WILD FRONTIER ECOLOGY

Borough Council of King's Lynn and West Norfolk

Habitats Regulations Assessment of Detailed Policies and Sites Plan: Site Allocations and Development Management Policies – Proposed Submission Document

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The data which we have prepared and provided is accurate, and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that any opinions expressed are our best and professional bona fide opinions.

This report conforms to the British Standard 42020:2013 Biodiversity – Code of practice for planning and development.

Contents

1 Executive Summary

This document has been produced to inform the Site Allocations and Development Management Policies – Proposed Submission Document (formerly known as the Site Specific Proposals Development Plan Document). This Habitats Regulations Assessment (HRA) takes into account comments received from Natural England and the RSPB on the previous HRA undertaken for the Preferred Options stage, and comments received from these and other parties (including Norfolk Wildlife Trust) at the submission stage. The SADMP forms part of a hierarchical process and adds detail to the policies from the Core Strategy (adopted in July 2011). Once adopted, the SADMP will form part of the Local Plan (along with the existing Core Strategy) for the Borough. The Core Strategy was subject to a Habitats Regulations Assessment to ensure no adverse effects of the policies on sites within the European nature protection area network (Natura 2000); i.e. SACs and SPAs.

This document has considered the potential for effects on designated sites of European importance by the SADMP for the Borough of King's Lynn and West Norfolk. The potential effects were considered to arise from loss of supporting habitats, habitat fragmentation, non-specific proximity impacts, increased recreation and leisure pressures, increased use of roads, and the cumulative impacts on sites arising from multiple housing allocations.

By far the most important of these, in a borough-wide context, was considered to be the multi-faceted and complex impacts arising from increased recreation and leisure pressures on European sites. These were considered in some detail, and the best available evidence was used to inform the assessment. This indicated that visitors likely to cause greatest impacts were local site users, in particular those exercising dogs. This visitor group are most likely to be frequent site visitors. Impacts were predicted to be greatest where local users were within comfortable walking distance of European sites (estimated to be within 1km), but would also occur where sites were in a reasonable range of driving (estimated to be around 8km or 5 miles).

Likely significant effects from individual settlements and allocations were effectively removed by significant policy modifications subsequent to the Preferred Options document and HRA.

A more substantial effect was predicted when the in-combination effects of groups of new housing allocations within range of the European sites were considered. Sites where potential in-combination effects were identified were Roydon Common and Dersingham Bog SAC, North Norfolk Coast SPA, Wash SPA, the Wash and North Norfolk Coast SAC and Breckland SPA.

The impact potential was especially severe for the combined heath/ bog SAC of Roydon Common and Dersingham Bog, where visitor numbers are already considered to be at their upper limit. With large housing allocations proposed for King's Lynn at Knight's Hill, South Wootton and West Winch, the challenge is to accommodate the recreational needs of the extra population while demonstrating no adverse effect on the SAC and its bird interest, which is considered to be of SPA importance, though not yet designated as such.

Effect potentials are greatest for these areas during the long bird breeding season; the main species at risk being nightjar and woodlark. People exercising dogs are predicted to have the greatest disturbance impact.

While absolute certainty of combined effects cannot be predicted, a series of avoidance measures are proposed to alleviate the current recreational pressure, or shift it away from these sites, and to reduce the effects from developments within range of local

users.

Enhanced informal recreational provision on (or in close proximity to) the allocated site, is intended to limit the likelihood of additional recreational pressure (particularly in relation to exercising dogs) on nearby relevant nature conservation sites. This provision will be likely to consist of an integrated combination of:

a. Informal open space (over and above the Borough Council's normal standards for play space); the spaces provided will need to demonstrate their suitability for a variety of uses, including linear/ circular routes for dog exercising.

b. Landscaping, including landscape planting and maintenance. Landscaping in itself will make little difference to alleviate recreational pressure on Roydon Common or Dersingham Bog; however it may help to make the new housing areas more attractive to residents and dissuade them from travelling a greater distance, potentially to a SAC or SPA site.

c. A network of attractive pedestrian routes, and car access to these, which provide a variety of terrain, routes and links to the wider public footpath network.

d. Contribution to enhanced management of nearby designated nature conservation sites and/or alternative green space.

e. An ongoing programme of publicity to raise awareness of relevant environmental sensitivities and of alternative recreational opportunities away from the sensitive sites.

f. The new developments should be subject to screening for HRA. This does not replace those measures specified above, nor does it abdicate the duties of this HRA; rather it provides an additional safeguard that, at the point of delivery, a likely significant effect has been avoided.

g. Public use of the European sites should be subject to ongoing monitoring.

h. There should be an ongoing dialogue, most likely organised by the Borough Council, and involving all relevant stakeholders, with the specific aim of reducing effects on these sites, examining the results of site monitoring and acting on any findings.

i. The Borough and other stakeholders should continue to seek long-term access to, or acquire, further recreational greenspace on an opportunistic basis.

j. As the potential effects on the European site come from a number of sources, some of which are outside the scope of this plan (for example existing settlements), the site managers should continue to innovate and explore ways of reducing the on-site impacts of recreational disturbance. This could also be assisted by developer contributions.

In order to ensure delivery of effective mitigation and monitoring of European sites throughout the Borough, a Natura 2000 sites Mitigation and Monitoring Strategy has been developed and endorsed by the Borough Council.

The evolving Mitigation and Monitoring Strategy, approved by Cabinet (http://democracy.west-norfolk.gov.uk/documents/s1343/Appendix%202%20-%20HRA%20Monitoring%20and%20Mitigation%20Strategy.pdf), details how avoidance, mitigation and monitoring will be carried out. The monitoring and mitigation measures will be funded from a variety of sources and different bodies, including making use of existing services and funding provided by the Borough Council. Existing services provided by Natural England and other conservation organisations are also referenced where the funding is in place. Further funding is required from developers, which will be sought through a Habitat Mitigation Contribution and planning obligations (also

known as Section 106 agreements), and in the future through the Community Infrastructure Levy (CIL). The prime responsibility for funding of the directly provided mitigation measures will lie with the developer.

It is proposed that the Borough Council form an advisory panel (Habitat Mitigation Advisory Panel) to assist it in making expenditure decisions on mitigating recreational impacts of new development through both Habitat Mitigation Contributions and any funding generated through CIL.

The functions of the Panel would include the following: agree and prioritise a 5 year programme for delivery of recreation mitigation, measures and monitoring; provide expert advice; allocate budget accordingly, taking account of other arising mitigation opportunities; secure the cooperation of all stakeholders; monitor risks, progress and effectiveness of delivery; monitor effectiveness of mitigation and agree changes where necessary; identify, lobby for and secure complementary funds; identifying projects that can come forward in a timely manner and will result in cost effective mitigation benefits; estimating costs and timescales; overseeing effective management of mitigation measures to ensure their long-term effectiveness; coordinating monitoring of European site integrity.

The Panel would comprise: BCKLWN; Portfolio Holder for Environment, Officers; RSPB; Norfolk Wildlife Trust; Natural England; Norfolk County Council – Green Infrastructure; National Trust; Forestry Commission; Water Management Alliance; Environment Agency.

The Borough Council will administer the HMAP, which will report to Cabinet.

On this basis, no adverse effects on the conservation objectives of these sites are predicted, as a framework and funding mechanism is in place for the avoidance of harm, mitigation of potential impacts and monitoring of status.

2 Introduction

The Habitats and Birds Directives protect sites of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within Europe. These sites are referred to as European Sites and consist of Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Offshore Marine Sites (OMSs), however there are no OMSs designated at present.

Articles 6(3) and 6(4) of the Habitats Directive require Appropriate Assessment (AA) of any plans or projects likely to have a significant effect on a designated feature of a European Site. Appropriate Assessment is an assessment of the potential effects of a proposed plan on all European sites, both within and adjacent to the plan area. The intention is that a plan or project should only be approved after determining that it will not adversely affect the integrity of any European Site. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, compensatory measures must be incorporated to ensure that the overall coherence of a European Site is protected.

An Appropriate Assessment is a determination by the 'Competent Authority', in this case the Borough Council of King's Lynn and West Norfolk (BCKLWN), as to whether a proposed plan or project will result in an adverse effect on the integrity of any European sites. *Planning Policy Guidance Note 9* (PPG9, the precursor to PPS9) (Department of the Environment, 1994) defined a site's integrity as "*the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or population of the species for which the site is classified*".

On the 20th October 2005, the European Court of Justice (ECJ) ruled that the UK had not transposed the *Habitats Directive* into law in the proper manner. Land use plans were incorrectly described under the UK Habitats Regulations as not requiring an Appropriate Assessment to determine impacts on sites designated under the *Habitats* and *Birds Directives*.

Appropriate assessment is considered to be a risk-based assessment, drawing on available information. The Department for Communities and Local Government (DCLG) has produced draft guidance on carrying out Appropriate Assessment for the protection of European sites for Regional Planning Bodies and Local Planning Authorities. It addresses determining the need for an Appropriate Assessment for a given plan and the provision of an assessment if one is required. The UK Habitats Regulations have also been amended to include provisions for land use plans (the *Conservation (Natural Habitats &c.) (Amendment) (England and Wales) Regulations (2007)*). There is draft Natural England (formerly English Nature) guidance on the provision of Appropriate Assessments for Regional Spatial Strategies and Sub-Regional Strategies. These two documents: "*Planning for the Protection of European Sites: Appropriate Assessment*" (DCLG, 2006) and "*The Assessment of Regional Spatial Strategies under the Provisions of the Habitats Regulations – Draft Guidance*" (English Nature, 2006), currently provide the most cohesive source of guidance relating to Appropriate Assessments of land use plans. Further documents which have provided scope to this work are the Royal Society for the Protection of Birds (RSPB) publication "*The Appropriate Assessment of Land Use Plans in England*" (2007) and recent guidance for competent authorities (Tyldesley and Hoskin 2008).

The report therefore takes the following format:

- Evidence gathering - Identifying European sites within the District and outside potentially affected, qualifying features, condition of sites, conservation objectives and other relevant plans or projects.

- Task 1 – Screening. Deciding whether or not a policy is likely to have a significant effect. It is considered that at this stage there is sufficient available information to effectively screen policies.
- Task 2 – Appropriate Assessment and ascertaining the effect on site integrity.

It is anticipated that the main outcomes of this report are likely to be adjustments to policies subsequent to the Assessment (Table 7).

2.1 Requirement for an Appropriate Assessment for the Detailed Policies and Sites Plan

A number of International sites (Natura 2000 and Ramsar sites) occur within the boundaries of King's Lynn and West Norfolk District, and several others lie in adjoining districts or within reasonable catchments of the settlements where growth is proposed. BCKLWN is therefore taking a proactive and precautionary approach in ensuring that these sites will not be adversely affected by proposed future growth. It also recognises the potential for 'in combination' impacts resulting from interactions between its detailed Policies and Sites Plan (SSP) and factors associated with the Local Plans of nearby authorities.

3 The Appropriate Assessment process

Task 1: Screening for likely significant effects

Identifying whether a plan option is likely to have a significant effect on any European Site. This will determine whether the subsequent steps of Appropriate Assessment are required.

The precautionary principle must be used when assessing whether effects are significant. Where there is any doubt or further research is needed the Appropriate Assessment process should proceed to the next test, rather than reach a conclusion of 'no significant effect'.

The assessment of likely significant effect needs to take account of impacts in combination with other plans and projects, however only those plans or projects which are considered most relevant should be considered.

If there are found to be likely significant effects the plan option must be subject to Appropriate Assessment of its implications for the conservation objectives of the European Site.

Task 2: Appropriate Assessment

The implications for the conservation objectives of the European Site should be examined.

A plan should only be adopted after having ascertained that it will not adversely affect the integrity of the European Site. There may be a need to fine-tune the plan as it emerges to ensure that adverse effects on European sites are avoided. This process will render Stage 3 unnecessary, which is important since this task is complex, expensive and not in keeping with the spirit of the Habitats Directive.

Task 3: Alternative Solutions and Mitigation

Where the plan is assessed as having an adverse effect on the integrity of a site, then alternative solutions must be considered.

In considering whether a plan or project will adversely affect the integrity of the site, regard to the manner in which it is proposed to be carried out or to any conditions or restrictions must be considered.

The primary aim of any mitigation of an option should be to allow 'no adverse affect on integrity' to be concluded. Where this is not possible then mitigation should aim to reduce the adverse affect as much as possible. Measures will normally involve the modification of an option.

After mitigation measures and possible alternatives have been exhausted and it still cannot be concluded 'no adverse affect on integrity' as a rule the option should be abandoned.

In exceptional circumstances, and as an exception to that rule, if the pursuit of the option is justified by 'imperative reasons of overriding public interest' consideration can be given to proceeding. Strong justification will be required to support this and it must be demonstrated to the satisfaction of the Secretary of State that there were no possible mitigation measures and/or alternative solutions to cancel out the negative effects. In these cases the Secretary of State shall secure any necessary compensatory measures to ensure the overall coherence of the European site is protected.

4 Consultation and Preparation

Natural England is the statutory nature conservation body responsible for providing advice on Appropriate Assessment, and has been involved throughout the AA process on the KLWNBC Core Strategy Policies. The consultations for the Core Strategy also included extensive dialogue with the RSPB, including the Examination in Public.

The responses to the last version of this document, assessing the site specific proposals at the Preferred Options stage, are appended.

5 Methods

The methods for this exercise have been developed in accordance with DCLG and Natural England guidance, as well as that offered by the RSPB. The approach developed has also been tailored to ensure that the requirements of the Habitats Regulations and supporting guidance are met. Additionally, Appropriate Assessment methodologies devised for large scale developments have been evaluated to ensure that our approach is based on practical implementation of the Habitats Regulations.

Given that the application of Appropriate Assessments to land use plans in the UK remains in its early stages we have taken a carefully-considered approach to developing the methodology to ensure that the process is as simple and transparent as possible. The need to ensure that the assessment is 'appropriate' to the evaluation of policy is also recognised.

The process has been broken down into a series of clearly defined steps that will provide a transparent and accountable assessment of the proposed sites. These steps are outlined below and where necessary references are provided to the specific guidance utilised in informing the process.

5.1 Task 1. Policy Screening - Test of Likely Significant Effect (LSE)

This screening stage undertakes two levels of assessment prior to Appropriate Assessment. It:

- Determines which options have Likely Significant Effect and will therefore be subject to full Appropriate Assessment; and
- Provides a discussion on the implications of each option where appropriate

This stage is provided as a coarse filter based on available information and a consideration of the likely effects of policy (both positive and negative) in regard to the sensitivities of the sites in question. This stage considers the effects both alone and in combination with other plans and projects.

5.2 Task 2. Determination, Preventative, Avoidance and Mitigation Measures. Assessment of Effects on the Integrity of the Site(s) – The 'Appropriate Assessment'

Where sites are determined to have a Likely Significant Effect they will be subject to Appropriate Assessment. It should be stressed however, that the assessment is provided at the plan level. Policies and allocated sites need to be considered at this individual level and then as a whole. It is possible however, to establish policies and sites where any effect can be discounted. Sites for which 'no adverse effect on the integrity of the site' cannot be determined (alone, or in-combination with other plans and projects), alternative solutions and mitigation and avoidance measures will be pursued.

Where it is not possible to avoid adverse effects of site integrity through adopting mitigation and avoidance measures the case for pursuing particular development sites on the basis of imperative reasons of over-riding public importance (IROPI) may be made. At all stages, site integrity and conservation objectives for each international site will be a central consideration; justification for the (un)acceptability of options makes reference to these. Greater detail on the full assessment is provided below.

5.2.1 Provision of an 'in combination' assessment

The 'in combination' assessment builds on the assessment of individual sites (the 'alone' stage). As this assessment of Site Specific Proposals differs significantly from an assessment of, for example, an LDF Core Strategy, the approach taken to the in

combination assessment differs from previous studies. As there is the potential for many interactions between sites, with compound effects on particular International sites, the assessment focuses on the receptor (the site) and identifies those settlement proposals which might be considered to contribute to an in-combination impact. The additional impact of other policies or approved projects yet to be implemented is also incorporated at this stage.

The in-combination assessment will provide an account of all Site Specific Proposals collectively (assessment at the plan level) and in-combination with other plans and policies.

5.2.2 Consideration of preventative, avoidance, and mitigation measures

If the assessment concludes that no sites, considered alone or 'in combination' with other plans or projects, will have an adverse effect on the international sites then the assessment would end at this stage. It would be possible to recommend that the proposed sites can be brought forward for development.

However, if following completion of the above stages sites remain where an adverse effect on site integrity cannot be ruled out, preventative, avoidance and mitigation measures must be considered.

Working with the Planning Departments of BCKLWN and other relevant authorities, available guidance and best practice would be used to determine measures which are both practically implementable and acceptable in terms of the Habitats Regulations.

Broad classes of measures, employed in Appropriate Assessments elsewhere, are outlined below by way of example:

- **Monitoring public use** on international sites in response to new housing development, so that implementing other measures (e.g. SANG, site management) can be based on evidence that disturbance thresholds are being exceeded;
- **Management of access** to international sites e.g. restriction of public access certain times of year or to specific locations, requirements to keep dogs on leads, limiting parking to key areas where site information /management can be supplied/implemented;
- **Allocation of Sustainable Accessible Natural Greenspace** (SANG) to attract residents away from undertaking informal recreation on International sites;
- **Highlighting** within Appropriate Assessments that compliance with water quality and water resources requirements on international sites is dependent on water infrastructure development, which needs to be sanctioned by OFWAT;
- **Implementation of additional policies** within development planning documents which will avoid or offset other policies or developments which have potential to adversely affect the integrity of European Sites.

5.2.3 Determination of alternative solutions and imperative reasons of overriding public interest

As outlined above if options/sites have been identified as potentially having an adverse impact on the integrity of the site(s), and preventive measures or mitigation are not adequate or appropriate, further consideration should include:

First, alternative solutions should be considered. Can another site which meets local needs but also avoids potential impacts on International sites be identified instead?

Consideration of alternatives will require the combined efforts of the Appropriate Assessment project team and the local planning officers: and

Second, if a viable alternative is not available, then the matter of whether it is required in the interests of overriding public interest should be considered. Claims for policy adoption on the grounds of imperative reasons of overriding public interest need to be carefully considered in regard to Regulations 85C and E (of the amended Habitats Regulations). The procedure is well defined in the Habitats Regulations and in associated guidance. Particulars will depend both on the reasons for the IROPI claim and the priority attached to the species or habitat in question. Claims for IROPI must be submitted to Central Government with clear reasoning, and with compensatory mechanisms fully defined. This process would be followed according to regulation.

6 Evidence Gathering for Habs Regs Assessment

Prior to beginning the HRA, the following evidence should be gathered:

- European sites within and surrounding the potentially affected areas of the proposed plans;
- The characteristics of those European sites and their conservation objectives; and
- Other relevant plans or projects

6.1 Potentially affected International and European Protected Sites

Special Areas of Conservation (SAC)

- Breckland (directly bordering)
- Norfolk Valley Fens
- Ouse Washes
- Roydon Common and Dersingham Bog
- The Wash and North Norfolk Coast
- River Wensum

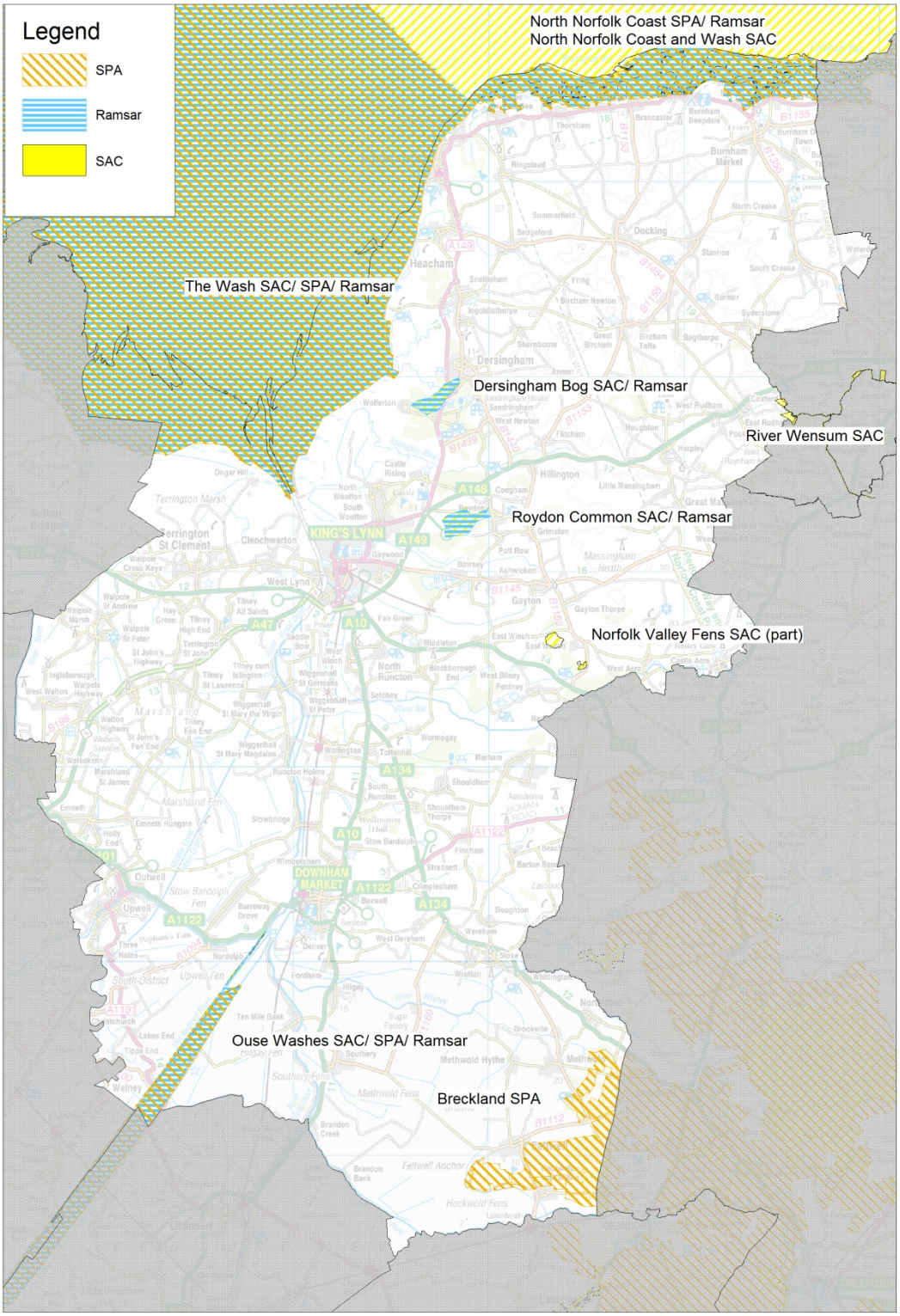
Special Protection Areas (SPA)

- Breckland
- The North Norfolk Coast
- The Ouse Washes
- The Wash

Wetlands of International Importance (Designated under the Ramsar Convention)

- Dersingham Bog
- North Norfolk Coast
- Ouse Washes
- Roydon Common
- The Wash

Figure 1. Plan showing location of European Sites within the Borough (Base map reproduced from Ordnance survey digital map data, © Crown Copyright 2011).



6.2 Description, Characteristics and Conservation Objectives of SAC Sites

6.2.1 Breckland SAC

Designated on 1st April 2005

Site Area: 7548.06ha, of which Weeting Heath borders the Borough for approximately 3.5 km. No part of the SAC falls within the Borough.

Breckland in the heart of East Anglia is a gently undulating plateau underlain by bedrock of Cretaceous Chalk, covered by thin deposits of sand and flint. The conditions during the last glaciation have given rise to the patterned ground features and ice depressions (pingos) that we see today and that are of high geological and biological importance. The continental climate, with low rainfall and free-draining soils, has led to the development of dry heath and grassland communities. Relatively lush river valleys provide a gentle contrast to the drier harsher surroundings. Occasional woods with alder *Alnus glutinosa* and willow *Salix* sp.the most dominant trees occur beside rivers and streams in the floodplains. These woods rely on high water levels and sometimes surface flooding as both river flooding or spring flows can be very important.

The dry heaths of Breckland are of the *Calluna vulgaris – Festuca ovina* (heather – sheep's-fescue) community. The sand sedge-dominated *Carex arenaria* sub-community is typical of areas of blown sand – a very unusual feature of this location. The highly variable soils of Breckland, with underlying chalk being largely covered with wind-blown sands, have resulted in mosaics of heather-dominated heathland, acidic grassland and calcareous grassland that are unlike those of any other site. In many places there is a linear or patterned distribution of heath and grassland, arising from fossilised soil patterns that formed under peri-glacial conditions.

Breckland is the most extensive surviving area of the rare *Festuca ovina – Hieracium pilosella – Thymus praecox* (sheep's-fescue – mouse-ear-hawkweed – wild thyme) grassland type. The grassland is rich in rare species typical of dry, winter-cold, continental areas, and approaches the features of grassland types in central Europe more than almost any other semi-natural dry grassland found in the UK.

Wangford Warren and adjoining parts of RAF Lakenheath have one of the best-preserved systems of active inland sand dunes in the UK. The habitat type, which is in part characterised by the nationally rare grey hair-grass *Corynephorus canescens* occurring here at its only inland station, is associated with open conditions with active sand movement. The site shows the colonisation sequence from open sand to acidic grass-heath.

The Breckland meres are examples of hollows within glacial outwash deposits and are fed by water from the underlying chalk aquifer. Natural fluctuations in groundwater tables mean that these lakes occasionally dry out. The flora is dominated by stonewort – pondweed *Characeae – Potamogetonaceae* associations. A number of the water bodies within the site support populations of amphibians, including great crested newts *Triturus cristatus.*

Site Condition

Weeting Heath SSSI was assessed as being in 40.15% favourable condition, 38.97% in unfavourable recovering condition, and 20.88% unfavourable no change.

For the SAC as a whole, general site character is as given on the Joint Nature

Conservation Committee's website:

- Inland water bodies (standing water, running water) (0.5%)
- Bogs, marshes, water fringed vegetation, fens (1%)
- Heath, scrub, maquis and garrigue, Phrygana (20%)
- Dry grassland, steppes (59.4%)
- Improved grassland (0.2%)
- Other arable land (0.1%)
- Broad-leaved deciduous woodland (9%)
- Coniferous woodland (5%)
- Mixed woodland (4%)
- Inland rocks, screes, sands, permanent snow and ice (0.5%)
- Other land (including towns, villages, roads, waste places, mines, industrial sites) (0.3%)

Weeting Heath is in the ownership of Norfolk Wildlife Trust, and access to the public is restricted to the visitor centre and hides during the bird nesting season.

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

Qualifying Features

H2330. Inland dunes with open *Corynephorus* and *Agrostis* grasslands; Open grassland with grey-hair grass and common bent grass of inland dunes
H3150. Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation; Naturally nutrient-rich lakes or lochs which are often dominated by pondweed
H4030. European dry heaths
H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone
H91E0. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*); Alder woodland on floodplains*
S1166. *Triturus cristatus*; Great crested newt

6.2.2 Norfolk Valley Fens SAC

Designated on 20th May 2004

Site Area: 616.21ha, of which 62.27ha is within the Borough. This is the SSSI known as East Walton and Adcock's Common.

This site comprises a series of valley-head spring-fed fens. Such spring-fed flush fens are very rare in the lowlands. The spring-heads are dominated by the small sedge fen type, mainly referable to black-bog-rush – blunt-flowered rush (*Schoenus nigricans – Juncus subnodulosus*) mire, but there are transitions to reedswamp and other fen and wet grassland types. The individual fens vary in their structure according to intensity of management and provide a wide range of variation. There is a rich flora associated with these fens, including species such as grass-of-Parnassus *Parnassia palustris*, common butterwort *Pinguicula vulgaris*, marsh helleborine *Epipactis palustris* and narrow-leaved marsh-orchid *Dactylorhiza traunsteineri*.

In places the calcareous fens grade into acidic flush communities on the valley sides. Purple moor-grass *Molinia caerulea* is often dominant with a variety of mosses including thick carpets of bog-moss *Sphagnum* spp. Marshy grassland may be present on drier ground and purple moor-grass is again usually dominant but cross-leaved heath *Erica tetralix* can be frequent. Alder *Alnus glutinosa* forms carr woodland in places by streams. Wet and dry heaths and acid, neutral and calcareous grassland surround the mires.

Within the Norfolk Valley Fens there are a number of marginal fens associated with pingos – pools that formed in hollows left when large blocks of ice melted at the end of the last Ice Age. These are very ancient wetlands and several support strong populations of Desmoulin's whorl snail *Vertigo moulinsiana* as part of a rich assemblage of rare and scarce species in standing water habitat. At Flordon Common a strong population of narrow-mouthed whorl snail *Vertigo angustior* occurs in flushed grassland with yellow iris *Iris pseudacorus*.

Site Condition

100% of the East Walton and Adcock's Common section of the Norfolk Valley Fens site is in "unfavourable recovering" condition, according to Natural England's website. East Walton Common is open access under the CROW Act, Adcocks Common is privately owned without public access.

General site character as given on the Joint Nature Conservation Committee's website:

- Inland water bodies (standing water, running water) (5%)
- Bogs, marshes, water fringed vegetation, fens (25%)
- Heath, scrub, Maquis and garrigue, *Phrygana* (30%)
- Dry grassland, steppes (5%)
- Humid grassland, Mesophile grassland (5%)
- Broad-leaved deciduous woodland (30%)

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

Qualifying Features:

H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross - leaved heath
H4030. European dry heaths
H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone
H6410. *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows
H7210. Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)*
H7230. Alkaline fens; Calcium-rich springwater-fed fens
H91E0. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*); Alder woodland on floodplains*
S1014. *Vertigo angustior*; Narrow-mouthed whorl snail
S1016. *Vertigo moulinsiana*; Desmoulin`s whorl snail
* denotes a priority natural habitat or species

6.2.3 Ouse Washes SAC

Designated on 20th May 2004

Site Area: 311.5ha, of which approximately 98.3ha is within the Borough.

The Ouse Washes is one of the country's few remaining areas of extensive washland habitat. The associated dykes and rivers hold a great variety of aquatic plants; the pondweeds *Potamogeton* spp. are particularly well represented. The associated aquatic fauna is similarly diverse and includes spined loach *Cobitis taenia*. The Counter Drain, with its clear water and abundant aquatic plants, is particularly important, and a healthy population of spined loach is known to occur.

Site Condition

19.13% of the SSSI is in favourable, or "unfavourable recovering" condition. All of the site units within the Borough are in "unfavourable no change" condition.

General site character as given on the Joint Nature Conservation Committee's website:

- Inland water bodies (standing water, running water) (50%)
- Bogs, marshes, water fringed vegetation, fens (20%)
- Improved grassland (30%)

The Ouse Washes are not open access land, but can be viewed by the public from limited access points, many of which are nature reserve watchpoints. Access in West Norfolk is largely limited to such access points, or a substantial walk from nearby settlements or car parking areas.

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

Qualifying Features:

S1149. *Cobitis taenia*; Spined loach

6.2.4 Roydon Common and Dersingham Bog SAC

Designated on 20th May 2004

Site Area: 351.83ha, entirely within the Borough.

Roydon Common and Dersingham Bog represent the largest and best examples of cross-leaved heath – bog-moss (*Erica tetralix – Sphagnum compactum*) wet heath in East Anglia. This vegetation community is part of a lowland mixed valley mire, a complex series of plant communities grading from wet acid heath through valley mire to calcareous fen. This gradation is of outstanding interest. The mire is extremely diverse and supports many rare plants, birds and insects, including the black darter dragonfly *Sympetrum scoticum*, a northern species with a very local distribution in south-east England. The site also contains an area of dry heathland, which is dominated by heather *Calluna vulgaris,* gorse *Ulex europaeus* and young silver birch *Betula pendula*, and has areas of bracken around the margins.

There are examples of depressions on peat substrates in natural bog pools of patterned valley mire, in flushes on the margins of valley mire and locally in disturbed areas associated with trackways and paths in mire and wet heath. Mosaics containing this habitat type are important for bog orchid *Hammarbya paludosa*.

Site Condition

Roydon Common: 95.53% of the site is in "unfavourable recovering" condition and 4.47% is in "unfavourable declining" condition according to Natural England's website.

Dersingham Bog: 62.26% of the site is in "unfavourable recovering" condition and 37.74% is in "favourable" condition according to Natural England's website.

General site character as given on the Joint Nature Conservation Committee's website:

- Inland water bodies (standing water, running water) (0.3%)
- Bogs, marshes, water fringed vegetation, fens (5%)
- Heath, scrub, Maquis and garrigue, Phrygana (67%)
- Dry grassland, steppes (1%)
- Improved grassland (1.7%)
- Broad-leaved deciduous woodland (11%)
- Coniferous woodland (7%)
- Mixed woodland (6%)
- Other land (including towns, villages, roads, waste places, mines, industrial sites) (1%)

Both sites are open access under the CROW Act, but are also nature reserves with full time wardens (though the warden at Roydon also covers a number of other sites). There are small car parks and well established access points at the north-west and north-east of Roydon Common. There are areas of land under restoration to wildlife habitats nearby which are also accessible to the public. Access to Dersingham Bog is mainly from the southern end.

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

Qualifying Features:

- H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath
- H4030. European dry heaths
- H7150. Depressions on peat substrates of the *Rhynchosporion*

6.2.5 River Wensum SAC

Designated: 20th May 2004

Site Area: 381.74 ha, of which approximately 31.34ha is in the Borough at Broomsthorpe and Helhoughton Commons.

The Wensum is a naturally enriched, calcareous lowland river. The upper reaches are fed by springs that rise from the chalk and by run-off from calcareous soils rich in plant nutrients. This gives rise to beds of submerged and emergent vegetation characteristic of a chalk stream. Lower down, the chalk is overlain with boulder clay and river gravels, resulting in aquatic plant communities more typical of a slow-flowing river on mixed substrate. Much of the adjacent land is managed for hay crops and by grazing, and the resulting mosaic of meadow and marsh habitats, provides niches for a wide variety of specialised plants and animals.

Ranunculus vegetation occurs throughout much of the river's length. Stream water-crowfoot *R. penicillatus* ssp. *pseudofluitans* is the dominant *Ranunculus* species but thread-leaved water-crowfoot *R. trichophyllus* and fan-leaved water-crowfoot *R. circinatus* also occur in association with the wide range of aquatic and emergent species that contribute to this vegetation type. The river supports an abundant and rich invertebrate fauna including the native freshwater crayfish *Austropotamobius pallipes* as well as a diverse fish community, including bullhead *Cottus gobio* and brook lamprey *Lampetra planeri*. The site has an abundant and diverse mollusc fauna which includes Desmoulin's whorl-snail *Vertigo moulinsiana*, which is associated with aquatic vegetation at the river edge and adjacent fens.

Site Condition

As on 22nd January 2010, 13.74% of the site was in favourable condition, with 56.69% "unfavourable recovering", a further 29.56% being "unfavourable no change".

General Site Character:

- Inland water bodies 42%
- Bogs, marshes, water-fringed vegetation, fens 12%
- Humid grassland, mesophile grassland 40%
- Broad-leaved deciduous woodland 6%

Most parts of the SAC are on private land and are not accessible to the public. There are a few well used access points to the river, none of which are within the Borough.

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

- The distribution of qualifying species within the site.

Designated Features

H3260. Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot
S1016. *Vertigo moulinsiana*; Desmoulin's whorl snail
S1092. *Austropotamobius pallipes*; White-clawed (or Atlantic stream) crayfish
S1096. *Lampetra planeri*; Brook lamprey
S1163. *Cottus gobio*; Bullhead

6.2.6 The Wash and North Norfolk Coast SAC

Designated: 20th May 2004

Site Area: 107761.28ha, of which <10% is within the Borough, but it directly borders the entire coastline (approximately 56.7km) of the Borough. Concurrent with much of the Wash SPA and North Norfolk Coast SPA.

The Wash is the largest embayment in the UK. It is connected via sediment transfer systems to the north Norfolk coast. Together, the Wash and North Norfolk Coast form one of the most important marine areas in the UK and European North Sea coast, and include extensive areas of varying, but predominantly sandy, sediments subject to a range of conditions. Communities in the intertidal include those characterised by large numbers of polychaetes, bivalve and crustaceans. Subtidal communities cover a diverse range from the shallow to the deeper parts of the embayments and include dense brittlestar beds and areas of an abundant reef-building worm ('ross worm') *Sabellaria spinulosa*. The embayment supports a variety of mobile species, including a range of fish, otter *Lutra lutra* and common seal *Phoca vitulina*. The extensive intertidal flats provide ideal conditions for common seal breeding and hauling-out.

Sandy sediments occupy most of the subtidal area, resulting in one of the largest expanses of subtidal sandbanks in the UK. The subtidal sandbanks vary in composition and include coarse sand through to mixed sediment at the mouth of the embayment. Communities present include large dense beds of brittlestars *Ophiothrix fragilis*. Species include the sand-mason worm *Lanice conchilega* and the tellin *Angulus tenuis*. Benthic communities on sandflats in the deeper, central part of the Wash are particularly diverse. The subtidal sandbanks provide important nursery grounds for young commercial fish species, including plaice *Pleuronectes platessa*, cod *Gadus morhua* and sole *Solea solea*.

In the tide-swept approaches to the Wash, with a high loading of suspended sand, the relatively common tube-dwelling polychaete worm *Sabellaria spinulosa* forms areas of biogenic reef. These structures are varied in nature, and include reefs which stand up to 30 cm proud of the seabed and which extend for hundreds of metres. The reefs extend into The Wash where super-abundant *S. spinulosa* occurs and where reef-like structures such as concretions and crusts have been recorded. The reefs are diverse and productive habitats which support many associated species that would not otherwise be found in predominantly sedimentary areas. Associated motile species include large numbers of polychaetes, mysid shrimps, the pink shrimp *Pandalus montagui*, and crabs.

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

The site contains the largest single area of saltmarsh in the UK and is one of the few areas in the UK where saltmarshes are generally accreting. The proportion of the total saltmarsh vegetation represented by glasswort *Salicornia* and other colonising annuals is high because of the extensive enclosure of marsh in this site and is also unusual in that it forms a pioneer community with common cord-grass *Spartina anglica*. There are large ungrazed saltmarshes on the North Norfolk Coast and traditionally grazed saltmarshes

around the Wash. Saltmarsh swards dominated by sea-lavenders *Limonium* spp. are particularly well-represented. In North Norfolk, in addition to typical lower and middle saltmarsh communities, there are transitions from upper marsh to tidal reedswamp, sand dunes (which are largely within the adjacent North Norfolk Coast SAC), shingle beaches and mud/sandflats. Mediterranean saltmarsh scrub vegetation is dominated by a shrubby cover up to 1 metre high of bushes of shrubby sea-blite *Suaeda vera* and sea-purslane *Atriplex portulacoides*, with a patchy cover of herbaceous plants and bryophytes. This scrub vegetation often forms an important feature of the upper saltmarshes, and extensive examples occur where the drift-line slopes gradually and provides a transition to dune, shingle or reclaimed sections of the coast. At a number of locations on this coast perennial glasswort *Sarcocornia perennis* forms an open mosaic with other species at the lower limit of the sea-purslane community.

Site Condition

The Wash: 62.24% of the site is in "favourable" condition, 37.25% of the site is in "unfavourable recovering" condition and 0.51% of the site is in "unfavourable declining" condition.

North Norfolk Coast: 96.62% of the site is in "favourable" condition, 2.8% of the site is in "unfavourable recovering" condition and 0.58% is in "unfavourable no change" condition.

It should be noted that neither The Wash nor North Norfolk Coast are entirely within the boundaries of the Borough. It is impossible to distinguish the locations of the areas in different conditions, but in all likelihood, the areas of varying conditions are all present to some degree within the Borough (with the possible exception of "unfavourable declining").

General site character as given on the Joint Nature Conservation Committee's website:

- Marine areas, sea inlets (51%)
- Tidal rivers, estuaries, mud flats, sand flats, lagoons (including saltwork basins) (46%)
- Salt marshes, salt pastures, salt steppes (3%)

Most of the Wash part of the site is inaccessible to the public because of the dangerous tidal habitats. However, within the Borough, there are footpaths adjacent (the Peter Scott Walk), or access points to shingle banks which can all be walked and are open access. Some of the more accessible sites (e.g. Snettisham) are nature reserves and are wardened year-round. Other areas (e.g. Snettisham north to Hunstanton) are not wardened.

The North Norfolk coast is largely accessible to the public; some areas (e.g. Titchwell) are wardened nature reserves and offer more restricted access, but are nevertheless popular, and visiting is encouraged. In other areas (e.g. Scolt Head Island) large-scale access is limited by tides and physical features.

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species

- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features

H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks
H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats
H1150. Coastal lagoons*
H1160. Large shallow inlets and bays
H1170. Reefs
H1310. *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand
H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
H1420. Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*); Mediterranean saltmarsh scrub
S1355. *Lutra lutra*; Otter
S1365. *Phoca vitulina*; Common seal

6.3 Description, Characteristics and Conservation Objectives of SPA Sites

6.3.1 Breckland SPA

Site Area: 39,433.66ha, of which approximately 1,987.2ha is within the Borough. The only component sections within the Borough are Breckland Farmland SSSI and Breckland Forest SSSI. Breckland Forest makes up 1,062ha within the Borough, and Breckland Farmland is 925.2ha.

Site description

The Breckland of Norfolk and Suffolk lies in the heart of East Anglia on largely sandy soils of glacial origin. In the 19th century the area was termed a sandy waste, with small patches of arable cultivation that were soon abandoned. The continental climate, with low rainfall and free-draining soils, has 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. Woodlark *Lullula arborea* and Nightjar *Caprimulgus europaeus* breed in recently felled areas and open heath areas within the conifer plantations, while Stone Curlew *Burhinus oedicnemus* establishes nests on open ground provided by arable cultivation in the spring.

Site Condition

100% of Breckland Farmland SSSI and 99.91% of Breckland Forest SSSI is reported as being in favourable condition, with 0.09% of Breckland Forest reported as being in unfavourable recovering condition.

Throughout this large SPA there are areas of public access and other areas of limited access. Within the Borough, there is public access through Forestry Commission land (Breckland Forest) but very limited public access to the field boundaries of Breckland Farmland east and south of Feltwell.

Conservation Objectives

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

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

Qualifying Features

A133 *Burhinus oedicnemus*; Stone-curlew (Breeding)
A224 *Caprimulgus europaeus*; European nightjar (Breeding)
A246 *Lullula arborea*; Woodlark (Breeding)

6.3.2 The North Norfolk Coast SPA

Site Area: 7886.79ha, of which approximately 2267ha is within the Borough and approximately 21.1km of the Borough's coastline directly borders it.

Site Description

The North Norfolk Coast SPA encompasses much of the northern coastline of Norfolk in eastern England. It is a low-lying barrier coast that extends for 40 km from Holme to Weybourne and includes a great variety of coastal habitats. The main habitats – found along the whole coastline – include extensive intertidal sand- and mud-flats, saltmarshes, shingle and sand dunes, together with areas of freshwater grazing marsh and reedbed, which has developed in front of rising land. The site contains some of the best examples of saltmarsh in Europe. There are extensive deposits of shingle at Blakeney Point, and major sand dunes at Scolt Head. Extensive reedbeds are found at Brancaster, Cley and Titchwell. Maritime pasture is present at Cley and extensive areas of grazing marsh are present all along the coast. The grazing marsh at Holkham has a network of clear water dykes holding a rich diversity of aquatic plant species. The great diversity of high-quality freshwater, intertidal and marine habitats results in very large numbers of waterbirds occurring throughout the year. In summer, the site holds large breeding populations of waders, four species of terns, Bittern *Botaurus stellaris* and wetland raptors such as Marsh Harrier *Circus aeruginosus*. In winter, the coast is used by very large numbers of geese, sea-ducks, other ducks and waders. The coast is also of major importance for staging waterbirds in the spring and autumn migration periods. Breeding terns, particularly Sandwich Tern *Sterna sandvicensis*, and wintering sea-ducks regularly feed outside the SPA in adjacent coastal waters.

To the west, the coastal habitats of North Norfolk Coast SPA are continuous with The Wash SPA, with which area the ecology of this site is intimately linked.

Site Condition

96.62% of the site is in "favourable" condition, 2.8% of the site is in "unfavourable recovering" condition and 0.58% is in "unfavourable no change" condition.

Natural England assesses the West Norfolk units of the SSSI as all being in favourable condition, except for one small unit noted as "unfavourable recovering". This is despite concerns in some units about declining numbers of birds such as brent goose on Holkham freshmarshes and elsewhere. It is also noted that the condition assessments in many units neglect to mention bird populations at all.

Conservation Objectives

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

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

Qualifying Features

A021 *Botaurus stellaris*; Great bittern (Breeding)
A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)

A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
A081 *Circus aeruginosus*; Eurasian marsh harrier (Breeding)
A084 *Circus pygargus*; Montagu's harrier (Breeding)
A132 *Recurvirostra avosetta*; Pied avocet (Breeding)
A143 *Calidris canutus*; Red knot (Non-breeding)
A191 *Sterna sandvicensis*; Sandwich tern (Breeding)
A193 *Sterna hirundo*; Common tern (Breeding)
A195 *Sterna albifrons*; Little tern (Breeding)

6.3.3 Ouse Washes SPA

Site Area: 2447.26ha, of which approximately 725.5ha is within the Borough.

Site Description

The Ouse Washes are located in eastern England on one of the major tributary rivers of The Wash. It is an extensive area of seasonally flooding wet grassland ('washland') lying between the Old and New Bedford Rivers, and acts as a floodwater storage system during winter months. The cycle of winter storage of floodwaters from the river and traditional summer grazing by cattle, as well as hay production, have given rise to a mosaic of rough grassland and wet pasture, with a diverse and rich ditch fauna and flora. The washlands support both breeding and wintering waterbirds. In summer, there are important breeding numbers of several wader species, as well as Spotted Crake *Porzana porzana*. In winter, the site holds very large numbers of swans, ducks and waders. During severe winter weather elsewhere, the Ouse Washes can attract waterbirds from other areas due to its relatively mild climate (compared with continental Europe) and abundant food resources. In winter, some wildfowl, especially swans, feed on agricultural land surrounding the SPA.

The Ouse Washes Special Protection Area is a wetland of major international importance comprising seasonally flooded washlands which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders. The boundaries of the Special Protection Area are coincident with those of the Ouse Washes SSSI apart from the exclusion of a section of the Old Bedford River in the north of the SSSI.

The Ouse Washes are not open access land, but can be viewed by the public from limited access points, many of which are nature reserve watchpoints. Access in West Norfolk is largely limited to such access points, or a substantial walk from nearby settlements or car parking areas.

Site Condition

19.13% of the SSSI is in favourable, or "unfavourable recovering" condition. All of the site units within the Borough are in "unfavourable no change" condition.

Conservation Objectives

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

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

Qualifying Features

A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
A038 *Cygnus cygnus*; Whooper swan (Non-breeding)
A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
A051 *Anas strepera*; Gadwall (Breeding)
A052 *Anas crecca*; Eurasian teal (Non-breeding)
A053 *Anas platyrhynchos*; Mallard (Breeding)
A054 *Anas acuta*; Northern pintail (Non-breeding)
A055 *Anas querquedula*; Garganey (Breeding)

A056 *Anas clypeata*; Northern shoveler (Non-breeding)
A056 *Anas clypeata*; Northern shoveler (Breeding)
A082 *Circus cyaneus*; Hen harrier (Non-breeding)
A151 *Philomachus pugnax*; Ruff (Breeding)
A156a *Limosa limosa limosa*; Black-tailed godwit (Breeding)
Waterbird assemblage
Breeding bird assemblage

6.3.4 The Wash SPA

Site Area: 62211.66ha, of which approximately 741.9ha is within the Borough and approximately 33.63km of the Borough's coastline directly borders it.

Site description

The Wash is located on the east coast of England and is the largest estuarine system in the UK. It is 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 eastern end of the site includes low chalk cliffs at Hunstanton. In addition, on the eastern side, the gravel pits at Snettisham are an important high-tide roost for waders. The intertidal flats have a rich invertebrate fauna and colonising beds of Glasswort *Salicornia* spp. which are important food sources for the large numbers of waterbirds dependent on the site. The sheltered nature of The Wash creates suitable breeding conditions for shellfish, principally Mussel *Mytilus edulis*, Cockle *Cardium edule* and shrimps. These are important food sources for some waterbirds such as Oystercatchers *Haematopus ostralegus*. The Wash is of outstanding importance for a large number of geese, ducks and waders, both in spring and autumn migration periods, as well as through the winter. The SPA is especially notable for supporting a very large proportion (over half) of the total population of Canada/Greenland breeding Knot *Calidris canutus islandica*. In summer, the Wash is an important breeding area for terns and as a feeding area for Marsh Harrier *Circus aeruginosus* that breed just outside the SPA.

To the north, the coastal habitats of The Wash are continuous with Gibraltar Point SPA, whilst to the east The Wash adjoins the North Norfolk Coast SPA.

Site Condition

62.24% of the site is in "favourable" condition, 37.25% of the site is in "unfavourable recovering" condition and 0.51% of the site is in "unfavourable declining" condition.

Conservation Objectives

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

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

Qualifying Features

A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
A051 *Anas strepera*; Gadwall (Non-breeding)
A054 *Anas acuta*; Northern pintail (Non-breeding)
A065 *Melanitta nigra*; Black (common) scoter (Non-breeding)
A067 *Bucephala clangula*; Common goldeneye (Non-breeding)
A130 *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)

A143 *Calidris canutus*; Red knot (Non-breeding)
A144 *Calidris alba*; Sanderling (Non-breeding)
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)

A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
A160 *Numenius arquata*; Eurasian curlew (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
A169 *Arenaria interpres*; Ruddy turnstone (Non-breeding)
A193 *Sterna hirundo*; Common tern (Breeding)
A195 *Sterna albifrons*; Little tern (Breeding)

6.4 Description, Characteristics and Conservation Objectives of Ramsar Sites

6.4.1 Dersingham Bog Ramsar

Site Area: 157.75ha, entirely within the Borough.

General overview (as given on "Ramsar Information Sheet: UK11019")

Dersingham Bog is East Anglia's largest remaining example of pure acid valley mire, and supports extensive bog, wet heath and transition communities over peat. These are sustained via groundwater, fed by springs and seepage from the underlying greensand, which in places has caused the development of iron pans. The mire grades into dry heathland along the greensand scarp slope. The scarp slope is a former sea cliff, and the bog habitats are a remnant of the transition mires that formerly existed between this former shoreline and the now mostly land-claimed salt marshes around The Wash. In addition to its internationally important plant communities, the site also supports important assemblages of birds and British Red Data Book invertebrates.

Ramsar Criteria:

2: Supports an important assemblage of invertebrates - nine British Red Data Book species have been recorded.

6.4.2 North Norfolk Coast Ramsar

Site Area: 7862.39ha, of which approximately 2254ha is within the Borough, and approximately 21.1km of the Borough's coastline directly borders it.

General overview (as given on Ramsar Information Sheet: UK11048)

This low-lying barrier coast site extends for 40km from Holme to Weybourne and encompasses a variety of habitats including intertidal sands and muds, saltmarshes, shingle and sand dunes, together with areas of land-claimed freshwater grazing marsh and reedbed, which is developed in front of rising land. Both freshwater and marine habitats support internationally important numbers of wildfowl in winter and several nationally rare breeding birds. The sandflats, sand dune, saltmarsh, shingle and saline lagoons habitats are of international importance for their fauna, flora and geomorphology.

Ramsar Criteria:

1: The site is one of the largest expanses of undeveloped coastal habitat of its types in Europe. It is a particularly good example of marshland coast with intertidal sand and mud, saltmarshes, shingle banks and sand dunes. There are a series of brackish-water lagoons and extensive areas of freshwater grazing marsh and reed beds.

2: Supports at least three British Red Data Book and nine nationally scarce vascular plants, one British Red Data Book lichen and 38 British Red Data Book invertebrates.

5: Assemblages of international importance:

Species with peak counts in winter: 98462 waterfowl (5 year peak mean 1998/99-2002-03)

6: species/populations occurring at levels of international importance.

Qualifying species/populations (as identified at designation):

Species regularly supported during the breeding season:

Sandwich Tern Sterna (Thalasseus) sandvicensis sandvicensis (W Europe): 4275 apparently occupied nests, representing an average of 7.7% of the breeding population (Seabird 2000 Census)

Common Tern, Sterna hirundo hirundo (N & E Europe): 408 apparently occupied nests, representing an average of 4% of the GB populations (Seabird 2000 Census)

Little Tern Sterna albifrons albifrons (W Europe): 291 apparently occupied nests, representing an average of 2.5% of the breeding population (Seabird 200 Census)

Species with peak counts in spring/autumn:

Red Knot Calidris canutus islandica (W & S Africa - wintering): 30781 individuals, representing an average of 6.8% of the population (5 year peak mean 1998/99-2002/03)

Species with peak counts in winter:

Pink-footed Goose Anser brachyrhynchus (Greenland, Iceland/UK): 16787 individuals, representing an average of 6.9% of the population (5 year peak mean 1998/99-2002/03)

Dark-bellied Brent Goose Branta bernicla bernicla: 8690 individuals, representing an average of 4% of the population (5 year peak mean 1998/99-2002/03)

Eurasian Wigeon Anas penelope (NW Europe): 17940 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/99-2002/03)

Northern Pintail Anas acuta, NW Europe: 1148 individuals, representing an average of

1.9% of the population (5 year peak mean 1998/99-2002/03)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in spring/autumn:

Ringed Plover Charadrius hiaticula (Europe/NW Africa): 1740 individuals, representing an average of 2.3% of the population (5 year peak mean 1998/99-2002/03)

Sanderling Calidris alba (Eastern Atlantic): 1303 individuals, representing an average of 1% of the population (5 year peak mean 1998/99-2002/03)

Bar-tailed Godwit, Limosa lapponica lapponica (W Palearctic): 3933 individuals, representing an average of 3.2% of the population (5 year peak mean 1998/99-2002/03)

6.4.3 Ouse Washes Ramsar

Site Area: 2469.08ha, of which approximately 761.1ha is within the Borough.

General overview (as given on Ramsar Information Sheet: UK11051)

This site is an area of seasonally-flooded washland habitat managed in a traditional agricultural manner. The washlands support nationally and internationally important numbers of wintering waterfowl and nationally important numbers of breeding waterfowl. The site is also of note for the large area of unimproved neutral grassland communities which it holds, and for the richness of the aquatic flora within the associated watercourses.

Ramsar Criteria:

1: The site is one of the most extensive areas of seasonally-flooding washland of its type in Britain.

2: The site supports several nationally scarce plants, including small water pepper *Polygonum minus*, whorled water-milfoil *Myriophyllum verticillatum*, greater water parsnip *Sium latifolium*, river water dropwort *Oenanthe fluviatilis*, fringed water-lily *Nymphoides peltata*, long-stalked pondweed *Potamogeton praelongus*, hair-like pondweed *Potamogeton trichoides*, grass-wrack pondweed *Potamogeton compressus*, tasteless water pepper *Polygonum mite* and marsh dock *Rumex palustris*.

3: Invertebrate records indicate that the site holds relict fenland fauna, including British Red Data Book species scarce chaser dragonfly *Libellula fulva*, and the rifle beetle *Oulimnius major*.

4: The site also supports a diverse assemblage of nationally rare breeding waterfowl associated with seasonally-flooding wet grassland.

5: Assemblages of international importance:

Species with peak counts in winter: 59133 waterfowl (5 year peak mean 1998/99-2002/03)

6: Species/populations occurring at levels of international importance.

Qualifying species/populations (as identified at designation):

Species with peak counts in winter:

Tundra Swan Cygnus columbianus bewickii (NW Europe): 1140 individuals, representing an average of 3.9% of the population (5 year peak mean 1998/99-2002/03)

Whooper Swan Cygnus cygnus (Iceland/UK/Ireland): 653 individuals, representing an average of 3.1% of the population (5 year peak mean 1998/99-2002/03)

Eurasian Wigeon Anas penelope (NW Europe): 22630 individuals, representing an average of 1.5% of the population (5 year peak mean 1998/99-2002/03)

Gadwall Anas strepera strepera (NW Europe): 438 individuals, representing an average of 2.5% of the GB population (5 year peak mean 1998/99-2002/03)

Eurasian Teal Anas crecca (NW Europe): 3384 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1998/99-2002/03)

Northern Pintail Anas acuta (NW Europe): 2108 individuals, representing an average of 3.5% of the population (5 year peak mean 1998/99-2002/03)

Northern Shoveler Anas clypeata (NW & C Europe): 627 individuals, representing an average of 1.5% of the population (5 year peak mean 1998/99-2002/03)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in winter:

Mute Swan Cygnus olor (Britain): 722 individuals, representing an average of 1.9% of the population (5 year peak mean 1998/99-2002/03)

Common Pochard Aythya ferina (NE & NW Europe): 4678 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/99-2002/03)

Black-tailed Godwit Limosa limosa islandica (Iceland/W Europe): 2647 individuals, representing an average of 7.5% of the population (5 year peak mean 1998/99-2002/03)

6.4.4 Roydon Common Ramsar

Site Area: 194.1ha, entirely within the Borough

General overview (as given on Ramsar Information Sheet: UK11061)

Roydon Common is an area of lowland mixed valley mire surrounded by heathland. It sits on the Cretaceous greensand of west Norfolk, within a broad south-west-facing valley basin. It has a classic sequence of vegetation types associated with valley mires of this type. The dry heath of the upper slopes is hydrologically linked with wetter lower slopes, which experience seasonal waterlogging and are colonised by wet heath. This grades into the valley bottom, which is permanently waterlogged, and comprises acid bog and nutrient-poor fen communities, blending into more base-rich fen and carr woodland in the valley bottom.

Ramsar Criteria

1: The site is the most extensive example of valley mire-heathland biotype within East Anglia. – It is mixed valley mire holding vegetation communities which reflect the influence of both base-poor and base-rich water.

3: The vegetation communities have a restricted distribution within Britain. – It also supports a number of acidophilic invertebrates outside their normal geographic range and six British Red Data Book invertebrates.

6.4.5 The Wash Ramsar

Site Area: 62211.66ha, of which approximately 741.9ha is within the Borough and approximately 33.63km of the Borough's coastline directly borders it.

General overview (as given on Ramsar Information Sheet: UK11072)

The Wash is the largest estuarine system in Britain. It is fed by the rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and over-wintering site for migrant wildfowl and wading birds in eastern England. It supports a valuable commercial fishery for shellfish and also an important nursery area for flatfish. It holds one of the North Sea's largest breeding populations of common seal *Phoca vitulina* and some grey seals *Halichoerus grypus*. The sublittoral area supports a number of different marine communities including colonies of the reef-building polychaete worm *Sabellaria spinulosa*.

Ramsar Criteria:

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

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

5: Assemblages of international importance:

Species with peak counts in winter: 292541 waterfowl (5 year peak mean 1998/99-2002/03)

6: Species/populations occuring at levels of international importance.

Qualifying species/populations (as identified at designation):

Species with peak counts in spring/autumn:

Eurasian Oystercatcher Haematopus ostralegus ostralegus (Europe & NW Africa – wintering): 15616 individuals, representing an average of 1.5% of the population (5 year peak mean 1998/99-2002/03)

Grey Plover Pluvialis squatarola (E Atlantic/W Africa – wintering): 13129 individuals, representing an average of 5.3% of the population (5 year peak mean 1998/99-2002/03 – spring peak)

Red Knot Calidris canutus islandica (W & S Africa - wintering): 68987 individuals, representing an average of 15.3% of the population (5 year peak mean 1998/99-2002/03)

Sanderling Calidris alba (Eastern Atlantic): 3505 individuals, representing on average 2.8% of the population (5 year peak mean 1998/99-2002/03)

Eurasian Curlew Numenius arquata arquata (Europe - breeding): 9438 individuals, representing an average of 2.2% of the population (5 year peak mean 1998/99-2002/03)

Common Redshank Tringa totanus tetanus: 6373 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/99-2002/03)

Ruddy Turnstone Arenaria interpres interpres (NE Canada, Greenland/W Europe & NW Africa): 888 individuals, representing an average of 1.7% of the GB population (5 year

peak mean 1998/99-2002/03)

Species with peak counts in winter:

Pink-footed Goose Anser brachyrhyncus (Greenland, Iceland/UK): 29099 individuals, representing an average of 12.1% of the population (5 year peak mean 1998/99-2002/03)

Dark-bellied Brent Goose Branta bernicla bernicla: 20861 individuals, representing an average of 9.7% of the population (5 year peak mean 1998/99-2002/03)

Common Shelduck Tadorna tadorna (NW Europe): 9746 individuals, representing an average of 3.2% of the population (5 year peak mean 1998/99-2002/03)

Northern Pintail Anas acuta (NW Europe): 431 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/99-2002/03)

Dunlin Calidris alpina alpina (W Siberia/W Europe): 36600 individuals, representing an average of 2.7% of the population (5 year peak mean 1998/99-2002/03)

Bar-tailed Godwit Limosa lapponica lapponica (W Palearctic): 16546 individuals, representing an average of 13.7% of the population (5 year peak mean 1998/99-2002/03)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in spring/autumn

Ringed Plover Charadrius hiaticula (Europe/Northwest Africa): 1500 individuals, representing an average of 2% of the population (5 year peak mean 1998/99-2002/03)

Northern Lapwing Vanellus vanellus (Europe – breeding): 46422 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/99-2002/03)

6.5 Other Relevant Plans or Projects

The assessment of significant effects of a given option needs to take account of the option's impact in combination with other plans and projects. The guidance states that only those that are considered most relevant should be collected for the 'in combination' test - an exhaustive list could render the assessment exercise unworkable. The following plans or strategies are considered to have potential effects and therefore have been included within the assessment:

- KLWN Core Strategy 2011-2025 adopted 28th July 2011;
- Local Transport Plan for Norfolk 2011-2026;
- King's Lynn Urban Development Strategy 2006;
- Waterfront Regeneration Master Plan (revised 2009) & Project; (Marina project);
- King's Lynn Town Centre Extension Master Plan 2008;
- Hunstanton Town Centre & Southern Seafront Master Plan July 2008;
- King's Lynn Growth Plan (Integrated Programme of Development 2009/10 – 2010/11) Oct. 2008 (funding announced Dec 08);
- KLWN Green Infrastructure Study Stage 2 (May 2010);
- KLWN Water Cycle Study;
- The Wash & Fens Green Infrastructure Plan Consultation Draft Feb. 11;
- Cambridgeshire Green Infrastructure Strategy July 11;
- Shoreline Management Plans for North Norfolk and the Wash;
- Wash Biodiversity Action Plan – Currently being prepared;
- The Wash Estuary Management Plan 2nd Revised Edition 2004;
- Brecks Biodiversity Action Plan – Currently being prepared;
- Norfolk Coast Partnership Management Plan (2009-14 published Sept 09);
- AONB Action Plan 2009-14 (latest published annual Action Plan 2010-11);
- Fen Restoration Project – Currently being undertaken by Norfolk Wildlife Trust around Hilgay;
- "Grasslands: Magical Meadows" – Currently being undertaken by Norfolk Wildlife Trust;
- Gaywood Valley SURF Project report;
- Wissey Living Landscape Project;
- Breckland Stone Curlew 1500m development exclusion zone policy/Breckland Adopted Core Strategy 2009.
- KLWN Green Infrastructure Action Plan

6.5.1 Neighbouring District/Boroughs

The Borough of King's Lynn and West Norfolk borders North Norfolk, Breckland, Forest Heath, Fenland, East Cambridgeshire and South Holland districts.

6.5.2 Increases in Settlement Populations

Based on an average of 2.25 persons per new household, the housing allocations per settlement allow for an increase in population of around 3% for key rural service centres, and around 2% for rural villages. The core strategy proposes 16,533 new homes in the Borough within the plan period, an estimated increase in population of 31,800. This represents a population increase of 25.8% during the plan period. The housing allocations in King's Lynn, Downham Market, Hunstanton and Wisbech will therefore account for by far the greatest proportion of the overall increase, with 11,350 new homes or an estimated 25,537 population increase.

7 Appropriate Assessment and Plan Analysis

7.1 Process

In order to determine whether the BCKLWN Site Allocations and Development Management Policies – Proposed Submission Document represents an adverse affect to the integrity of any European Site within the Borough a two stage assessment has been carried out, in line with relevant guidance.

Task 1 – Identifying whether a plan option is likely to have a significant effect.

Task 2 – Where there is found to be a likely significant effect, assess the effect to the integrity of the European site and explore any mitigation measures that could reduce or remove the impact. Where insufficient information is available to carry out a reasonable assessment, identify gaps in knowledge and outline research programme designed to fill such gaps.

Task 1 is a screening process. Those policies which are considered not to have a likely significant effect on any European Site need be considered no further. Those that are considered to have a likely significant effect will be taken forward to Task 2. The screening process involves consultation with the statutory nature conservation body (Natural England), and is a judgement based on a number of factors including the proximity of proposals to the European Sites, the type of impacts likely to be caused by the policy, the qualifying features of the European Site, the probability of the impact, the duration, frequency and reversibility of the impact.

The term "significant" means **not trivial or inconsequential** but an effect that is potentially relevant to the site's Conservation Objectives. The Conservation Objectives for each site are produced by Natural England, and are the objectives of management necessary to maintain the qualifying features in favourable condition. Maintenance implies restoration where the feature is currently in unfavourable condition.

A series of matrices have been created which seek to assess the following:

- Whether the policy is necessary for the conservation management of a European Site.
- If a 'likely significant effect' can be expected.
- What is the likely mechanism for impact and the feature/features affected?
- Is an Appropriate Assessment required?
- Can it be ascertained it will not adversely affect the integrity of the European Site?
- Can it be carried out in a different way or be conditioned or restricted?
- What modifications to the policy/option are required?
- Can the modified policy/option be pursued without adversely affecting the integrity of the European Site?

7.2 Considered Impacts

This section sets out the nature of potential impacts that policies within the Local Development Framework document could have upon European sites within or around the Borough.

The impacts considered are as follows.

7.2.1 Loss of Supporting Habitats

As the European sites themselves are protected, it is unlikely that any developments will take place directly on these sites, but some could be located immediately adjacent to them, hence impacting any protected species which also use neighbouring land. This is particularly relevant to birds, where normally only roosting/nesting sites are protected whereas feeding/foraging areas are often overlooked and can therefore be located beyond the borders of the European site. If such land is used for developments, it reduces the amount of supporting habitat available for use by protected species and can therefore potentially affect the integrity of the SPA populations.

7.2.2 Habitat Fragmentation Impacts

This is where development increases the separation of available habitats, either by removing or degrading intermediate habitats, or splitting extensive areas of suitable habitat. Once again SPA bird populations are the most likely to be affected by this impact.

7.2.3 Non-specific Proximity Impacts (stone curlew)

These are the impacts on protected habitats and species brought about by their proximity to development, especially new housing. They are numerous, diverse and largely site and project specific, but contributing factors can include the following:

- Disturbance effects from construction activities (including noise and lighting)
- Increased traffic impacts from construction activities.
- Increased human disturbance from use of the development.
- Increased predation from pets and animals associated with urban areas (cats, foxes, rats).
- Increased fly tipping.
- Increased incidence of fires on heathland.
- Increased levels of lighting.
- Increased random disturbance events.

There is particular concern about an unspecified proximity impact from new built development on the Breckland SPA species, stone curlew. This has been identified by a study undertaken for Breckland District Council (Sharp et al 2008). To avoid detrimental proximity impacts on stone curlew, the Core Strategy Policy CS12 Environmental Assets states: "*New built development will be restricted within 1,500m 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 the Breckland SPA. Beyond the SPA, a 1,500m buffer will also 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.*" The Detailed Policies and Sites Plan therefore follow this policy.

An approach to site-specific proposals has been agreed between the Council and Natural England, whereby:

- The Council will carry out a Habitats Regulations screening assessment (stages 1 & 2) in accordance with ODPM Circular 06/2005 (see appendix 1) and the Conservation of Habitats and Species Regulations 2010, 61 (1) (a) on the suitable sites to ascertain whether allocation would have a likely significant effect on the integrity of the SPA.

- The findings from the Habitats Regulations screening will form part of the Habitats Regulation Assessment (HRA) of the detailed Policies and Sites Plan.

- The Council can then select the "preferred options" taking in to account all of the relevant planning issues.

If a preferred site is considered as likely to have a significant effect on the SPA in the stage 2 assessment, the Borough Council will introduce a policy in the "preferred options," requiring the landowner to provide information to inform an appropriate assessment to assess the implications of the allocation on the SPA.

Prior to publication of the "preferred options" consultation document the Borough Council will consult Natural England on the "preferred options," in the SPA buffer area.

7.2.4 Hydrological Impacts

Hard Surface Runoff

Changes in hard surface runoff (i.e. over urban areas) may lead to altered flow patterns in watercourses (storm water surges), and during the construction phase could increase nutrient and sediment discharge into watercourses. River Wensum, Ouse Washes and The Wash could be affected by increased nutrient and sediment discharge and deposition.

However, within the River Wensum SAC catchment, only 10 houses are allocated at East Rudham, well away from the watercourse, so this issue can effectively be ruled out on the basis of negligible effects.

Groundwater Supply

This is where water stored in aquifers or porous strata are depleted or contaminated by development activity. Dersingham Bog and Roydon Common would be particularly vulnerable to this, as they are both dependent on a relatively stable water level in the areas surrounding them. Any depletion or contamination could seriously affect these sites as all protected species and habitats would be highly sensitive to such changes.

Sewerage Capacity

The capacity of the current sewerage system to process increased levels of human waste could form a limitation to development where nutrient levels are likely to exceed targets set for European sites, including the River Wensum where phosphate levels are of critical importance to site condition. This impact is relevant only to East Rudham, which is in the only settlement within the Wensum catchment.

Sewage discharge into the North Sea could also increase as the number of people living in the new housing developments rises. This could impact the mudflats, sandbanks and shingle of The Wash and North Norfolk Coast through changes in nutrient status.

7.2.5 Impacts from Increased Recreation and Leisure Pressures

7.2.5.1 Green Infrastructure Study

The Green Infrastructure Strategy for the Borough takes the following strategy approach to "*Maintain and where appropriate enhance the value of The Wash and Norfolk Coast, Brecks and Ouse Washes as a resource for wildlife, whilst also conserving and, where appropriate enhancing their landscape and historic value and their value as a resource for people.*" Such an approach suggests an approach to leisure use of these sites which puts the interests of the wildlife (and presumably the designated European features) very much at the forefront while indicating pragmatism towards sensible development of leisure facilities.

As many of the site-specific policies refer to increasing the volume of housing in the Borough, the population will inevitably rise, although it is not absolutely certain by how much. The projected rise in housing in the Borough 2001 to 2025 is for 16,200 new houses. The latest population estimate for the Borough in 2010 was 139,100 people. The combined effects of increases in homes and people on Natura 2000 sites were considered within the Core Strategy Habitats Regulations Assessment. Therefore in this document we assess the effects of finer scale housing allocation to specific areas on Natura 2000 sites, rather than the cumulative increase.

There is also likely to be increased use of the Borough for tourism, though no projected figures are available. It should also be taken into consideration that the Natura 2000 sites attract visitors from outside of the Borough. Increased recreation in these areas is therefore only partially contributed to by local residents.

7.2.5.2 Types of Visitor

The HRA of the Core Strategy for Suffolk Coastal District contains a useful categorisation of the type of visitors to natural areas within that district. Visitors are described in three ways; "tourists", "day trippers" and "local users".

- Tourists would stay overnight or longer, and their use would typically be seasonal and short-lived, and would not be related to housing growth inferred by the policies assessed here. Whilst, therefore, there may be many factors influencing the numbers of tourist visitors to the Borough, the policies within the assessed plan document are not one of those factors.
- Day trippers may be local, or come from a distance. There is currently no evidence base to suggest where most day visitors come from, but it would be reasonable to suggest that they come from a distance feasible to preclude an overnight stay. This could perhaps include areas as far as 2-3 hours' drive away, and might therefore be a large, but unspecified number. There is also no data to suggest how frequently such visitors might come.
- Local users would typically live within walking distance, or a short drive, of the European site, and use the area as convenient local green space. As can be seen from the Natural England study below, local users make up the majority of

visitors to green spaces.

As far as housing allocations go, the second and third categories are clearly the most relevant to the plan document, on the assumption that people who live in the Borough would be unlikely to go on holiday there.

Local users will tend to be more frequent in their use of European sites, while day trippers are likely to come from further afield. Any increase in day trippers from this plan is likely to contribute to a wider increase in visitor numbers from rising populations in the east of England, and the overall impact is therefore harder to predict.

7.2.5.3 Visitor Studies

Some visitor studies have been undertaken in other areas or nationally, parts of which have some relevance to West Norfolk.

In 2010 a visitor survey in Suffolk Coastal District was commissioned by a consortium led by Suffolk Wildlife Trust and Forestry Commission, and funded by the Haven Gateway Partnership. These studies were cited in the Appropriate Assessment for Suffolk Coastal District Core Strategy (Landscape Partnership 2011). There is some similarity between Suffolk Coastal and West Norfolk, though population levels are higher in Suffolk Coastal. Use of the European sites in that area are, however, likely to be broadly similar to West Norfolk.

Findings from the 2010 South Sandlings Visitor Survey were:

- 19% of visitors in summer and 6% of visitors in winter were tourists.
- 63% of visitors had dogs with them; the proportion being slightly higher in the winter than in summer.
- Dog walking was undertaken by 52.8% of people interviewed; walking, exercise, family outings and cycling were undertaken by the majority of other visitors.
- Half of all visitors who arrived on foot lived within 420m of the access point, and half of all visitors who arrive by car live less than 8km away. Over 75% of dog walkers lived within 10km of the access point.

Studies in Dorset, carried out to investigate the impact of development on European sites there, have demonstrated that the average distance walked on heaths by walkers with or without dogs, was 2.2km. Of the people who walked to the site, 75% had walked less than 500m to reach the heath, and 89% had walked less than 1km. Half the people who arrived at the site by car came from up to 3.7km away and most who arrived by car had come from up to 8km away.

Natural England has published the results of a 2010 / 2011 national visitor survey (Natural England 2011) which gives a national picture of visitor use of the countryside, urban greenspaces and the sea coast. The findings included:

- Just over half of visits to the natural environment were taken to the countryside (53%), while 37% were to green spaces within towns and cities. In total, 11% of visits were taken in coastal locations of which seven per cent were taken to a green space in a seaside town and four per cent to another coastal location.
- While parks in towns and cities continued to be the most visited location, representing
- 22% of all visits (558 million visits), these visits decreased from the levels recorded in 2009/10 when 24% of all visits were taken to this type of location (679 million visits).
- Two-thirds of visits (66%) were taken within two miles (3.2km) of the respondents home (or other start point e.g. their workplace or holiday accommodation) highlighting the importance of accessible green space that is close to home (local users).

- Visits to coastal areas were more likely to be taken by car, while the majority of countryside visits were taken on foot by people living locally in rural or urban fringe areas. Visits to coastal locations were more likely to involve a longer journey of 5 miles (8km) or more (32 per cent of visits to coastal resorts or towns, 31 per cent to other coastal areas).
- The average visit to the natural environment lasted for just under 2 hours (1 hour 58 minutes).
- Around half of all visits (51%) involved walking with a dog.
- The largest proportion of visits involved walking (63%). A car or van was used in 30% of visits and public transport was used for only 2% of visits.
- The vast majority (92%) of visits involving a journey of less than one mile (1.6km) were taken on foot.
- 79% of visits where the journey was 8km or more featured a car or van as the main mode of transport used. Urban locations were most likely to have been visited on foot (67%). Seaside resorts or towns and other coastal areas were the type of place most likely to involve travelling by car (40% and 45% respectively).
- 82% of all journeys to a greenspace were under 8km.
- Only 9% of dog owners would travel more than 8km to reach a greenspace.
- Nearly half (48%) of dog owners travelled less than 1 mile (1.6km) to reach a greenspace.

Most people travelled by foot to their greenspace, and most journeys were under a mile (1.6km). This is considered likely to reflect the routine use of convenient local greenspace by most people most of the time, with occasional visits at greater distance. Most people travelled less than 8km by vehicle to a greenspace, consistent with the South Sandlings visitor survey.

The Borough Council have been working with the Norfolk Coast Partnership to undertake some visitor surveys in 4 sensitive areas along the North Norfolk Coast. Preliminary results are as follows:

22% of visitors were walking a dog.

18% of visitors were local residents
21% Day Visitors (travelling direct from home)
Remainder of visitors staying overnight locally (tourists).

22% gave "character of area" given as their main influence on visiting.
19% gave habit/custom as the main influence.
15% gave wildlife as the main influence.

When asked how far visitors had travelled that day, visitors replied as follows:

Less than 5 miles	31%
5-10 miles	22%
10-20 miles	14%
20-50 miles	12%
Over 50 miles	22%

45% of visitors stayed an hour or less.

35% of visitors went less than 100 metres from the entrance.
65% of visitors went less than 500 metres from entrance.

60% claimed knowledge of the areas' importance for wildlife.

38% said they were influenced in their use of the site by their knowledge of the sites' importance for wildlife. Others said they were influenced in their use by (among other things) information boards (14%), zoning schemes (5%) and specific warning/info signs (3%).

7.2.5.4 Visitors to European Sites in West Norfolk

Within West Norfolk, it is speculated that, due to the dispersed pattern of development, visitors will travel further by car to reach attractive destinations, perhaps the north coast in particular, and that the proportion of visitors using cars to coastal areas will be proportionally greater. This is a hypothesis supported by the Natural England (2011) study, and by the preliminary results from the NCP visitor survey.

Increases in visitors from the site specific allocations plan to areas where access is permitted or facilitated are likely to be both "day trippers" and "local users", but not "tourists". Such usage creates the possibility of impacts on sites through physical damage to habitats (i.e. trampling of vegetation, erosion of dunes etc), physical disturbance to species (nest trampling, occupying areas used by birds and other designated features) and visual and noise disturbance (i.e. indirect disturbance to birds and other sensitive species through scaring).

The possible harm to habitats and disturbance to species can be, and usually is very effectively reduced when the visited site is a wardened nature reserve, and honeypot sites such as Titchwell RSPB reserve handle many thousands of visitors every year without causing significant disturbance to birds. The most important techniques for reducing visitor disturbance are on-site wardening presence, physical barriers to visitor movement (such as temporary fencing), and education of visitors.

Day Trippers

Many sites are visited by individuals or families for longer trips, often involving more family members and often timed over weekends. This might be particularly the case for coastal sites, where such family parties are commonly encountered, and there is the added attraction of beaches and a range of walking possibilities. Some sites are likely to be less well used in this respect, for example where there is a limited distance and paths for walking. Examples where day trips are less likely include Dersingham Bog and Roydon Common, which are probably more suited to shorter visits by local users, or shorter visits by specialist visitors from further afield.

Local Users

The frequent use of sites by resident populations may be significant in that there is less of a seasonal bias (Rushmer 2009a), and a resulting increase in winter use of European sites. Rushmer's review study suggests that the disturbance caused by people walking dogs is proportionally much greater (around 8x) than those without dogs on sites around the Wash and North Norfolk Coast both in summer and winter. Also, dogs off leads cause far more disturbance (by area of site) than those on leads. The study also concluded that around 85% of visitations around the Wash were the result of local users, rather than day trippers.

Horse riders, cyclists/mountain bikers and joggers use protected European Sites, such as the coastline of The Wash, North Norfolk Coast and Breckland. Increased levels of these activities could also disrupt protected birds' usage of these sites, although the volume and frequency of usage is likely to be a lot lower than pedestrians with and without dogs.

The above studies (section 7.2.5.3) indicate that housing development is likely to result in local users living in new housing walking to any European site within 1km, and driving to any European site within 8km, for walking or other recreation where facilities such as open access or rights of way exist.

The new housing provisions within the Borough of King's Lynn and West Norfolk are therefore likely to result in an increase in local user recreation on European sites within 1km (for people walking) and 8km (for people driving to a car parking location). This would be a greater increase than that increase on day trips to the AONB generally, as regular visits to places near home tend to be much more frequent (e.g. for daily dog walking) than visits to attractive sites at some distance. It is therefore necessary to identify European sites within the 1km and 8km distances of proposed housing allocations, and assess whether any increase in visitors is likely to occur there. To assess if an increase in visitors is likely to occur, the existence of alternative sites for recreation needs to be taken into account, and the availability of the European sites for access needs to be identified.

The cumulative impacts of several developments are considered, and only if a number of proposed allocations were within the 1km and 8km distance bands of particular parts of European sites would a cumulative impact occur whilst considering specific site impact. Distances are in reality the distance that people travel by road or other network, rather than straight-line distances. Obstructions to travel, such as road networks or rivers with no crossing points therefore reduce the straight-line distance from which people will not travel to a European site.

The effect of developments on specific European sites within 1km and 8km distances should be considered in combination with the additional visitors from day trips expected across the whole suite of European sites.

In addition to the major allocations, a number of smaller allocations across the District combined could also cause an increase of visitor pressure on the suite of European sites in the District.

Recreation along the North Norfolk Coast

Two SPA species of the North Norfolk Coast, ringed plover and little tern, have been identified as being in particular risk of visitor disturbance associated with use of the North Norfolk Coast. Nesting numbers of both species have declined at some localities, with human disturbance being a likely contributory cause.

While little terns are colonial and are largely situated within wardened nature reserves, and therefore possible to defend against disturbance events, ringed plovers can be more dispersed, and more challenging to conserve. The nesting period coincides with increased visitor numbers in the April to June period. Numbers of pairs of ringed plovers recorded in 2011 (Norfolk Bird and Mammal Report) are much lower than the 220 pairs cited for the North Norfolk Coast SPA.

Main concentrations of little terns in West Norfolk are found at Holme, Scolt Head and Holkham, and their productivity in 2011 was half that of 2006, although overall numbers were higher.

Ringed plovers are found at wardened reserves at Holme, Titchwell, Scolt Head, Snettisham and on unwardened beaches between Snettisham and Hunstanton. However,

nesting ringed plover is not a site feature of the Wash SPA, and cannot therefore strictly be considered in the HRA.

Impacts from disturbance for both species are best alleviated by effective on-site protection, such as by wardening or temporary fencing of nesting sites, and by on-site education (Rushmer 2009b). Table 1 details information collected for North Norfolk Coast sites by North Norfolk District Council and specifically for this report.

Table 1: Existing visitor estimates, and management measures at specific sites

Site and Management organisation	Visitors per annum	Management measures in place
Brancaster (National Trust)	150,000 (per National Trust Brancaster)	No wardened visitor management on beach – however, west of entrance is intended to be a dog-free zone. Large car park.
Snettisham (RSPB)	29,000	The southern lagoon is fenced off to prevent access/disturbance –viewing takes place from four birdwatching hides. During the breeding season there is an issue regarding nesting ringed plovers and oystercatchers on the beach. One area on a large spit is cordoned off with signs asking people not to enter due to nesting birds. Along the remainder of the reserve beach, there are signs at all access points, informing visitors that there are nesting birds, and to help them by staying on the path at the top of the beach from late April to early August. Most visitors adhere to these restrictions.
Holme Dunes (Norfolk Wildlife Trust)	100,000 visitors per annum	Car parking for a max of 100 cars. Visitor centre with information / education boards. Bird hides and walking trail. Norfolk coast path runs through the site. Nesting areas for ringed plovers are fenced off during the breeding season. Site Wardens
Holkham (Natural England)	800,000 – 1,000,000	Information Boards. Site Wardens and volunteers. Nesting areas are fenced off during the breeding season.
Scolt Head	5,000 visits per annum	Difficult to access (can get access by boat) and has a management policy of non-intervention. Wardened site.
Titchwell RSPB	Capacity of 125,000 visitors per annum. Received 76,500 visitors in financial year 2011/12	The car park is a natural barrier to visitor numbers exceeding capacity on any day – once the car park is full people have to consider moving to another area as the only way to access the site is through the car park and visitor centre. Nesting areas for ringed plovers are fenced off during the breeding

		season.
OUTSIDE BOROUGH		
Blakeney / Morston (National Trust)	100,000 visitors park at Blakeney and Morston Quay.	Information centre at Morston Quay. Restricted access to certain areas of the Point during bird breeding season (April to September). Large areas are fenced off. Circular walking route with boardwalks and interpretation. Tours available.
Cley Marshes (Norfolk Wildlife Trust)	100,000 visitors per annum (30,000 on reserve. 90,000 in centre)	Visitor centre with information / education boards. Boardwalks around the Reserve with few opportunities to divert from them.
Salthouse marshes Norfolk Wildlife Trust	?	No NWT car park, but parking is available nearby. Norfolk coast path runs along its southern edge.

In addition to the wardened reserves, the area of beach leading north from Snettisham beach car park to the south end of Hunstanton is an important area for breeding ringed plovers, and currently this area has no visitor management for ringed plovers. Increasing numbers of people in this area are likely to contribute to a further decline in its ringed plover population, unless some form of visitor management is undertaken. Increasing numbers of people on this area of beach have been occurring for some years.

Between Snettisham and King's Lynn, human disturbance is less likely to be an issue, as there is no public access to the seawall. The Wash edge west of King's Lynn has a footpath (the Peter Scott Walk) running along the seawall, but is lightly used and there are limited access points.

Table 2 gives numbers of ringed plovers and little terns from the most recent Norfolk Bird and Mammal Report (2012).

Table 2. Numbers of ringed plovers and little terns in the North Norfolk Coast and Wash SPA, 2012.

Location	Ringed Plover	Little Tern
Snettisham	**15 pairs, 10 young fledged**	**None**
Snettisham - Hunstanton	**5 pairs, success not noted**	**None**
Holme	**27 pairs, min 6 young fledged**	**34 pairs, none fledged (fox predation)**
Scolt Head	**61 pairs, c35 young fledged**	**220 pairs, 175 young fledged**
Holkham	**22 pairs, success not noted**	**114 pairs, 20 young fledged**
Blakeney Point	**3 pairs, success not noted**	**140 pairs, 28 young fledged**

Recreation in Breckland

The two SPA species in the Breckland which are likely to be vulnerable to visitor disturbance, woodlark and nightjar, have been studied in some detail in work commissioned by Breckland District Council. The indications from this work are that "the low level of disturbance is not likely to have a significant effect, yet a lack of research to the contrary led to the precautionary conclusion that adverse effects could not be ruled out with the necessary certainty" (Liley *et al* 2008).

The Borough Council Core Strategy specifies a 400 metre buffer for these two species, within which proposals will require a project level HRA. 400 metres is specified due to potential in-combination impacts from proximity of housing. Further impacts may occur from recreation impacts of development up to 8km distant from the site, as outlined above from car using visitors.

The nearest development allocation (Methwold) within the assessed plan is around 1.6km from the forested areas where these two species are likely to occur. Other allocations within 8km of Breckland SPA are Hockwold and Feltwell, Castle Acre, Marham, Stoke Ferry, Fincham and Wereham.

Recreation around King's Lynn

Both Roydon Common and Dersingham Bog are adjacent to King's Lynn. Although currently. The European site (comprising the two component sites) is not designated as SPA. However, the two sites combined appear to fulfil the requirements for designation in relation to breeding woodlark and nightjar (numbers given in table 4 below), and overwintering hen harrier. It is quite possible that by the time any housing developments take place, designation of SPA will have occurred. Therefore this report takes into account the likelihood of the site (Dersingham Bog and Roydon Common) becoming (proposed) SPA, and assesses the site accordingly.

The recreational issues around the sites are identified by the site managers in the Norfolk Wildlife Trust response to the Preferred Options document. These are largely associated with the increasing numbers of dogs being exercised on the sites, which have the potential to cause disturbance to breeding birds with SPA level populations of Annex 1 species on the two sites. Table 3 outlines the numbers of pairs at both sites:

Table 3. Most Recent Numbers of Nightjar and Woodlark at Dersingham and Roydon (numbers supplied by NWT and Natural England).

Component Site	Numbers of nightjar pairs	Numbers of woodlark territories
Roydon Common	24 in 2012. Peak count of 37 in 2003. Scattered throughout the site.	12 in 2012, 11 in 2013.
Dersingham Bog	23 in 2014, fluctuating between 12 and 28 pairs from 2004 to 2014.	5 in 2014, between 1-5 pairs from 2004-2014.

There is evidence that disturbance can cause reduction in numbers and productivity of nightjar (Langston *et al* 2007). This study, relating to sites in Dorset, is perhaps more comparable to the situations at Roydon and Dersingham than to a study undertaken by Dolman (2009) in Breckland, where no clear relationship was found between recreational use and nightjar/ woodlark nest predation. The Breckland heaths have lower levels of recreational use than is the case at Roydon/ Dersingham, and nightjars and woodlarks use clearfell in Breckland rather than heathland.

There is most potential for conflict when nightjars and woodlarks are breeding. The breeding season for nightjar occurs from mid-May through to August, with a peak in June; woodlark nest from March until July, but commence territorial activity from early February. Hen harriers use Roydon Common for roosting in the winter months, but there is perhaps less potential for disturbance of hen harriers than the other two species. However, an impact on hen harrier (potentially the desertion of the roost site) would be significant.

Nightjar and woodlark are both ground nesters. The potential for disturbance and other effects is well summarised in Langston *et al* (2007) and quoted here:

Nests which failed were significantly closer to paths, tended to be closer to the main points of access to heaths, in areas with higher footpath density, notably of high levels of use, and in more sparsely vegetated locations. The proximate cause of nest failure was most frequently egg predation.

Although the disturbance issue is not necessarily confined to dog owners and their dogs, the evidence given in Rushmer (2009a, 2009b) strongly suggests that this group are likely to cause much more disturbance than walkers without dogs, or other users, and especially so if the dog is off the lead. At Roydon and Dersingham, the main other users are people visiting the sites for their natural features and wildlife, which make up a small percentage of the overall visitor numbers.

Another issue which dogs can cause is conflict with grazing animals. Scaring of, and damage to, grazing animals can affect the ability of the site managers to properly manage the site. For example Roydon Common is fenced and grazed, and would not currently be practically manageable without grazing animals.

7.2.6 Impacts from Increased Use of Roads

This refers to the impacts of increased traffic flows resulting from new development, including increased noise impacts (volume, duration), increased vehicular emissions, increasing road mortality, and increasing fragmentation impacts. These impacts are most likely to be important for SPA bird species and certain SAC habitats. However transport planning is undertaken at a county-wide level, and is detailed in the County Transport Plan identified in section 4.3.

Effects from vehicular emissions on Breckland SAC and SPA are noted as being small in the AA report of the Regional Spatial Strategy, and not likely to adversely affect the integrity of the European sites. This report has no evidence to present contradicting this assessment, and therefore does not identify emissions as a likely source of impacts on European sites. At a site level, there may be proximity impacts from increased traffic at specific points near to new housing, which may need to be addressed by mitigation at the site design stage.

7.2.7 Cumulative Impacts

Cumulative impacts are those where an impact in itself may not be significant, but in combination with other impacts from this plan, or from other plans and projects, may amount to a significant impact. At a site-specific level, this is likely to relate to the accumulated effects of housing developments on specific European sites, depending on the distance from access points to those sites. Potential cumulative impacts on European sites are detailed in table 6.

7.2.8 Changes since the Preferred Options HRA

The following changes have occurred in settlement housing allocations since the preferred options were consulted on in 2013:

Table 4. Main Settlements.

Settlement	Preferred Options Allocations	Site Allocations and Development Management Policies – Proposed Submission Document	Change +/-
King's Lynn Town Centre	1,410	1,450	+40
West Lynn	249	249	No change
South Wootton	300	300	No change
Knight's Hill	600	600	No change
West Winch	1,600	1,600	No change
Downham Market	390	390	No change
Hunstanton	220	333	+113
Wisbech	550	550	No change
Total	5,319	5,472	+153

Table 5. Key Rural Service Centres

Key Rural Service Centres	Preferred Options Allocations	Submission Version	Change +/-
Brancaster with Brancaster Staithe and Burnham Deepdale	14	15	+1
Burnham Market	30	32	+2
Castle Acre	11	11	No change
Clenchwarton	56	50	-6
Dersingham	30	30	No change
Docking	16	20	+4
East Rudham	0	10	+10
Emneth	40	36	-4
Feltwell	60	70	+10
Gayton with Grimston and Pott Row	46	46	No change
Great Massingham	12	12	No change
Heacham	66	66	No change
Marham	25	50	+25
Methwold and Northwold	40	45	+5
Snettisham	20	34	+14
Stoke Ferry	15	27	+12
Terrington St Clement	55	62	+7
Terrington St John with St John Highway and Tilney St Lawrence	0	35	+35
Upwell with Outwell	65	80	+15
Watlington	32	32	No change
West Walton with Walton Highway	16	20	+4
Total	649	783	+134

Table 6. Rural Villages

Rural Villages	Preferred Options Allocations	Submission Version	Change +/-
Ashwicken	5	0	-5
Burnham Overy Staithe	0	0	No change
Castle Rising	0	0	No change
Denver	10	0	-10
East Winch	10	10	No change
Fincham	5	10	No change
Flitcham	0	0	No change
Great Bircham with Bircham Tofts	10	10	No change
Harpley	5	5	No change
Hilgay	12	12	No change
Hillington	5	5	No change
Ingoldisthorpe	8	10	+2
Marshland St James with St Johns Fen End	15	25	+10
Middleton	15	15	No change
Old Hunstanton	0	0	No change
Runcton Holme	10	10	No change
Sedgeford	10	10	No change
Shouldham	10	10	No change
Southery	15	15	No change
Syderstone	5	5	No change
Ten Mile Bank	5	5	No change
Thornham	5	0	-5
Three Holes	5	5	No change
Tilney All Saints	5	5	No change
Walpole Cross Keys	5	0	-5
Walpole Highway	6	10	+4
Walpole St Peter with Walpole St Andrew and Walpole Marsh	16	20	+4
Welney	7	22	+15
Wereham	8	8	No change
West Newton	0	0	No change
Wiggenhall St Germans	12	0	-12
Wiggenhall St Mary Magdalen	10	10	No change
Wimbotsham	0	0	No change
Wormegay	0	0	No change
Total	234	232	-2

8 Task 1: Screening for Likely Significant Effects.

8.1 Introduction

Please refer to tables, 8, 9 and 10 for determination of Likely Significant Effects.

Recreational impacts are initially screened by using Table 7. The justification for this screening is based on:

- Proximity of proposal sites within the SADMP to the European sites (1 and 8km).
- Perceived vulnerability of the site.
- Available public access to the site.

Table 7. Likely vulnerability of European sites from Recreation

European site	Perceived vulnerability to recreational impacts	Likely use of European site		
		Local users by foot*	Local users by car**	Day trippers***
Roydon Common and Dersingham Bog SAC/ Ramsar	Vulnerable to physical disturbance to SAC habitats. Disturbance to birds with SPA level populations. Limited access points, but are already at capacity for visitors. Limited walking distance available.	No	Yes	No
North Norfolk Coast SPA/ Ramsar	SPA birds. Several access points, some not tightly controlled.	Yes	Yes	Yes
Wash SPA/ Ramsar	SPA birds. Several access points, some not tightly controlled. Wash SPA west of King's Lynn is not well visited and judged to be less vulnerable.	No	Yes	Yes
Wash and North Norfolk Coast SAC	Habitats vulnerable to physical disturbance. Several access points, some not tightly controlled.	No	Yes	Yes
River Wensum SAC	SAC habitats robust to disturbance. Little public access within range of local users. No housing allocation within catchment.	No	No	No
Norfolk Valley Fens SAC	Public access allowed but sites not generally heavily visited, and habitats robust.	No	No	No
Ouse Washes SPA/ SAC/ Ramsar	SPA birds most vulnerable. Publicly accessible, but a long walk (e.g. from Denver), or via a nature reserve (Welney) where access tightly	No	No	No

	controlled.			
Breckland SAC	SAC habitats, though they are generally robust. Open access on some sites (e.g. Cranwich Camp) but restricted or not allowed on others.	No	Yes	Yes
Breckland SPA	SPA birds. Some public access within Breckland Forest and Farmland.	Yes	Yes	Yes

* Refers to visitors travelling by foot from their home (see section 7.1.5.4) within 1km
** Refers to visitors travelling from their home within 8km
*** See 7.2.5.2

Policies highlighted in pink are those considered likely to result in a significant effect. This table then carries forward to Task 1 (tables 8-10), where recreational effects deemed likely are considered, but those not deemed likely are not considered. Further justification is given in the narrative within tables 8-10.

Table 8: Identification of likely significant effects on Natura 2000 sites as a result of proposals, with the allocation for Key Rural Service Centres and Rural Villages based on the size of the existing population

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Policy E1.1 King's Lynn Town Centre	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	No mechanism for impact identified.	No features identified	No
Policy E1.2 King's Lynn – Town Centre Retail Expansion area	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	No mechanism for impact identified.	No features impacted	No
Policy E1.3 Gaywood Clock Area	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	No mechanism for impact identified.	No features impacted	No
Policy E1.4 Marsh Lane. (170 houses)	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy.	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.		
Policy E1.5 King's Lynn – Boal Quay (350 houses)	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.		
Policy E1.6 King's Lynn – South of Parkway (260 houses)	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		considered in combination.		
Policy E1.7 King's Lynn – Land at Lynnsport (450 houses)	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No
Policy E1.8 King's Lynn – South Quay (50 houses)	6km from Roydon Common and Dersingham Bog	The number of houses is not large enough, in a King's Lynn context, to contribute significantly to effects on European sites either in isolation or cumulatively.	SPA features (disturbance of breeding/wintering birds) SAC features	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
	SAC/ Ramsar		(coastal habitats)	
Policy E1.9 King's Lynn – Land west of Columbia Way (100 houses)	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No
Policy E1.10 King's Lynn – North of Wisbech	6km from Roydon Common and Dersingham Bog	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on	SPA features (disturbance of breeding/wintering birds) SAC features	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Road (50 houses)	SAC/ Ramsar	the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.	(coastal habitats)	
Policy E1.11 King's Lynn – Southgates	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area,	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.		
Policy E1.12 King's Lynn – Employment Land	6km from Roydon Common and Dersingham Bog SAC/ Ramsar	No mechanism for impact identified.	No features identified	No
Policy E1.13 King's Lynn Green Infrastructure	n/a	The policy acknowledges the need for an additional package of GI measures to mitigate potential adverse effects on Natura 2000 sites. This is further detailed in the Natura 2000 Sites Mitigation and Monitoring Strategy.	SAC features	No
Policy E1.14 and E1.15; West Lynn – 249 homes	Road distances: 10.8km from Roydon Common SAC/ Ramsar, 4.4km from Wash SPA.	The Wash SPA is probably too far for most on-foot visitors, but may be visited by car. However the Wash SPA coast in this area is not well visited and has capacity for more without likely significant effects.	SPA features (disturbance of breeding/wintering birds)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Policy E2.1 – West Winch growth Area Strategic Policy	Distance by road: 7.84km from Roydon Common SAC/ Ramsar; 17km from Wash SPA	May result in an increase in number of local users of Roydon Common – however, within 8km there are several other greenspace alternatives which are not European sites. The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast may make a minor contribution to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations, and other general population increases in the east of England. Physical disturbance to SAC habitats also not likely to be significant in isolation, but also need to be considered in combination.	SPA features (disturbance of breeding/wintering birds)	No
Policy E3.1 – Hall	Road distances;	The proposed housing numbers would not, in isolation,	SPA features	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Lane, South Wootton: around 300 homes	17km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC. 3.6km by road to Roydon Common SAC/ Ramsar. 8.8km by road to Dersingham Bog SAC/ Ramsar	result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA. The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.	(disturbance of breeding/wintering birds) SAC features (habitats)	
Policy E4.1. King's Lynn NE – adjacent to Knight's Hill: 600 homes	Road distances; 1.1km from Roydon Common and 6km from Dersingham Bog SAC. 14.8km from Wash SPA	The proposed housing numbers would not, in isolation, result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these are also addressed in view of the possibility of designation as SPA.	SPA features (disturbance of breeding/wintering birds) SAC features (coastal habitats)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		The policy, in common with other proposed housing sites around King's Lynn, directly addresses the issue of recreational disturbance to designated sites in the area, including Roydon and Dersingham SAC (and their stated bird interest which is of SPA quality). The series of safeguards the policies stipulate are effective in removing the likelihood of a significant effect. This is reinforced by the Natura 2000 Sites Mitigation and Monitoring Strategy. Increased day-trip visitors to the coast from King's Lynn may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA, and SAC features. They may also contribute to physical damage of SAC coastal habitats. These visitors are not likely to cause a likely significant effect in isolation, but should also be considered in combination with other housing allocations. Physical disturbance to SAC habitats are also not likely to be significant in isolation, but should be considered in combination.		
North Wootton: no allocation	Distance by road: 15.4km from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC. 5.6km from Roydon Common SAC/ Ramsar	No current allocation of houses, therefore no likely significant effect.		No
Policies F1.1 to F1.4. Downham Market: 390	Distance by road: 3.52km from Ouse Washes SAC/ SPA/	Unlikely to result in increased disturbance levels to Ouse Washes because of limited vehicle and foot access, and managed access at next-nearest point (Welney reserve).	SPA features (disturbance of breeding/wintering	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
homes	Ramsar, plus 3km walk from nearest parking place, or 14km to Welney nature reserve	Increased day trip visitors to the coast may contribute to physical, visual and noise disturbance of breeding and wintering birds at The Wash SPA and North Norfolk Coast SPA. Probably too far to travel for most on-foot visitors, but may be visited by more people using vehicles.	birds)	
Policies F2.1 – F2.5. Hunstanton: 333 homes	Distance by road: 1.8km from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Hydrological Impacts – increased sewage discharge. However the Core Strategy Appropriate Assessment predicted no likely significant effect based on results of the Water Cycle Study. Increased local users at the coast may contribute to physical, visual and noise disturbance of breeding and wintering birds. However, the policies provide significant safeguards for European sites through increased green space provision, pedestrian routes and contribution to wider green infrastructure.	SPA features (disturbance of breeding/wintering birds)	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Policy F3.1. Wisbech Fringe: 550 homes (divided between Emneth and Walsoken)	Distance by road: 10-11km from the Nene Washes SPA and Ramsar, 20km from the Wash SPA/ Ramsar.	Development not sufficiently close enough for local users affect European sites. Day trippers from Wisbech may visit the Wash or North Norfolk Coast, but even these are quite distant and numbers are likely to be a negligible addition to any cumulative effect, and not of likely significance in themselves.		No
Brancaster/ Brancaster Staithe/Burnham Deepdale: 15 homes	0.68km from The North Norfolk Coast SPA/ Ramsar and The Wash and North Norfolk Coast SAC	The preferred location for development is to the south of the main settlement, and will not therefore result in direct disturbance impacts on the European site. The main access to the European site from the development would be along Broad Lane or the coastal footpath, already well used routes. The 11 homes would increase the population of Brancaster by 3%, and the increase in usage would be almost imperceptible given the already heavy use of the area. Development not sufficiently large enough to Natura 2000 site to cause a likely significant effect.		No
Burnham Market: 32 homes	Distance by road: 2km from The North Norfolk Coast SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Not sufficiently close for local users to get to the coast on foot, but will do so by car. Nearest access to the SPA is at Burnham Norton, a potentially sensitive site. While the numbers of houses are not high, there is a possibility of localised disturbance effects. The policy stipulates that a programme of publicity aimed at occupants of the development and other residents in Burnham Market highlighting the opportunities for recreation (especially dog-walking) in the vicinity avoiding areas within the Wash Special Protection Area and the North Norfolk Coast Special Protection Area should be put in place. This will highlight the sensitivity of those protected areas to dog-walking and other recreation. The policy will not result	SPA birds	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		in significant impacts in isolation, but is also considered cumulatively.		
Castle Acre: 11 homes	6.42km from Norfolk Valley Fens SAC	The location, within Castle Acre village, is in an area where there is a good supply of public open space and footpaths. Development is also not sufficiently close or large enough to any Natura 2000 site to cause a likely significant effect.		No
Clenchwarton: 50 homes	3.18km from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	The preferred development site is well connected to the Clenchwarton Parish Walk via a minor road. The Wash SPA is nevertheless probably too far for most on-foot visitors, but may be visited by car. However the Wash SPA coast in this area is not well visited and has capacity for more visitors without adverse effects.		No
Dersingham: 30 homes	1.4km from Dersingham Bog SAC/ Ramsar. 8.06km by road from the Wash SPA/ Ramsar.	Dersingham Bog SAC is already at capacity for recreational disturbance, any more than a negligible increase would trigger likely significant effect. Increased visitors would damage habitat features of Dersingham Bog SAC. However the location and number of houses, and the position of access points to the Bog, indicate that this allocation in itself is unlikely to cause a likely significant effect; however cumulative effects on this site are also considered. May contribute to cumulative impacts on the Wash SPA from recreational disturbance.	SAC features SPA features	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Docking: 20 homes	6.47km from The North Norfolk Coast SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Too far to travel to North Norfolk Coast SPA for most on-foot visitors, but may be visited by more people using vehicles. However the number of houses proposed is small, and the most likely close sites (Brancaster, Burnham Overy, perhaps Holme) are already well visited, so the increase in usage would be almost imperceptible given the already heavy use of the area. May contribute to cumulative impacts on the North Norfolk Coast SPA from recreational disturbance.	SPA birds	No
East Rudham: 10 homes	2.06km from River Wensum SAC	Inside the catchment for the River Wensum. Potential issues with sewerage capacity; no issues for disturbance as access to the SAC on upper stretches is limited, and the sites are robust. The policy states no construction shall commence before sewerage arrangements and confirmation of sewerage capacity have been submitted to and approved by the local planning authority. No likely significant effect is therefore predicted.	SAC features	No
Feltwell & Hockwold cum Wilton: 75 homes	0.29km from Breckland SPA	Proximity impacts for birds sensitive to human presence (stone curlew). However Feltwell sites are masked completely from the SPA by existing development, and the Hockwold site is not masked from the SPA, but is more than 1,500 metres from the nearest exposed SPA. Recreational impacts from daily activities of local people such as dog walking in the forest. The recreational impacts are thought to be insufficient in scale from the proposed allocations alone to cause likely significant effects, but may do so in combination with plans from neighbouring authorities.	SPA features particularly stone curlew for sensitivity to human presence, and nightjar and woodlark for recreational impacts.	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Gayton, Grimston and Pott Row: 46 homes (23 Gayton, 23 Pott Row)	2.43km from Norfolk Valley Fens SAC, 1.8km from Roydon Common SAC/ Ramsar by road	May result in an increase in number of local users of Roydon Common – however, within 8km there are several other greenspace alternatives which are not European sites, including Bawsey Country Park which is much closer. Such an increase would not on its own result in a likely significant effect on the qualifying SAC/ Ramsar features. However there may be effects on Annex 1 species (nightjar and woodlark) which nest on the site, these would also need to be addressed in view of the possibility of designation.	SAC habitats	No
Great Massingham: 12 homes	8.67km from Norfolk Valley Fens SAC, 10.1km from Roydon Common SAC/ Ramsar	The allocation is too far for regular recreational visits to European sites. Development is therefore not large enough or sufficiently close to European sites to cause a likely significant effect.		No
Heacham: 60 homes	1.18km from The Wash SPA/ Ramsar. 10.1km from the North Norfolk Coast SPA/ Ramsar.	Increased local users at the coast may contribute to physical, visual and noise disturbance of breeding and wintering birds. Visitors may visit the Wash by foot or by vehicle. However, the policy provides significant safeguards for European sites through increased green space provision, pedestrian routes and contribution to wider green infrastructure.	SPA features	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Marham: 50 homes	5.59km from Breckland SPA	Development not sufficiently close or large enough to Natura 2000 site to cause a likely significant effect. Probably too far to travel for most on-foot visitors, but may be visited by more people using vehicles. However this diffuse and limited impact is not likely to cause a significant effect.		No
Methwold and Northwold: 45 homes	1.62km from Breckland SPA	Outside of 1500 metre stone curlew buffer. Recreational impacts from daily activities such as dog walking in the forest. Probably too far to travel for most on-foot visitors, but may be visited by more people using vehicles. The recreational impacts are thought to be insufficient in scale from the proposed allocation alone to cause likely significant effects, as it is beyond the 400 metre buffer specified for woodlark and nightjar.	SPA features particularly stone curlew for sensitivity to human presence, and nightjar and woodlark for recreational impacts.	No
Outwell/ Upwell: 85 homes	10.5km from Ouse Washes Ramsar and SAC	Development not sufficiently close or large enough to Natura 2000 site to cause a likely significant effect. Too far to travel for most on-foot visitors, and not a likely destination for vehicle-bound visitors unless it is Welney where access is strictly controlled.	SPA features	No
Snettisham: 34 homes	2.97km from The Wash SPA/ Ramsar. 7.1km from Dersingham Bog SAC/ Ramsar	Dersingham Bog SAC is already at capacity for recreational disturbance, any more than a negligible increase would trigger likely significant effect. Increased visitors would damage habitat features of Dersingham Bog SAC. However the location and number of houses, and the position of access points to the Bog, indicate that this allocation in itself is unlikely to cause a likely significant effect; however it may contribute to cumulative effects on this site. The policy has been	SPA birds	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		adjusted in the submission document to clarify the potential for green infrastructure improvements		
Stoke Ferry: 27 homes	8.3km by road from Norfolk Valley Fens SAC (Foulden Common)	Too far to travel for most on-foot visitors, but site may be visited by more people using vehicles. However Foulden Common is not especially well visited currently, and has not indicated signs of negative effects on habitats from disturbance. Development not sufficiently close or large enough to Natura 2000 site to cause a likely significant effect.		No
Terrington St. Clement: 27 homes	6.15km from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	The Wash is too far to travel for most on-foot visitors, but may be visited by more people using vehicles. However the Wash SPA coast in this area is not well visited and probably has capacity for more visitors without adverse effects.		No
Terrington St. John/St. John's Highway/ Tilney St. Lawrence: 35 homes	11.06km from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Development would not be sufficiently close or large enough to Natura 2000 site to cause a likely significant effect.		No
Watlington: 32 homes	16km by road from the Ouse Washes Ramsar and SAC	Development not sufficiently close or large enough to Natura 2000 site to cause a likely significant effect.		No
West Walton/ Walton Highway: 20 homes	15km by road from Nene Washes Ramsar and SPA	Development not sufficiently close or large enough to Natura 2000 site to cause a likely significant effect.		No
Ashwicken: **[no allocation]**	2.90km from Roydon Common and Dersingham Bog SAC and Roydon Common	No allocation, and therefore no likely significant effect.		No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
	Ramsar			
Burnham Overy Staithe: **[no allocation]**	0.43km from The North Norfolk Coast SPA Ramsar and The Wash and North Norfolk Coast SAC	No allocation, and therefore no likely significant effect.	SPA features	No
Castle Rising: [**no allocation**]	2.22km from Roydon Common and Dersingham Bog SAC and Roydon Common Ramsar	No allocation, and therefore no likely significant effect.	None	No
Denver: [**no allocation**]	2.7km by road plus 2.8km by foot from Ouse Washes SPA/ SAC/ Ramsar	No allocation, and therefore no likely significant effect.		No
East Winch: 10 homes	6.1km by road from Norfolk Valley Fens SAC (East Walton Common)	Too far to travel for most on-foot visitors, but may be visited by more people using vehicles. However East Walton Common is not especially well visited currently, and has not indicated signs of negative effects on habitats from disturbance. The distance from the site and small number of houses indicate no likely significant effect.	SAC habitats	No
Fincham: 5 homes	8km from Breckland SPA	The recreational impacts on Breckland SPA are thought to be insufficient in scale from the proposed allocation alone to cause likely significant effects, as it is considerably beyond the 400 metre buffer specified for woodlark and nightjar.	Breckland SPA	No
Flitcham: [**no**	4.18km from Roydon Common and	No allocation, and therefore no likely significant effect.		No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
allocation]	Dersingham Bog SAC and Roydon Common Ramsar			
Great Bircham/Bircham Tofts: 10 homes	12.6km by road from the Wash SPA/ Ramsar, 13.2km by road from Dersingham Bog SAC/ Ramsar.	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Harpley: 5 homes	7.7km by road from River Wensum SAC; 11.9km from Roydon Common and Dersingham Bog SAC.	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Hilgay: 12 homes	9.8km by road from Ouse Washes Ramsar and SPA	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect. Nearest convenient access is Welney reserve, where public access is strictly controlled.	SPA birds	No
Hillington: 5 homes	4.8km by road from Roydon Common SAC/ Ramsar	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect on its own, but may contribute to cumulative effects on the SAC.		No
Ingoldisthorpe: 10 homes	5.3km by road from Dersingham Bog SAC/ Ramsar. 4.7km from the Wash SPA/ Ramsar	Too far to travel for most on-foot visitors, but may be visited by more people using vehicles. Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect on its own, but may contribute to cumulative effects on the		No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		SAC.		
Marshland St. James, St. Johns Fen/Tilney Fen End: 25 homes	16.6km by road plus 2.8km on foot from Ouse Washes Ramsar and SAC	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect through recreation. Nearest convenient access is Welney reserve, where public access is strictly controlled and is significantly further away.		No
Middleton: 15 homes	9.5km by road from Roydon Common SAC/ Ramsar	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Old Hunstanton: [**no allocation**]	0.42km from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	No allocation, and therefore no likely significant effect.	SPA features	No
Runcton Holme: 10 homes	12.75km by road from Ouse Washes Ramsar and SAC, further to other European sites.	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Sedgeford: 10 homes	5.8km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Too far to travel to North Norfolk Coast SPA and Wash SPA for most on-foot visitors, but may be visited by more people using vehicles. However the number of houses proposed is small, and the most likely close sites (Snettisham, Hunstanton, Heacham) are already well visited, so the increase in usage would be almost imperceptible given the already heavy use of the area. May contribute to in-combination effects.		No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Shouldham: 10 homes	11.4km by road from Breckland SPA	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Southery: 15 homes	11.1km by road from Ouse Washes SPA and Ramsar	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect. Nearest convenient access is Welney reserve, where public access is strictly controlled.		No
Syderstone: 5 homes	3.6km from River Wensum SAC. 12.55km from The North Norfolk Coast SPA/ Ramsar and The Wash and North Norfolk Coast SAC	There would be no effects on the River Wensum SAC, as the development is sufficiently distant and would have negligible effect on discharge levels, being 1.5km above the source. Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Ten Mile Bank: 5 homes	7.3km by road from Ouse Washes SPA and Ramsar	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect. Nearest convenient access is Welney reserve, where public access is strictly controlled.		No
Three Holes: 5 homes	7.9km by road from Ouse Washes SPA/ SAC/ Ramsar	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect. Nearest convenient access is Welney reserve, where public access is strictly controlled.		No
Thornham: [**no allocation**]	0.14km from The North Norfolk Coast SPA/ Ramsar and The Wash and North Norfolk Coast SAC	No allocation, and therefore no likely significant effect.		No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Tilney All Saints: 5 homes	10km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Walpole Cross Keys: [**no allocation**]	11.2km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Walpole Highway: 10 homes	15.5km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Walpole St Peter / Walpole St Andrew / Walpole Marsh: 20 homes	14.3km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Welney: 20 homes	0.1km from Ouse Washes SPA/ SAC/ Ramsar	Possible disturbance of SPA features during construction, particularly breeding or wintering birds. Disturbance impacts for birds sensitive to human presence. Subsequent to the Preferred Options document, Natural England have requested that any proposal should be accompanied by sufficient information, including drainage arrangements, to demonstrate that there will be no adverse effect on the Ouse Washes SAC, SPA,	SPA birds	No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
		Ramsar. This wording has been incorporated into the policy.		
Wereham: 8 homes	8.1km by road from Norfolk Valley Fens SAC (Foulden Common). 8.3km from Breckland SPA by road	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
West Newton: [**no allocation**]	2.22km from Dersingham Bog SAC/ Ramsar	No allocation, and therefore no likely significant effect.		No
Wiggenhall St Germans: [**no allocation**]	18km by road from The Wash SPA/ Ramsar and The Wash and North Norfolk Coast SAC	No allocation, and therefore no likely significant effect.		No
Wiggenhall St Mary Magdalen: 10 homes	13.2km by road from Ouse Washes SAC/ SPA/ Ramsar	Development not sufficiently large or close enough to Natura 2000 site to cause a likely significant effect.		No
Wimbotsham: [**no allocation**]	4.99km from Ouse Washes SPA/ Ramsar	No allocation, and therefore no likely significant effect.		No

Site	Distance to relevant Natura 2000 sites	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Wormegay: [**no allocation**]	13.4km by road from Norfolk Valley Fens SAC	No potential sites identified, and therefore no likely significant effect.		No

Table 9: Identification of likely significant effects on Natura 2000 sites as a result of Borough-wide policies

Area-wide Policies			
Policy	**Possible Mechanism by which Policy may Impact European Site**	**Possible Feature(s) Impacted**	**Likely significant effect and need for Appropriate Assessment?**
DM1: Presumption in favour of sustainable development	There is no mechanism for effects on European sites	None	No
DM2: Development boundaries	The policy defines the function of the new single development boundary and describes exceptions where development might be permitted. Those exceptions would be subject to CS policies, and would be outside the scope of this policy. No mechanism is therefore identified for effects on European sites.	None	No
DM3: Infill development in the smaller villages and hamlets	Allows for infill development along a road frontage of up to 3 houses in smaller villages and hamlets within or adjacent to current development. It is considered that the location and scale of such development will almost always be too small to cause a likely significant effect.	None	No
DM4: Houses in multiple occupation	There is no mechanism for effects on European sites.	None	No
DM5: Enlargement of dwellings in the countryside	There is no mechanism for effects on European sites.	None	No
DM6: Housing needs of	There is no mechanism for effects on European sites.	None	No

Area-wide Policies			
Policy	**Possible Mechanism by which Policy may Impact European Site**	**Possible Feature(s) Impacted**	**Likely significant effect and need for Appropriate Assessment?**
rural workers			
DM7: Residential annexes	There is no mechanism for effects on European sites.	None	No
DM8: Delivering affordable housing on phased development	There is no mechanism for effects on European sites	None	No
DM9: Community Facilities	There is no mechanism for effects on European sites	None	No
DM10: Retail development outside town centres	There is no mechanism for effects on European sites.	None	No
DM11: Touring and permanent holiday sites	The policy has been amended from the Preferred Options document to reflect a fuller consideration for effects on European sites. Therefore no likely significant effect is predicted.	SPA birds, SAC habitats	No
DM12: Strategic road network	There is no mechanism for effects on European sites.	None	No
DM13: Disused railway trackbeds	There is no mechanism for effects on European sites.	None	No

Area-wide Policies			
Policy	**Possible Mechanism by which Policy may Impact European Site**	**Possible Feature(s) Impacted**	**Likely significant effect and need for Appropriate Assessment?**
DM14: Development Associated with CITB Bircham Newton and RAF Marham	There is no mechanism for effects on European sites	None	No
DM15: Environment, design and amenity	There is no mechanism for effects on European sites.	None	No
DM16: Provision of recreational open space for residential developments	This policy defines the amount of recreational space that should be provided in new developments. The open space referred to is of the "sports field" and children's play space type. While there is some limited crossover between the use of this type of space and the kind of recreational use of European sites, it is not considered that LSE would arise from this policy alone.	None	No
DM17: Parking provision in new development	There is no mechanism for effects on European sites	None	No
DM18: Coastal flood risk hazard zone	The policy refers to the area of tidal flood zone at the coast between Wolferton and Hunstanton, and applies a precautionary approach to development within this area. However there is no clear mechanism for adverse effects on European sites.	None	No
DM19: Green Infrastructure	The policy was identified through the consultation process as not being robust enough to ensure policies are effective, as there was an over-reliance on the 2010 Green Infrastructure Strategy which provided insufficient detail and a lack of clarity on actions to take the strategy forward. It is therefore identified as causing likely significant effect, and taken forward.	SPA birds, SAC habitats	No

Area-wide Policies			
Policy	**Possible Mechanism by which Policy may Impact European Site**	**Possible Feature(s) Impacted**	**Likely significant effect and need for Appropriate Assessment?**
	The policy has been subject to substantial alteration – see Task 2.		
DM20: Renewable energy	The policy details the potential impacts to be taken into consideration for renewable energy proposals. These include both designations and biodiversity alone and in combination; it is therefore considered that the policy takes full account of any likely significant effect on European sites.	None	No
DM21: Allocated sites in areas of flood risk	There is no mechanism for effects on European sites.	None	No
DM22: Protection of local green space	The policy aims to protect existing locally important open space.	SPA birds/ SAC habitats	No

Table 10: Identification of likely significant effects on Natura 2000 sites as a result of in-combination effects

Site	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Dersingham Bog SAC and Ramsar	Combined effects of increased recreational pressure from new housing at Knights Hill (600), South Wootton (300), Dersingham (30), Snettisham (34) and Ingoldisthorpe (10), total 974 houses. Combined effects from development outside the Borough are not likely, because of the nature of the users of the site (mostly local users).	SAC habitats (and bird populations deemed to be of European level importance)	Yes

Site	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Roydon Common SAC and Ramsar	Combined effects of increased recreational pressure from new housing at King's Lynn (1450), Knights Hill (600), South Wootton (300), Runcton/ West Winch (1600), Gayton/ Grimston/ Pott Row (46) and Hillington (5), total 4,001 houses. Combined effects from development outside the Borough are not likely, because of the nature of the users of the site (mostly local users).	SAC habitats (and bird populations deemed to be of European level importance)	Yes
North Norfolk Coast SPA/ Ramsar	Combined effects of increased recreational disturbance from new housing at Hunstanton (333), Docking (20) and Burnham Market (30), total 383 houses. Combined effects from outside the Borough are likely, because of the mixed nature of users (local, day trippers and tourists).	SPA birds	Yes
Wash SPA/ Ramsar	Combined effects of increased recreational disturbance from new housing at Hunstanton (333), Heacham (66), Snettisham (34), Ingoldisthorpe (10), Dersingham (30), Sedgeford (10), total 483 houses. Combined effects from outside the Borough are likely because of the mixed nature of users (local, day trippers and tourists).	SPA birds	Yes
Wash and North Norfolk Coast SAC	Combined effects of increased recreational pressure from new housing at Hunstanton (333), Heacham (66), Snettisham (34), Ingoldisthorpe (10), Dersingham (30), Sedgeford (10) and Burnham Market (32), total 515 houses. Combined effects from outside the Borough are likely because of the mixed nature of users (local, day trippers and tourists).	SAC habitats	Yes

Site	Possible Mechanism by which Policy may impact European Site(s)	Possible Feature(s) Impacted	Likely significant effect and need for Appropriate Assessment?
Breckland SPA/ SAC	No LSE has been identified for the allocation at Feltwell/ Hockwold. Effects of increased recreational pressure on the SPA (woodlark and nightjar) from new housing at Feltwell and Hockwold (75), Methwold/ Northwold (45), RAF Marham (50), Stoke Ferry (27), Castle Acre (11), Wereham (8) and Fincham (10) – total 226 houses.	SPA birds	Yes
Ouse Washes SPA/ SAC/ Ramsar	Although a number of settlements are within 8km of the site by road, there is a significant walk-in at the northern end of the Ouse Washes before the European site is reached. More straightforward access is attainable at Welney reserve, where access is strictly controlled. No in-combination effects are predicted, despite development affecting this site outside the Borough, because of the limited access.	None	No
Norfolk Valley Fens SAC	East Walton Common and Foulden Common are not well visited, and are relatively robust to human disturbance. No in-combination effects are predicted. Other component sites of the SAC may be affected by separate issues, though this plan would not contribute to those issues or a cumulative effect.	None	No
River Wensum SAC	Public access is limited near to settlements within the Borough. No in-combination effects are predicted. East Rudham is the only settlement that influences this site.	None	No

8.2 Conclusions of Task 1

In conclusion, the following policies are found to result in Likely Significant Effect (LSE), and are taken through to the Task 2 Appropriate Assessment.

- In-combination effects of recreational pressure on Dersingham Bog SAC/ Ramsar
- In-combination effects of recreational pressure on Roydon Common SAC/ Ramsar
- In-combination effects of recreational pressure on North Norfolk Coast SPA/ Ramsar
- In-combination effects of recreational pressure on Wash SPA/ Ramsar
- In-combination effects of recreational pressure on North Norfolk Coast and The Wash SAC
- In-combination effects of recreational pressure on Breckland SPA
- Policy DM19.

9. Task 2: Appropriate Assessment

9.1 Overall Approach to Avoidance and Mitigation

Effects on European sites within the Borough have been identified above. The sole source of LSE on all of the sites is recreational pressure. A unified approach to mitigating issues of potential recreational impacts has been taken. This is in the form of a Natura 2000 sites Mitigation and Monitoring Strategy, approved by Cabinet (http://democracy.west-norfolk.gov.uk/documents/s1343/Appendix%202%20-%20HRA%20Monitoring%20and%20Mitigation%20Strategy.pdf), which sets out:

a) what the mitigation measures are;
b) how and when they will be decided;
c) how they will be delivered, by whom, and when;
d) what happens if they are not delivered;
e) how will it be known whether they have had the desired effect; and,
f) what will be done if they do not.

Such an approach was outlined in previous versions of the HRA, but the Monitoring and Mitigation Strategy provides a clear and more detailed pathway for enablement of avoidance of harm, and where necessary, mitigation.

9.2 Established Policy Modifications and Avoidance Measures

In the preferred options document HRA, the following policy amendment was made to housing proposals within 8km of sensitive European sites. Policy wording was proposed as follows:

1. *Provision of ….*
    a. *an agreed package of habitat protection measures, to mitigate potential adverse impacts of additional recreational pressure associated with the allocated development upon nature conservation sites covered by the Habitats Regulations Assessment. This package of measures will require specialist design and assessment, but is anticipated to include provision of:*
        i. *Enhanced informal recreational provision on (or in close proximity to) the allocated site [Sustainable Accessible Natural Greenspace], to limit the likelihood of additional recreational pressure (particularly in relation to exercising dogs) on nearby relevant nature conservation sites. This provision will be likely to consist of an integrated combination of*
            1. *Informal open space (over and above the Council's normal standards for play space);*
            2. *Landscaping, including landscape planting and maintenance;*
            3. *A network of attractive pedestrian routes, and car access to these, which provide a variety of terrain, routes and links to the wider public footpath network.*

ii. *Contribution to enhanced management of nearby designated nature conservation sites and/or alternative green space;*
iii. *A programme of publicity to raise awareness of relevant environmental sensitivities and of alternative recreational opportunities.*

The success of such measures is not entirely predictable, and that a level of monitoring of use of European and alternative sites will be required post-development. The results of this monitoring would need to lead to further measures being taken if harm to European sites is thought to be likely.

The policy wording in these instances should be amended to refer to the evolving Natura 2000 Sites Monitoring and Mitigation Strategy.

9.3 Potential Avoidance Measures for Recreation Impacts on all European sites, with particular reference to Roydon Common and Dersingham Bog SAC/ Ramsar (with potential to achieve SPA status).

The following habitat protection measures are proposed in order to mitigate potential adverse impacts upon nature conservation sites covered by the Habitats Regulations, arising from increased recreational pressure associated with the allocated development. These should be applied in proportion with the size of the proposed development.

Proposals will be expected to provide enhanced informal recreational provision on (or in close proximity to) the allocated site, to limit the likelihood of additional recreational pressure (particularly in relation to exercising dogs) on nearby relevant nature conservation sites. This provision will be likely to consist of an integrated combination of:

a. Informal open space (over and above the Borough Council's normal standards for play space); the spaces provided will need to demonstrate their suitability for a variety of uses, including linear/ circular routes for dog exercising.

b. Landscaping, including landscape planting and maintenance. Landscaping in itself will make little difference to alleviate recreational pressure on Roydon Common or Dersingham Bog; however it may help to make the new housing areas more attractive to residents and dissuade them from travelling a greater distance, potentially to a SAC or SPA site.

c. A network of attractive pedestrian routes, and car access to these, which provide a variety of terrain, routes and links to the wider public footpath network;

d. Contribution to enhanced management of nearby designated nature conservation sites and/or alternative green space; see section 9.4 below. Measures are likely to include, but not be limited to: education and enforcement; information provision; Visitor management; dog control; access restrictions; specific studies; fencing/planting/landscaping/screening; gating; signage; bird hides; and wardening.

e. An ongoing programme of publicity to raise awareness of relevant environmental sensitivities and of alternative recreational opportunities away from the sensitive sites. For example, prominent and permanent signage could be provided both at the new development and at the sensitive sites.

f. The new developments will be subject to screening for HRA. This does not replace those measures specified above, nor does it abdicate the duties of this HRA; rather it provides an additional safeguard that, at the point of delivery, an adverse effect has been avoided.

g. Use of the European sites will be subject to ongoing monitoring, as a part of an agreed mitigation strategy. This will be to identify whether adverse effects on site integrity are predicted and, if so, the proportion of such harm arising from visitors from the developments in question. This monitoring must be able to provide timely evidence to inform the developers' obliged response, which would be likely to involve influencing future recreational use of these areas through future phases of development, contributions to European site management measures, alternative recreational provision, influencing wider recreation take up, or some combination of these.

h. There will be an ongoing dialogue, organised by the Borough Council and involving all relevant stakeholders, with the specific aim of reducing effects on these sites by examining the results of site monitoring and acting on any findings.

i. The Borough Council and other stakeholders will continue to seek long-term access to, or acquire, recreational greenspace on an opportunistic basis.

j. As the potential effects on the European sites come from a number of sources, some of which are outside the scope of this plan (for example existing settlements), the site managers should continue to innovate and explore ways of reducing on-site impacts of recreational disturbance. This will also be assisted by developer contributions via a universal Habitat Mitigation Contribution.

The above habitat protection measures will be enacted through the Natura 2000 Sites Monitoring and Mitigation Strategy.

9.3.1 Specific Avoidance and Mitigation Measures for North Norfolk Coast SPA and Wash SPA/ SAC

Avoidance of adverse effects in combination with other proposals outside the Borough has already been considered at Core Strategy level, but that the Preferred Options HRA specified that further work is needed to develop an agreed package of habitat protection measures. Baseline visitor pressure data, monitoring and management measures will need to be developed and demonstrated to be deliverable. The Borough Council will continue to work with its partners in pursuit of this.

With regard to the combined effect of housing proposals specific to the submission document (Heacham, Hunstanton, Docking, Burnham Market, Snettisham, Ingoldisthorpe, Dersingham), it is recommended that a parallel strategy of green infrastructure provision (as outlined above and detailed in the Natura 2000 Sites Mitigation and Monitoring Strategy), plus a programme of permanent public information, will be sufficient to ensure reduction of likely impacts to an insignificant level, and no adverse effect on site integrity. This will be tested for larger proposals by submission to HRA screening.

For the adjoining district of North Norfolk, a programme of monitoring was proposed in the site-specific HRA (Royal Haskoning 2009). The programme was designed to be proactive in helping to predict where adverse effects may occur within the European site. The Borough Council should consult with North Norfolk District Council to clarify progress with this monitoring programme, and where feasible, and in partnership with others, ensure that a similar programme is installed in West Norfolk.

9.3.2 Avoidance and Mitigation Measures for Breckland SPA

Breckland Council produced, as part of their Site-specific Policies and Proposals DPD (2012), an Access and Bird Monitoring Implementation Framework, of which the Borough Council are cited as having some responsibility. There is a joint responsibility for its delivery, with a number of other bodies, namely the Forestry Commission, Natural England, RSPB, Breckland Council, Forest Heath District Council and St Edmundsbury Borough Council.

The Framework requires annual monitoring of access levels across the Breckland SPA, and biennial monitoring of woodlark and nightjar populations. Any significant levels of disturbance will require mitigation by diverting access, creation of permanent areas of habitat suitable for woodlark and nightjar with low levels of access, and by mobile wardens and rangers.

The Borough Council will contribute to the monitoring of the SPA within the Borough, and participate in the delivery of the Framework as proposed by Breckland Council. The Habitat Mitigation Contribution (see 9.5 below) from housing within 8km of Breckland SPA will contribute towards the Framework.

9.4 Implementation of Avoidance and Mitigation Measures

The Borough Council has produced a Natura 2000 Sites Mitigation and Monitoring Strategy, from which the following section is an abridged version. The Strategy details how avoidance, mitigation and monitoring will be carried out. The monitoring and mitigation measures will be funded from a variety of sources and different bodies. These include making use of existing services and funding provided by the Council. Existing services provided by Natural England and other conservation organisations are also referenced where the funding is in place. Further funding is required from developers which will be sought through a Habitat Mitigation Contribution and planning obligations (also known as Section 106 agreements) and in the future through the CIL. The prime responsibility for funding of the directly provided mitigation measures will lie with the developer.

9.5.1 Proposed Habitat Mitigation Payments

A collective approach will take into account the cumulative impacts of many developments. Applying this approach reduces the burden on developers in respect of evidence required to accompany planning applications and also reduces the demands on local authorities to undertake assessments. This approach should also promote a more consistent, logical and reasoned approach to mitigation through which smaller sums of money, collected from smaller scale schemes, can be pooled and used to pay for more costly mitigation measures. It will also allow for larger scale developments to contribute in the same way.

The requirement for mitigation will apply to:

- Housing and tourist accommodation applications;
- The whole Borough area;
- All sizes of application from 1 unit upwards.

The need for mitigation will apply to all forms of housing/ tourist accommodation.

The developer will pay the standard Habitat Mitigation Contribution or may be required to provide mitigation in addition to the standard payment.

The size of the standard Habitat Mitigation Contribution is:

- £50 per house (index linked).
- For tourist accommodation the contribution will be calculated on a case by case basis by the Borough Council, depending on the type, location and seasonality of the accommodation.
- A fee of £50 will also be charged to cover legal and administration costs.
- The standard contribution is in addition to making the standard Public Open Space provision required for the development.

In a few special cases, where there will be a big impact, the standard mitigation may be insufficient and additional mitigation may be required. The Council will discuss this with the applicant. There may also be instances where the likely harm cannot be sufficiently mitigated and refusal will be necessary.

If the developer offers alternative mitigation, the Borough Council will have to undertake a full AA to check that the measures offered are adequate. This is potentially a lengthy process and the AA may find that the alternative mitigation offered is insufficient.

Alternative mitigation could be provision of a Suitable Accessible Natural Green Space (SANGS). There are strict size and quality requirements for SANGS: a SANGS site must be at least 2ha in size, and at least 8ha/1,000 new residents. It must be of a particular countryside-landscape character, with an adequate level of facilities for recreational use and with provision for ongoing management.

9.5.2 Habitat Mitigation Advisory Panel

Section 9.3(h) identifies the need for ongoing dialogue with a range of bodies to both understand the results of monitoring and to coordinate existing and future works. It is proposed that the Borough Council form an advisory panel (Habitat Mitigation Advisory Panel) to assist it in making expenditure decisions on mitigating recreational impacts of new development through both Habitat Mitigation Contributions and any funding generated through CIL.

The Panel, advising Cabinet, will consist of representatives of bodies that have expertise in managing impacts on these habitats to make recommendations for projects and expenditure of monies and set priorities for future action to meet the requirement from the HRA. In addition, the Panel would consider the Green Infrastructure Action Plan and progress towards the implementation of projects within it.

The Panel will ensure timely and efficient mitigation of the recreational pressures arising from new development in the area of local European sites, in order to ensure compliance with the Habitat Regulations. The HRA identifies likely significant in-combination effects relating to Dersingham Bog and Roydon Common SAC/Ramsar, the North Norfolk Coast SPA/Ramsar, the Wash SPA/Ramsar, and the North Norfolk Coast and The Wash SAC. Breckland SAC/SPA is also likely to experience in-combination increases in visitor pressure. The monitoring and mitigation is therefore focused on these areas.

The functions of the Panel include the following:

- Agree and prioritise a 5 year programme for delivery of recreation mitigation, measures and monitoring;
- Provide expert advice;
- Allocate budget accordingly, taking account of other arising mitigation opportunities;
- Secure the cooperation of all stakeholders;
- Monitor risks, progress and effectiveness of delivery;
- Monitor effectiveness of mitigation and agree changes where necessary;
- Identify, lobby for and secure complementary funds;
- Identifying projects that can come forward in a timely manner and will result in cost effective mitigation benefits;
- Estimating costs and timescales;
- Overseeing effective management of mitigation measures to ensure their long-term effectiveness;
- Coordinating monitoring of European Site integrity.

The Panel would comprise:

- BCKLWN; Portfolio holder for environment, Officers.
- RSPB
- Norfolk Wildlife Trust
- Natural England
- Norfolk County Council – Green Infrastructure
- National Trust
- Forestry Commission
- Water Management Alliance
- Environment Agency

The Borough Council will administer the HMAP, which will report to Cabinet. Other interested parties will be invited to attend the Panel in an advisory capacity.

The Panel should meet quarterly. This frequency can be adjusted to suit the nature, amount and urgency of business. Meetings are not required to be held in public and recommendations made by the Panel will be published in the normal way through the Cabinet system.

9.6 Policy DM19 – Re-wording

The following re-wording of DM19 is proposed:

Context

C.19.1 Green Infrastructure is a term that encompasses a wide range of green and blue spaces and other environmental features. Ensuring that there is a network of green infrastructure is important to the health and wellbeing of local people and for biodiversity.

C.19.2 The Green Infrastructure Study was completed in 2010 and provides a Borough-wide analysis of:

- *existing provision,*

- *deficiencies in provision,*
- *potential improvements to green infrastructure,*
- *policies to deliver green infrastructure,*
- *High, medium and low priority projects in addition to specific policies that will deliver green infrastructure.*

C.19.3 This Study has been supplemented by ~~a~~ recent (2013) research identifying existing green infrastructure projects around the Borough being undertaken by a range of agencies. This combined information will aid the Council in developing and targeting further green infrastructure funds and endeavours, particularly in relation to planned development which has been identified by the Habitats Regulations Assessment as having potential adverse impacts on designated nature conservation sites. By supporting existing projects, or filling gaps (geographical or type) in existing or emerging provision, the Council's efforts can be targeted to best effect.

Relevant Local and National Policies

- *National Planning Policy Framework: Conserving and enhancing the natural environment*
- *Natural Environment White Paper – The Natural Choice: securing the value of nature (2011)*
- *Core Strategy Policy CS12 Environmental Assets*
- *Core Strategy Policy CS13 Community and Culture*
- *Core Strategy Policy CS14 Infrastructure Provision*
- *Green Infrastructure Strategy Stage 1 (2009) and Stage 2 (2010)*

Policy Approach

C.19.4 Retaining and developing the Borough's green infrastructure network is highly important to the long-term wellbeing of the area, its residents and visitors. Furthermore the Habitats Regulations Assessment identified potential effects on designated European sites of nature conservation importance from additional recreational pressure. The need for monitoring and, where necessary, a package of mitigation measures, both on and off site, were identified to ensure no adverse effects on European sites.

Policy DM 19 – Green Infrastructure/Habitats Monitoring and Mitigation

Opportunities will be taken to link to wider networks, working with partners both within and beyond the Borough.

The Council supports delivery of the projects detailed in the Green Infrastructure Study including:

- *The Fens Waterway Link – Ouse to Nene;*
- *The King's Lynn Wash/Norfolk Coast Path Link;*
- *Gaywood Living Landscape Project;*
- *The former railway route between King's Lynn and Hunstanton; and*

- *Wissey Living Landscape Project.*

The Council will identify, and coordinate strategic delivery, with relevant stakeholders, of an appropriate range of proportionate green infrastructure enhancements to support new housing and other development and mitigate any potential adverse effects on designated sites of nature conservation interest as a result of increased recreational disturbance arising from new development.

These enhancements will be set out in a Green Infrastructure Delivery Plan.

Major development will contribute to the delivery of green infrastructure, except:

- *Where it can be demonstrated the development will not materially add to the demand or need for green infrastructure.*

Where such a contribution would make the development unviable, the development will not be permitted unless:

- *It helps deliver the Core Strategy; and*
- *There is no adverse effect on a European Protected Site; or*
- *The relevant contribution to that Strategy could not be achieved by alternative development, including in alternative locations or in the same location at a later time; or*
- *Unless the wider benefits of the proposed development would offset the need to deliver green infrastructure enhancements.*

More detailed local solutions based on the Green Infrastructure Strategy will be developed for Downham Market and Hunstanton, particularly in relation to the main growth areas and King's Lynn and surrounding settlements.

In relation to Habitats Regulations Assessment monitoring and mitigation the Council has endorsed a Monitoring and Mitigation Strategy including:

- ***Project level HRA to establish affected areas (SPA, SAC, RAMSAR, etc.) and a suite of measures including all/some of:***
  - ***I. On site provision of suitable measures (as per, for example, South Wootton E3.1, 1d) i);***
  - ***II. Offsite mitigation;***
  - ***III. Offsite alternative natural green space;***
  - ***IV. Publicity, etc.***
- ***Notwithstanding the above suite of measures the Borough Council will levy an interim Habitat Mitigation Payment of £50 per house to cover monitoring/small scale mitigation at the European sites. The amount payable will be reviewed following the results of the 'Visitor Surveys at European Sites across Norfolk during 2015 and 2016'.***
- ***The Borough Council anticipates utilising CIL receipts (should a CIL charge be ultimately adopted) for contributing to green infrastructure provision across the plan area.***

- ***Forming a HRA Monitoring & Mitigation & GI Coordination Panel to oversee monitoring, provision of new green infrastructure through a Green Infrastructure Delivery Plan and the distribution of levy funding.***

9.7 Feltwell and Hockwold-cum-Wilton

The allocations at Feltwell and Hockwold, totalling 75 houses, are in 3 separate locations, two in Feltwell (G35.1 and G35.2) and one in Hockwold (G35.4). While the two allocations in Feltwell (totalling 70 houses) are completely masked from the Breckland SPA by existing development, the Hockwold allocation is not, but is around 1,700 metres from the unmasked SPA. The allocations are therefore compliant with policy CS12, which states that "*New built development will be restricted within 1,500m 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 the Breckland SPA.*"

The allocations should nevertheless be subject to project level HRA in respect to recreational effects on Breckland SPA. Habitat Mitigation Contributions levied from development within 8km of the Breckland SPA should contribute towards the Access and Bird Monitoring Implementation Framework established throughout Breckland.

9.8 Summary of Avoidance and Mitigation Proposals

Table 11 below summarises the measures for avoidance of harm and mitigation which will be applied to developments identified as having a likely significant effect.

Table 11: Appropriate Assessment

Sites and mechanisms for impacts	Can it be ascertained it will not adversely affect the integrity of the European Site	Can it be carried out in a different way or be conditioned or restricted?	Modification to original policy	Can it be ascertained that the modified policy will not adversely affect the integrity of the European Site
Feltwell & Hockwold cum Wilton: 75 homes. Proximity impacts to stone curlew. In-combination recreational impacts on woodlark and nightjar.	No	Yes	Feltwell allocations are completely masked from the SPA by existing development, and Hockwold allocations are more than 1.5km from the SPA, and are therefore compliant with policy CS12. Developments within Feltwell should only be permitted if no adverse effects on the SPA are determined by a project-level Habitats Regulations Assessment, with regard to in-combination recreational impacts on woodlark and nightjar. Contributions from the Habitat Mitigation Contribution would be expected to go to the Breckland Access and Bird Monitoring Implementation Framework.	Yes
Dersingham Bog SAC/ Ramsar in combination impacts from housing at Knight's Hill, South Wootton, Dersingham, Snettisham and Ingoldisthorpe (974 houses)	No	Developments can be modified and designed to reduce off-site impacts.	Approach specified in Section 9.2 to be applied to larger proposals. To provide additional certainty, larger proposals should be subject to screening for project level HRA. Sites should be subject to the process outlined in the Mitigation and Monitoring Strategy, and to the updated wording of Policy DM19.	Yes

Sites and mechanisms for impacts	Can it be ascertained it will not adversely affect the integrity of the European Site	Can it be carried out in a different way or be conditioned or restricted?	Modification to original policy	Can it be ascertained that the modified policy will not adversely affect the integrity of the European Site
Roydon Common SAC/ Ramsar in combination impacts from housing at King's Lynn, Knight's Hill, South Wootton, Runcton/ West Winch, Gayton/ Grimston/ Pott Row, and Hillington. (4001 houses)	No	Development can be modified and designed to reduce off-site impacts.	Approach specified in Section 9.2 to be applied to larger proposals. To provide additional certainty, larger proposals should be subject to screening for project level HRA. Sites should be subject to the process outlined in the Mitigation and Monitoring Strategy, and to the updated wording of Policy DM19.	Yes
North Norfolk Coast SPA In combination effects from housing at Hunstanton, Docking and Burnham Market.	No	Yes	Policy should ensure the provision of such facilities and, if required to achieve this, an increase/improvement in local greenspace provision over and above the normal allocation. Developments should be required to provide a programme of publicity aimed at occupants of the development and other residents highlighting the opportunities for recreation (especially dog-walking) in the vicinity avoiding areas within the Wash Special Protection Area and the North Norfolk Coast Special Protection Area. To provide additional certainty, larger proposals should be subject to screening for project level HRA. Sites should be subject to the process outlined in the Mitigation and Monitoring Strategy, and to the updated wording of Policy DM19.	Yes

Sites and mechanisms for impacts	Can it be ascertained it will not adversely affect the integrity of the European Site	Can it be carried out in a different way or be conditioned or restricted?	Modification to original policy	Can it be ascertained that the modified policy will not adversely affect the integrity of the European Site
Wash SPA In-combination effects from new housing at Hunstanton, Heacham, Snettisham, Sedgeford, Ingoldisthorpe and Dersingham.	No	Yes	Policy should ensure the provision of such facilities and, if required to achieve this, an increase/improvement in local greenspace provision over and above the normal allocation. Developments should be required to provide a programme of publicity aimed at occupants of the development and other residents highlighting the opportunities for recreation (especially dog-walking) in the vicinity avoiding areas within the Wash Special Protection Area and the North Norfolk Coast Special Protection Area. To provide additional certainty, larger proposals should be subject to screening for project level HRA. Sites should be subject to the process outlined in the Mitigation and Monitoring Strategy, and to the updated wording of Policy DM19.	Yes
Wash and North Norfolk Coast SAC In-combination effects from new housing at Hunstanton, Heacham, Snettisham, Sedgeford, Ingoldisthorpe, Dersingham and Burnham Market.	No	Yes	Policy should ensure the provision of such facilities and, if required to achieve this, an increase/improvement in local greenspace provision over and above the normal allocation. Developments should be required to provide a programme of publicity aimed at occupants of the development and other residents highlighting the opportunities for	Yes

Sites and mechanisms for impacts	Can it be ascertained it will not adversely affect the integrity of the European Site	Can it be carried out in a different way or be conditioned or restricted?	Modification to original policy	Can it be ascertained that the modified policy will not adversely affect the integrity of the European Site
			recreation (especially dog-walking) in the vicinity avoiding areas within the Wash Special Protection Area and the North Norfolk Coast Special Protection Area. To provide additional certainty, larger proposals should be subject to screening for project level HRA. Sites should be subject to the process outlined in the Mitigation and Monitoring Strategy, and to the updated wording of Policy DM19.	

10. Conclusion

This document has considered potential effects on designated nature conservation sites of European importance as a result of the Site Allocations and Development Management Policies – Proposed Submission Document for the Borough of King's Lynn and West Norfolk. The potential effects were considered to arise from loss of supporting habitats, habitat fragmentation, non-specific proximity impacts, increased recreation and leisure pressures, increased use of roads, and the cumulative recreational impacts on sites arising from multiple housing allocations.

By far the most important of these, in a borough-wide context, was considered to be the multi-faceted and complex impacts arising from increased recreation and leisure pressures on European sites. These were considered in some detail, and the best available evidence was used to inform the assessment. This indicated that visitors likely to cause greatest impacts were those local site users, in particular those exercising dogs. Impacts were predicted to be greatest where local users were within comfortable walking distance of European sites (estimated to be 1km), and would also occur where sites were in a reasonable range of driving (estimated to be around 8km or 5 miles).

While the effects of individual preferred options for housing were considered not to give rise to Likely Significant Effect, a more substantial effect was predicted when the in-combination effects of groups of new housing allocations within range of the European sites were considered. This was especially severe for the combined heath/ bog of Roydon Common and Dersingham Bog SAC/Ramsar, where visitor numbers are already considered to be at their upper limit.

Following consultation and input from consultees, a Natura 2000 Sites Monitoring and Mitigation Strategy has been developed and endorsed by the Borough Council's Cabinet, which will provide for funding of monitoring and small scale mitigation of impacts on European sites. It will also provide for a Habitat Mitigation Advisory Panel, which will advise the Borough Council on such measures and provide recommendations for allocation of funds.

This Strategy will contribute to safeguarding the integrity of European sites within, and adjacent to the Borough boundary and will be monitored and reviewed to ensure the effectiveness of the identified measures. Partnership working is a key component of the Strategy and the Borough Council will continue to pursue a joined up approach with all relevant authorities, organisations and site owners with responsibility for managing the designated European Sites.

The Natura 2000 Sites Monitoring and Mitigation Strategy therefore provides the required certainty that future developments **will not result in adverse effects** on European sites within the Borough.

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