection to original proposal for 46 dwellings and no likely significant effects on European sites. Letter dated 20/5/2015 confirmed this position for the amended proposal for 34 dwellings. No mitigation measures for disturbance and other urban edge effects were specified in the HRA or Natural England comments.	HRA of SALP can rely on project level HRA; adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.
SA13(b) Land at Meddler Stud – 63 units housing and racehorse training establishment	Most of site is within the 1,500 m of components of Breckland SPA designated for stone curlew and within 1,500 m of functionally linked stone curlew nesting attempts areas	Proposal DC/14/0585/OUT allowed at appeal The inspector did not complete HRA but project level HRA (dated 20/10/2014) was carried out by FHDC as part of the assessment of the planning application	Project level HRA by FHDC ruled out LSE alone or in combination. Natural England (letter dated 25/4/2014) confirmed no objection and no LSE on Breckland SPA. No mitigation measures for disturbance and other urban edge effects were specified in the HRA or Natural England comments.	HRA of SALP can rely on project level HRA; adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Table 7.2 Appropriate Assessment of allocations for which project HRA not relied upon

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
Brandon						
SA2(a) Land at Warren Close – 23 units housing	Within 1,500 m of components of Breckland SPA designated for stone curlew	None	<p>This site is surrounded by the existing built environment and therefore adequately screened from Breckland SPA.</p> <p>Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.</p>	<p>Given the site's location in the town, predators such as domestic cats would need to navigate a number of roads to travel between the site and the SPA. This and the small size of the allocation mean that cat predation effects from the site would be negligible.</p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>	<p>Allocation is for small scale housing development (23 dwellings) so that the amount of noise generated will be small and unlikely to be perceptible above that generated by the surrounding buildings of Brandon.</p> <p>Conclusion: The allocation will not result in noise pollution effects alone or in combination.</p>	Adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.
SA2(b) Land off Gas House Drove – 10 units housing	Within 1,500 m of components of Breckland SPA designated for stone curlew	Current proposal DC/16/1450/OUT for 8 dwellings being considered; letter of no objection from NE	<p>This site is surrounded by the existing built environment except for a small section to the north.</p> <p>Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.</p>	<p>Given the site's location in the town, domestic cats would need to either cross the Little Ouse River or navigate a number of roads to travel between the site and the SPA. This and the small size of the allocation mean that cat predation effects from the site would be negligible.</p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>	<p>Allocation is for small scale housing development (10 dwellings) so that the amount of noise generated will be small and unlikely to be perceptible above that generated by the surrounding buildings of Brandon.</p> <p>Conclusion: The allocation will not result in noise pollution effects alone or in combination.</p>	Adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.
Mildenhall						
SA5(a) Land at 54 Kingsway – 23 units housing	Within 1,500 m of components of Breckland SPA designated	None	This site is surrounded by the existing built environment and therefore adequately	Given the site's location in the town, predators such as domestic cats would need to navigate a number of	Allocation is for small scale housing development (23 dwellings) so that the amount of noise generated will be small	Adverse effects on the integrity of Breckland SPA can be

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
	for stone curlew		<p>screened from Breckland SPA.</p> <p>Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.</p>	<p>roads to travel between the site and the SPA. The main bulk of the SPA is also separated from the site by the A1065. This and the small size of the allocation mean that cat predation effects from the site would be negligible.</p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>	<p>and unlikely to be perceptible above that generated by the surrounding buildings of Mildenhall.</p> <p>Conclusion: The allocation will not result in noise pollution effects alone or in combination.</p>	ruled out, both alone and in combination.
SA5(b) District Council Offices, College Heath Road – 89 units housing	Within 1,500 m of components of Breckland SPA designated for stone curlew	None	<p>This site is surrounded by the existing built environment and therefore adequately screened from Breckland SPA.</p> <p>Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.</p>	<p>Given the site's location in the town, predators such as domestic cats would need to navigate a number of roads to travel between the site and the SPA. The main bulk of the SPA is also separated from the site by the A1065. This and the small size of the allocation mean that cat predation effects from the site would be negligible.</p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>	<p>Although the allocation is for medium scale housing development (89 dwellings) it is separated from the nearest parts of the SPA to the east by built development for the whole distance and a minor road (Brandon Road), and to the south by a major road (A1101/Kingsway) and 250 m of existing built development. As such it is judged unlikely that additional noise generated by the development will be perceptible at the SPA.</p> <p>Conclusion: The allocation will not result in noise pollution effects alone or in combination.</p>	Adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.
SA17(a) Mildenhall Academy and Dome Leisure Centre site – B1 employment	Within 1,500 m of components of Breckland SPA designated for stone curlew and within 400 m of components designated for	None	<p>The 4.0 ha site is on the south east edge of Mildenhall, is directly adjacent to Breckland SPA and is not screened from the SPA by existing built development, creating a risk of visual disturbance</p>	<p>No residential component to allocation.</p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>	<p>Although the site is separated from the nearest parts of the SPA to the east by a major road (A1101/Kingsway), the fact that it is directly adjacent to the SPA to the east, that it is only separated from the SPA by approximately 250 m of open land to the south, and that it is</p>	Adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
	woodlark or nightjar		<p>and light pollution effects.</p> <p>It is judged that the risk is adequately mitigated by the requirement in Policy SA17 for project level HRA. This should ensure that a design and layout that avoids potential visual presence and light pollution effects can be secured (e.g. via planting schemes that provide screening; appropriate positioning, duration, type of light source and level of lighting).</p> <p>Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.</p>		<p>allocated for employment use creates a risk of significant noise pollution effects.</p> <p>Some mitigation of potential noise pollution effects is provided by the fact that this employment allocation is limited to B1 use, i.e. office, research and development, or industrial processes compatible with a residential area. A residual risk exists, however, that site preparation and construction could lead to direct disturbance, as could some B1 uses.</p> <p>It is judged that the residual risk is adequately mitigated by:</p> <ul style="list-style-type: none"> - the requirement in Policy SA17 that redevelopment of the site "would need to have regard to its location adjacent to Breckland SPA which may limit the type of employment use that would be acceptable" which should ensure that B1 proposals which would generate harmful levels of noise pollution would be prevented; and - the requirement for project level HRA which should ensure that any mitigation appropriate to the proposal that comes forward could be secured, for example restricting construction activity to outside of the nesting season. <p>Conclusion: The allocation will not result in noise pollution effects alone or in combination.</p>	

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
Lakenheath						
SA7(b) Land west of Eriswell Road – 140 units housing	Within 1,500 m of functionally linked stone curlew nesting areas	Resolution to approve proposal F/2013/0394/OUT FHDC completed a project level HRA in 2014 but has stated that this will need significant updating to ensure it is fit for purpose, therefore not relied upon	This site is located on the western side of Lakenheath and is therefore screened from the SPA by built development. Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.	While the original Natural England response to this proposal (dated 13/8/2013) did not object in relation to statutory conservation sites, it is noted that the stone curlew nesting attempts data available at the time (1995-2006) indicated no grid squares associated with Breckland SPA within 1,500 m of the site. The updated (2011-2015) nesting attempts data shows, however, that the site is within 1.5 km of two stone curlew nesting attempts grid squares associated with Breckland SPA. Given the site's location in the town, domestic cats would need to cross the B1112 Eriswell Road to travel between the site and the nesting attempts grid squares associated with Breckland SPA and would also need to need to navigate a number of roads to access most of the two grid squares. While this is judged to avoid the possibility of an adverse effect on functionally linked stone curlew nesting areas for this allocation alone, the total amount of development allocated to	Although the allocation is for medium scale housing development (140 dwellings) it is separated from the nearest parts of the SPA to the east by a major road (the B1112), built development in Lakenheath and Little Eriswell and by Lakenheath airbase. As such it is judged unlikely that additional noise generated by the development will be perceptible at the SPA. Conclusion: The allocation will not result in noise pollution effects alone or in combination.	Adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
				<p>Lakenheath by the SALP (768 dwellings), together with other provision at Lakenheath set out in the SIR presents a potential risk of significant effects in combination.</p> <p>The potential for development at Lakenheath, including the current proposal for this site, to have in combination effects on Breckland SPA has been ruled out by reliance on a EIA Screening Direction by the Secretary of State (dated 20/5/2016) which considers all of the allocated sites and those identified by the in combination assessment and states that in consultation with Natural England it is concluded that would not affect the integrity of Breckland SPA. The fact that Natural England's opinion on this matter is not altered by the most recent (2011-2015) stone curlew nesting attempts data is confirmed by its email to FHDC dated 22/7/2016.</p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>		
SA8(a) Rabbit Hill Covert,	N/A – reliance placed on project level HRA (see Table 7.1)					

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
Station Road – 81 units housing						
SA8(b) Land north of Station Road – 375 units housing and primary school	N/A – reliance placed on project level HRA (see Table 7.1)					
Red Lodge						
SA9(b) Land east of Red Lodge (north) – 140 units housing	N/A – reliance placed on project level HRA (see Table 7.1)					
SA9(c) Land east of Red Lodge (south) – 382 units housing	N/A – reliance placed on project level HRA (see Table 7.1)					
SA10(a) Land north of Acorn Way – 300 units housing	A small area in the south east of the site is within 1,500 m of components of Breckland SPA designated for stone curlew	Current proposal for part of the site DC/16/2364/OUT for up to 46 dwellings plus employment use, supported by 'Document information to inform a HRA' dated 19/10/2016 but no project level HRA yet or comment from Natural England	Whilst the site is not screened from the SPA, the risk of significant visual presence and light pollution effects is very small because the area of the site within the SPA 1,500 m constraint zone for stone curlew is only approximately 0.2 ha in size. In addition, the nearest part of the SPA (to the south east of the site allocation) was assessed as part of the project level HRA for Land east of Red Lodge (north and south),	Whilst the site is not separated from the SPA by significant physical barriers, the risk of significant cat predation effects is very small because the area of the site within the SPA 1,500 m constraint zone for stone curlew is only approximately 0.2 ha in size. In addition, the nearest part of the SPA (to the south east of the site allocation) was assessed as part of the project level HRA for Land east of Red Lodge (north and south),	The risk of significant noise pollution effects is very small because the area of the site within the SPA 1,500 m constraint zone for stone curlew is only approximately 0.2 ha in size. In addition, the nearest part of the SPA (to the south east of the site allocation) was assessed as part of the project level HRA for Land east of Red Lodge (north and south), and found to be sub-optimal for stone curlew given the existing environmental factors. Finally, any small residual risk can be avoided via the allocation	Adverse effects on the integrity of Breckland SPA can be ruled out, both alone and in combination.

Site	Reason screening was unable to rule out LSE	Status of any related proposal and project level HRA	Visual presence and light pollution from buildings	Domestic cat predation	Noise pollution	Overall conclusion
			<p>and found to be sub-optimal for stone curlew given the existing environmental factors.</p> <p>Finally, any small residual risk can be avoided via the allocation policy's requirement that <i>"The masterplan and any future planning applications will require a project level Habitats Regulations Assessment."</i></p> <p>Conclusion: The allocation will not result in visual presence or light pollution effects alone or in combination.</p>	<p>and found to be sub-optimal for stone curlew given the existing environmental factors.</p> <p>Finally, any small residual risk can be avoided via the allocation policy's requirement that <i>"The masterplan and any future planning applications will require a project level Habitats Regulations Assessment."</i></p> <p>Conclusion: The allocation will not result in cat predation effects alone or in combination.</p>	<p>policy's requirement that <i>"The masterplan and any future planning applications will require a project level Habitats Regulations Assessment."</i></p> <p>Conclusion: The allocation will not result in noise pollution effects alone or in combination.</p>	
Kentford						
SA13(a) Land to the rear of The Kentford – 34 units housing	N/A – reliance placed on project level HRA (see Table 7.1)					
SA13(b) Land at Meddler Stud – 63 units housing and racehorse training establishment	N/A – reliance placed on project level HRA (see Table 7.1)					

8 Conclusions

- 8.1 The HRA Screening of the SALP was able to rule out likely significant effects from the Plan with the exception of possible disturbance and other urban edge effects on Breckland SPA.
- 8.2 Appropriate Assessment in relation to this potential effect was able to rule out an adverse effect on the integrity of Breckland SPA.
- 8.3 The method and conclusions of the HRA of the SIR and SALP in relation to air quality effects are presented in a separate report prepared by AECOM (43). That report concludes that *"no adverse effect on Breckland SAC, SPA or Rex Graham Reserve SAC is expected to occur from growth in Forest Heath District Council alone, or in combination with other projects and plans"*.

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Appendix 1

Initial screening of site allocations

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
	<p>Unable to rule out potential for likely significant effects (LSE), prior to mitigation, if site allocation:</p> <ul style="list-style-type: none"> overlaps any European site, or overlaps a 1 km grid square with ≥ 5 stone curlew nesting attempts (2011-2015). 	<p>Unable to rule out potential for LSE on Breckland SPA, prior to mitigation, if site allocation for built development:</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 a 1 km grid square with ≥ 5 stone curlew nesting attempts (2011-2015) 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 potential for LSE on Breckland SPA, prior to mitigation, for any site allocations with a housing component within a zone of influence (ZoI) extending 7.5 km from the non-farmland components of Breckland SPA, 1.5 km from the farmland components, and 1.5 km from stone curlew nesting attempts (2011-2015).</p>
Housing and mixed use site allocations in the market towns (including allocation for new cemetery)			
BRANDON			
SA2(a) 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 recreation ZoI of Breckland SPA
SA2(b) 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 recreation ZoI of Breckland SPA
SA3 Brandon Cemetery New cemetery site	LSE ruled out Site does not overlap any European site or stone curlew nesting habitat functionally linked to Breckland SPA	LSE ruled out Allocation is not for built development	LSE ruled out Allocation has no housing component
MILDENHALL			
SA4(a) Land west of Mildenhall Housing, employment (B1, B2 and B8 use classes), schools, leisure facilities and public services	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 recreation ZoI of Breckland SPA

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
SA5(a) Land at 54 Kingsway 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 recreation ZoI of Breckland SPA
SA5(b) District Council Offices, College Heath Road 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 recreation ZoI of Breckland SPA
NEWMARKET			
SA6(a) Brickfield Stud, Exning 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 recreation ZoI of Breckland SPA
SA6(b) Land at Black Bear Lane and Rowley Drive junction Housing, racehorse training yard and paddock	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 recreation ZoI of Breckland SPA
SA6(c) Land at Phillips Close and grassland south-west of Leaders Way and Sefton Way 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 recreation ZoI of Breckland SPA
SA6(d) Former St Felix Middle School site 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 recreation ZoI of Breckland SPA

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
SA6(e) Land adjacent to Jim Joel Court 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 recreation ZoI of Breckland SPA
SA6(f) Land at 146a High Street 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 recreation ZoI of Breckland SPA
SA6(g) Land at Hatchfield Farm Housing, employment (B1, B2 and B8 use classes), 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 Site is not within recreation ZoI of Breckland SPA
Housing and mixed use allocations in the key service centres			
LAKENHEATH			
SA7(a) Matthews Nursery Housing and 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 recreation ZoI of Breckland SPA
SA7(b) Land west of Eriswell Road 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 functionally linked stone curlew nesting attempts areas	Potential LSE Site is within recreation ZoI of Breckland SPA

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
SA8(a) Rabbit Hill Covert, Station Road Housing	LSE ruled out Site does not overlap any European site or stone curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Approximately two thirds of site (the eastern part) is within 1,500 m of functionally linked stone curlew nesting attempts areas	Potential LSE Site is within recreation ZoI of Breckland SPA
SA8(b) Land north of Station Road Housing and primary school	LSE ruled out Site does not overlap any European site or stone curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Approximately half of site (the eastern part) is within 1,500 m of functionally linked stone curlew nesting attempts areas	Potential LSE Site is within recreation ZoI of Breckland SPA
SA8(c) Land off Briscoe Way 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 recreation ZoI of Breckland SPA
RED LODGE			
SA9(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 recreation ZoI of Breckland SPA
SA9(b) Land east of Red Lodge (north) Housing	LSE ruled out Site does not overlap any European site or stone curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Approximately two thirds of site (southern part) is within the 1,500 m of components of Breckland SPA designated for stone curlew; a small area in the south east of the site is also within 1500 m of functionally linked stone curlew nesting areas	Potential LSE Site is within recreation ZoI of Breckland SPA

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
SA9(c) Land east of Red Lodge (south) 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 components of Breckland SPA designated for stone curlew and within 1,500 m of functionally linked stone curlew nesting attempts areas	Potential LSE Site is within recreation ZoI of Breckland SPA
SA9(d) Land west of Newmarket Road and north of Elms 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	Potential LSE Site is within recreation ZoI of Breckland SPA
SA10(a) Land north of Acorn Way Housing, employment (B1, B2 and B8 use classes), and primary school	LSE ruled out Site does not overlap any European site or stone curlew nesting habitat functionally linked to Breckland SPA	Potential LSE A small area in the south east of the site is within the 1,500 m of components of Breckland SPA designated for stone curlew	Potential LSE Site is within recreation ZoI of Breckland SPA
Housing and mixed use allocations in the primary villages			
BECK ROW			
SA11(a) Land adjacent to St Johns Street 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 recreation ZoI of Breckland SPA
SA11(b) Land adjacent to and south of the caravan park, Aspal Lane 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 recreation ZoI of Breckland SPA

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
SA11(c) Land east of Aspal Lane 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 recreation ZoI of Breckland SPA
SA11(d) Land adjacent to Beck Lodge Farm 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 recreation ZoI of Breckland SPA
EXNING			
SA12(a) Land south of Burwell Road and west of Queens View 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 recreation ZoI of Breckland SPA
KENTFORD			
SA13(a) Land to the rear of The Kentford 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 and within 1,500 m of functionally linked stone curlew nesting attempts areas	Potential LSE Site is within recreation ZoI of Breckland SPA
SA13(b) Land at Meddler Stud Housing and racehorse training establishment	LSE ruled out Site does not overlap any European site or stone curlew nesting habitat functionally linked to Breckland SPA	Potential LSE Most of site is within the 1,500 m of components of Breckland SPA designated for stone curlew and within 1,500 m of functionally linked stone curlew nesting attempts areas	Potential LSE Site is within recreation ZoI of Breckland SPA
WEST ROW			

Site and proposed use	Direct loss / damage	Disturbance / urban edge effects	Recreation pressure
SA14(a) Land east of Beeches 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	Potential LSE Site is within recreation ZoI of Breckland SPA
Site for allocation in the secondary villages			
SA15 Moulton Primary School Expansion of primary 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
Employment allocations			
SA17(a) Mildenhall Academy and Dome Leisure Centre site, Mildenhall Employment (B1 use class)	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
SA17(b) St Leger, Newmarket Employment (B1 and B8 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
Retail allocation			
SA18(a) Former Gas Works, Exning Road, Newmarket Convenience food store (A1 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

Appendix 2

Review of other relevant plans and projects

Forest Heath Core Strategy

Outline of development proposed by remaining policies of Forest Heath Core Strategy

Policy CS 7 of the adopted Forest Heath Core Strategy, which is the subject of the Single Issue Review, defines the total amount of housing to be provided, its broad distribution between the larger settlements, the broad locations for large urban extensions, the minimum average housing density to be achieved, and the proportion of housing to be developed on brownfield land.

The remaining policies of the Core Strategy remain in force and are therefore considered in the in-combination assessment. Many of the Core Strategy policies other than CS 7 were screened out as not likely to have significant effects on European sites by the HRA of the Core Strategy because they would not give rise to development. For the remaining Core Strategy policies which would give rise to development, Table A1 describes the types and amounts of development provided for and the findings of the HRA of the Core Strategy.

Table A1: Review of Core Strategy and findings of HRA of Core Strategy

Core Strategy policy	Findings of HRA of Core Strategy
<p><i>Policy CS 1 Spatial Strategy</i></p> <p>Establishes the settlement hierarchy and summarises the amount and type of development to be provided at the larger settlements (towns and key service centres) by the more detailed Core Strategy policies.</p>	<p>Likely significant effects ruled out since it is an umbrella policy that draws its proposals from other, more detailed Core Strategy policies, each of which has been subject to HRA.</p>
<p><i>Policy CS 6 Sustainable Economic and Tourism Development</i></p> <p>Provides for development of 16 ha of employment land, with Newmarket (approximately 5 ha) identified as the primary location for strategic employment growth, and development at other settlements in broad alignment with the scale of housing development - Mildenhall (approximately 4.5 ha), Brandon (approximately 2 ha), Lakenheath and Red Lodge growth. Spatially non-specific support for tourism development that will not have a significant adverse effect on the environment.</p>	<p>While research links housing rather than economic or tourism development to potential adverse effects on Annex 1 birds of Breckland SPA, the HRA assumed on a precautionary basis that likely significant effects could not be ruled out for any of these types of development. The types of likely significant effect not ruled out from economic and tourism development were:</p> <ul style="list-style-type: none"> • "A potential reduction in the density of Habitats Directive Annex I bird species, taking a precautionary approach following the negative relationship which has been shown to exist with housing density (stone curlews, nightjars and woodlarks); • Potential reduction in the density of stone curlews due to their avoidance of roads and the impact of increased road traffic; • Increased levels of recreational activity resulting in increased disturbance to Annex I ground nesting bird species sensitive to disturbance (stone curlew, nightjar and woodlark) in the Breckland SPA; • Increased water abstraction requirements to meet the additional water supply needs; and • Increased water discharges to meet the additional waste water treatment needs." <p>The topic-based Appropriate Assessment therefore considered these types of potential effect from all screened in Core Strategy policies.</p>
<p><i>Policy CS 8 Provision for Gypsy and Travellers</i></p> <p>Allocation of six additional pitches between 2006-2011 and spatially non-specific commitment to provide for a</p>	<p>Likely significant effects were ruled out as this was a 'general policy without location specificity', the effects of which are more appropriately assessed at a lower tier in the planning process via the HRA of specific allocations or development proposals.</p>

Core Strategy policy	Findings of HRA of Core Strategy
3% annual increase in pitches across the District thereafter.	
<i>CS 10 Sustainable Rural Communities</i> Spatially non-specific support for limited provision of housing and local facilities within villages and small settlements subject to various criteria. Also support for enterprises requiring a rural location, subject to no significant environmental effects.	Likely significant effects were ruled out by reliance on the protection afforded by the environmental clause within the policy and by Policy CS 2 Natural Environment.
<i>Policy CS 11 Retail and Town Centre Strategy</i> Provision for additional retail floorspace and other town centre uses at Newmarket, Mildenhall and Brandon.	Likely significant effects were ruled out because this policy directs development away from European sites.
<i>Policy CS 12 Strategic Transport Improvement and Sustainable Transport</i> Supporting partner organisations to deliver strategic transport road, rail and cycle network improvements, including dualling of the A11 between Thetford and Barton Mills and improvements to Fiveways roundabout and improvements to the A14/A142 junction at Newmarket.	<p>The HRA screening was unable to rule out likely significant effects in relation to:</p> <ul style="list-style-type: none"> • <i>"Potential reduction in the density of stone curlews from their avoidance of roads;</i> • <i>Pollution of SAC habitats which are vulnerable to air-borne pollution (i.e. heaths which are vulnerable to nitrogen deposition)."</i> <p>The topic-based Appropriate Assessment therefore considered these types of potential effect from the Core Strategy as a whole.</p>

Potential for effects in-combination

Table A1 shows that the HRA screening of the Core Strategy was unable to rule out a number of types of likely significant effect on European sites from employment, tourism and transport infrastructure development provided by Policies CS 6 and CS 12. These were considered further in the Appropriate Assessment of the Core Strategy and adverse effects on integrity were ruled out following inclusion of a package of avoidance and mitigation measures in Core Strategy policy. The findings of the HRA of the Core Strategy can therefore be relied on to conclude that no adverse effects on the integrity of European sites will arise from the adopted Core Strategy policies alone. However, a possibility exists that the types of effect identified by the HRA Screening of the Core Strategy could combine with those of the SALP, reviewed Policy CS 7 (as per the SIR), and other relevant plans and projects to become significant and the HRA of the SALP therefore considers this.

Other county or district level plans providing for development

Breckland Core Strategy (adopted 2009)
Plan Owner/ Competent Authority: Breckland Council
Related HRA/AA: Habitats Regulation Assessment: Breckland Council Submission Core Strategy and Development Control Policies Document (November 2008) and Habitats Regulation Assessment Breckland Council Site Specific Policies and Proposals Document Preferred options (May 2010).
Summary of Plan proposals: <i>Housing provision:</i> The Core Strategy makes provision for at least 19,100 new dwellings within the period 2001-2026 (Policy CP 1). <i>Employment land provision:</i> 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

Breckland Core Strategy (adopted 2009)

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 makes 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, and 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 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

Breckland Core Strategy (adopted 2009)

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.

Breckland emerging new Local Plan

Plan Owner/ Competent Authority: Breckland Council

Related HRA/AA: HRA of the Proposed Submission Local Plan (August 2017).

Summary of Plan proposals:

The Breckland Proposed Submission Local Plan was submitted for Examination on 30 November 2017¹⁰.

Housing provision: Breckland Council's Proposed Submission Local Plan (provides for 15,950 houses over the plan period 2011 to 2036.

Employment land provision: The Proposed Submission document provides for 67 ha of land for employment growth between 2011 and 2036.

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

The key impact and mitigation themes identified by the HRA in relation to European sites scoped into the HRA of the Forest Heath Local Plan (Breckland SAC, Breckland SPA, Norfolk Valley Fens SAC) were:

- impacts of built development on Stone Curlew;
- recreation disturbance to SPA birds;
- urbanisation effects on SAC and SPA habitats;
- additional measures in sensitive areas of focussed growth (Thetford, Swaffham, Mundford);
- air quality and road improvements;
- water supply, water quality and waste water discharge, flood risk.

The adoption of mitigation measures recommended by earlier stages of the HRA allowed a conclusion of no adverse effects on the integrity of European sites.

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

¹⁰ Breckland Council (August 2017) <https://www.breckland.gov.uk/article/7343/Evidence-Base-Submission-Documents->

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

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
- 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

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

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: Habitats Regulations Assessment: 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

St Edmundsbury Core Strategy (adopted 2010)

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 as supporting stone curlew habitat. In these areas development may be 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 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

East Cambridgeshire Local Plan (adopted 2015)

Related HRA/AA: Habitats Directive Assessment Screening Document - updated (September 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.

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 SAC is vulnerable to encroachment of other coarse dense grasses, while the main potential effect is increased recreation pressure in association with new housing development.

The Ouse Washes, on the other hand, is vulnerable to water quantity, water quality, salinity, turbidity and sediment. As such, the main potential impacts of the Local Plan on the SAC, SPA and Ramsar are changes in water quality as a result of development, through flooding, increased sediment or increased levels of phosphorus (thought to be derived from sewage treatment plants).

Chippenham Fen and Wicken Fen are vulnerable to physical damage, physical habitat loss and associated increases in pollution. While Breckland SPA and SAC is vulnerable to deposition from the atmosphere and adjacent land.

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

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

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, 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 Annex 1 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.

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:

South Cambridgeshire District Council has carried out additional work on their Local Plan, to address issues raised by the Planning Inspectors during examination.

Housing provision: Proposed modification to the Local Plan include the provision of 19,500 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 effect were identified;

- Ouse Washes – additional sewerage discharge, additional flow in sewerage drain network

South Cambridgeshire Local Plan 2011-2031 (submitted 2014)

- 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 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

Suffolk Minerals Core Strategy DPD (adopted 2008)

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.
- 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 Minerals and Waste Local Plan (Preferred Options Draft, October 2017)

Plan Owner/ Competent Authority: Suffolk County Council

Related HRA/AA: Suffolk Minerals and Waste Local Plan Strategic HRA (October 2017)

Summary of Plan proposals:

The Suffolk Minerals & Waste Local Plan (SMWLP) contains planning policies for determining planning applications for minerals and waste development, as well as safeguarding the same from other forms of competing development. Policies include those that specify sites for future minerals and waste development.

The SMWLP has allocated 10 sites for the extraction of sand and gravel sufficient to supply 10.422 Mt over the Plan period to the end of 2036. Policy also states that the County Council will seek to maintain a land bank of permitted reserves of at least 7 years based upon the average of the last ten years' sales.

There is no immediate shortfall in waste management capacity and only one site for waste development has been allocated at Sizewell "A" Nuclear Power Station for the treatment and temporary storage of radioactive material removed as part of decommissioning.

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

Potential effects on Breckland SAC and SPA were identified from a number of site specific allocations but these allocations were considered to have a neutral effect on the European sites until such time as a project-specific HRA screening process and Appropriate Assessment have been undertaken.

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 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 projects¹¹

A14 Cambridge to Huntingdon Improvement Scheme
Plan Owner/ Competent Authority: Highways England
Related HRA/AA: Report On The Implications For European Sites Proposed A14 Cambridge to Huntingdon Improvement Scheme (October 2015)
<p>Summary of Plan proposals: A development consent order for A14 Cambridge to Huntingdon Improvement Scheme was taken in May 2016.</p> <p>The scheme comprises:</p> <ul style="list-style-type: none"> widening of the A1 between Brampton and Alconbury over a length of approximately 5.6 km (3½ miles) from the existing two lane dual carriageway to a three lane dual carriageway. Between Alconbury and Brampton Hut, this would generally be achieved by widening on the east side of the existing road; between Brampton and Brampton Hut a new road would be constructed to the west of the existing A1 which would become the new A1. This would enable the existing carriageway over this length to form part of the new A14 Huntingdon Southern Bypass. A local access road approximately 2.5 km (1.6 miles) would link the Ellington Junction with Woolley Road; a new Huntingdon Southern Bypass of approximately 20 km (12½ miles) in length, which would provide a two lane dual carriageway between Ellington and the A1 at Brampton and a three lane dual carriageway between Brampton and Swavesey. The new bypass would cross over the River Great Ouse and the East Coast Mainline railway. It would include junctions with the A1 at Brampton and with the A1198 at Godmanchester; downgrading the existing A14 trunk road (de-trunking to county road status) over approximately 21 km (13 miles) between Brampton Hut and Swavesey, as well as between Alconbury and Spittals interchange; Huntingdon Town Centre improvements, to include the closure and demolition of the A14 viaduct over the East Coast Mainline railway and Brampton Road in Huntingdon. A new link road would be constructed to improve accessibility into Huntingdon from the south and east by connecting the old A14 directly with Huntingdon Ring Road near the bus station and by constructing a new link road from Brampton Road to connect with the A14 to the west. As such, a through route for light vehicles would be maintained; widening of the existing A14 over approximately 7.9 km (5 miles) to provide three lanes in each direction between Swavesey and Report to the Secretary of State 6 A14 Cambridge to Huntingdon Bar Hill and four lanes in each direction between Bar Hill and Girton; widening of a 2.5 km (1½ mile) section of the Cambridge Northern Bypass between Histon and Milton; improvement of existing A14 junctions at Swavesey, Bar Hill and Girton; to improve the capacity of the road, ensure compatibility with adjacent proposed developments such as Northstowe and provide improved connections for non-motorised users; <p>a new local access road following the route of the A14 over a distance of approximately 8 km (5 miles), including construction of a dual carriageway link between the existing A14 near Fen Drayton and Swavesey junction and a single carriageway between Swavesey and Girton. The road would provide a route for local traffic between Cambridge and Huntingdon as well as providing access to properties and businesses along the corridor.</p>
<p>Conclusions on potential effects of relevance to European sites within scope of HRA of Forest Heath Local Plan</p> <p>Five European sites were screened prior to examination including Ouse Washes SAC/SPA/Ramsar. The applicant concluded that there would be no likely significant effect on the Ouse Washes SAC/SPA/Ramsar and its qualifying features.</p>

Kings Lynn B Connection Project
Plan Owner/ Competent Authority: National Grid
Related HRA/AA: Habitats Regulations Assessment – No Significant Effects Report (July 2012)
<p>Summary of Plan proposals: A development consent order for Kings Lynn B Connection Project – a 2.8km 400 kilovolts overhead electric line - was taken in December 2013. The Project is required to make a connection from Centrica's approved King's Lynn B 981 MV combined cycle gas turbine power station and substation to the national grid high-voltage electricity transmission network.</p>
Conclusions on potential effects of relevance to European sites within scope of HRA of Forest

¹¹ National Infrastructure Planning website <http://infrastructure.planningportal.gov.uk/>

Kings Lynn B Connection Project

Heath Local Plan

The HRA concludes that the proposed 400Kv connection from King's Lynn B Power Station to the existing 400Kv route is not likely to have a significant effect on either the Ouse Washes SPA or The Wash SPA. This view is confirmed by Natural England.

Palm Paper 3 CCGT Power station Kings Lynn

Plan Owner/ Competent Authority: Palm Paper Ltd

Related HRA/AA: Habitat Regulations Assessment, No Significant Effects Report (August 2014)

Summary of Plan proposals: Development consent for Palm Paper 3 CCGT Power station Kings Lynn, a 162 megawatt Combined Cycle Gas Turbine, was granted in February 2016.

The Site comprises two separate areas. When built, the CCGT plant will occupy an area of 3,500m². Some areas will also be required during the construction phase for contractors' working areas and storage, and this will be contained within the present Palm Paper premises. This area is approximately 7,000m² in size.

In summary, the Proposed Development will comprise:

- Fuel supply
- Gas turbine-generator set
- Heat Recovery Steam Generator (HRSG)
- Steam turbine and steam turbine generator
- Condensers
- Water treatment plant including associated ancillary systems
- Transformers
- Switchyard
- Fire protection system

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

The HRA concludes that the only potential mechanism through which the project may act upon The Wash and North Norfolk Coast SAC and the Wash SPA at such a distance (circa 6.0km), and the only one that has been raised as a concern, is through the aerial emissions generated by the proposed development.

It was determined that by taking into account the avoidance and mitigation measures incorporated into the design of the CCGT it could be concluded that the proposed development would have no adverse effect on any of the Natura 2000 sites relevant to this document.

Progress Power Station

Plan Owner/ Competent Authority: Progress Power Limited

Related HRA/AA: Habitat Regulations Screening Assessment: No Significant Effects Report (February 2014)

Summary of Plan proposals: Development consent for Progress Power Station, a Gas Fired Power Station at Eye Airfield Industrial Estate in Mid Suffolk, was granted in July 2015.

The Project consists of three main elements: The Power Generation Plant, the Gas Connection, and the Electrical Connection.

- A new Power Generation Plant, a Single Cycle Gas Turbine gas fired power generating station capable of providing up to 299 MW, incorporating up to five gas turbine generators (GTG) with up to five exhaust gas flue stacks.
- A new electrical connection, (referred to as the Electrical Connection) to export electricity from the Power Generation Plant to the National Grid Transmission System. This element incorporates a new underground cable circuit connection, and a new access road, with a new road junction off the A140 (the A140 Junction), and a new Electrical Connection Compound comprising a new substation and sealing end compound; and
- A new gas pipeline connection to bring natural gas to the Power Generation Plant from the National Grid

Progress Power Station

Transmission System in the vicinity of the Project Site. This element incorporates an Above Ground Installation at its southern end and a new access road off Potash Lane.

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

The HRA concludes that there will be no likely significant effects either alone or 'in combination' on any of the Natura 2000 sites relevant to this document.

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 allocations 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.

FHDC Local Plan ref. (at Options stage)	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?	Current position in relation to HRA
Brandon					
B/17	DC/15/1072/OUT	Land to West of Brandon	Outline application for up to 9,264m ² gross external area floor space (in total) for class A1, A3, A4, C1, D1 and sui generis use. Such development to include up to 1,650 dwellings ; a relief road; public transport facilities; pedestrian, cyclist and vehicular ways; green infrastructure; groundworks; drainage works; provision and/or upgrade of services and related media and apparatus; miscellaneous ancillary development and associated engineering and other operations.	Yes – site is within the 1,500 m stone curlew constraint zone and the 400 m woodlark / nightjar constraint zone for Breckland SPA	<p>There is an ES supporting the application and appendix 11.2 is a report to inform a habitats regulations assessment. A project level HRA has not yet been completed as there is insufficient information; the applicant is in discussion with NE.</p> <p>Conclusion: Since there is not yet sufficient information to complete project level HRA, FHDC should carry out such HRA when the information becomes available and refuse permission if adverse effects on the integrity of a European site cannot be ruled out in combination with other plans and projects, including with the SIR and SALP.</p>
Newmarket					
N/A	DC/16/2063/FUL	New Gallops, Hamilton Road' Newmarket	Artificial 'uphill training' gallop with lagoon, car park, access and all associated works	No	<p>Application is supported by an ES. Natural England confirmed that potential effects on surface water quality are adequately addressed by the proposed lagoon. Natural England identified potential effects on Devil's Dyke SAC and Chippenham Fen SAC due to emissions from horse waste on site (consultation responses dated 16/1/2016 and 26/10/2016). The Council has confirmed that conditions will be sought that secure the necessary mitigation, namely that</p>

FHDC Local Plan ref. (at Options stage)	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?	Current position in relation to HRA
					<p>horse waste must be stored on-site in a secure container and removed regularly.</p> <p>Conclusion: There is no potential for minor effects that could act in-combination with the SIR and SALP.</p>
Lakenheath					
N/A	DC/18/0456/EIASCR	RAF Lakenheath, Brandon Road, Lakenheath Suffolk IP27 9PR	Screening opinion for New campus to facilitate the new F-35A Lightning II aircraft; re-development of hospital to provide new and refurbished facilities; new high school to replace existing school within RAF Lakenheath; extension to existing on-base shopping mall and food court; and replacement of existing oil and water separator	Yes - site is adjacent to Breckland SPA and includes a component of SAC	<p>Current planning application is supported by an EIA screening request. Natural England has confirmed to the Council (email dated 21/3/18) that all issues raised by it have been resolved, i.e. that it is happy with the information provided and proposed mitigation. An EIA Screening carried out by the Council (dated 22/3/2018) identifies that elements of the project site form part of Breckland SAC and that Breckland SPA and other areas of the SAC are immediately to the east of it. Despite this, the Council has concluded that there would be no significant effects to these designations. The factors affecting the SAC are likely to be enhanced by the project because of enhanced air quality conditions (compared to existing base line conditions) resulting from a reduced emissions from decreased aircraft activity (jet take-offs in particular). No impacts to the adjacent SPA and SAC designations to the east of the site are anticipated, subject to careful construction management during the sensitive bird nesting seasons (as part of a Construction and</p>

FHDC Local Plan ref. (at Options stage)	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?	Current position in relation to HRA
					Environmental Management Plan). Conclusion: EIA Screening indicates that significant effects are not likely. However, prior to determining this planning application, FHDC should carry out a project level HRA informed by the information available and refuse permission if adverse effects on the integrity of a European site cannot be ruled out in combination with other plans and projects, including with the SIR and SALP.
Other settlements					
N/A	DC/16/1360/OUT	Land at Little Eriswell	Outline Planning Application (Means of Access to be considered) - (i) Up to 550 dwellings (ii) Primary School (iii) Retail unit (iv) Associated open and play space, allotments, landscaping and infrastructure works	Yes – site is within the 1,500 m stone curlew constraint zone	Current planning application is supported by an ES and additional supporting HRA information but the HRA has not yet been completed. Mitigation is proposed as part of the application in relation to disturbance and recreational effects including in-combination recreational effects on Breckland SAC and SPA. The local planning authority is not supporting this application - it is not included in the local plan. Natural England has confirmed (consultation response dated 6/6/2017) that they have no objection subject to securing mitigation in the form of provision of habitat for stone curlew and provision of green infrastructure on-site. Conclusion: Prior to determining this planning application, FHDC should carry out a project level HRA informed by the information available and refuse permission if adverse

FHDC Local Plan ref. (at Options stage)	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?	Current position in relation to HRA
					effects on the integrity of a European site cannot be ruled out in combination with other plans and projects, including with the SIR and SALP.
N/A	East Cambridgeshire District 16/01196/SCOPE	Land Southwest Of 98 To 138 Station Road Kennett Suffolk	SCOPING OPINION 500 dwellings , new primary school, other community facilities, strategic green infrastructure and commercial development opportunities	Yes – site is within 1,500 m of 2011-2015 stone curlew nesting attempts grid squares associated with Breckland SPA (although it would not be subject to CS2 as it is in the neighbouring authority of East Cambridgeshire)	Natural England consultation response indicates the need to assemble a variety of information for HRA but this has not yet been carried out. Conclusion: Since there is not yet sufficient information to complete project level HRA, East Cambridgeshire District Council should carry out such HRA when the information becomes available and refuse permission if adverse effects on the integrity of a European site cannot be ruled out in combination with other plans and projects, including with the SIR and SALP.

Appendix 3
European sites information

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
Breckland SPA 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. Component SSSIs within Forest Heath are listed below.	Article 4.1, Annex I species: Breeding populations of stone curlew (60.1% GB breeding population), nightjar (12.2% GB breeding population) and woodlark (28.7% GB breeding population).	Current pressures Lack of ground disturbance, under-grazing and inappropriate scrub and weed control. Planning permission: general – development, especially for housing, roads and solar farms. Potential future threats Inappropriate forestry and woodland management. stone curlew monitoring and intervention – vulnerability of nests and chicks to farming operations. Air pollution: impact of atmospheric nitrogen deposition. Public access / disturbance – does not appear to be currently significantly affecting bird populations but impacts of increased recreational activities uncertain. Climate change. Inappropriate pest control – predation on ground-nesting SPA birds.	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: <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. 	None.
Breckland SAC Component SSSIs within Forest Heath are listed below.	Annex I habitats: 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	Current pressures Lack of ground disturbance, under grazing, inappropriate scrub and weed control, inappropriate cutting/mowing. Water pollution: There has been a considerable loss of aquatic species in Ringmere and high nutrient levels	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;	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.

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>recorded in previous water analysis suggest nutrients are impacting the mere. Langmere too shows signs of nutrient enrichment.</p> <p>Changes in species 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 	Managed by Suffolk Wildlife Trust

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. 	
Devil's Dyke SAC (on FH boundary, part in FH and part in East Cambridgeshire DC) 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> .	Annex I habitats: Semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites)	Current pressures Inappropriate scrub control Potential future threats Air pollution: impact of atmospheric nitrogen deposition.	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: <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.
Fenland SAC (outside FH) The Fenland SAC is comprised of three fenland Sites of Special Scientific Interest: Woodwalton Fen, Wicken Fen and Chippenham Fen. Each site generally consists of standing water bodies, ditch systems, bogs, marshes and broad-leaved woodland carr.	Annex I habitats: Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>) Annex II species: Spined Loach (<i>Cobitis taenia</i>), Great Crested Newt (<i>Triturus cristatus</i>)	Current pressures Water pollution – nutrient enrichment of Chippenham Fen component, fed from a mixture of groundwater, rainfall and surface runoff. Hydrological changes related to public water supply abstraction. Air pollution: impact of atmospheric nitrogen deposition Potential future threats None identified.	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; <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.	
Ouse Washes SAC, SPA and Ramsar site (outside FH) 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.	<u>SAC qualifying species</u> Annex II: Spined loach <i>Cobitis taenia</i> <u>SPA qualifying species</u> Article 4.1, Annex 1 species (breeding season): Ruff <i>Philomachus pugnax</i> ; Spotted Crake <i>Porzana porzana</i> 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> , Article 4.2 (migratory species – breeding season): Black-tailed Godwit <i>Limosa limosa limosa</i> ; Gadwall <i>Anas strepera</i> ; Shoveler <i>Anas clypeata</i> Article 4.2 (migratory species – over winter): Black-tailed Godwit <i>Limosa limosa</i>	Current pressures Inappropriate water levels. Potential future threats Water pollution.	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving... - the Favourable Conservation Status of its Qualifying Features (SAC), or - the aims of the Wild Birds Directive (SPA) ...by maintaining or restoring: <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 	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.

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>Redgrave and South Lopham Fens Ramsar (outside FH)</p> <p>The site is an extensive example of lowland base-rich valley, remarkable for its lack of fragmentation. The diversity of the site is due to the lateral and longitudinal zonation of the vegetation types characteristic of valley mires, such as dry birch woodland, scrub and carr, floristically-rich fen grassland, mixed fen, wet heath and areas of reed and saw sedge. The site supports many rare and scarce invertebrates, including a population of the fen raft spider <i>Dolomedes plantarius</i>.</p>	<p><u>Ramsar criteria</u></p> <ol style="list-style-type: none"> 1. The site is an extensive example of spring-fed lowland base-rich valley, remarkable for its lack of fragmentation. 2. The site supports many rare and scarce invertebrates, including a population of the fen raft spider <i>Dolomedes plantarius</i>. 3. The site supports many rare and scarce invertebrates, including a population of the fen raft spider <i>Dolomedes plantarius</i>. The diversity of the site is due to the lateral and longitudinal zonation of the vegetation types characteristic of valley mires. 	<p>Current pressures</p> <p>Inappropriate scrub control</p> <p>Inappropriate water levels - Historical evidence suggests that water levels have significantly dropped over time and as a result habitats and features have been damaged.</p> <p>Air Pollution: impact of atmospheric nitrogen deposition - Nitrogen deposition exceeds site relevant critical loads.</p> <p>Water pollution - Poor water quality arising from agricultural run-off particularly from nearby outdoor poultry and pig units causes nutrient enrichment and can lead to a reduction in</p>		

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
		biodiversity. Potential future threats None identified		
The Wash SPA/Ramsar (outside FH) 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. The Wash comprises very extensive saltmarshes, major intertidal banks of sand and mud, shallow waters and deep channels. 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 considerable botanical interest and the mature saltmarsh is a valuable bird breeding zone. Also very important as a breeding ground for Common seals.	<u>SPA qualifying species</u> Article 4.1, Annex 1 species (breeding season): Common Tern <i>Sterna hirundo</i> ; Little Tern <i>Sterna albifrons</i> ; Marsh Harrier <i>Circus aeruginosus</i> Article 4.1, Annex 1 species (over winter): Avocet <i>Recurvirostra avosetta</i> ; Bar-tailed Godwit <i>Limosa lapponica</i> ; Golden Plover <i>Pluvialis apricaria</i> , Whooper Swan <i>Cygnus cygnus</i> Article 4.2 (migratory): Ringed Plover Charadrius hiaticula; Sanderling Calidris alba; Black-tailed Godwit <i>Limosa limosa islandica</i> ; Curlew Numenius arquata; 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> Article 4.2 Assemblage qualification: regularly supports at least 20,000 waterfowl	Current pressures Inappropriate water level. Change in species distribution. Potential future water threats Public access/Disturbance – ongoing threat to site from recreational activities and low flying aircraft. Fisheries: Recreational marine and estuarine - potential to impact on fish stocks as a resource for designated birds. Inappropriate coastal management. Fisheries: Commercial and marine estuaries - risk to site features due to uncertainty of current management. Predation. Coastal squeeze.	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; <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. 	None.
The Wash and North Norfolk	Annex I habitats: Sandbanks slightly covered by sea water all	Current pressures	Ensure that the integrity of the site is maintained or	None.

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
Coast SAC (outside FH)	<p>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>Glauco-Puccinellietalia maritimae</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>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 restriction on harvesting methodology</p> <p>Coastal squeeze</p>	<p>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 habitats of qualifying species rely • The populations of qualifying species, and, The distribution of qualifying species within the site. 	
Chippenham Fen Ramsar (outside FH)	<p>Criterion 1: Spring-fed calcareous basin mire with a long history of management, which is partly reflected in the diversity of present-day vegetation. Criterion 2: The invertebrate fauna is very rich, partly due to its transitional position between Fenland and Breckland. The species list is very long, including many rare and scarce invertebrates characteristic of ancient fenland sites in Britain.</p>	<p>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.</p>	Not applicable.	Inappropriate scrub control, cutting and mowing in several units contributing to unfavourable no change status.

Site	Summary of reasons for designation	European site pressures and threats	Conservation Objectives	Other notes
	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>).			
Wicken Fen Ramsar (outside FH)	<p>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.</p> <p>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.</p>	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 HRAs of the 'Issues and Options', 'Preferred Options', and 'Proposed Submission' versions of the SALP

Consultation on 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 (statutory consultee)		
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 in subsequent stages of HRA through discussion and correspondence with Natural England.
Non-statutory consultees		
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. Appropriate assessment at later stages of plan making demonstrates 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 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	This error in the HRA of the SALP Issues and Options document is acknowledged. The current position is reflected in subsequent HRA reports.

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
	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.	
Suffolk County Council	<p>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 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>	Noted.
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 subsequent HRA reports.
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 the HRA of the Issues and Options. The updated data was used in later stages of HRA, once they 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 (36) 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 (37) is measured from home postcodes to the boundary of Thetford Forest. (36) state that the two sets of findings are similar. See paragraphs 4.46 to 4.49 of this HRA report for further discussion.

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
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 Newmarket Horsemen's Group	<p><i>HRA para 4.90</i></p> <p>The EA flood risk maps together with the site descriptions should help 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.</p>	The Council has relied on the Council's updated Water Cycle Study to inform the SIR and SALP and the HRA; this was not available at the time of the HRA of the Issues and Options.
Pegasus Group on behalf of Newmarket Horsemen's Group	<p><i>HRA Para 4.112 and following</i></p> <ol style="list-style-type: none"> 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. 2. Important sources e.g. Reviews of Consents and Management Plans have been omitted. 3. No consideration has been given to identifying which sites are vulnerable to changes in groundwater. 4. There has also been no consideration of the Breckland SAC. 	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 subsequent stages of HRA (air pollution issues are now dealt with in the HRA of the SIR and AECOM's separate report). Both types of habitat are sensitive to air pollution from roads (nutrient

Consultee	Summary of comment (N.B. Section and page numbers refer to the HRA report at Issues and Options stage)	LUC response
		build-up from nitrogen deposition), therefore broad conclusions were unaffected.
Pegasus Group on behalf of Newmarket Horsemen's Group	<i>HRA Para 5.3</i> Flood risk, water quality and water supply should be considered as it should be possible to identify sufficient spatial information to inform allocations - see comments above and made for the SIR.	See response to 'HRA Para 4.90' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<i>HRA Section 6</i> 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.	See response to individual comments above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<i>HRA Paras. 6.4 and 6.7</i> Given the comments in para 4.49 the disturbance within 7.5 km is not appropriate and should be extended to 10 km.	See response to 'HRA Para 4.49' above.
Pegasus Group on behalf of Newmarket Horsemen's Group	<i>HRA Para. 6.8</i> 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.	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	<i>HRA 6.12 and Appendix 2</i> 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 Cambridgeshire Local Plan will be subject to review and some Plans have not been considered. (see comment on para 3.3).	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 was carried out for all allocated sites and recommendations were made to the Council re. further action required (including further assessment, if appropriate) to ensure that the requirements of the Habitats Regulations are met.

Consultation on the 'Preferred Options' SALP

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
Natural England (statutory consultee)			
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	General point	Natural England is broadly satisfied that the assessment have been prepared in accordance with the requirements of the Conservation (of Habitats and Species) Regulations (2010). You will be aware that Natural England provided comments at the Issues and Options stage in our letter dated 2015. Following these comments we note that much of our previous advice, particularly in relation to providing clarity in the documents, has been taken into consideration in the updated HRA. We find the report clearer, particularly in terms of the various components of urban and recreational effects. However we have some concerns about the method of screening site allocations, which is outlined in the section below.	Noted. Specific concerns addressed below.
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	Section 4: Information used and assumptions made in the HRA	Before progressing with your appropriate assessment, we recommend that your authority reviews the criteria by which development sites have been screened in or out.	Specific concerns addressed below.
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	4.31 - 4.58 Recreation Pressure	As explained in our response to the Issue and Options consultation, we agree that it is necessary to consider cumulative recreational effects to the qualifying species of Breckland Special Protection Area (SPA) up to a distance of 7.5km. This distance was agreed during the Breckland Local Plan process as this is the distance within which it has been established that the majority of recreational effects can be captured. However these discussions focussed around the woodland and heathland areas of the SPA rather than the farmland areas as it was felt that visitors were likely to travel some distance to forest/heathland areas, but would only use farmland (for walking dogs etc.) near to home. With this in mind, the distance was largely put in place to protect nightjar and woodlark. Having considered the issue further, Natural England agrees that it should also be applied to stone curlew, as this species also uses heathland (but not forested) areas. However, given the above, this distance does not need to apply to farmland areas, so for example is not relevant to Breckland Farmland SSSI. We	Breckland SPA 7.5 km buffer used for screening for recreation pressure has been redrawn to exclude those parts of the SPA which are overlain by SSSI units which Natural England website (39) identifies as having a 'Arable and horticulture' habitat type.

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		appreciate it may be difficult to separate the farming areas from the heathland/forested areas easily during the HRA screening process but it would be worth reviewing the site allocations again with that in mind.	
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	4.31 - 4.58 Recreation Pressure	<p>Furthermore the above discussions had no bearing on any agreed distances regarding cumulative recreational effects to Breckland Special Areas of Conservation (SAC). Although recreational effects to Breckland SAC need to be taken into account when reviewing applications at the planning stage, there is no evidence that the 7.5km distance needs to be applied to the Breckland SAC sites. This distance relates to effects on the qualifying species of Breckland SPA, being initially focused on Thetford Forest (in view of concerns regarding extensive development in Thetford). The site improvement plan for Breckland SAC mentions that recreation may cause an effect in future but we do not consider that it is currently affecting any specific interest features on site, hence why the site improvement plan does not list any SAC interest features currently under pressure. Taking this into account, we would expect site allocations affecting Breckland SAC would be reviewed very much on a case by case basis and appropriate mitigation applied but would not expect this distance to be applied. Should further evidence become available, we would be happy to review our position on this.</p> <p>Rex Graham Reserve is generally closed to the public and, as we understand it, the illegal plant collection is more a case of organised theft, i.e. it is not linked to recreation.</p> <p>Taking this into account, the above 7.5km distance to review cumulative recreational effects does not, in our view, need to apply to either Breckland SAC or Rex Graham SAC. We recommend you review the HRA Screening of housing distribution options again with the above advice in mind.</p>	Subsequent to Issues and Options stage, the method applied to HRA screening of the SALP was amended to remove the assumption that likely significant recreation pressure effects cannot be ruled out for housing allocations within 7.5 km of Breckland SAC or Rex Graham Reserve SAC.
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	4.1 The FHDC Deliverability Study (Screening Criteria)	<p>Natural England is currently undertaking an internal review of the effectiveness of the screening criteria used to decide whether developments may pass the likely significant effect test in relation to the 1500m constraints zone. Note that this does not specifically apply to Forest Heath's criteria but relates to the screening criteria of all the relevant councils.</p> <p>We note that the Site Allocations Plan HRA includes</p>	The method applied by the HRA Screening of the SALP does not rely on the screening criteria applied by FHDC in its Deliverability Study.

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		reference to screening criteria used by the Core Strategy which includes a) totally screened from the European site by built development, and b) would not advance the line of built development towards the European site (4.1). We note that these mitigation options address impacts to stone curlew associated with the visual impact of increasing development (screening) and in terms of a gradual loss of area within the zone; however they cannot mitigate against indirect impacts, particularly those associated with housing (disturbance by human activity). Therefore whilst we do not have particular concerns about any of the site allocations set out in the current site allocations document, having worked with your authority on any we felt may affect the qualifying species of Breckland SPA, we suggest that in future the suitability of these criteria are reviewed against the types of development proposed for each allocation, to ensure they are appropriate and that the Habitats Regulations Assessment is robust.	LUC agrees that criteria (a) and (b) cited in Natural England's comment cannot address all aspects of the type of potential effect categorised by the HRA as 'Disturbance and other urban edge effects from construction or occupation of buildings' and this has been reflected in the approach to Appropriate Assessment of site allocations for which the HRA Screening of the SALP cannot rule out likely significant effects.
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	Information included within this HRA screening document	We note that the draft HRA screening of the single issue review contains less information than the accompanying HRA screening for the single issue review. The Section 7, Conclusions and Recommendations within that document contains information on existing mitigation and recommendations. This information is also relevant to the HRA screening for the site allocations as you need to establish whether current or planned mitigation may protect the sites, and therefore any sites can be screened out of your appropriate assessment. We would recommend you make sure that this draft HRA screening contains all the relevant information necessary from the other report.	The conclusions sections of the HRA Screening of the SALP now present information on existing mitigation where this is relevant to the likely significant effects from site allocations which cannot be ruled out, prior to consideration of screening.
Natural England (Cheshire) (Ms Francesca Shapland) [C-24212-12637]	5.8 Settlement boundary reviews	Following a review of the proposed changes to the settlement boundaries, we agree that the extensions are not likely to lead to likely significant effects and so can be ruled out at this stage. Where boundary extensions affect the Breckland Forest 400m and 1500m constraints zones, these are not likely to result in further development as the extensions leave little room outside of current or planned development. Many of the changes will actually provide further protection for Breckland SPA as they take sections out of the constraints zones or away from other areas that support biodiversity.	Noted.

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
Natural England (Cheshire) (Ms Francesca Shapland) [C- 24212-12637]	The stone curlew nest attempts data	We understand that the stone curlew nest attempts information is not yet ready and consider that this should be added when it becomes available.	The HRA Screening of the Proposed Submission and subsequent stages of the SALP was based on updated stone curlew nesting attempts data supplied to FHDC by Footprint Ecology in July 2016 (50).
Non-statutory consultees			
KWA Architects (Mrs Meghan Bonner) for Hills Residential Ltd [- 24087 - 12651]	General point	The exclusion of site RL/07 is unjustified. A site assessment carried out by qualified and competent ecologists confirms the development of site RL/07 would not affect Stone Curlew. Development of site RL/07 is not likely to have any greater impacts on Stone Curlew than the sites already taken forward in the Local Plan and therefore in the interests of reasonableness site RL/07 should be allocated. This would not alter the position set out in table 6.1 of the HRA. See supporting documents. Site RL/07 should be allocated for mixed residential and HRI use as set out in the supporting documents.	The choice of sites to be allocated is a matter for FHDC in preparing the Local Plan informed by the HRA.
Pegasus Planning for Newmarket Horsemen's Group [O - 24575 - 11392]	General point	The NHG submitted detailed evidence to the Hatchfield Farm inquiry raising significant concerns regarding the Council's approach to the Habitats Regulations. These concerns were reiterated in the NHG's response to the 2015 consultation of this document. The NHG's consultant has reviewed this latest draft of the HRA and considers that the previous concerns raised have not been addressed and therefore remain.	See responses to individual points in preceding table.
Pegasus Planning for Newmarket Horsemen's Group [O - 24576 - 11392]	4.1 The FHDC Deliverability Study (Screening Criteria)	As the constraint zones are being reconsidered, it means that the Policy CS2 is effectively out of date and therefore that the allocations and distribution options cannot be considered as properly determined. The presence of other significant barriers such as the A 14 has not been used to screen site options - this leads to some sites e.g. in Kentford being excluded on the basis of spurious grounds and can skew allocations.	The method applied by the HRA Screening of the SALP does not rely on the screening criteria applied by FHDC in its Deliverability Study.
Pegasus Planning for Newmarket Horsemen's Group	4.11 Disturbance and other urban edge effects	There is an omission of other effects including fragmentation, vandalism, connectivity in the assessment	Vandalism is not identified by Site Improvement Plans as a particular current pressure or potential future threat facing any of the scoped-in European sites and would, in any case, be difficult to differentiate from the generic

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
[O - 24577 - 11392]			<p>effects categories of 'disturbance and other urban edge effects' and 'recreation pressure'.</p> <p>The potential importance of habitat areas outside European site boundaries to their designated species populations is given due consideration under the effects category 'direct loss or physical damage due to construction'. More diffuse fragmentation/ loss of connectivity effects are not identified by Site Improvement Plans as a particular current pressure or potential future threat facing any of the scoped-in European sites and there is no evidence to suggest that the Local Plan poses a credible threat to site integrity in this regard.</p>
Pegasus Planning for Newmarket Horsemen's Group [O - 24578 - 11392]	4.17 Disturbance and other urban edge effects	Non-residential building may have a cumulative or in combination effect with residential construction and this should be considered.	The approach to HRA screening for disturbance and other urban edge effects considers all forms of built development not just residential development.
Pegasus Planning for Newmarket Horsemen's Group [O - 24579 - 11392]	4.22 Disturbance and other urban edge effects – stone curlew nesting attempts	<p>This predates the reappraisal of stone curlew records and will need reconsideration.</p> <p>A 1km grid square is unnecessarily onerous and may include land that is suitable thus skewing the allocation of sites, consideration of options.</p>	<p>The HRA screening of the Preferred Options Local Plan document used the most up-to-date stone curlew nesting attempts data available at the time. An updated data set was used for HRA of the Proposed Submission and subsequent stages of the Local Plan.</p> <p>The screening uses the most appropriate stone curlew nesting attempts data available and this is reported using 1 km grid squares (50). The approach has been agreed with Natural England.</p>
Pegasus Planning for Newmarket Horsemen's Group [O - 24580 - 11392]	4.32 Recreation pressure – European sites potentially affected	<p>The distance of 7.5 km from the district boundary is not appropriate because of the potential for in combination effects. Two sites are vulnerable to recreational pressure:</p> <ul style="list-style-type: none"> • Chippenham Fen has a public footpath with easy access to other parts of the site and is vulnerable to pressure. Natural England reports vandalism (evidence to Hatchfield Farm Inquiry (HFI)). • Devil's Dyke has a public footpath along the top of a vulnerable structure which already shows signs of erosion. <p>Rex Graham reserve - theft is not a result of recreational pressure but specific criminal activity. It is considered that</p>	<p>Disagree - it is considered that development within the District will not make a significant contribution to in combination recreation effects beyond a distance of 7.5 km.</p> <p>The site is generally closed to the public and the plant collection is organised theft rather than linked to</p>

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		this needs a separate section.	recreation. In addition, the related SSSI is in 100% favourable condition. Natural England has confirmed that an assumption of cumulative recreation pressure from all housing allocations within 7.5 km of Rex Graham Reserve SAC is not necessary.
Pegasus Planning for Newmarket Horsemen's Group [O - 24581 - 11392]	4.42-4.46	The NHG's previous comments about the applicability of the 7.5 km v 10 km buffer have been ignored. It does not matter where Fearnley measured to, the precautionary principle established by the Sweetman case indicates that in the light of very clear advice the 10 km boundary should be adhered to. The report says that the majority of visitors live within 10 km but there is in fact a case for a greater than 10 km radius as the average distance from home to survey location in the Fearnley report was 16.7 km. Further, no efforts were made to assess travel time and from some major towns journey time to core SPA areas is very quick along major roads.	Disagree. The justification for use of a 7.5 km buffer set out in the HRA report stands and has been agreed with Natural England.
Pegasus Planning for Newmarket Horsemen's Group [O - 24583 - 11392]	4.50	For the reasons set out in relation to 4.42 and following.	Specific points addressed above and below.
Pegasus Planning for Newmarket Horsemen's Group [O - 24584 - 11392]	4.59-4.66	<p>The NHG considers that Water Quality, Water Quantity and Air Pollution are not appropriately dealt with.</p> <p>Furthermore, at paragraph 4.66 it is the location of a road and its juxtaposition to a component SSSI which may determine whether there is a likely significant effect.</p> <p>The NHG is concerned to see that water quantity is not appropriately addressed and notes that the Sustainability Appraisal advises at p 460 that potential effects will primarily be a function on the cumulative effect of all the proposed growth. The NHG has already made comments in relation to the HRA for the SIR to make the point that this is not true because there are different WRZ and therefore</p>	<p>Noted.</p> <p>The location of roads in relation to European sites which are sensitive to air quality effects is initially considered in the HRA of the SIR and in more detail in the separate air quality report prepared by AECOM.</p> <p>As stated in the response to similar comments on the HRA of the Issues and Options SALP, the Council had 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 the HRA of Preferred Options. At Proposed Submission and subsequent stages, any site-specific issues were dealt with in the HRA of the SALP.</p>

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		<p>potential deficits and availability of water needs in each to be taken into account in determining site allocations. This has not been done and is thus inadequate.</p> <p>The NHG considers that it is not appropriate to rely on the future (now complete) Water Cycle Study to reveal site specific issues to be addressed at this consultation stage.</p>	Noted.
Pegasus Planning for Newmarket Horsemen's Group [O - 24585 - 11392]	Appendix 1	<p>The NHG considers that the screening exercise in Appendix 1 is inadequate as it only considers direct damage, disturbance/ urban effect and recreation. It does not consider water, air quality, sewage etc.</p> <p>Furthermore, the NHG objects to the use of 7.5 km as a screening tool for recreation for the reasons already explained. This distance unreasonably rules out Newmarket and Exning from any further consideration as it considers there will be no likely significant effects. The implication of this is that it puts these sites to the forefront of any consideration based on an inaccurate screening exercise.</p> <p>Appendix 1 does not consider the likely significant effects from non-housing allocation sites, which might result from disturbance/ recreation from lunch time walks, after work walks etc. This NHG considers that this is a shortcoming of the exercise and should be rectified.</p>	<p>The reasons for considering certain effects in the HRA of the SIR rather than that of the SALP are clearly set out in the HRA report and remain valid.</p> <p>7.5 km recreation buffer: see responses above and to comments on HRA Screening of Issues and Options document.</p> <p>Recreation effects from non-housing development are judged not to present a credible threat to Breckland SPA. In any event, disturbance from all forms of development within 1,500 m of Breckland SPA is assessed under the 'disturbance and other urban edge effects' category.</p>
Pegasus Planning for Newmarket Horsemen's Group [O - 24586 - 11392]	6.5	<p>Given that likely significant effects could not be excluded with certainty, as is required under the legislation, for recreation and water quantity, the NHG considers that there is a need to properly consider the potential in combination effects for every relevant European designated site.</p> <p>Further where mitigation has been proposed, it is necessary to reaffirm that this remains deliverable with the addition of a new plan.</p>	<p>The review of other relevant plans and projects considers the potential for in combination effects on all European sites within the scope of the HRA of the SALP.</p> <p>The in combination assessments for the HRA of the Proposed Submission and Modification stages of the SALP considered whether any non-significant effects could potentially combine with non-significant effects from other plans and projects to become significant and the deliverability of any relevant mitigation.</p>
Pegasus Planning for Newmarket Horsemen's Group [O - 24587 - 11392]	6.7-6.12	Depending on the results of the review of stone curlew data CS2 may need to be amended.	Natural England has endorsed use of the most recent nesting attempts data (2011-2015) for the HRA of the SIR and SALP. A literal interpretation of Core Strategy Policy CS2 would require reference to all nesting attempts data 'since 1995'. Since this is a more precautionary approach it does not affect the ability of the HRA of the

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
			SIR and SALP to rely on assurance provided by CS2 that unallocated development proposals that could have an adverse effect on the integrity of Breckland SPA will be subject to project level HRA.
Pegasus Planning for Newmarket Horsemen's Group [O - 24588 - 11392]	6.14 and following	As previously discussed there are good reasons for the buffer zone to be 10km.	See responses above and to comments on HRA Screening of Issues and Options document.
Pegasus Planning for Newmarket Horsemen's Group [O - 24589 - 11392]	6.25 Role of Accessible Natural Greenspace study in mitigating recreation pressure	The NHG considers that it is not sufficient to 'help mitigate the potential' and depend on an Accessible Greenspaces Policy. If greenspace is to be compensation and/ or mitigation, then it needs to be 'at least equally if not more attractive'. It is by no means certain that this can be achieved. No detailed information is given on the sites that would be potentially affected.	Natural England commented on FHDC's Natural Accessible Greenspace Study at Preferred Options stage that " <i>it has not been proved that strategic recreational effects are having an effect on the qualifying species of Breckland SPA</i> " but recognising the potential for development in the district to give rise to such effects and stating that " <i>we welcome the approach set out in the report to address this potential issue</i> ". Where Natural England has made suggestions to strengthen the mitigation offered by the study, FHDC has given consideration to these and reflected them in latest (January 2017) version of the study, for example by adding. As such, it is judged appropriate for the HRA to rely on the approach to mitigation set out in the study and referenced in the Local Plan documents.
Sellwood Planning for Lord Derby S – 24085 - 5831]	4.31 Recreation pressure – Hatchfield Farm allocation	It is therefore recommended that the pre submission version of the SALP reduces the area of the Hatchfield Farm allocation to that needed to accommodate the level of development proposed. Since this results in none of the allocation being within or touching the 7.5km buffer of the Breckland SPA, this issue is resolved.	Noted.
Sellwood Planning for Lord Derby [S – 24085 - 5831]	Appendix 1: Disturbance and other urban edge effects – Hatchfield Farm allocation	Since Appendix 1 of the HRA already concludes that the Hatchfield Farm allocation is unlikely to generate disturbance or other urban edge effects from construction or occupation of buildings on the Breckland SPA and SAC, the reduction in the extent of the allocation means that no SPA / SAC effects are to be expected.	Noted.
Sellwood Planning for Lord Derby [S- 24085-5831]	4.60 Water Quantity	The March 2016 Water Cycle Strategy Update concludes that that Forest Heath preferred sites can be supplied with water without increased abstraction and there is therefore no negative impact from the development plans in terms of	Noted. As per the intention stated in the HRA of the Preferred Options SALP, water quantity has primarily been assessed via HRA of the SIR and has referenced the update to the

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		<p>water supply. Even if it had been considered that additional water resources had been required, there are a series of technical and regulatory measures which interlock to ensure there could be no risk to European sites.</p> <p>Therefore there will be no likely significant effects on internationally important sites in terms of water supply which is in accordance with the Conservation of Habitats and Species Regulations.</p>	Water Cycle Study; any relevant mitigation was taken into account.
Sellwood Planning for Lord Derby S-24085-5831]	4.61 Water quality	The updated Water Cycle Strategy, referenced by LUC, confirms no that there are no technically insurmountable issues associated with treatment of wastewater from the Preferred Option and hence likely significant effects can be ruled out in terms of water quality.	<p>Noted.</p> <p>As per the stated intention in the HRA of the Preferred Options and Modification stages of the SALP, water quality has been primarily assessed via HRA of the SIR and referenced the update to the Water Cycle Study.</p>
Sellwood Planning for Lord Derby [S-24085-5831]	4.65 Air pollution – Hatchfield Farm allocation	Whilst no air quality issue has been raised in terms of Hatchfield Farm, the allocation would not be likely to result in air quality concerns in relation to European designated sites.	Noted.
Breckland District Council (Martin Pendlebury) [C-24099-12898]	SPA and designated features terminology	We note some inconsistency in the drafting of the documents in terms of the Special Protection Area and referencing all the features from which it derives the designation. We would recommend making this consistent especially in terms of Habitats Regulation Assessment.	Unclear which particular references to the SPA and designated features are inconsistent in the HRA for the Preferred Options SALP but the HRA of the Proposed Submission SALP has sought to be consistent.
Suffolk Wildlife Trust (Mr James Meyer) [C-24283-12367]	6.11 Screening conclusion for disturbance and other urban edge effects	We note that the screening conclusion in paragraph 6.11 of the document concludes that likely significant effects on the Breckland SPA, arising from 'disturbance and other urban edge effects from construction or occupation of buildings' from the site allocations identified, cannot be ruled out. As likely significant effects cannot be ruled out, Appropriate Assessment of the identified site allocations policies must be undertaken to determine whether their adoption and allocation would result in an adverse impact on the integrity of the SPA. In the absence of the demonstration of no adverse impact on the integrity of the SPA, the sites should not be allocated for development.	HRA Screening at the Preferred Options and subsequent stages was designed to highlight likely significant effects to FHDC and to provide the basis of recommendations to avoid these. Where likely significant effects could not be ruled out in HRA Screening of the SALP, Appropriate Assessment of the relevant policies was carried out.
Suffolk Wildlife Trust (Mr James Meyer) [C-24283-12367]	Recreation pressure – mitigation strategy	With regard to impacts from increased recreational pressure, we agree that a recreational mitigation strategy is required and are pleased to see that this will be informed by an up to date accessible natural greenspace study. Any sites	Noted. The assessment of recreation pressure considered whether the Local Plan adequately reflects the recreation mitigation strategy set out in the accessible natural greenspace.

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		allocated for new development must provide open space in accordance with the requirements of the recreational mitigation strategy.	
Suffolk Wildlife Trust (Mr James Meyer) [Ref. C-24283-12367]	Recreation pressure – Rex Graham Reserve SAC	In its consideration of recreational impacts, the HRA screening includes the Rex Graham Reserve SAC, it is our understanding that this site is not publically accessible, except for designated open days, this should therefore be included in the consideration of likely impacts on the site.	As stated in response to Natural England comment above [Ref. C-24212-12637], the method applied to HRA screening of the Proposed Submission and Modification stages of the SALP was amended to remove the assumption that likely significant recreation pressure effects cannot be ruled out for housing allocations within 7.5 km of Rex Graham Reserve SAC.
Newmarket Horsemen's Group (NHG) [C-24582-11392]	4.47 Recreation pressure – Rex Graham Reserve SAC	This is not recreation pressure.	See response to comments C-24212-12637 and C-24283-12367 above.

Consultation on the 'Proposed Submission' SALP

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
Natural England (statutory consultee)			
24883 - Natural England (Cheshire) (Ms Francesca Shapland) [12637]	General point	Habitats Regulations Assessment We are pleased that our previous comments from the HRA screening stage have evidently been taken into account within chapters 1-5 of the current HRA and agree with the conclusions of the Appropriate Assessment, Chapter 7. However we consider that in order to ensure the HRA is robust, issues relating to recreation need further explanation and we again highlight a point we made in our previous advice that the screening criteria would benefit from review.	Noted. Responses to detailed concerns are provided below.
24883 - Natural England (Cheshire) (Ms Francesca	Recreation effects	<u>Recreational effects to Breckland Farmland/Breckland SPA within the 1.5km constraints zone</u>	In response to this comment, changes to the methodology for future iterations of the HRA of the SALP were proposed under the heading 'Recreation' in

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
Shapland) [12637]		<p>The effect of recreation on farmland within the 1500m constraints zone does not appear to have been screened into the appropriate assessment or covered in much detail within the section on recreation. Recreational disturbance due to walking/dog walking activities by local residents in close proximity to Breckland Farmland SSSI is likely to be a contributing factor to stone curlew's avoidance of nesting in proximity to housing. Therefore whilst we agree that the cumulative effect of recreation within a 7.5km radius on the heath and forest areas can be screened out of the appropriate assessment, effects on the farmland elements need to be carried forward. Taking this into account, chapters 6 and 7 should be reviewed and changed accordingly.</p> <p><u>Recreational effects to Breckland Forest /Breckland SPA within the 400m constraints zone</u></p> <p>The immediate effect of housing in close proximity to Breckland Forest SSSI/Breckland SPA i.e. within the 400m constraints zone, needs to be considered separate to the cumulative recreational effect within 7.5km. This is due to the fact that allocations within 400m would be likely to require specific mitigation to address increased recreation within the local area and therefore measures that would be likely to mitigate for the cumulative effect of increased housing within 7.5km of Breckland Forest SSSI would not be sufficient to address the effect in close proximity to Breckland Forest SSSI/Breckland SPA. Therefore this should also be mentioned as a separate issue in the recreational section in Chapter 6 (although it does not appear to be relevant to any housing allocations). Note that any housing allocations within the 400m buffer would need to be screened into the appropriate assessment as an effect to integrity could not be initially ruled out.</p>	LUC's letter to Natural England of 23 May 2017. These have been agreed by Natural England, as confirmed in the Statement of Common Ground dated 4 October 2017.
24883 - Natural England (Cheshire) (Ms Francesca Shapland) [12637]	Air quality effects	We have reviewed the Forest Heath Local Plan Air Quality Assessment Regarding Breckland Special Area of Conservation and Breckland Special Protection Area and agree with the conclusions regarding potential pollution levels at specific road networks close to these sites. We consider that, in terms of individual site allocations, the information is sufficient to rule out effects to the integrity	Comments noted

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		of Breckland SAC and Breckland SPA.	
24883 - Natural England (Cheshire) (Ms Francesca Shapland) [12637]	Screening criteria	As stated in our previous response, there are many other factors that affect stone curlew nesting density. Natural England agrees that any proposals that will not increase the existing amount of built development on the site can be screened out, but we are not satisfied that all proposals that are within the 1.5km constraints zone but screened from Breckland SPA can be screened out from further assessment, unless indirect effects have also been considered in detail. We would welcome a change to the wording of this criteria as whilst we agree that anything small and within an established town can be screened out, we are not comfortable that this applies to medium sized developments or those outside of large settlements as the only effect screening addresses is visual disturbance.	In response to this comment, proposed changes to the methodology for future iterations of the HRA of the SALP are provided under the heading 'Screening criteria' in LUC's letter to Natural England of 23 May 2017. These have been agreed by Natural England, as confirmed in the Statement of Common Ground dated 4 October 2017.
24883 - Natural England (Cheshire) (Ms Francesca Shapland) [12637]	Table 7.1	<u>Housing Allocations Table 7.1 (for which project level HRA relied on)</u> We are happy with all allocations in Table 7.1 as we have been consulted on the ones that would cause concern already and ruled out an effect on integrity (subject to appropriate mitigation).	Comments noted
24883 - Natural England (Cheshire) (Ms Francesca Shapland) [12637]	Table 7.2	<u>Table 7.2 (for which project level HRA not relied on)</u> We agree with most of the conclusions drawn in this table but consider it needs amendment in view of our comments above on recreational effects to Breckland Farmland SSSI within the 1500m buffer and the screening criteria. Assessment on recreational effects should be added to the Potential for Indirect urban edge effects column. In particular, we recommend the following changes. SA2a - We agree that effects to integrity can be ruled out but update the indirect effects column as above. SA5 A & B - We agree with the conclusion that adverse effects can be ruled out, but suggest the following information is added. In the column for Potential Direct Disturbance we advise that further detail on the location should be included, so it is possible to assess whether noise disturbance would be a factor. In the Column covering the potential for indirect urban edge effects we would	In response to this comment, proposed changes to the methodology for future iterations of the HRA of the SALP were provided in LUC's letter to Natural England of 23 May 2017. Modifications to require measures to mitigate recreational effects to stone curlew on farmland have been proposed. These have been agreed by Natural England, as confirmed in the Statement of Common Ground dated 4 October 2017.

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		<p>recommend that recreational effects should be discussed but can also be ruled out due to the size of the proposal, its position in town and separation by the A1065.</p> <p>SA17a and SA7b - We agree with the conclusions and do not consider that these need amendments.</p> <p>SA10 - Even though only a small proportion of this is within the 1500 constraints zone, a development of this size at this distance from the SPA may require mitigation to offset the recreational effect to stone curlew. In our view it is therefore not possible to rule out an effect on integrity here without providing further information on the need for a project level HRA with mitigation if necessary, and regarding its position in relation to the nest attempts buffer.</p>	
Non-statutory consultees			
24936 - Elveden Farms Ltd. [13111]	Paragraphs 5.11, 5.12, 6.9, and 6.13	<p>RPS on behalf of Elveden Farms Ltd, seek to object to the Habitats Regulations Assessment of the Site Allocations Local Plan. This objection is formed on the basis of the following points:</p> <p>* With reference to paragraphs 5.11, 5.12, 6.9, and 6.13 we consider it incorrect to state that the allocation of site SA7(b) could have a potential effect upon Breckland SPA. There has been an application submitted for this site in which the effects of development upon the Breckland SPA have been discussed. FHDC resolved to grant planning permission subject to a S106 agreement, this therefore demonstrates that FHDC considers that there would be no likely significant impact of the development on the SPA. On this basis, we consider it wrong for the SALP HRA to ignore this vital information;</p>	<p>The HRA screening methodology applied in these paragraphs was agreed with Natural England. It is based on the principle of development within the allocated boundary rather than a specific proposal and only takes account of mitigation provided by the adopted Core Strategy and emerging SIR and SALP. The approach to consideration of more detailed evidence available from any project level HRA that has already been carried out is described at paragraph 7.3.</p> <p>In relation to site SA7(b), FHDC completed a project level HRA in 2014 but stated that this would need significant updating to ensure it is fit for purpose; the HRA of the SALP did, therefore, not rely upon it. As set out in Table 7.2, Appropriate Assessment for this site allocation was able to rule out an adverse effect on the integrity of Breckland SPA.</p>
24936 - Elveden Farms Ltd. [13111]	Paragraph 6.30	<p>* We consider paragraph 6.30 and the adjacent box to be contradictory in which we would require more clarification. We would also require confirmation that developers are not asked to fund the ANGST plan implementation as impacts are provided equally by residents of existing and proposed housing.</p>	<p>Both paragraph 6.30 and the following boxed HRA screening conclusion state that likely significant effects on Breckland SPA due to recreation pressure can be ruled out.</p> <p>New development would be required to make a proportionate contribution to mitigate in-combination</p>

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
			recreational effects on the SPA.
24936 - Elveden Farms Ltd. [13111]	Table 7.2	* With reference to table 7.2 we agree and support the conclusion that SA7 (b) has no adverse effect upon the integrity of the Breckland SPA.	Comments noted
24936 - Elveden Farms Ltd. [13111]	Development at Little Eriswell (REF. DC/16/1360/FUL)	To conclude, RPS CgMs on behalf of Elveden seek to object to the Habitats Regulations Assessment of the Site Allocations Local Plan on the basis that the material included within it makes little or no reference to the inclusion of the development at Little Eriswell (REF. DC/16/1360/FUL). As part of this application, the impacts of development on the Breckland SPA where [sic] discussed with Natural England in which they expressed satisfaction with the mitigation measures proposed. As a result it is considered that the development on this site has shown to have no adverse impact upon the integrity of the Breckland SPA and so it is recommended that the site should be allocated within the plan.	The proposal for development at Little Eriswell is not supported by the Council and not allocated in the SALP. This development is included in the list of other projects in Appendix 2 and used information available at that time. It has now been updated to reflect the latest correspondence between the Council and Natural England.
24721 - Hills Residential Ltd [12651]	Site RL/07	In assessing our comments during previous consultation rounds, FHDC states 'the choice of sites to be allocated is a matter for FHDC in preparing the Local Plan informed by the HRA.' They have not commented or apparently reviewed the additional information provided. Whilst it is FHDC's choice to allocate sites, this must be based on the most appropriate sites coming forward and a consistent assessment. Continuing to decline to allocate site RL/07 for impact on Stone Curlew when a full assessment has been provided to demonstrate it will not impact on Stone Curlew (which is now supported by Natural England - see Appendix 2) is unacceptable and contravenes requirements for positive plan preparation, a justified plan and a plan which is consistent with national planning policy. To address this, site RL/07 should be allocated.	The HRA of the SALP did not assess site RL07 because FHDC are not allocating it.
24939 - RSPB - Eastern England (Mr Mike Jones) [6257]	Box 1: FHDC Recreation Mitigation and Monitoring Strategy: Key Features - page 33.	We strongly support the Recreation Mitigation and Monitoring Strategy in order to address recreational pressures on European sites from the new housing allocations. However, as the plan needs to be able to anticipate and mitigate any recreational pressures before they become adverse, especially given research has	Comments noted

Respondent [comment reference]	Section of Preferred Options HRA report	Comment summary	LUC response
		identified a projected increase in visitor pressure of 30% on the Breckland SPA as a result of the adjacent Local Authority's housing plans, we strongly recommend that the monitoring proposals in the Strategy are made a core and regular feature, as per the approach taken in neighbouring authorities' plans.	