Appropriate Assessment

for

Ipswich Borough Council
Draft Core Strategy and Policies DPD
Focused Review

January 2014

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Quality control

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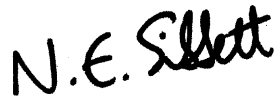
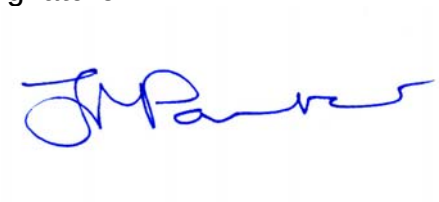
Signature: 	Signature: 
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Date: 10th January 2014	Date: 10th January 2014

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This document is the Appropriate Assessment under the Conservation of Habitats and Species Regulations 2010, of Ipswich Borough Council's Draft Core Strategy and Policies DPD Focused Review, which forms part of the Council's Local Plan. There are 20 Core Strategy policies and 32 Development Management policies within the plan.

The Appropriate Assessment in this report is carried out on behalf of Ipswich Borough Council to allow it to decide whether to give effect to the plan. The plan would not be sound if the Appropriate Assessment could not show that there was no adverse affect upon the integrity of nature conservation sites of European importance as recognised by their designation as Special Areas of Conservation and / or Special Protection Area. The Draft Core Strategy and Policies DPD Focused Review is likely to be subject to an Examination in Public, and this Appropriate Assessment will also be open to scrutiny at that Examination.

Screening of 'Likely Significant effect' identified that policy CS7 and related issues was The assessment showed that Policy CS7, 'The Amount of Housing Required', and related policies would not have an adverse affect upon the integrity of European sites. Additional recreational impact causing disturbance to birds on the Stour and Orwell Estuaries SPA and causing disturbance or harm to European sites at greater distance would not occur, due to mitigation within the Draft Core Strategy and Policies DPD Focused Review. The mitigation includes a new Country Park in the Ipswich northern fringe, visitor management plans for existing European sites, requiring major new developments to include on-site public open spaces and wildlife habitat, and others. Other policies would not have any impact. The mitigation was also satisfactory to mitigate any potential harm from the Draft Core Strategy and Policies DPD Focused Review in combination with the Local Plan of Suffolk Coastal District Council and no inc-combination adverse affect was identified.

1 Introduction

1.1 The plan being considered

1.1.1 This document is the Appropriate Assessment under the Conservation of Habitats and Species Regulations 2010, of Ipswich Borough Council's Draft Core Strategy and Policies DPD Focused Review. This forms part of the Ipswich Local Plan and covers three areas of policy.

1.1.2 Firstly, it sets out a strategic vision and objectives to guide the development of the town. Secondly it promotes the spatial strategy for the development of the town over the next fifteen years through strategic policies, and thirdly it provides a suite of policies to control, manage and guide development across the Borough.

1.1.3 The Draft Core Strategy and Policies DPD Focused Review sets out the strategy for the future development of Ipswich to 2031. It indicates broadly how and where the Borough will accommodate development to meet local needs identified in the Ipswich Community Strategy and through local evidence. It also explains how it will ensure this is done in a sustainable way. It contains detailed policies to enable the management of development in Ipswich.

1.1.4 An Appropriate Assessment of the Ipswich Borough Council Core Strategy and Policies DPD was undertaken in 2009, and updated in November 2010 for the Focussed Review at that time, was carried out by The Landscape Partnership.

1.2 Appropriate Assessment requirement

1.2.1 The Appropriate Assessment process is required under the Conservation of Habitats and Species Regulations 2010. These regulations are often abbreviated to, simply, the 'Habitats Regulations'.

1.2.2 Regulation 102 states that

> (1) Where a land use plan—
>
> (a) is likely to have a significant effect on a European site in Great Britain or a European offshore marine site (either alone or in combination with other plans or projects), and
>
> (b) is not directly connected with or necessary to the management of the site,
>
> the plan-making authority for that plan shall, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site's conservation objectives.
>
> (2) The plan-making authority shall for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.
>
> (3) They shall also, if they consider it appropriate, take the opinion of the general public, and if they do so, they shall take such steps for that purpose as they consider appropriate.
>
> (4) In the light of the conclusions of the assessment, and subject to regulation 103 (considerations of overriding public interest), the plan-making authority or, in the case of a regional spatial strategy, the Secretary of State shall give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).
>
> (5) A plan-making authority shall provide such information as the Secretary of State or the Welsh Ministers may reasonably require for the purposes of the discharge of the obligations of the Secretary of State or the Welsh Ministers under this Part.
>
> (6) This regulation does not apply in relation to a site which is—
>
> (a) a European site by reason of regulation 10(1)(c); or
>
> (b) a European offshore marine site by reason of regulation 15(c) of the 2007 Regulations (site protected in accordance with Article 5(4) of the Habitats Directive).

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1.2.3 The plan-making authority, as defined under the Regulations, is Ipswich Borough Council.

1.2.4 The screening in this report is carried out on behalf of Ipswich Borough Council to allow it to decide whether an Appropriate Assessment is required. The Draft Core Strategy and Policies DPD Focused Review is likely to be subject to an Examination in Public, and the screening process will also be open to scrutiny at that Examination.

1.3 Appropriate Assessment process

1.3.1 The Appropriate Assessment process involves a number of steps, which are set out sequentially below.

Likely significant effect

1.3.2 The Council, in consultation with Natural England should decide whether or not the plan is likely to have a significant effect on any European site. This is a 'coarse filter' and any effect, large or small, positive or negative, should be considered.

Connected to management of the site

1.3.3 The Council should decide whether the plan is connected to the nature conservation management of European sites. Invariably, for a development plan, this is not the case.

Screening

1.3.4 The combination of decisions on likely significant effect and connections to management is often called 'screening'. If the plan is likely to have a significant effect, and is not connected to the management of the site, an Appropriate Assessment is required.

Scoping

1.3.5 The whole plan must be assessed, but a 'scoping' exercise helps decide which parts of the plan have potential to give rise to significant effects and therefore where assessment should be prioritised. Natural England is an important consultee in this process. The implementation of both screening and scoping process is described in Section 3 below.

Consultations

1.3.6 Natural England is a statutory consultee, and so should be consulted at the draft plan stage. The public may also be consulted if it is considered appropriate, for example if the appropriate assessment is likely to result in significant changes to the plan.

Iterations and revision

1.3.7 The process is iterative; the conclusions of the first assessment may result in changes to the plan, and so a revision of the assessment would be required. If the revised assessment suggests further plan changes, the iteration will continue.

1.3.8 Iterative revisions typically continue until it can be ascertained that the plan will not have an adverse affect on the integrity of any European site.

1.3.9 There are further provisions for rare cases where over-riding public interest may mean that a land-use plan may be put into effect, notwithstanding a negative assessment, where there are no alternatives to development, but these provisions are not expected to be routinely used.

Guidance and good practice

1.3.10 This report has taken account of published guidance and good practice including: Department for Communities and Local Government, 2006, *Planning for the Protection of European Sites: Appropriate Assessment under The Conservation (Natural Habitats &c.) (Amendment) (England and Wales) Regulations 2006: Guidance for Regional Spatial Strategies and Local Development Documents*; Office of the Deputy Prime Minister (ODPM), Circular 06/2005, Department for Environment Food and Rural Affairs Circular 01/2005, *Biodiversity and Geological Conservation: Statutory obligations and their impact within the planning system*; and Royal Society for the Protection of Birds, 2007, *The Appropriate Assessment of Spatial Plans in England: A guide to why, when and how to do it*.

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1.4 European sites

1.4.1 European sites, often known as Natura 2000 sites across Europe, are those legally registered as Special Protection Areas (for bird sites) and Special Areas of Conservation (for species other than birds, and habitats). These are usually abbreviated as SPA and SAC respectively. Wetlands of International Importance, designated under the Ramsar Convention, are usually abbreviated as Ramsar sites.

1.4.2 Although the Appropriate Assessment process only legally applies to European sites, Government Policy in NPPF[1] is to apply the same protection to potential Special Protection Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites. The use of the term 'European site' or 'European sites' in this report includes all those sites to which Government policy applies.

1.4.3 As the interest features of the Ramsar sites are usually very similar to the interest features of the SPA and / or SAC designations, both geographically and ecologically, the assessment below, for clarity does not always repeat Ramsar site names. The assessment does however consider Ramsar sites fully, and if an assessment for a Ramsar site was found to differ from that for the respective SPA / SAC, this would be clearly identified.

[1] National Planning Policy Framework (March 2012). Department of Communities and Local Government.

2 European sites potentially affected

2.1 Sites within the Local Plan area

2.1.1 All European sites within the Local Plan area are potentially affected. There is one site within Ipswich Borough which is designated as SPA and as a Ramsar site, with much overlap between designations. The site location is shown in Figure 01.

2.1.2 Appendix 1 gives details of the European site within Ipswich Borough (from JNCC), and Appendix 2 gives Natural England's Conservation Objectives for the SPA.

Stour and Orwell Estuaries SPA

2.1.3 The Stour and Orwell Estuaries is a wetland of international importance, comprising extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. It provides habitats for an important assemblage of wetland birds in the non-breeding season and supports internationally important numbers of wintering and passage wildfowl and waders.

Stour and Orwell Estuaries Ramsar site

2.1.4 In addition to the internationally important bird interest as set out above, the Ramsar site also supports several nationally scarce plant species and British Red Data Book invertebrates.

2.2 Sites outside the Local Plan area

2.2.1 European sites in neighbouring Districts are also potentially affected by development within Ipswich Borough.

2.2.2 European sites in the vicinity are large and in some instances overlap Local Authority boundaries, so are listed below without reference to specific Districts/Boroughs. A 15km radius from the boundary of Ipswich Borough was chosen as the 'area of search' within which European sites potentially affected by development in the Local Plan were identified. Sites are shown in Figure 01. Appendix 3 gives details of the European sites within a 15km radius from the boundary of Ipswich Borough (from JNCC), and Appendix 4 gives Natural England's Conservation Objectives for these sites. Appendix 5 gives the site plan for Hamford Water candidate SAC as it is not yet available in GIS form for inclusion on Figure 01.

2.2.3 European sites within the 15km radius are;

Hamford Water candidate SAC

2.2.4 Hamford Water is a large, shallow estuarine basin comprising tidal creeks, islands, intertidal mud, sand flats and saltmarshes. Above the saltmarsh there is unimproved and improved grassland (including grazing marsh), scrub, woodland, hedges, ditches, ponds and reedbeds. The SAC encompasses those areas where Fisher's Estuarine Moth's food plant hog's fennel (*Peucedanum officinale*) grows and where there is an abundance of the grasses required by the species for egg laying. Fisher's Estuarine Moth *Gortyna borelii lunata* has a localised population distribution in the UK, due to its specific habitat requirements and is only found in two areas, the north Essex coast and the north Kent Coast. Hamford Water supports the majority of the Essex population and is the most important UK site for this species, supporting approximately 70% of the population. The SAC is small in size, in comparison to the SPA.

Hamford Water SPA and Ramsar site

2.2.5 Hamford Water SPA and Ramsar site is an estuary and saltmarsh system which supports a great number of breeding and wintering birds.

Deben Estuary SPA / Ramsar

2.2.6 The Deben Estuary is designated as SPA and as Ramsar. The estuary supports a highly complex mosaic of habitat types including mudflats, lower and upper saltmarsh, swamp and scrub. The composition of the mosaic varies with substrate, frequency and duration of tidal inundation, exposure, location and management.

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2.2.7 The SPA designation is based on large numbers of wintering Avocet and Dark-bellied Brent geese, whereas the Ramsar designation also includes a wider range of migrating and wintering birds, flora, and fauna including the rare snail *Vertigo angustifolia*.

Sandlings SPA

2.2.8 Sandlings SPA contains heathland and conifer plantation which support nightjar and woodlark.

Staverton Park and the Thicks SAC

2.2.9 This site is representative of old acidophilous oak woods in the eastern part of its range, and its ancient oaks *Quercus* spp. have rich invertebrate and epiphytic lichen assemblages. Despite being in the most 'continental' part of southern Britain, the epiphytic lichen flora of this site includes rare and Atlantic species, such as *Haemotomma elatinum*, *Lecidea cinnabarina*, *Thelotrema lepadinum*, *Graphis elegans* and *Stenocybe septata*. Part of the site includes an area of old holly *Ilex aquifolium* trees that are probably the largest in Britain. The site has a very well-documented history and good conservation of woodland structure and function.

Alde-Ore Estuary SPA / Ramsar

2.2.10 Alde-Ore Estuary SPA is an estuary with extensive areas of saltmarsh and shingle habitats, which supports a large number of wintering and breeding bird species.

2.2.11 The Ramsar site, with the same boundaries as the SPA, comprises the estuary complex of the rivers Alde, Butley and Ore, including Havergate Island and Orfordness. There are a variety of habitats including, intertidal mudflats, saltmarsh, vegetated shingle (including the second-largest and best-preserved area in Britain at Orfordness), saline lagoons and grazing marsh. The Orfordness/Shingle Street landform is unique within Britain in combining a shingle spit with a cuspate foreland. The site supports nationally-scarce plants, British Red Data Book invertebrates, and notable assemblages of breeding and wintering wetland birds.

Alde, Ore and Butley Estuaries SAC

2.2.12 This estuary, made up of three rivers, is the only bar-built estuary in the UK with a shingle bar. This bar has been extending rapidly along the coast since 1530, pushing the mouth of the estuary progressively south-westwards. It is relatively wide and shallow, with extensive intertidal mudflats on both sides of the channel in its upper reaches and saltmarsh accreting along its fringes. The Alde subsequently becomes the south-west flowing River Ore, which is narrower and deeper with stronger currents. The smaller Butley River, which has extensive areas of saltmarsh and a reedbed community bordering intertidal mudflats, flows into the Ore shortly after the latter divides around Havergate Island. There is a range of littoral sediment and rock biotopes (the latter on sea defences) that are of high diversity and species richness for estuaries in eastern England. Water quality is excellent throughout. The area is relatively natural, being largely undeveloped by man and with very limited industrial activity. The estuary contains large areas of shallow water over subtidal sediments, and extensive mudflats and saltmarshes exposed at low water. Its diverse and species-rich intertidal sand and mudflat biotopes grade naturally along many lengths of the shore into vegetated or dynamic shingle habitat, saltmarsh, grassland and reedbed.

Orfordness – Shingle Street SAC

2.2.13 Orfordness – Shingle Street SAC contains coastal lagoons, annual vegetation of drift lines and perennial vegetation of stony banks.

2.2.14 The lagoons at this site have developed in the shingle bank adjacent to the shore at the mouth of the Ore estuary. The salinity of the lagoons is maintained by percolation through the shingle, although at high tides sea water can overtop the shingle bank. The fauna of these lagoons includes typical lagoon species, such as the cockle *Cerastoderma glaucum*, the ostracod *Cyprideis torosa* and the gastropods *Littorina saxatilis tenebrosa* and *Hydrobia ventrosa.* The nationally rare starlet sea anemone *Nematostella vectensis* is also found at the site.

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2.2.15 Orfordness is an extensive shingle spit some 15 km in length and is one of two sites representing Annual vegetation of drift lines on the east coast of England. The drift-line community is widespread on the site and comprises sea beet *Beta vulgaris* ssp. *maritima* and orache *Atriplex* spp. in a strip 2-5 m wide.

2.2.16 The spit supports some of the largest and most natural sequences in the UK of shingle vegetation affected by salt spray. The southern end of the spit has a particularly fine series of undisturbed ridges, with zonation of communities determined by the ridge pattern. Pioneer communities with sea pea *Lathyrus japonicus* and false oat-grass *Arrhenatherum elatius* grassland occur. Locally these are nutrient-enriched by the presence of a gull colony; elsewhere they support rich lichen communities. The northern part of Orfordness has suffered considerable damage from defence-related activities but a restoration programme for the shingle vegetation is underway.

2.3 Other relevant plans or projects affecting these sites

2.3.1 In addition to a potential effect from the Ipswich Local Plan, the European sites may also affected by a number of plans or projects, including Local Plans of other neighbouring Local Authorities, existing developments and proposed developments, management carried out by land managers with the consent of Natural England, projects of statutory agencies and utility companies such as projects affecting the water environment, and third party effects such as recreation, etc.

2.3.2 In the context of this Appropriate Assessment screening, the most relevant other plans or projects to be considered are

- Suffolk Coastal District Local Plan - Core Strategy and Development Management Policies
- Babergh District Council Local Plan - Core Strategy and Policies
- Mid Suffolk District Council Local Plan – Core Strategy

2.3.3 These plans are considered as part of this Appropriate Assessment screening.

3 Likely significant effects

3.1 Connected with the management of European sites

3.1.1 It is considered that the Ipswich Borough Draft Core Strategy and Policies DPD Focused Review is not necessary for, or connected with, the nature conservation management of any European sites.

3.2 Criteria for screening of individual policies

3.2.1 The screening of individual policies is a process to determine which, if any, of the individual policies requires individual assessment. For example, some of the proposed policies might each have a direct or indirect effect upon an international site, whilst other individual policies may have no effect. Criteria are set to determine which individual polices may have an effect. Effects from a combination of policies are also considered.

3.2.2 The criteria for determining if an individual policy, or a combination of policies, would have a likely significant effect, and require assessment, are based on the characteristics of the relevant European site and the objectives set by Natural England. The main factors to consider are

- Development on or close to the European site destroying part or all of the site, or changing the ecological functioning of the site (e.g. disrupting water flows or migration routes, or providing damaging levels of air pollution)
- Increased public recreation, causing disturbance to birds, damage to vegetation, increased littering / flytipping, or leading to management compromises (e.g. grazing being restricted).
- Reduction in water levels or flow, from increased water demand in the District requiring greater water abstraction
- Reduction of water quality, from increased discharges of sewage and surface water drainage, or from pollution incidents, either during, or after, construction

3.2.3 Development on or close to the European site is a location-dependent factor, but the other factors may affect a European site at some distance from development.

3.3 Screening of individual policies

3.3.1 The table in Appendix 6 lists each policy, with a brief explanation of the policy, and assessed whether the policy is likely to have a significant effect on any European site.

3.3.2 The conclusion drawn from the table in Appendix 6 is that Policy CS7, 'The Amount of Housing Required', is likely to have a significant effect on one or more European sites. Whilst Policy CS2 'The location and nature of development' and Policy CS10 'Ipswich Northern Fringe' are not likely to have a significant effect in themselves, they are considered together with Policy CS7.

3.4 Screening of the whole Plan

3.4.1 Policies in this Plan do not have cumulative effects on European sites and the whole plan has no greater likely significant effect than that resulting from Policy CS7 alone.

3.5 Screening of the Plan in combination with other plans

3.5.1 An Appropriate Assessment of the Suffolk Coastal District Council Local Plan Core Strategy and Development Management Policies document adopted in July 2013 has shown that it would not have an adverse effect upon the integrity of any European site, alone or in combination with the Ipswich Borough Local Plan. Mitigation to prevent an adverse effect from the Suffolk Coastal Local Plan includes joint working with Ipswich Borough to provide a Country Park and visitor management plans. It is possible that changes to the Ipswich Borough Draft Core Strategy and Policies DPD Focused Review, since the Suffolk Coastal District Council Local Plan Core Strategy and Development Management Policies document was adopted in July 2013, may have an in-combination effect and so need to be assessed.

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3.5.2 A Habitats Regulations screening for the Babergh District Council Core Strategy submission draft was published in September 2011. It concluded that the proposals for development within Babergh District were unlikely to have a significant effect on any European site, even though a large residential development was proposed at Brantham close to the Stour and Orwell Estuaries SPA. An addendum in June 2012 assesses subsequent changes to the Core Strategy and comes to a similar conclusion. It is not likely that there will be a significant in-combination effect due to the scale and location of proposed development within the Babergh Local Plan.

3.5.3 The Mid Suffolk Core Strategy underwent a Focussed Review in 2012. The Inspector at Examination in Public agreed that an Appropriate Assessment of the Plan was not necessary because the Reviewed Core Strategy would not have a likely significant effect upon any European site. It is not likely that there will be a significant in-combination effect due to the scale and location of proposed development within the Mid Suffolk Local Plan.

3.6 Conclusion of screening ('likely significant effect')

3.6.1 It is concluded that the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review is likely to have a significant effect on European sites, particularly with respect to 'The Amount of Housing Required' (Policy CS7) and related policies (CS2, CS10). This conclusion is made for the Plan alone, and in combination with the Suffolk Coastal adopted Core Strategy and Policies Local Plan document. An Appropriate Assessment of the Plan is therefore necessary.

4 Methods of assessing European site visitor increases from an increased human population

4.1 Introduction

4.1.1 This Section discusses the increased population arising from proposed housing in Ipswich Borough and in Suffolk Coastal District to take into account cumulative impacts.

4.1.2 Assessment of the impact on European sites of proposed new housing some distance away is not straightforward; for example there are no generic guidelines on impacts, distance thresholds, etc. The potential impacts of housing at a distance are briefly introduced in Section 4 above. In this Section, the methods of assessing an increased human population near European sites are discussed.

4.1.3 The existing human population can cause impacts on European sites through disturbance of birds and other fauna, trampling damage to habitat, litter, fires, interference with management works (e.g. theft of equipment or causing a reluctance to graze when people have free access). Natural England currently monitors the Sites of Special Scientific Interest which form the European sites. If human impacts are currently adverse we would expect those sites, or parts of those sites, to be recorded as being in unfavourable condition even if the cause of the unfavourable condition is not known. Existing condition assessments are discussed in Section 5.2 below.

The amount of housing proposed in Ipswich Borough

4.1.4 The Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review contains proposals for 13,550 new dwelling units to be provided in Ipswich between 2011 and 2031 focused primarily within the central Ipswich 'IP-One' area and within and adjacent to identified district centres (these areas are identified on the key diagram). The proposals comprise 379 dwellings completed between 2011 and 2013, 574 dwellings under construction, 1654 dwellings with planning permission but not constructed by July 2013, 653 dwellings with a resolution to grant planning permission, and 10,520 new dwellings in allocations, broad locations or windfall sites to 2031. Of the 10,520 new dwellings, 4611 will be windfall sites and 5909 will be allocated by the Borough.

The amount of housing proposed in Suffolk Coastal District

4.1.5 The Suffolk Coastal District Local Plan Core Strategy and Development Management Policies (July 2013), contains proposals for 7,900 new dwellings, comprising 1,480 dwellings with planning permission, 230 new dwellings on identified brownfield potential sites within existing physical limits boundaries, 80 dwellings previously allocated, an estimated windfall of 850 dwellings, and 5,260 new allocations on greenfield land. This gives an average annual requirement of 465 new dwellings per year between 2010 and 2027.

4.1.6 The total amount of the housing proposed within the Suffolk Coastal District Local Plan Core Strategy and Development Management Policies is given in its table 3.3, as 2,320 dwellings in the Eastern Ipswich plan area, 1,760 new dwellings in Felixstowe Walton and the Trimleys, and 3,510 in the remainder of Suffolk Coastal District.

The use of three visitor typologies – tourist, day trips or local greenspace users

4.1.7 There are three typologies of visitors to European sites which can be used, where data is consistent with these typologies.

4.1.8 The first typology is the use of European greenspace by tourists staying overnight in the area, for example on short breaks or longer holidays. It is considered that the holiday use of Ipswich or Suffolk Coastal is not altered greatly by the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review, as no major increase in tourist facilities is proposed, and assuming that housing development will not increase or decrease tourist use of European sites.

4.1.9 The second typology is the 'day trip' to European sites, often including visits to towns or other tourist facilities within the day. European sites might be visited for the enjoyment of nature

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(e.g. visitors to Walberswick National Nature Reserve), used as recreational sites (e.g. the shingle beaches within SACs) or simply as a backdrop to walks within a beautiful landscape. 'Day trips' can include people travelling from substantial distances away.

4.1.10 There is a limited amount of data regarding the quantity of visitors to European sites. A survey within the Suffolk Coast and Heaths AONB in 2004 provides useful data which can be used to predict increases in visitor numbers from new housing. The impacts of these extra visitors are hard to predict. One study, however, has looked at the impact of recreational disturbance on birds in the Stour and Orwell Estuaries SPA, which gives good evidence of impacts. This is discussed in Section 4.3 below, which concentrates on 'day trips' only.

4.1.11 The third typology is the use by people of European sites close to their homes for recreation or other activities. These visits tend to treat the European sites simply as convenient local greenspace. An example might be someone living near an estuary walking or driving a short distance to take a dog for a walk. This is discussed in section 5.6 below, regarding specific sites close to areas of new development.

4.1.12 Further studies of visitors to the South Sandlings, and to the Deben Estuary at / near Waldringfield have been made available and include European sites within the influence of the Core Strategy. Natural England has published a national survey of People and the Natural Environment. These are discussed in Sections 4.5 and 4.7.

4.1.13 These typologies, using appropriate data, may be used to predict any change in visitors to European sites based on changes in numbers of people in each typology. The change in visitor numbers can be assessed to determine if that change would have an adverse affect upon the integrity of the European site.

Identifying the origin of visitors

4.1.14 Where data exists, the origin of visitors to European sites compared to the total number of people at that point of origin can be used to predict change in visitors; if the total number of people at a point of origin changes, the number of visitors from that point of origin may change proportionately.

4.2 Existing condition assessments of European sites

4.2.1 Natural England has a programme of monitoring Sites of Special Scientific Interest (SSSIs) to assess their condition against the objectives set for each site. The condition of the European sites is therefore referable to the condition of the component SSSIs. As some sites are very large, they are divided into 'units' for monitoring; units may vary in interest feature and/or management from other units on the site.

4.2.2 The condition assessments for the relevant component SSSIs (Section 2 above) were downloaded from Natural England's website[2] on 11th April 2011. The nineteen SSSIs are divided into around 400 units, each of which has been monitored at least once.

4.2.3 The outcome of monitoring is a judgement of unit condition into one of a number of categories, such as favourable, unfavourable recovering, unfavourable no change, unfavourable declining or destroyed. Favourable or unfavourable recovering conditions mean that its habitats and species are being conserved. If a unit is found to be in an unfavourable condition, this means there is a current lack of appropriate management, or that there are damaging impacts (which may be outside of the control of the owner) which need to be addressed[3].

4.2.4 Of the 400 or so SSSI units, nine were assessed as in unfavourable condition for reasons of public access / disturbance. Four of these SSSI units were within Minsmere – Walberswick Heaths and Marshes SSSI, (units 84, 85, 86, 110), two units were within Leiston – Aldeburgh SSSI, and three were within Alde-Ore Estuary SSSI. These units are all shingle beaches where human impact on vegetation is monitored. In 2009, nine units were also recorded as being in unfavourable condition but this comprised eight units at Minsmere – Walberswick SSSI and one

[2] www.naturalengland.org.uk
[3] Natural England (2009) SSSI condition assessment A guide for owners and occupiers

unit at Pakefield to Easton Bavents; four of the Minsmere – Walberswick SSSI units and the at Pakefield to Easton Bavents have recovered due to management action but new damage has been recorded at Alde-Ore Estuary SSSI and Leiston – Aldeburgh SSSI. However, the SPA qualifying feature of Leiston – Aldeburgh SSSI is not shingle beach, so the public access there is not harming the European site.

4.2.5 The unfavourable condition of the relevant SSSI units is considered to be an existing adverse affect on the integrity of the respective European sites.

4.2.6 It is interesting to note that there were no estuary or coastal SSSIs where disturbance to birds from human recreation is recorded as a reason for unfavourable no change or unfavourable declining condition. The condition assessment for unit 3 of the Orwell Estuary SSSI is favourable despite the large current public access from Orwell Country Park However, Natural England has commented that it does not routinely monitor disturbance to birds on Sites of Special Scientific Interest, and recreational impacts may therefore not be included as a reason for non-favourability in condition assessments.

4.2.7 Most units on the Stour Estuary SSSI were recorded in 2009 as unfavourable because of 'coastal squeeze', although the comments at that time suggested that there was a 'possible contribution from recreational disturbance'. Coastal squeeze occurs where the normal processes of coastal erosion are interrupted; the normal erosion of the seaward side of saltmarsh and mudflat continues but the normal erosion of dry land to form new saltmarsh and mudflat is prevented; the natural landward progression of saltmarsh and mudflat therefore does not occur and instead the areas of these habitats shrink. In 2010, nine of the ten units were assessed as in favourable condition and the possible recreational disturbance was no longer mentioned. Research shows that the amount of disturbance on the Stour Estuary SSSI from visitors is significantly less than that in the Orwell Estuary SSSI[4].

4.3 Calculations to predict additional visitors to European sites across the Suffolk Coast and Heaths AONB using Tourist Board data.

4.3.1 This section looks at the group of people classified as 'day visitors' in the three typologies described in section 4.1 above (i.e. those travelling a significant distance to a destination for recreation on an occasional basis, rather than a local and/or regular use of a place close to home. The survey locations were situated in such places that the majority of people would be day visitors rather than routine users of convenient local greenspace.

4.3.2 There is little information available regarding the destinations of Suffolk Coastal and Ipswich residents for their recreation. However, in 2004 the Suffolk Coast and Heaths Unit commissioned East of England Tourist Board to carry out a visitor survey of the AONB (EETB 2004[5]). A snap-shot survey was carried out in summer 2004 by questionnaires of visitors across the AONB.

4.3.3 The survey found that 55% of visitors to the AONB were 'day visitors' (page 9 of the research). The exact number of people visiting the AONB was not measured, but the proportion of visitors from each location of origin can be identified. The raw data has been obtained from East of England Tourism. A GIS analysis on those 430 'day visitors' who provided a postcode identified the proportion of those who originated from various places as listed in Table 2 below.

4.3.4 It is considered that 'day visitors' are people living near the AONB; these people are unlikely to book a significant amount of overnight accommodation. 'Day visitors' is therefore the best measure of potential impact to sites across the whole AONB.

4.3.5 Many of the sites in the AONB involved in the visitor study were European sites, so the study is relevant to this Appropriate Assessment.

[4] Ravenscroft, Parker, Vonk and Wright 2007 *Disturbance to waterbirds wintering in the Stour-Orwell Estuaries SPA* Commissioned by Suffolk Coast and Heaths Unit.

[5] EETB (2004) Suffolk Coast and Heaths Area of Outstanding Natural Beauty. Visitor Research 2004. Available from http://www.suffolkcoastandheaths.org/uploads/SCH%20AONB%20Visitor%20Research%20Report%202004.pdf

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Table 1. Proportion of day visitors to Suffolk Coast and Heaths AONB from location of origin (data from EETB 2004 as re-analysed)

Origin of day visitors to AONB	Number of day visitors (total day visitors in survey = 430)	Percentage of total AONB day visitors (estimate)
Ipswich Borough, plus adjoining Pinewood ward (Babergh district)	50	11.6%
Eastern Ipswich plan area within Suffolk Coastal (Rushmere, Kesgrave and Martlesham wards)	29	6.7%
Felixstowe, Walton and the Trimleys	19	4%
Remainder of Suffolk Coastal District	114	26.5%
Shotley	1	0.2%
Total of these origins	**213**	**49.5%**

4.3.6 The increase in population is related to the increase in housing available. The Office for National Statistics (ONS) published estimates of population at mid-2010 for Local Authorities in June 2011 as provided in Appendix 7[6]). For Ipswich, the projections in population growth suggest that there will be an average of 1.7 net additional people into the Borough per new dwelling. This seems low, but is realistic considering the proportion of flats planned, an increase in the student population, and taking into account the continued decline in the average number of people per household in Ipswich, and ongoing national decline in average household size. This is not an assumption about the occupancy rate of new dwellings, as some multiple person households already living in the area will fragment and disperse into the new dwellings, or some dwellings (existing or new) may be bought as holiday homes with zero occupancy. There is a trend towards a lower occupancy level per house caused by an increase in split households, an ageing population and second homes. For Suffolk Coastal, the population projection suggests an average of 1.8 net additional people per new dwelling.

4.3.7 This Appropriate Assessment therefore uses an average population increase of 1.7 new people per new dwelling in Ipswich Borough, and 1.8 new people per new dwelling in Suffolk Coastal District.

4.3.8 The proportionate growth in population in new housing development in Ipswich and Suffolk Coastal and elsewhere can be calculated by looking at the existing population, the predicted net increase in people, and therefore the proportionate increase. Table 2 shows the projected increase in population for each of the study areas under consideration.

Table 2. The estimated numerical increase in population for new housing.

Town / area	Proposed new housing units	Estimated net increase in people*
Ipswich Borough	13,550	23,035

[6] Available from www.suffolkobservatory.info

Eastern Ipswich plan area	2,320	4,176
Felixstowe, Walton and the Trimleys	1,760	3,168
Remainder of Suffolk Coastal District	3,510	6,318
Totals	**21,140**	**36,697**

* based on population projections

4.3.9 Table 3 shows the proportionate increase in population for these areas of new housing. It is important to look at the increases of each development in combination, as well as individually, as each impact might be individually too small to give rise to a significant impact, but in combination could have an adverse affect.

Table 3. The proportionate increase in population for areas of new housing.

Town / area	**Existing population size**	**Estimated increase in people (table 2)**	**Estimated % increase in local population (estimated increase / existing)**
Ipswich Borough, plus adjoining Pinewood ward (Babergh district	132,013	23,035	17.4%
Eastern Ipswich plan area	20,014	4,176	20.9%
Felixstowe, Walton and the Trimleys	33,735	3,168	9.4%
Remainder of Suffolk Coastal District	68,251	6,318	9.3%
Totals	**254,013**	**36,697**	**14.4%**

4.3.10 The data in Tables 2 and 3 above can be used to calculate the extra number of people visiting European sites within the Suffolk Coast and Heaths AONB, subject to the following assumptions;

- the pattern of day visits to sites by the new residents is similar to that of the existing population;
- the pattern of visits to sites by day visitors and overnight visitors remains as that identified in the 2004 visitor survey;
- an increase in visits to sites is not constrained by other factors e.g. lack of public transport, or car parks reaching capacity;
- the relative proportions of day visitors and overnight visitors does not change; and
- the summer snapshot survey is typical of visitors all year round.

4.3.11 The percentage increase of total visitors to European sites in the AONB is calculated, rather than a numeric increase, because the total number of visitors is not known. The percentage increase in total visitors to European sites takes into account the ratio of day visitors to overnight visitors (i.e. holiday makers), the proportion of visitors from each point of origin, and the increase of people in each point of origin. This can be expressed by the calculation (%day visitors) x (%from point of origin) x (%increase at point of origin).

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4.3.12 Table 4 below calculates the increase in total visitors to the AONB based on the calculation above, for each point of origin and for the total. For clarity of calculation, percentages are given as a proportion of 1 e.g. 55% is shown as 0.55. To reduce rounding errors, the total for column D is calculated from the totals for columns B and C.

Table 4. Predicted increase in total visitors to Suffolk Coast and Heath AONB.

Origin of day visitors to AONB	**(A) proportion of total AONB day visitors (estimate) from table 1 expressed as a fraction of 1**	**(B) proportion of total AONB visitors (A x 0.55)**	**(C) increase in local population from table 3 expressed as a fraction of 1**	**(D) The overall increase of all visitors to the AONB (B) x (C)**
Ipswich Borough, plus adjoining Pinewood ward (Babergh district	0.116	0.064	0.174	0.011
Eastern Ipswich plan area	0.067	0.037	0.209	0.007
Felixstowe, Walton and the Trimleys	0.04	0.022	0.094	0.002
Remainder of Suffolk Coastal District	0.265	0.146	0.093	0.014
Totals	**0.488**	**0.269**	**0.131**	**0.035**

4.3.13 Table 5 below shows the Table 4 column D data alone, given as a percentage increase in total visitors to the AONB.

Table 5. The predicted percentage increase in total visitors to the Suffolk Coast and Heaths AONB resulting from proposed growth in Ipswich Borough and Suffolk Coastal

Place of origin	**The predicted proportionate increase in visitors to the AONB from each place of origin**
Ipswich Borough, plus adjoining Pinewood ward (Babergh district)	1.1%
Eastern Ipswich plan area	0.7%
Felixstowe, Walton and the Trimleys	0.2%
Remainder of Suffolk Coastal District	1.4%
Totals	**3.5%**

4.3.14 Table 5 shows that the increase in visitors to the Suffolk Coast and Heaths AONB, as a result of the proposed developments is predicted to be 3.5%. The numbers in Table 5 do not add exactly to 3.5% due to rounding earlier in the calculations. The increase in visitors can be apportioned as 1.1% for Ipswich Borough and 2.4% for Suffolk Coastal District.

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4.3.15 To allow for assumptions about people's behaviour patterns, the 3.5% increase in total visitors to the AONB is best considered as an approximation, with the likely figure considered to be perhaps somewhere in the range of 3% - 5%.

4.3.16 The calculations of increased visitors to European sites are complex. Superficially, one would expect that an 13% increase in the combined population of Ipswich Borough and Suffolk Coastal District to cause a 13% increase in visitors to European sites in the Suffolk Coast and Heaths AONB. In reality, a 13% increase in population will result in a proportionate increase from only those visitors who come from Ipswich Borough and Suffolk Coastal District. Visitor numbers from elsewhere are unchanged, so the increase in the total number of visitors will be significantly less.

4.3.17 Data presented in the Appropriate Assessment shows that about half (55%) of visitors to the Suffolk Coast and Heaths AONB were local people on a day trip, with the remainder being holiday makers staying in tourist accommodation. Of the locals on a day trip, about half (49.5%) were from Ipswich Borough and Suffolk Coastal District, with the remainder from elsewhere, for example, from Norwich or Bury St Edmunds. Combining these figures, half the visitors being on day trips, and half of these day trip visitors being from Ipswich Borough and Suffolk Coastal District, the calculation is that roughly one-quarter of all visits to the AONB originate from Ipswich Borough and Suffolk Coastal District. This assumption is also applied to the European sites within the AONB.

4.3.18 With roughly around one-quarter of the day trips coming from residents in Ipswich Borough and Suffolk Coastal, those day trips are predicted to rise in proportion with the predicted 13% population increase i.e. the number of day trips from Ipswich Borough and Suffolk Coastal are expected to rise by 13% in the period 2013 – 2031. However, other sources of visitors (holidaymakers or day trips from elsewhere) will not rise accordingly, so the total visits from all sources is calculated to rise by around 3 - 5%. Figure 1, which is drawn to relative scale, is a bar chart where the length of the bar represents the number of visitors in each group. It shows the effect of the 13% increase in day trips from Ipswich Borough / Suffolk Coastal District in relation to the total visits from all sources.

4.3.19 There are a number of assumptions made regarding these calculations and people's behaviour, including

- 'New' people in the Borough / District will have the same visiting pattern as 'existing' people
- Visits by holiday makers will not be affected by any increased use by local visitors
- Sites, including their car parks, will not constrain the number of visits by becoming 'full' and turning away visitors

4.3.20 The separate breakdown of visits into 'day-trippers' and 'holidaymakers' was undertaken in the school summer holiday period when a greater proportion of 'holidaymakers' may have been present compared to other months

4.3.21 To allow for these assumptions, the approximate 3.5% increase in total visitors to the AONB is given as a range of 3% - 5%.

4.3.22 **It would therefore be reasonable to assume that the increase in visitors to European sites in the Suffolk Coast and Heaths AONB, using this survey data, could be in the range of 3% - 5% as a result of the Ipswich Borough Council and Suffolk Coastal District Council Core Strategy proposals combined**.

4.3.23 Not all the European sites under assessment are within the Suffolk Coast and Heaths AONB, specifically the sites in Tendring District which are Hamford Water SPA, Hamford Water Ramsar site, and Hamford Water candidate SAC. The amount of visits to these sites from Suffolk Coastal District and Ipswich Borough was not surveyed in the 2004 AONB study. It is considered that the greater distances to these sites from Ipswich / Suffolk Coastal, compared to sites with the Suffolk Coast and Heaths AONB, means that the expected number of visits from Ipswich / Suffolk Coastal to the Essex sites is likely to be much less than to sites in Suffolk. The

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Essex sites are closer to other towns such as Harwich and Colchester, and the influence of those towns is considered to be much more dominant.

4.4 Impact on European sites in Colchester and Tendring Districts, Essex

4.4.1 A report of visitor monitoring on Natura 2000 sites in Colchester and Tendring, Essex[7], was also considered. It showed that only a tiny proportion of visitors to European sites travelled from Ipswich or Suffolk Coastal. However, the sample sizes were so small that it is considered that the results may not have been meaningful.

4.5 Calculations to predict additional visitors to European sites in the south Sandlings using 2010 visitor survey data

4.5.1 A visitor survey was commissioned by a consortium led by Suffolk Wildlife Trust and Forestry Commission, and funded by the Haven Gateway Partnership. The survey was carried out in winter 2009/10 and summer 2010 by Footprint Ecology. Their final report was published on 10th February 2011[8] and the use of this report is gratefully acknowledged. It is considered that the visitor survey and data analysis were generally carried out to high standards. The report is referred to as the 2010 South Sandlings Visitor Survey in the remainder of this report.

4.5.2 The 2010 South Sandlings Visitor Survey took place in an area east and north-east of Woodbridge, encompassing Tunstall Forest, Rendlesham Forest and surrounding areas. The study included Sandlings SPA (comprising Sandlings Forest SSSI, Blaxhall Heath SSSI, Sutton and Hollesley Heaths SSSI and Tunstall Common SSSI), Staverton Park and the Thicks SAC, , and small parts of Alde-Ore Estuary (SPA, SAC, Ramsar) and Deben Estuary (SPA, Ramsar). Visitors at a number of points within the study area were counted and many were asked a number of questions about their visit, including where they had come from, where they went on their visit, what they did, how they arrived on site for their visit, and why they had chosen that place to visit.

4.5.3 Key messages from the 2010 South Sandlings Visitor Survey are

- 53% of total visitors entered the study area at just three points; the forest opposite Sutton Heath Estate (housing associated with MoD Woodbridge including some open market housing), Sutton Heath car park, and Iken.
- Visitors were not spread out evenly across the study area; there were 'hotspots' of visitors at Sutton Heath and in Rendlesham Forest at Tangham visitor centre; there were also spots of activity concentrated at the Rendlesham Forest runway car park and by the B1084, and in the north of Tunstall Forest at Tunstall Heath and Blaxhall Common. Heaths were used disproportionately more by visitors compared to equivalent areas of forestry plantation.
- In the study area there were 16 formal car parks providing a total of 261 spaces, and 106 locations used for informal parking providing 256 parking spaces. The density of visitors within the sites was closely related to the location of car parks; the visitor hotspots were close to the bigger and formal car parks; other spots of activity were close to small and/or informal car parks.
- 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.

[7] Habitat Regulations Assessment Survey and Monitoring. Year 1 Interim Report December 2010. Colchester Borough Council.
[8] Cruickshanks K, Liley D and Hoskin R (2011) Suffolk Sandlings Living Landscape Project Visitor Survey Report. Footprint Ecology / Suffolk Wildlife Trust.

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- 80% of all visitors arrived by car, and 17% of all visitors walked across the road from the Sutton Heath Estate into the adjacent forest.
- 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.
- The number of houses within 5km of a site had a positive relationship with the number of visitors entering; the more houses there were, the more visitors there were.
- Most people stayed for 1 – 2 hours.
- 64% of visitors visited the sites at least weekly, and over half of these visited daily.
- Over half the visitors also said that they would visit coastal and estuary sites in the area
- There was a higher density of nightjar nests in the areas with the lowest category of visitor numbers, but no clear relationship between nest density across all categories of visitor numbers; for example the areas with the highest category of visitor numbers had more nightjar nests than those with an intermediate number of visitors.
- Public access had no apparent effect on the current distribution of woodlark nests in the Forest or on heaths.
- For non-SPA species, Dartford warbler nest density was negatively correlated to visitor numbers, but there was no apparent relationship between visitor numbers and silver-studded blue butterflies or ant-lion.

4.5.4 These key messages are extracted from the 2010 South Sandlings Visitor Survey, which gives much more detail.

4.5.5 The 2010 South Sandlings Visitor Survey contains good data on the location of the home of visitors to the study area within 0.5km distance bands from access points (normally car parks) to recreational sites. The survey also used postcode data to identify the number of existing dwellings within each distance bands. These are shown on Figures 6 and 7 of the 2010 South Sandlings Visitor Survey report. This data may be used to model changes in the number of visitors as the number of dwellings in each distance band changes.

4.5.6 It is a reasonable assumption that an increase in dwellings would generate a proportionate increase in visitors from any particular distance band. For example, if the number of houses doubled in a particular distance band the number of visitors from that area would also double. The proposed dwelling numbers can therefore be added to existing dwelling numbers in each distance band and used to calculate the increase in visitors for each distance band and the total overall increase in visitors.

4.5.7 The distribution of proposed housing is not precisely specified within the Core Strategies. For this assessment, the distribution of the proposed housing allocation as it relates to access points within the South Sandlings study area is considered to be as shown in table 6 below.

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Table 6. Approximate distribution of proposed housing allocations from Sandlings access points

Location	no. of proposed new dwellings	Approximate or nominal distance of housing from South Sandlings study area access points / km
Ipswich Borough	13,550	13.5 - 14
Eastern plan area	2320	4.5 - 5
Felixstowe Walton and Trimleys	1760	12 – 12.5
rest of Suffolk Coastal*	700	4.5 - 5
rest of Suffolk Coastal*	700	9.5 - 10
rest of Suffolk Coastal*	700	14.5 - 15
rest of Suffolk Coastal*	700	19.5 - 20
rest of Suffolk Coastal*	710	24.5 – 25
* 3510 dwellings nominally allocated to five distance bands across the District.		

4.5.8 The South Sandlings Visitor Survey data for the number of visitors, and the existing number of houses, within 0.5km distance bands up to 50km from access points to sites within the study area were kindly supplied by Steve Aylward of Suffolk Wildlife Trust (the commissioning group's project manager) and Footprint Ecology. The use of this data is gratefully acknowledged.

4.5.9 For each distance band up to 50km from the study area access points, Table 7 shows the existing housing numbers and visitor numbers supplied from the South Sandlings Visitor Survey. The proposed housing numbers are also listed, using the distribution given above. For clarity, the distribution of proposed housing within distance bands has been highlighted; there is no change to numbers in other bands. The increase in visitors is calculated by multiplying the existing visitors in each distance band by the proportionate increase in housing. The proportionate increase in housing is calculated by dividing the proposed housing numbers (existing number plus proposed new dwellings) by existing housing numbers.

4.5.10 To illustrate the calculations, if a distance band had 8 recorded visitors from 100 existing dwellings, and 50 new dwellings were proposed within a Core Strategy, then the proportionate increase in housing is (100+50)/100 = 1.5. The predicted number of new visitors is therefore 8 people x (100+50)/100, giving a predicted number of 12 visitors.

Table 7. Predicted increase in visitor numbers to South Sandlings study area calculated as the number of existing visitors multiplied by the proportionate increase in dwellings (proposed / existing) within each distance band

Distance from access point (km)	Approximate Location of existing towns in relation to distance from access points	Number of existing dwellings	Number of visitors recorded in the survey	Number of existing and proposed dwellings	Number of predicted visitors on re-survey
0 – 0.5	Sutton Heath estate	495	71	495	71
0.5 - 1		305	12	305	12
1 – 1.5		802	26	802	26

Distance from access point (km)	Approximate Location of existing towns in relation to distance from access points	Number of existing dwellings	Number of visitors recorded in the survey	Number of existing and proposed dwellings	Number of predicted visitors on re-survey
1.5 - 2	Rendlesham Melton Woodbridge	1936	55	1936	55
2 – 2.5		2211	45	2211	45
2.5 - 3		2024	29	2024	29
3 – 3.5		1812	44	1812	44
3.5 - 4		1471	21	1471	21
4 – 4.5		716	8	716	8
4.5 - 5	SCDC eastern plan area	653	6	3673	33.7
5 – 5.5		2164	12	2164	12
5.5 - 6		2269	7	2269	7
6 – 6.5		1558	7	1558	7
6.5 - 7	Saxmundham Martlesham	2488	16	2488	16
7 – 7.5		2826	11	2826	11
7.5 - 8		3361	13	3361	13
8 – 8.5		2657	7	2657	7
8.5 - 9		1765	7	1765	7
9 – 9.5		1187	2	1187	2
9.5 - 10		1304	2	2004	3.1
10 – 10.5		1884	4	1884	4
10.5 - 11		2376	5	2376	5
11 – 11.5	Framlingham, Felixstowe, eastern Ipswich	5574	11	5574	11
11.5 - 12		7065	8	7065	8
12 – 12.5		9048	14	10808	16.7
12.5 - 13		9848	7	9848	7
13 – 13.5		8119	7	8119	7
13.5 - 14	central Ipswich	6020	7	19570	22.7
14 – 14.5		6001	1	6001	1
14.5 - 15		7289	5	7989	5.5
15 - 15.5		6961	2	6961	2
15.5 - 16		4716	2	4716	2
16 - 16.5	western Ipswich	6573	3	6573	3
16.5 - 17		5199	4	5199	4
17 - 17.5		5488	2	5488	2
17.5 - 18		4601	3	4601	3
18 - 18.5		2140	0	2140	0
18.5 - 19		2831	1	2831	1
19 - 19.5		1421	0	1421	0
19.5 - 20		1516	2	2216	2.9
20 - 20.5		1870	0	1870	0
20.5 - 21		1738	0	1738	0
21 - 21.5		2076	2	2076	2
21.5 - 22		1746	0	1746	0

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Distance from access point (km)	Approximate Location of existing towns in relation to distance from access points	Number of existing dwellings	Number of visitors recorded in the survey	Number of existing and proposed dwellings	Number of predicted visitors on re-survey
22 - 22.5		1545	0	1545	0
22.5 - 23		2483	0	2483	0
23 - 23.5		2409	0	2409	0
23.5 - 24		2229	1	2229	1
24 - 24.5		2287	0	2287	0
24.5 - 25		1517	1	2217	1.5
25 - 25.5		3455	0	3455	0
25.5 - 26		4038	1	4038	1
26 - 26.5		4762	0	4762	0
26.5 - 27		4622	1	4622	1
27 - 27.5		5637	0	5637	0
27.5 - 28		5694	1	5694	1
28 - 28.5		4392	2	4392	2
28.5 - 29		2613	0	2613	0
29 - 29.5		2684	0	2684	0
29.5 - 30		3004	0	3004	0
30 - 30.5		2807	0	2807	0
30.5 - 31		1549	0	1549	0
31 - 31.5		1853	0	1853	0
31.5 - 32		1931	0	1931	0
32 - 32.5		4916	0	4916	0
32.5 - 33		7166	1	7166	1
33 - 33.5		9392	0	9392	0
33.5 - 34		7896	0	7896	0
34 - 34.5		6345	2	6345	2
34.5 - 35		7947	1	7947	1
35 - 35.5		12714	3	12714	3
35.5 - 36		11523	1	11523	1
36 - 36.5		10084	0	10084	0
36.5 - 37		10980	0	10980	0
37 - 37.5		10937	2	10937	2
37.5 - 38		12992	0	12992	0
38 - 38.5		11420	1	11420	1
38.5 - 39		6578	0	6578	0
39 - 39.5		7071	1	7071	1
39.5 - 40		7930	1	7930	1
40 - 40.5		8830	0	8830	0
40.5 - 41		10081	0	10081	0
41 - 41.5		8352	1	8352	1
41.5 - 42		8429	0	8429	0
42 - 42.5		6388	1	6388	1
42.5 - 43		5502	0	5502	0
43 - 43.5		5197	1	5197	1
43.5 - 44		2623	0	2623	0

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Distance from access point (km)	Approximate Location of existing towns in relation to distance from access points	Number of existing dwellings	Number of visitors recorded in the survey	Number of existing and proposed dwellings	Number of predicted visitors on re-survey
44 - 44.5		3550	0	3550	0
44.5 - 45		5576	0	5576	0
45 - 45.5		4676	0	4676	0
45.5 - 46		4839	0	4839	0
46 - 46.5		3465	0	3465	0
46.5 - 47		6665	1	6665	1
47 - 47.5		8176	1	8176	1
47.5 - 48		6198	1	6198	1
48 - 48.5		8790	0	8790	0
48.5 - 49		6508	0	6508	0
49 - 49.5		5118	0	5118	0
49.5 - 50		4319	0	4319	0
Totals			**517**		**566.1**

4.5.11 For those distance bands with significant housing allocations, the change in visitor numbers is large. For example, the allocation of 13,550 dwellings for Ipswich Borough Council at a nominal distance of 13.5km - 14km from the study area increases the number of visitors from that distance band from 7 to 22.7. Similarly, the allocation of 2,320 dwellings for the Eastern Ipswich plan area, plus 700 further allocations for the 'rest of Suffolk Coastal', increases the number of visitors from the 4.5km - 5km distance band from 6 to 33.7. However, for some distance bands there is no change in visitor numbers.

4.5.12 The total existing visitor number identified in the survey is 517, according to the data received from the South Sandlings Visitor Survey. The predicted number of visitors, following implementation of housing as allocated within the Ipswich and Suffolk Coastal Core Strategies, is 566.1. These are nominal figures based on visitor samples, so the absolute number is of less relevance than the overall change. A change from 517 to 562.3 is **an increase of visitors of 9.5%** (562.3/517).

Assumptions and limitations

4.5.13 There are a number of assumptions and limitations to the model of predicted visitor change, including

- All new housing in Ipswich is based in the centre of the town
- the pattern of day visits to sites by the new residents is similar to that of the existing population;
- an increase in visits to sites is not constrained by other factors e.g. lack of public transport, or car parks reaching capacity; so that the predictions may be an over-estimate;
- the number of holiday-makers does not change as a result of the Core Strategies housing allocations;
- the results of the summer and winter surveys are typical of visitors all year round
- the calculations do not take account of declining household size when calculating visitor numbers but assume that the number of people per dwelling remains constant;

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- changes to the nominal distribution of housing allocations; a re-distribution of housing between distance bands would give higher or lower predicted numbers.

4.5.14 These assumptions are such that the predicted 9.5% increase in visitors is not considered to be precise. It would be reasonable to assume that the increase in visitors to European sites in the South Sandlings study area could be in the range of 6% - 12% as a result of the Ipswich Borough Council and Suffolk Coastal District Council Core Strategy proposals.

4.5.15 **It is concluded, in absence of mitigation, it is not possible to ascertain no adverse affect upon the integrity of European sites due to visitor increases to European sites in the surrounds of Ipswich.** However, mitigation is included within the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review as discussed below.

4.6 Impact on specific sites

4.6.1 This section discusses the third typology in Section 5.1 above, which is the use by people of European sites close to their homes for recreation or other activities. The predicted general increase of visitors to European sites across the area is not necessarily a uniform increase to all sites. It is likely that European sites close to new development (i.e. within walking distance or a short cycle ride, bus trip or drive away) is likely to be used as convenient local greenspace, with routine activities such as recreational dog walking or play undertaken. The Stour and Orwell Estuaries SPA / Ramsar site is the only European site to which this applies for this assessment.

4.6.2 Studies in Dorset, carried out to investigate the impact of development on European sites there[9], 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.

4.6.3 The 2010 South Sandlings Visitor Survey showed that half of all visitors who arrived on foot lived within 420m of the access point, and 75% of visitors walked 500m or less to reach the access point. The median distance travelled to reach the access point by car was less than 8km away. Over 75% of dog walkers lived within 10km of the access point. These data are reasonably consistent with the Dorset studies.

4.6.4 These studies indicate that housing development is likely to result in people living in that 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. Car parks were necessary for those people arriving by car.

4.6.5 The new housing provisions within Ipswich Borough are therefore likely to result in an increase in visitor 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 proportionate increase in population in those distance bands can be looked at, the provision of alternative sites for recreation needs to be taken into account, and the availability of the European sites for access needs to be identified.

4.6.6 The cumulative impacts of several developments are considered in Sections 5.3 and 5.5 above, 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. Distance bands are in reality the distance that people travel, rather than straight-

[9] Clarke, R., Liley, D., Underhill-Day, J. & Rose, R. 2005. Visitor Access patterns on the Dorset heathlands. *English Nature Research Reports*, No. 683

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line distances. Obstructions to travel, such as railways or rivers with no crossing points therefore reduce the straight-line distance from which people will not travel to a European site.

4.6.7 The Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review has 'proposed major housing' in its Key Diagram within the IP-One area, well over 1km from the Stour and Orwell Estuaries SPA / Ramsar and with no direct walking route due to the presence of docks. There is also a 'strategic housing allocation' on the far side (north) of Ipswich which is a considerable distance from the SPA / Ramsar site where no walking route is likely. No significant use of the SPA / Ramsar site is expected to occur by people walking from 'proposed major housing' or from 'strategic housing allocations'. An access point to the Stour and Orwell Estuaries SPA / Ramsar site is within 8km of 'proposed major housing' and from 'strategic housing allocations', with Orwell Country Park providing this access point. It is possible that there may be additional visitor pressure on the Stour and Orwell Estuaries SPA / Ramsar site arising from people driving to the estuary from the proposed residential development.

4.6.8 **It is concluded, in absence of mitigation, it is not possible to ascertain no adverse affect upon the integrity of Stour and Orwell Estuaries SPA / Ramsar site due to visitor increases at Orwell Country Park**. However, mitigation is included within the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review as discussed below.

4.7 Other visitor surveys, comparison of visitor surveys and calculations of impact

Comparison of AONB and South Sandlings impacts

4.7.1 The calculations in Section 5.3 for visitors to the Suffolk Coast and Heaths AONB, and in 5.5 for visitors to the South Sandlings result in different figures for increases in visits. For the Suffolk Coast and Heaths AONB, the increase in visitors to European sites is estimated at 2 – 5 %, whereas for the South Sandlings the increase is 6 – 12%. The differences may be due to the baseline research being different, or simply because the AONB is a much larger area with much of it at a greater distance from population centres and strategic allocations compared to the South Sandlings. Fewer people living in or east of Ipswich might visit distant parts of the AONB compared to the South Sandlings, thus having a smaller impact over the AONB.

4.7.2 Both surveys contain various assumptions about the visitor behaviour, and both are based on sample surveys; neither should calculations be treated as precision forecasting tools. It would not be appropriate to choose either calculation of visitor increase as taking precedence over the other, nor to take an average of the two calculations to provide one overall prediction. In this assessment, both calculations are considered to be reasonable and useful indicators of increases in visitors for their respective areas.

Deben Estuary Visitor Survey report, July 2011

4.7.3 A Deben Estuary Visitor Survey report was made available in July 2011 by 'No Adastral New Town', a campaign group. The report gives details of a visitor survey carried out in April and May 2011 to provide detailed local information on recreational activities in the Waldringfield area (including Martlesham church car park and Hemley). The visitor survey methodology used a similar but reduced methodology to the South Sandlings Visitor Survey. Although the methodology and report have some fundamental problems (for example it is unclear if all survey points were surveyed simultaneously, people at Waldringfield may have been double-counted at the car park and beach, and some data looks anomalous), the results have some consistency with the South Sandlings Visitor survey and so are helpful.

4.7.4 The average size of groups of people was similar, and the proportion of people walking with or without dogs is similar between the Deben Estuary and South Sandlings surveys. The proportion of dog walkers compared to walkers without dogs was however much less in the Deben Estuary survey. The overall proportion of people who travelled by car was very similar in both surveys, although people tended to stay longer on the Deben Estuary perhaps because of the pub at Waldringfield.

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4.7.5 The proportion of visitors who visit all year round was also significantly lower in the Deben Estuary visitor survey compared to the South Sandlings. This is a key point because wintering birds are vulnerable to disturbance in the estuary, yet visitor numbers are lowest in winter according to the Deben Estuary survey.

4.7.6 The distances people travelled to reach the survey points on the Deben Estuary survey are very different to the distances people travelled to the South Sandlings. For example, the arithmetic mean of the distance travelled on foot to the Deben Estuary survey points was 3.8km, with a number of people recorded as walking to the survey area from Ipswich, Woodbridge and from even further away such as Trimley St Mary near Felixstowe. The South Sandlings in comparison used medians to work out where most people came from, with a median distance of 400m travelled on foot to an access point to the South Sandlings.

4.7.7 The Deben Estuary survey did not question people about their walks, for example where they went or how far they went. Data on estuary-side walks is absent; whether people simply walked a short distance along the beach at Waldringfield, walked a circular route along the estuary returning inland, or other route, is not known. The number of people walking away from the busy beach area at Waldringfield is not known. Fifteen groups of people out of 510 groups were interviewed across the 16 days of interviews at Manor Farm, away from car parks and a point on one circular walk from Waldringfield car park, suggesting that few people walk that particular circular route.

4.7.8 The Deben Estuary visitor survey is helpful in pointing out the activities which visitors carry out, (primarily walking, sailing, outing with family, pub, dog walking) and giving a general picture of the survey area, but does not have the data or analysis to predict changes in visitor numbers.

Natural England national visitor survey

4.7.9 Natural England has published the results of a 2010 / 2011 national visitor survey[10] 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). Forests and woodlands received 13 per cent of all visits, an increased share from 11% in 2010.
- 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.
- 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.
- The average visit to the natural environment lasted for just under 2 hours (1 hour 58 minutes). This finding is not significantly different from that found in the 2009/10 survey.
- Around half of all visits (51%) involved walking with a dog.
- The average group size was 2.4 people.
- 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.

[10] Natural England (2011) Monitor of Engagement with the Natural Environment: The national survey on people and the natural environment Annual Report from the 2010-11 survey NECR083

- The vast majority of visits involving a journey of less than one mile were taken on foot (92%) while 79% of visits where the journey was 5 miles 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.

4.7.10 The report shows reasonable consistency with the local surveys; 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 to a greenspace, consistent with the Dorset studies and South Sandlings visitor survey.

Further Dorset studies

4.7.11 A study of visitors to heaths and the sea coast in Dorset in 2008[11] unsurprisingly found that the closer their home location is to a greenspace, the more likely they are to visit it. All greenspace types, except coastal, showed a rapid decline in the proportion of respondents who visit them as the distance increases to around 5 km. There was a negative relationship between the mean number of visits per respondent to a particular greenspace and the distance from that greenspace to their home postcode, with a steeper decline in the number of visits within the first 3 km and then a plateau thereafter. This was observed across all of the greenspace types. This confirms that those respondents living close to a greenspace sites tend to visit them more frequently than those who live further away.

4.7.12 Comparing greenspace types, the "catchment" is smallest for parks and gardens with 50 % of visits to them made by respondents living within approximately 1 km, while for other non-coastal sites, including heathland, this value is 1.5 to 2 km. A greater visitation to urban rather than rural heaths may reflect the lower size and availability of greenspace alternatives in urban areas and small/no access to gardens in urban areas.

4.7.13 This report, part 1 of which is downloadable from the internet, contains no comparisons of people's use of heaths and greenspaces. Part 2 of the report, which is hard to source but has been summarised in a Council report[12], says that the area of greenspace within the vicinity did not affect the amount of visits to a heath, but the number of greenspaces within the vicinity did – the more choice of greenspaces there were, the fewer people visited heaths

[11] Liley, D., Sharp, J. & Clarke, R. T. (2008). Access Patterns in South-east Dorset. Dorset Household Survey and Predictions of Visitor Use of Potential Greenspace Sites. Dorset Heathlands Development Plan Document. Unpublished report, Footprint Ecology

[12] http://www.eastdorsetdc.gov.uk/democracy/docstore/0904/090424155344-a66bf96d-279a-4f50-918f-002361845217.pdf, accessed on 5th August 2011

5 Water resources and water quality

5.1 Introduction

5.1.1 Public response to consultations has raised concerns regarding water availability for the housing allocations, and potential problems with surface water run-off and sewage treatment.

5.2 Water resources

5.2.1 The Haven Gateway Water Cycle Study Stage 2 Report (2009) concluded that water supply companies were confident that they had sufficient resources to supply the demands of the region over the forthcoming period and had plans in place to be able to realise these resources.

5.2.2 This report included as assessment of the environmental impacts of water abstraction.

5.3 Water quality

5.3.1 A number of the treatment facilities within the Haven Gateway area were stated in the Haven Gateway Water Cycle Study Stage 2 Report (2009) to be at, or will reach capacity, with the projected growth, and therefore will require increases to their permitted discharge, together with potential extensions to and upgrades of the facilities. Growth cannot take place until the treatment works have sufficient capacity.

5.3.2 Increases in discharge from sewage treatment works would need to be accommodated within the receiving watercourses without adverse impacts. There are areas within the region where treatment improvements will be required to avoid any increase in pollution loads within the receiving water bodies. This will occur before housing growth significantly increases.

5.3.3 Surface water run-off needs to be considered on a case by case basis, and there is no evidence at a strategic level that there would be any run-off into European sites. For example, a planning application would need to demonstrate that drainage is satisfactory, perhaps using a combination of traditional piped drainage and Sustainable Drainage Schemes.

5.4 Conclusion for water quality and water resources

5.4.1 Water availability and water quality issues related to the Core Strategy and Development Management Policies are therefore considered to have no likely significant effect on European sites.

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6 Mitigation

6.1 Mitigation aims and objectives

6.1.1 The principle of mitigation for remains as that described in the 2009 Appropriate Assessment, which is to reduce demand for visits to the European sites at risk of impact, and to manage existing sites with a specific high risk to re-distribute visitors from sensitive areas.

6.1.2 Detailed aims of such mitigation are

- To prevent a damaging increase in visitor number to all European sites across the Suffolk Coast and Heaths AONB
- To prevent an increase in visitor numbers to specific parts of European sites likely to be particularly affected – Orwell Estuary at Orwell Country Park

6.1.3 Detailed objectives are

- To provide new locations for countryside recreation, especially dog walking, for residents of existing and proposed housing, as a preferred alternative to visiting European sites
- To improve visitor infrastructure and management, including wardening, on existing sites to reduce the impact of increased visitors

6.2 Mitigation for strategic allocations in Ipswich affecting the Orwell Estuary at Orwell Country Park

6.2.1 The Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review contains several measures to mitigate for any possible harm caused by an increased human population arising from the new housing resulting in increased disturbance to birds at Orwell Country Park.

6.2.2 Policy CS16 'Green Infrastructure, Sport and Recreation' contains five sub-policies which reduce the motivation for residents of proposed housing to visit the Stour and Orwell Estuaries SPA / Ramsar site for regular visits. These are

b. *requiring major new developments to include on-site public open spaces and wildlife habitat. On-site provision must create a network or corridor with existing green infrastructure where such an ecological network exists beyond the site boundaries;*

6.2.3 Sub-policy 'b' provides on-site open spaces so that residents have the opportunity to access convenient local greenspace for frequent activities such as dog walking, and there is much less motivation to regularly travel to Orwell Country Park.

d. working with partners to prepare and implement management plans for green spaces, including visitor management plans for key parts of European sites within the Suffolk Coast and Heaths AONB to be completed by 2015, and a plan for Orwell Country Park that will result in a reduced impact upon birds in the Orwell Estuary;

6.2.4 Sub-policy 'd' includes a plan for Orwell Country Park which results in reduced visitor impact. No details are given, but further details are given in the Site Allocations Local Plan Document accompanying the Core Strategy including a new visitor centre. The Core Strategy stage is not the appropriate place to give these details, but there is reassurance that the Council commits to the appropriate actions.

e. supporting the Greenways Project in working with communities and volunteers to manage green corridors in Ipswich;

6.2.5 Improvement of green corridors provides improved opportunities for resident of existing and proposed housing to access convenient local greenspace for frequent activities such as dog walking, and there is much less motivation to regularly travel to Orwell Country Park.

g. working with partners to improve green infrastructure provision and link radial ecological networks green corridors with a publicly accessible green rim around Ipswich;

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6.2.6 Again, this sub-policy provides improved opportunities for resident of existing and proposed housing to access convenient local greenspace for frequent activities such as dog walking, and there is much less motivation to regularly travel to Orwell Country Park.

h. working with partners to ensure the provision of a new country park in the urban fringe of north eastern Ipswich (e.g. within any Northern Fringe development);

6.2.7 Sub-policy 'h' provides a new Country Park, which will in particular provide opportunities provides improved opportunities for resident of existing and proposed housing in the north of Ipswich (and beyond) to access convenient local greenspace for frequent activities such as dog walking, and there is much less motivation to regularly travel to Orwell Country Park.

6.2.8 Policy CS17 'Delivering Infrastructure' provides mechanisms for providing the Country Park and other green infrastructure. Policies CS4 'Protecting our assets', DM26 'Protection of amenity' and DM29 Provision of New Public Open Space, Sport and Recreation Facilities' also contain some protection for European sites (see Appendix 6).

6.2.9 **It is therefore ascertained that there would be no adverse affect upon the integrity of Stour and Orwell Estuaries SPA / Ramsar site from relevant housing policies within the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review**.

6.3 Mitigation for the cumulative impact of housing in Ipswich and in Suffolk Coastal

6.3.1 Mitigation for an increase in visitors to European sites is based on providing alternative recreational choices for residents (existing and proposed) of the whole of Ipswich Borough and Suffolk Coastal District, and managing visitors on existing European sites. Alternative recreation options should be located at convenient points for many users, and offer facilities sufficient to attract some people from European sites.

6.3.2 A new Country Park or similar high-quality provision is proposed in Policy CS16 'Green Infrastructure, Sport and Recreation' in the urban fringe of north eastern Ipswich (e.g. within any Northern Fringe development. This would provide an alternative to European sites and therefore attract existing and proposed residents of Ipswich and Suffolk Coastal District who might otherwise visit a European site. A new Country Park has been under discussion for some time, and was suggested by the Haven Gateway Green Infrastructure Project[13] independently of this Appropriate Assessment, in order to provide strategic green space for the population of greater Ipswich, particularly the northern part of the Borough. A suitable location would be accessible from major routes out of Ipswich, Woodbridge, and Felixstowe and therefore providing a facility for people from those towns.

6.3.3 The new Country Park or similar high-quality provision should be free to enter, contain areas for dog walking, children's play, and possibly more formal recreation such as orienteering, events such as Country Fairs, and a ranger service. A mixture of habitats including grassland, woodland and open water would make it more attractive and would also provide opportunities for delivery of BAP targets.

6.3.4 Information within the South Suffolk Visitor Survey suggest that a car park (preferably free) is essential, and that visitors would be likely to appreciate a café, toilets, a shop, a staffed information point, wildlife viewing areas, bins and benches, marked routes, children's facilities, and shelter for bad weather days. Provision of substantial areas where dogs may be let off leads would be important to attract dog-walkers away from European sites. The new Country Park must be attractive to dog walkers and include adequate provision for car parking.

6.3.5 The three ex-Suffolk County Council country parks (recently divested to others) currently attract a considerable number of people; in 2009/10 Brandon Country Park (13ha with access to over 1000ha of forest) attracted 175,000 visitors, Clare Country Park (13ha) attracted 180,000

[13] available at http://www.suffolkcoastal.gov.uk/yourdistrict/planning/review/evidence/studies/default.htm

people, and Knettishall Heath (158ha) attracted 75,000 people[14]. This demonstrates that Country Parks successfully attract recreational users, many of whom would otherwise have used other sites for recreation. It is therefore reasonable to assert that a new Country Park would also attract a large number of visitors.

6.3.6 It is expected that the new Country Park will form a substantial part of the mitigation requirements for development within both Ipswich Borough and Suffolk Coastal District. However, evidence from the Stour and Orwell Estuaries SPA disturbance report[15] discussed in Section 4 above, and studies of heathland in Dorset (see Section 4 above) indicate that there may still be some residual disturbance of birds, probably caused by local people engaging in low-key recreational activities on European sites near their homes, such as dog-walking. These people would not necessarily always be attracted to Country Parks. This residual disturbance would be an impact referable in particular to the aggregation of smaller provisions across Suffolk Coastal District as well as to people driving out of Ipswich.

6.3.7 Visitor management on European sites within the Suffolk Coast and Heaths AONB requires the provision of wardening and visitor management measures, guided by a visitor management plan, to manage and monitor recreational access and birds on designated sites. The designated sites include the Deben Estuary SPA/Ramsar and Sandlings SPA. These measures would be co-ordinated across the Coast & Heaths Area, and are likely to require a capital works programme, and on-site wardening. The programme would include

- identifying key sites where visitor pressure is currently, or close to, causing harm
- identifying the origin of visitors to those identified key sites
- writing and implementing a visitor management plan for key sites without such a plan, or revising existing plans, to reduce visitor impact. Reduction in visitor impact might mean changes to visitor infrastructure (e.g. car parks, paths), new or revised interpretation, wardening, provision of alternative recreation opportunities in less sensitive locations, etc, bylaws, identification of parts of sites where recreation will not be encouraged, etc.
- A monitoring programme, to determine visitor numbers and allow the impact of the visitor numbers to be identified, throughout time. The impact of visitor numbers may be difficult to determine and would rely on specialist studies as well as Natural England's programme of SSSI Condition assessment.

6.3.8 Ipswich Borough Council commits to progressing the programme, with sub-policy d of Policy CS16 as shown below.

d. working with partners to prepare and implement management plans for green spaces, including visitor management plans for key parts of European sites within the Suffolk Coast and Heaths AONB to be completed by 2015, and a plan for Orwell Country Park that will result in a reduced impact upon birds in the Orwell Estuary;

6.3.9 It is therefore ascertained that there would be no adverse affect upon the integrity of European sites from the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review alone or in combination with the Suffolk Coastal District Core Strategy and Policies.

[14] Suffolk County Council (January 2011) The future of country parks and recreation sites in Suffolk. Brandon Country Park. Clare Country Park. Knettishall Heath Country Park.
[15] Ravenscroft, Parker, Vonk and Wright 2007 *Disturbance to waterbirds wintering in the Stour-Orwell Estuaries SPA* Commissioned by Suffolk Coast and Heaths Unit

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7 Consultations

7.1 Consultation on 'Likely Significant Effect'

7.1.1 Natural England (statutory consultee) and Suffolk Wildlife Trust (interested body) were consulted on the Likely Significant Effect stage of the process. Both organisations were sent the report by The Landscape Partnership (November 2013) *Appropriate Assessment screening for Ipswich Borough Council Draft Site Allocations and Policies (incorporating IP-One Area Action Plan) DPD* on 13th November 2013.

7.1.2 At the time of writing, Natural England had not yet been able to respond to the consultation request.

7.1.3 Suffolk Wildlife Trust responded on 19th December 2013 and requested clarification for the relationship of the assessment with the assessment for the Draft Site Allocations Local Plan document being carried out simultaneously. Clarification was given on 6th January 2013. Correspondence is given in Appendix 8.

7.2 Consultation on the Appropriate Assessment

7.2.1 This Appropriate Assessment is published with the Local Plan documents for consultation with the public, stakeholders and statutory bodies. Comments received will be publicly available following the closure of the consultation period.

8 Summary Conclusions of the Appropriate Assessment

8.1 Policy CS7

8.1.1 The Appropriate Assessment was primarily focussed upon Policy CS7 (and related policies). It is ascertained that there would be no adverse affect upon the integrity of European sites from policy CS7 and related policies in the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review.

8.2 All other policies

8.2.1 All other policies in the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review document are not likely to have a significant effect on any European site.

8.3 Interactions between policies in this plan

8.3.1 Policies have initially been assessed individually. Interactions between policies have been fully considered and no further assessment or changes to conclusions are required.

8.4 In combination with plans from others

8.4.1 It is considered that one plan may have an effect in combination, which is the Suffolk Coastal District Core Strategy and Policies. All the above conclusions take into account any in combination effects. No other plans are considered to have an effect in combination.

8.5 Final conclusion

8.5.1 It is ascertained that there would be no adverse affect upon the integrity of European sites from the Ipswich Borough Council Draft Core Strategy and Policies DPD Focused Review.

Figure 1

Staverton Park and The Thicks, Wantisden SAC

Alde-Ore & Butley Estuaries SAC

Sandlings SPA

Deben Estuary SPA, RAMSAR

Orfordness - Shingle Street SAC

Alde-Ore Estuary RAMSAR, SPA

Stour and Orwell Estuaries SPA, RAMSAR

Stour and Orwell Estuaries SPA, RAMSAR

Stour and Orwell Estuaries SPA, RAMSAR

Hamford Water SPA, RAMSAR

Key

- Ipswich boundary
- 15km radius from Ipswich boundary
- Special Area of Conservation
- Special Protection Area
- RAMSAR

E13882 Ipswich Local Plan AA

Designations Sites

Figure 01

Scale 1:200,000

October 2013

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Appendix 1

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.

2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.

3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

FOR OFFICE USE ONLY.

DD MM YY

Designation date | Site Reference Number

Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

2. Date this sheet was completed/updated:

Designated: 13 July 1994

3. Country:

UK (England)

4. Name of the Ramsar site:

Stour and Orwell Estuaries

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* □;
ii**) an electronic format** (e.g. a JPEG or ArcView image) Yes
iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* □;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

051 57 16 N 001 09 38 E

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Felixstowe

The Stour Estuary forms the south-eastern part of Essex/Suffolk boundary.

The Orwell Estuary is a relatively long and narrow estuary with extensive mudflats and some saltmarsh, running from Ipswich in the north, southwards towards Felixstowe.

Administrative region: Essex; Suffolk

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 3676.92

Min. -1
Max. 3
Mean 0

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Stour and Orwell Estuaries is a wetland of international importance, comprising extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. It provides habitats for an important assemblage of wetland birds in the non-breeding season and supports internationally important numbers of wintering and passage wildfowl and waders. The site also holds several nationally scarce plants and British Red Data Book invertebrates.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

2, 5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 2

Contains seven nationally scarce plants: stiff saltmarsh-grass *Puccinellia rupestris*; small cord-grass *Spartina maritima*; perennial glasswort *Sarcocornia perennis*; lax-flowered sea lavender *Limonium humile*; and the eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*.

Contains five British Red Data Book invertebrates: the muscid fly *Phaonia fusca*; the horsefly *Haematopota grandis*; two spiders, *Arctosa fulvolineata* and *Baryphema duffeyi*; and the Endangered swollen spire snail *Mercuria confusa*.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:
63017 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

Common redshank , *Tringa totanus totanus*,	2588 individuals, representing an average of 2% of the population (5-year peak mean 1995/96-1999/2000)

Species with peak counts in winter:

Dark-bellied brent goose, *Branta bernicla bernicla*,	2627 individuals, representing an average of 1.2% of the population (5-year peak mean 1995/96-1999/2000)
Northern pintail , *Anas acuta*, NW Europe	741 individuals, representing an average of 1.2% of the population (5-year peak mean 1995/96-1999/2000)
Grey plover , *Pluvialis squatarola*, E Atlantic/W Africa -wintering	3261 individuals, representing an average of 1.3% of the population (5-year peak mean 1995/96-1999/2000)
Red knot , *Calidris canutus islandica*, W & Southern Africa (wintering)	5970 individuals, representing an average of 1.3% of the population (5-year peak mean 1995/96-1999/2000)
Dunlin , *Calidris alpina alpina*, W Siberia/W Europe	19114 individuals, representing an average of 1.4% of the population (5-year peak mean 1995/96-1999/2000)
Black-tailed godwit , *Limosa limosa islandica*, Iceland/W Europe	2559 individuals, representing an average of 7.3% of the population (5-year peak mean 1995/96-1999/2000)
Common redshank , *Tringa totanus totanus*,	3687 individuals, representing an average of 2.8% of the population (5-year peak mean 1995/96-1999/2000)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.
Details of bird species occuring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	shingle, sand, mud
Geomorphology and landscape	lowland, coastal, valley, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), estuary
Nutrient status	
pH	
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	no information
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Lowestoft, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/lowestoft.html) Max. daily temperature: 13.0° C Min. daily temperature: 7.0° C Days of air frost: 27.8 Rainfall: 576.3 mm Hrs. of sunshine: 1535.5

General description of the Physical Features:

The Stour and Orwell estuaries include extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. The site also includes an area of low-lying grazing marsh at Shotley Marshes on the south side of the Orwell.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Stour and Orwell estuaries include extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. The site also includes an area of low-lying grazing marsh at Shotley Marshes on the south side of the Orwell.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Sediment trapping

19. Wetland types:

Inland wetland, Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	44.2

H	Salt marshes	35
F	Estuarine waters	19.8
4	Seasonally flooded agricultural land	0.7
E	Sand / shingle shores (including dune systems)	0.3

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Orwell is a relatively long and narrow estuary with extensive mudflats bordering the channel that support large patches of eelgrass *Zostera* sp. The saltmarsh tends to be sandy and fairly calcareous with a wide range of communities. There are small areas of vegetated shingle on the foreshore of the lower reaches. Grazing marshes adjoin the estuary at Shotley. The Stour estuary is a relatively simply structured estuary with a sandy outer area and a muddier inner section. The mud is rich in invertebrates and there are areas of higher saltmarsh. The shoreline vegetation varies from oak-dominated wooded cliffs, through scrub-covered banks to coarse grasses over seawalls, with reed-filled borrow dykes behind.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher Plants.

Puccinellia rupestris (nationally scarce); *Spartina maritima* (nationally scarce); *Sarcocornia perennis* (nationally scarce); *Limonium humile* (nationally scarce); *Zostera angustifolia* (nationally scarce); *Zostera marina* (nationally scarce); *Zostera noltei* (nationally scarce).

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Pied avocet , *Recurvirostra avosetta*, W Europe	21 pairs, representing an average of 2.8% of the GB population (5-year peak mean 1996-2000)

Species with peak counts in spring/autumn:

Ringed plover , *Charadrius hiaticula*, Europe/Northwest Africa	638 individuals, representing an average of 2.1% of the GB population (5-year peak mean 1995/96-1999/2000)

Species with peak counts in winter:

Great crested grebe , *Podiceps cristatus cristatus*, NW Europe	245 individuals, representing an average of 1.5% of the GB population (5-year peak mean 1995/96-1999/2000)
Great cormorant , *Phalacrocorax carbo carbo*, NW Europe	232 individuals, representing an average of 1% of the GB population (5-year peak mean 1995/96-1999/2000)

Common shelduck , *Tadorna tadorna*, NW Europe	2955 individuals, representing an average of 3.8% of the GB population (5-year peak mean 1995/96-1999/2000)
Eurasian curlew , *Numenius arquata arquata*, N. a. arquata Europe (breeding)	1824 individuals, representing an average of 1.2% of the GB population (5-year peak mean 1995/96-1999/2000)
Ruddy turnstone , *Arenaria interpres interpres*, NE Canada, Greenland/W Europe & NW Africa	690 individuals, representing an average of 1.4% of the GB population (5-year peak mean 1995/96-1999/2000)

Species Information

Nationally important species occurring on the site.

Invertebrates.

Phaonia fusca; *Haematopota grandis* (Meigen) (RDB3); *Arctosa fulvolineata* (RDB3); *Baryphyma duffeyi* (RDB3); *Mercuria* (=*Pseudamnicola*) *confusa* (RDB1).

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic
Archaeological/historical site
Livestock grazing
Non-consumptive recreation
Sport hunting
Tourism
Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Local authority, municipality etc.	+	

National/Crown Estate	+	
Private	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Tourism	+	+
Recreation	+	+
Cutting of vegetation (small-scale/subsistence)	+	
Bait collection	+	
Permanent arable agriculture		+
Grazing (unspecified)	+	
Hunting: recreational/sport	+	
Sewage treatment/disposal	+	
Harbour/port	+	
Flood control	+	
Transport route	+	+
Urban development		+
Non-urbanised settlements	+	+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. *Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.*
2. *Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.*

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2	Natural coastal processes exacerbated by fixed sea defences, port development and maintenance dredging.	+		+

For category 2 factors only.
What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Erosion - Erosion is being tackled through sediment replacement for additional erosion that can be attributed to port development and maintenance dredging. A realignment site has been created on-site to make up for the loss of habitat due to capital dredging. General background erosion has not been tackled although a Flood Management Strategy for the site is being produced.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	
Site management statement/plan implemented	+	
Area of Outstanding National Beauty (AONB)	+	+

b) Describe any other current management practices:
The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.
Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.
High tide bird counts.

Environment, Flora and Fauna.
Vegetation, bird and invertebrate surveys/monitoring carried out on NGO reserves.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

None reported

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.
A popular area for tourists as it is within an AONB. There are more visitors in the summer. However it is well used throughout the year by walkers, bird watches and for sailing.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs, European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see **15** above), list full reference citation for the scheme.

Site-relevant references

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NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type A

1.2 Site code UK9009121

1.3 Compilation date 199407

1.4 Update 200505

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Stour and Orwell Estuaries**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	199407
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 09 38 E	51 57 16 N

2.2 Site area (ha) 3676.92

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK54	Essex	28.60%
UK403	Suffolk	71.40%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	X				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population				Site assessment			
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A054	*Anas acuta*			741 I		B		C	
A050	*Anas penelope*			3979 I		C		C	
A051	*Anas strepera*			97 I		C		C	
A169	*Arenaria interpres*			690 I		C		C	
A046a	*Branta bernicla bernicla*			2627 I		B		C	
A067	*Bucephala clangula*			213 I		C		C	
A149	*Calidris alpina alpina*			19114 I		B		C	
A143	*Calidris canutus*			5970 I		C		C	
A137	*Charadrius hiaticula*				638 I	B		C	
A137	*Charadrius hiaticula*			372 I		B		C	
A156	*Limosa limosa islandica*			2559 I		A		C	
A160	*Numenius arquata*			2153 I		C		C	
A017	*Phalacrocorax carbo*			232 I		C		C	
A141	*Pluvialis squatarola*			3261 I		B		C	
A005	*Podiceps cristatus*			245 I		C		C	
A132	*Recurvirostra avosetta*		21 P			B		C	
A048	*Tadorna tadorna*			2955 I		B		C	
A162	*Tringa totanus*			3687 I		B		C	
A162	*Tringa totanus*				2588 I	B		C	
A142	*Vanellus vanellus*			6242 I		C		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	88.0
Salt marshes. Salt pastures. Salt steppes	5.0
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	0.5
Inland water bodies (standing water, running water)	0.8
Bogs. Marshes. Water fringed vegetation. Fens	5.5
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	0.2
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Alluvium, Clay, Mud, Neutral, Sand, Shingle

Geomorphology & landscape:

Coastal, Estuary, Intertidal sediments (including sandflat/mudflat), Lagoon, Lowland, Subtidal sediments (including sandbank/mudbank)

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

Recurvirostra avosetta (Western Europe/Western Mediterranean - breeding)	3.6% of the population in Great Britain 5-year peak mean 1996-2000

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

Anas acuta (North-western Europe)	1.2% of the population 5-year peak mean 1995/96-1999/2000
Branta bernicla bernicla (Western Siberia/Western Europe)	1.2% of the population 5-year peak mean 1995/96-1999/2000
Calidris alpina alpina (Northern Siberia/Europe/Western Africa)	1.4% of the population 5-year peak mean 1995/96-1999/2000
Calidris canutus (North-eastern Canada/Greenland/Iceland/North-western Europe)	1.3% of the population 5-year peak mean 1995/96-1999/2000
Limosa limosa islandica (Iceland - breeding)	7.3% of the population 5-year peak mean 1995/96-1999/2000
Pluvialis squatarola (Eastern Atlantic - wintering)	1.3% of the population 5-year peak mean 1995/96-1999/2000
Tringa totanus (Eastern Atlantic - wintering)	2.8% of the population 5-year peak mean 1995/96-1999/2000

On passage the area regularly supports:

Tringa totanus (Eastern Atlantic - wintering)	2% of the population 5-year peak mean 1995/96-1999/2000

ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS

Over winter the area regularly supports:

63017 waterfowl (5 year peak mean 19/05/2005)

Including:

Podiceps cristatus , Phalacrocorax carbo , Branta bernicla bernicla , Tadorna tadorna , Anas penelope , Anas strepera , Anas acuta , Bucephala clangula , Charadrius hiaticula , Pluvialis squatarola , Vanellus vanellus , Calidris canutus , Calidris alpina alpina , Limosa limosa islandica , Numenius arquata , Tringa totanus , Arenaria interpres .

4.3 Vulnerability

There is pressure for increased port development and marine recreation in this area. Marine recreation is being addressed within the Estuary Management Plan. Port development is being considered by public inquiry. Maintenance dredging of the River Stour and River Orwell poses potential threats to the SPA but the activity is being addressed through the provisions of the Habitats Regulations. The saltmarsh is eroding, partly as a result of natural coastal processes; the beneficial use of dredgings is taking place to try to combat these processes.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

Appendix 2

European Site Conservation Objectives for Stour and Orwell Estuaries Special Protection Area Site Code: UK9009121

With regard to the individual species and/or assemblage of species for which the site has been classified ('the Qualifying Features' listed below);

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features:

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
A054 *Anas acuta*; Northern pintail (Non-breeding)
A132 *Recurvirostra avosetta*; Pied avocet (Breeding)
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
A143 *Calidris canutus*; Red knot (Non-breeding)
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
Waterbird assemblage

Additional Qualifying Features Identified by the 2001 UK SPA Review:

A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
A082 *Circus cyaneus*; Hen harrier (Non-breeding)
A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
A169 *Arenaria interpres*; Ruddy turnstone (Non-breeding)

This is a European Marine Site

This site is a part of the Stour and Orwell Estuaries European Marine Site. These conservation objectives should be used in conjunction with the Regulation 35 Conservation Advice Package, for further details please contact Natural England's enquiry service at enquiries@naturalengland.org.uk, or by phone on 0845 600 3078, or visit the Natural England website at: http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each bird feature for a Special Protection Area (SPA). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the Birds Directive for those features. On the first page of this document there may be a list of 'Additional Qualifying Features identified by the 2001 UK SPA Review'. These are additional features identified by the UK SPA Review published in 2001 and, although not yet legally classified, are as a matter of Government policy treated in the same way as classified features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

Appendix 3

Alde, Ore and Butley Estuaries

Site details

Country	England
Unitary Authority	Suffolk
Centroid*	TM444509
Latitude	52.10166667
Longitude	1.568888889
SAC EU code	UK0030076
Status	Designated Special Area of Conservation (SAC)
Area (ha)	1561.53

* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

Location of Alde, Ore and Butley Estuaries SAC/SCI/cSAC

General site character

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (70%)
Salt marshes, Salt pastures, Salt steppes (25%)
Shingle, Sea cliffs, Islets (5%)

Boundary map and associated biodiversity information on the NBN Gateway.

Natura 2000 data form for this site as submitted to Europe (PDF format, size 30kb).

Interactive map from MAGIC (Multi-Agency Geographic Information for the Countryside).

Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

Annex I habitats that are a primary reason for selection of this site

1130 Estuaries

This **estuary**, made up of three rivers, is the only bar-built estuary in the UK with a shingle bar. This bar has been extending rapidly along the coast since 1530, pushing the mouth of the estuary progressively south-westwards. The eastwards-running Alde River originally entered the sea at Aldeburgh, but now turns south along the inner side of the Orfordness shingle spit. It is relatively wide and shallow, with extensive intertidal mudflats on both sides of the channel in its upper reaches and saltmarsh accreting along its fringes. The Alde subsequently becomes the south-west flowing River Ore, which is narrower and deeper with stronger currents. The smaller Butley River, which has extensive areas of saltmarsh and a reedbed community bordering intertidal mudflats, flows into the Ore shortly after the latter divides around Havergate Island. The mouth of the River Ore is still moving south as the Orfordness shingle spit continues to grow through longshore drift from the north. There is a range of littoral sediment and rock biotopes (the latter on sea defences) that are of high diversity and species richness for estuaries in eastern England. Water quality is excellent throughout. The area is relatively natural, being largely undeveloped by man and with very limited industrial activity. The estuary contains large areas of shallow water over subtidal sediments, and extensive mudflats and saltmarshes exposed at low water. Its diverse and species-rich intertidal sand and mudflat biotopes grade naturally along many lengths of the shore into vegetated or dynamic shingle habitat, saltmarsh, grassland and reedbed.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

1140 Mudflats and sandflats not covered by seawater at low tide
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

Annex II species that are a primary reason for selection of this site

Not applicable.

Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.

2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.

3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

FOR OFFICE USE ONLY.

DD MM YY

Designation date | Site Reference Number

Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

2. Date this sheet was completed/updated:

Designated: 04 October 1996

3. Country:

UK (England)

4. Name of the Ramsar site:

Alde–Ore Estuary

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* □;
ii**) an electronic format** (e.g. a JPEG or ArcView image) Yes
iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* □;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

52 04 58 N 01 33 03 E

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Woodbridge

Alde-Ore Estuary is located on the east coast of Suffolk, east of Woodbridge, stretching between Aldeburgh to the north and Bawdsey to the south.

Administrative region: Suffolk

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 2546.99

Min. -1
Max. 5
Mean 1

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site comprises the estuary complex of the rivers Alde, Butley and Ore, including Havergate Island and Orfordness. There are a variety of habitats including, intertidal mudflats, saltmarsh, vegetated shingle (including the second-largest and best-preserved area in Britain at Orfordness), saline lagoons and grazing marsh. The Orfordness/Shingle Street landform is unique within Britain in combining a shingle spit with a cuspate foreland. The site supports nationally-scarce plants, British Red Data Book invertebrates, and notable assemblages of breeding and wintering wetland birds.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

2, 3, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 2

The site supports a number of nationally-scarce plant species and British Red Data Book invertebrates.

Ramsar criterion 3

The site supports a notable assemblage of breeding and wintering wetland birds.

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species regularly supported during the breeding season:

Lesser black-backed gull , *Larus fuscus graellsii*, W Europe/Mediterranean/W Africa	5790 apparently occupied nests, representing an average of 3.9% of the breeding population (Seabird 2000 Census)

Species with peak counts in winter:

Pied avocet , *Recurvirostra avosetta*, Europe/Northwest Africa	1187 individuals, representing an average of 1.6% of the population (5 year peak mean 1998/9-2002/3)
Common redshank , *Tringa totanus totanus*,	2368 individuals, representing an average of 2% of the GB population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

See Sections 21/22 for details of noteworthy species

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15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation)**:**

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

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16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	shingle, mud, nutrient-rich, sedimentary
Geomorphology and landscape	lowland, coastal, shingle bar, intertidal sediments (including sandflat/mudflat), estuary, lagoon
Nutrient status	mesotrophic
pH	no information
Salinity	saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent

Summary of main climatic features	Annual averages (Lowestoft, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/lowestoft.html) Max. daily temperature: 13.0° C Min. daily temperature: 7.0° C Days of air frost: 27.8 Rainfall: 576.3 mm Hrs. of sunshine: 1535.5

General description of the Physical Features:

This estuary is the only bar-built estuary in the UK with a shingle bar. This bar has been extending rapidly along the coast since 1530, pushing the mouth of the estuary progressively south-westwards. The eastwards-running Alde River originally entered the sea at Aldeburgh, but now turns south along the inner side of the Orfordness shingle spit. It is relatively wide and shallow, with extensive intertidal mudflats on both sides of the channel in its upper reaches and saltmarsh accreting along its fringes. The Alde subsequently becomes the south-west flowing River Ore, which is narrower and deeper with stronger currents. The smaller Butley River, which has extensive areas of saltmarsh and a reedbed community bordering intertidal mudflats, flows into the Ore shortly after the latter divides around Havergate Island. The mouth of the River Ore is still moving south as the Orfordness shingle spit continues to grow through longshore drift from the north.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Alde-Ore Estuary comprises the estuarine complex of the rivers Alde, Butley and Ore, including Havergate Island and Orfordness.

This estuary is the only bar-built estuary in the UK with a shingle bar. This bar has been extending rapidly along the coast since 1530, pushing the mouth of the estuary progressively south-westwards. The eastwards-running Alde River originally entered the sea at Aldeburgh, but now turns south along the inner side of the Orfordness shingle spit. It is relatively wide and shallow, with extensive intertidal mudflats on both sides of the channel in its upper reaches and saltmarsh accreting along its fringes. The Alde subsequently becomes the south-west flowing River Ore, which is narrower and deeper with stronger currents. The smaller Butley River, which has extensive areas of saltmarsh and a reedbed community bordering intertidal mudflats, flows into the Ore shortly after the latter divides around Havergate Island. The mouth of the River Ore is still moving south as the Orfordness shingle spit continues to grow through longshore drift from the north.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces

19. Wetland types:

Inland wetland, Marine/coastal wetland

Code	Name	% Area
E	Sand / shingle shores (including dune systems)	33.3
H	Salt marshes	23.6
G	Tidal flats	17.7
M	Rivers / streams / creeks: permanent	9.8
Sp	Saline / brackish marshes: permanent	5.9

Tp	Freshwater marshes / pools: permanent	3.9
U	Peatlands (including peat bogs swamps, fens)	3.8
J	Coastal brackish / saline lagoons	2

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The main habitat types of the Alde-Ore Estuary are: intertidal mudflats, saltmarsh, reedswamp, coastal freshwater, brackish lagoons, semi-improved grazing marsh, brackish ditches and vegetated shingle, the second-largest and best-preserved example in Britain.

A unique feature for East Anglian beaches is the abundance on the ground of normally epiphytic lichens.

There is a zonation of shingle vegetation from shifting to more stable areas of grassland and lichen communities.

Areas of saltmarsh succeed to higher saltmarsh and neutral grassland with ditches.

There is a series of brackish lagoons and ditches; and borrow pits.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher Plants.

A range of nationally scarce plant species characteristic of freshwater, estuarine, and shingle habitats, and their transitions are present. These include: *Althaea officinalis, Frankenia laevis, Lathyrus japonicus, Lepidium latifolium, Medicago minima, Parapholis incurva, Puccinellia fasciculata, Ruppia cirrhosa, Sarcocornia perennis, Sonchus palustris, Trifolium suffocatum, Vicia lutea* and *Zostera angustifolia*.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Eurasian marsh harrier , *Circus aeruginosus*, Europe	3 pairs, representing an average of 1.9% of the GB population (5 year mean 1993-1997)
Mediterranean gull , *Larus melanocephalus*, Europe	6 apparently occupied nests, representing an average of 5.5% of the GB population (Seabird 2000 Census)
Sandwich tern , *Sterna (Thalasseus) sandvicensis sandvicensis*, W Europe	169 pairs, representing an average of 1.6% of the GB population (5 year mean 1991-1995)

Little tern , *Sterna albifrons albifrons*, W Europe	88 apparently occupied nests, representing an average of 4.5% of the GB population (Seabird 2000 Census)
Species with peak counts in spring/autumn:	
Black-tailed godwit , *Limosa limosa islandica*, Iceland/W Europe	283 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
Spotted redshank , *Tringa erythropus*, Europe/W Africa	44 individuals, representing an average of 32.3% of the GB population (5 year peak mean 1998/9-2002/3)
Common greenshank , *Tringa nebularia*, Europe/W Africa	29 individuals, representing an average of 4.8% of the GB population (5 year peak mean 1998/9-2002/3)
Species with peak counts in winter:	
Greater white-fronted goose , *Anser albifrons albifrons*, NW Europe	186 individuals, representing an average of 3.2% of the GB population (5 year peak mean for 1996/7-2000/01)
Common shelduck , *Tadorna tadorna*, NW Europe	1398 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1998/9-2002/3)
Eurasian wigeon , *Anas penelope*, NW Europe	6851 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)
Eurasian teal , *Anas crecca*, NW Europe	2447 individuals, representing an average of 1.2% of the GB population (5 year peak mean 1998/9-2002/3)
Northern pintail , *Anas acuta*, NW Europe	556 individuals, representing an average of 1.9% of the GB population (5 year peak mean 1998/9-2002/3)
Northern shoveler , *Anas clypeata*, NW & C Europe	224 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Invertebrates.

The highly specialised invertebrate fauna of the saline lagoons includes *Nematostella vectensis*, and *Gammarus insensibilis*, both species protected under Schedules 5 and 8 of the Wildlife and Countryside Act 1981 (as amended).

Other notable invertebrates on the site include: *Malacosoma castrensis, Campsicnemus magius, Cheilosia velutina, Empis prodomus, Dixella attica, Hylaeus euryscapus, Pseudamnicola confusa, Euophrys browningi, Baryphyma duffeyi, Haplodrassus minor, Trichoncus affinis*.

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic
Aquatic vegetation (e.g. reeds, willows, seaweed)
Archaeological/historical site
Environmental education/ interpretation
Fisheries production
Livestock grazing
Non-consumptive recreation

Scientific research
Sport fishing
Sport hunting
Tourism
Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
National/Crown Estate	+	
Private	+	+
Public/communal	+	

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	
Collection of non-timber natural products: commercial	+	
Fishing: recreational/sport	+	
Marine/saltwater aquaculture	+	
Gathering of shellfish	+	
Permanent arable agriculture		+
Grazing (unspecified)	+	+
Hunting: recreational/sport	+	
Harbour/port		+
Flood control		+
Irrigation (incl. agricultural water supply)		+
Non-urbanised settlements		+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. *Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.*
2. *Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.*

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2		+		+

For category 2 factors only.
What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Erosion - English Nature provides advice to the Environment Agency and coastal local authorities in relation to flood and coastal protection management. This will inform the development of the Suffolk Estuaries strategies and the second generation shoreline management plan.
A Management Scheme is required, taking into account the effects of erosion. A Coastal Habitat Management Plan will be produced for this site.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	+
Site management statement/plan implemented	+	
Other	+	
Area of Outstanding National Beauty (AONB)	+	
Environmentally Sensitive Area (ESA)	+	
Special Area of Conservation (SAC)	+	
Management plan in preparation	+	

b) Describe any other current management practices:
The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.
Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Environment.
Monitoring estuarine processes.
Saline lagoon survey.
Study on the effects of guanofication on shingle flora.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

None reported

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities.
The site is used informally for walking, boating and angling.

Facilities provided.

River moorings.

Seasonality.

Walking and boating activities are predominantly in spring and summer. Seasonal (winter) wildfowling occurs on the estuary.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs, European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see **15** above), list full reference citation for the scheme.

Site-relevant references

Anon. (1995) *Biodiversity: The UK Steering Group Report. Volume 2: Action plans*. HMSO, London

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Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge. www.wwt.org.uk/publications/default.asp?PubID=14

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Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone**: +41 22 999 0170** • Fax: **+41 22 999 0169** • email: **ramsar@ramsar.org**

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type J

1.2 Site code UK9009112

1.3 Compilation date 199610

1.4 Update 199803

1.5 Relationship with other Natura 2000 sites

U	K	0	0	1	4	7	8	0

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Alde–Ore Estuary**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	199610
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 33 03 E	52 04 58 N

2.2 Site area (ha) 2416.87

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK403	Suffolk	100.00%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	X				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population					Site assessment		
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A081	*Circus aeruginosus*		>3 P			C		B	
A183	*Larus fuscus*		14070 P			A		C	
A151	*Philomachus pugnax*			3 I		C		C	
A132	*Recurvirostra avosetta*			766 I		A		B	
A132	*Recurvirostra avosetta*		104 P			A		B	
A195	*Sterna albifrons*		48 P			C		C	
A191	*Sterna sandvicensis*		170 P			C		C	
A162	*Tringa totanus*			1919 I		C		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	50.0
Salt marshes. Salt pastures. Salt steppes	20.0
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	25.0
Inland water bodies (standing water, running water)	
Bogs. Marshes. Water fringed vegetation. Fens	5.0
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Mud, Nutrient-rich, Sedimentary, Shingle

Geomorphology & landscape:

Coastal, Estuary, Intertidal sediments (including sandflat/mudflat), Lagoon, Lowland, Shingle bar

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

Circus aeruginosus	at least 1.9% of the GB breeding population 5 year mean, 1993-1997

Recurvirostra avosetta (Western Europe/Western Mediterranean - breeding)	23.1% of the GB breeding population 5 year mean, 1990-1994
Sterna albifrons (Eastern Atlantic - breeding)	2% of the GB breeding population 5 count mean, 1993-4,1996-8
Sterna sandvicensis (Western Europe/Western Africa)	1.2% of the GB breeding population 5 year mean, 1992-1996
Over winter the area regularly supports:	
Philomachus pugnax (Western Africa - wintering)	0.4% of the GB population 5 year peak mean 1991/92-1995/96
Recurvirostra avosetta (Western Europe/Western Mediterranean - breeding)	60.3% of the GB population 5 year peak mean 1991/92-1995/96

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

Larus fuscus (Western Europe/Mediterranean/Western Africa)	11.3% of the breeding population 5 year mean 1994-1998
Over winter the area regularly supports:	
Tringa totanus (Eastern Atlantic - wintering)	1.1% of the population 5 year peak mean 1991/92-1995/96

4.3 Vulnerability

The area is vulnerable to sea-level rise and coastal squeeze. These issues are being addressed through The Environment Agency Local Environment Action Plan, the estuary Management Plan and possibly managed retreat. Human disturbance from recreation is minimal as this is a reasonably robust system. Flood defence policy will need to take into account risks to the site from flooding and of flood control alleviation measures. Shooting is controlled through a management plan. A considerable part of the site is managed sympathetically by Suffolk Wildlife Trust, National Trust, Royal Society for the Protection of Birds and English Nature.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK01 (NNR)	4.5
UK04 (SSSI/ASSI)	100.0

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.

2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.

3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

FOR OFFICE USE ONLY.

DD MM YY

Designation date | Site Reference Number

Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

2. Date this sheet was completed/updated:

Designated: 11 March 1996

3. Country:

UK (England)

4. Name of the Ramsar site:

Deben Estuary

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* □;
ii**) an electronic format** (e.g. a JPEG or ArcView image) Yes
iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* □;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

52 02 31 N 01 20 44 E

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Ipswich

Deben Estuary is located in East Anglia, on the east coast of Suffolk. It extends 18 km from the tidal limit above Wilford Bridge near Woodbridge, south to the mouth of the estuary at Felixstowe.

Administrative region: Suffolk

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 978.93

Min. -1
Max. 4
Mean 1

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

This estuary is relatively narrow and sheltered. It has limited amounts of freshwater input and the intertidal areas are constrained by sea-walls. The site supports nationally and internationally-important flora and fauna.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

2, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 2

Supports a population of the mollusc *Vertigo angustior* (Habitats Directive Annex II (S1014); British Red Data Book Endangered). Martlesham Creek is one of only about fourteen sites in Britain where this species survives.

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

Dark-bellied brent goose, *Branta bernicla bernicla*,	1953 individuals, representing an average of 1.9% of the GB population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

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15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation)**:**

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

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16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	mud, sedimentary
Geomorphology and landscape	lowland, coastal, valley, intertidal sediments (including sandflat/mudflat), estuary
Nutrient status	eutrophic
pH	no information
Salinity	saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Lowestoft, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/lowestoft.html) Max. daily temperature: 13.0° C Min. daily temperature: 7.0° C Days of air frost: 27.8 Rainfall: 576.3 mm Hrs. of sunshine: 1535.5

General description of the Physical Features:

The Deben Estuary extends south-eastwards for over 12 km from the town of Woodbridge to the sea just north of Felixstowe. It is relatively narrow and sheltered, and has limited amounts of freshwater input. The estuary mouth is the narrowest section and is protected by the presence of shifting sandbanks. The intertidal areas are constrained by sea-walls. The saltmarsh and intertidal mudflats that occupy the majority of the site, however, display the

most complete range of saltmarsh community types in Suffolk. The estuary holds a range of swamp communities that fringe the estuary, and occasionally form larger stands. In general, these are dominated by common reed *Phragmites australis*.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Deben Estuary extends south-eastwards for over 12 km from the town of Woodbridge to the sea just north of Felixstowe. It is relatively narrow and sheltered, and has limited amounts of freshwater input. The estuary mouth is the narrowest section and is protected by the presence of shifting sandbanks. The intertidal areas are constrained by sea-walls. The saltmarsh and intertidal mudflats that occupy the majority of the site, however, display the most complete range of saltmarsh community types in Suffolk.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

No special values known

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
H	Salt marshes	46.8
G	Tidal flats	36.8
F	Estuarine waters	15.3
U	Peatlands (including peat bogs swamps, fens)	1
E	Sand / shingle shores (including dune systems)	0.1

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The estuary supports a highly complex mosaic of habitat types including:

mudflats, lower and upper saltmarsh, swamp and scrub. The composition of the mosaic varies with substrate, frequency and duration of tidal inundation, exposure, location and management.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher Plants.

Althaea officinalis, Bupleurum tenuissimum, Lepidium latifolium, Puccinellia fasciculata, Sarcocornia perennis, Suaeda vera, Zostera angustifolia are nationally scarce plants associated with estuarine habitats.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species currently occurring at levels of national importance:

Species with peak counts in spring/autumn:

Black-tailed godwit , *Limosa limosa islandica*, Iceland/W Europe	307 individuals, representing an average of 1.9% of the GB population (5 year peak mean 1998/9-2002/3)
Common greenshank , *Tringa nebularia*, Europe/W Africa	22 individuals, representing an average of 3.6% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Bean goose , *Anser fabalis fabalis*, NW Europe - wintering	5 individuals, representing an average of 1.2% of the GB population (Source period not collated)
Common shelduck , *Tadorna tadorna*, NW Europe	832 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)
Pied avocet , *Recurvirostra avosetta*, Europe/Northwest Africa	167 individuals, representing an average of 4.9% of the GB population (5 year peak mean 1998/9-2002/3)
Spotted redshank , *Tringa erythropus*, Europe/W Africa	3 individuals, representing an average of 2.2% of the GB population (5 year peak mean 1998/9-2002/3)
Common redshank , *Tringa totanus totanus*,	2124 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Invertebrates.

Vertigo angustior (Nationally Scarce)
Vertigo pusilla (Nationally Scarce)

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23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic
Fisheries production
Non-consumptive recreation
Sport fishing
Sport hunting
Tourism
Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
National/Crown Estate	+	
Private	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Cutting of vegetation (small-scale/subsistence)	+	
Fishing: commercial	+	
Fishing: recreational/sport	+	
Bait collection	+	
Arable agriculture (unspecified)		+
Grazing (unspecified)	+	+
Hunting: recreational/sport	+	
Flood control		+
Irrigation (incl. agricultural water supply)		+
Urban development		+
Non-urbanised settlements		+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. *Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.*
2. *Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.*

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2	Coastal squeeze within the Deben Estuary	+		+

For category 2 factors only.
What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Erosion - English Nature provides advice to the Environment Agency and coastal local authorities in relation to flood and coastal protection management. This will inform the development of the Suffolk Estuaries strategies and the second generation shoreline management plan.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Site management statement/plan implemented	+	
Other	+	+
Area of Outstanding National Beauty (AONB)	+	
Environmentally Sensitive Area (ESA)	+	

b) Describe any other current management practices:
The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

None reported

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities.

Boating and walking locally and bird watching centred on Martlesham Creek and Felixstowe Ferry. Fishing.

Facilities provided.

Moorings along the river at Woodbridge, Waldring Field, Ramsholt.

Seasonality.

Activities are predominantly undertaken during the summer especially fishing, as this is when thin-lipped grey mullet *Liza ramada* enter the estuary.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs, European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see **15** above), list full reference citation for the scheme.

Site-relevant references

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Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
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NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type A

1.2 Site code UK9009261

1.3 Compilation date 199603

1.4 Update 199803

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Deben Estuary**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	199603
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 20 44 E	52 02 31 N

2.2 Site area (ha) 978.93

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK403	Suffolk	100.00%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	X				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population				Site assessment			
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A046a	*Branta bernicla bernicla*			2516 I		B		C	
A132	*Recurvirostra avosetta*			95 I		B		B	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	80.0
Salt marshes. Salt pastures. Salt steppes	18.0
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	1.0
Inland water bodies (standing water, running water)	
Bogs. Marshes. Water fringed vegetation. Fens	1.0
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Mud, Sedimentary

Geomorphology & landscape:

Coastal, Estuary, Intertidal sediments (including sandflat/mudflat), Lowland, Valley

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

Recurvirostra avosetta (Western Europe/Western Mediterranean - breeding)	7.5% of the GB population 5 year peak mean 1991/92-1995/96

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

Branta bernicla bernicla (Western Siberia/Western Europe)	0.8% of the population 5 year peak mean 1991/92-1995/96

4.3 Vulnerability

The saltmarsh and intertidal habitats are vulnerable to sea level rise and coastal squeeze. These issues are being addressed through the Environment Agency LEAP, the estuary Shoreline Management Plan and research into possible managed retreat in parts of the site.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

Hamford Water

Site details

Country	England
Unitary Authority	Essex
Centroid*	TM217276
Latitude	51.9025
Longitude	1.2236
SAC EU code	UK0030377
Status	Candidate site submitted to the EU (Candidate)
Area (ha)	50.35

* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

Location of Hamford Water SAC/SCI/cSAC

General site character

Inland water bodies (Standing water, Running water) (7%)
Grassland and scrub habitats (general) (85%)
Woodland habitats (general) (8%)

Boundary map and associated biodiversity information on the NBN Gateway.

Natura 2000 data form for this site as submitted to Europe (PDF format, size 30kb).

Interactive map from MAGIC (Multi-Agency Geographic Information for the Countryside).

Note:
When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

Annex I habitats that are a primary reason for selection of this site

Not applicable

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

Not applicable.

Annex II species that are a primary reason for selection of this site

4035 Fisher's estuarine moth Gortyna borelii lunata

Fisher's estuarine moth *Gortyna borelii lunata* has a localised population distribution in the UK, due to its specific habitat requirements and is only found in two areas, the north Essex coast and the north Kent Coast. Hamford Water supports the majority of the Essex population and is the most important UK site for this species, supporting approximately 70% of the population. Hamford Water is a large, shallow estuarine basin comprising tidal creeks, islands, intertidal mud, sand flats and saltmarshes. Above the saltmarsh there is unimproved and improved grassland (including grazing marsh), scrub, woodland, hedges, ditches, ponds and reedbeds. The site encompasses those areas where the moth's food plant hog's fennel (*Peucedanum officinale*) grows and where there is an abundance of the grasses required by the species for egg laying.

Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type A

1.2 Site code UK9009131

1.3 Compilation date 199306

1.4 Update 199902

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Hamford Water**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	199306
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 14 29 E	51 52 46 N

2.2 Site area (ha) 2187.21

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK54	Essex	100.00%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	X				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population				Site assessment			
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A052	*Anas crecca*			3631 I		B		C	
A046a	*Branta bernicla bernicla*			6892 I		B		C	
A137	*Charadrius hiaticula*			520 I		C		C	
A156	*Limosa limosa islandica*			1121 I		A		C	
A141	*Pluvialis squatarola*			3251 I		B		C	
A132	*Recurvirostra avosetta*			317 I		A		B	
A195	*Sterna albifrons*		55 P			B		C	
A048	*Tadorna tadorna*			1629 I		B		C	
A162	*Tringa totanus*			1461 I		C		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	70.0
Salt marshes. Salt pastures. Salt steppes	25.0
Coastal sand dunes. Sand beaches. Machair	1.0
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	1.0
Bogs. Marshes. Water fringed vegetation. Fens	2.0
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	1.0
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Alluvium, Clay, Mud, Neutral, Sand

Geomorphology & landscape:

Barrier beach, Coastal, Enclosed coast (including embayment), Estuary, Floodplain, Intertidal sediments (including sandflat/mudflat), Islands, Lagoon, Lowland, Open coast (including bay), Subtidal sediments (including sandbank/mudbank)

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

Sterna albifrons (Eastern Atlantic - breeding)	2.3% of the GB breeding population 4 year mean 1992-1995
Over winter the area regularly supports:	
Recurvirostra avosetta (Western Europe/Western Mediterranean - breeding)	25% of the GB population 5 year peak mean 1991/92-1995/96

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

Anas crecca (North-western Europe)	2.7% of the population in Great Britain 5 year peak mean 1991/92-1995/96
Branta bernicla bernicla (Western Siberia/Western Europe)	2.3% of the population 5 year peak mean 1991/92-1995/96
Charadrius hiaticula (Europe/Northern Africa - wintering)	1.1% of the population 5 year peak mean 1991/92-1995/96
Limosa limosa islandica (Iceland - breeding)	1.7% of the population 5 year peak mean 1991/92-1995/96
Pluvialis squatarola (Eastern Atlantic - wintering)	7.5% of the population in Great Britain 5 year peak mean 1991/92-1995/96
Tadorna tadorna (North-western Europe)	2.2% of the population in Great Britain 5 year peak mean 1991/92-1995/96
Tringa totanus (Eastern Atlantic - wintering)	0.8% of the population 5 year peak mean 1991/92-1995/96

4.3 Vulnerability

The main vulnerability is due to natural changes in sea level, leading to accelerated erosion of saltmarshes. The problem is being addressed in two ways; use of sand and gravels from dredging in Harwich harbour to reinforce existing beaches and protecting grazing marsh areas by reinforcing seawall toe with these materials in the most aggressive areas. The option of managed realignment may be considered in the future.

The nature of the site leads to potential water quality problems due to discharge from boats and from local sewage works as well as small industrial discharges. English Nature is addressing this problem with Water Quality Control officers of the Environment Agency (monitoring) and any authorised discharges will be reviewed under the provisions of the Habitat Regulations.

Although a secluded backwater the site attracts a large number of yachts and accompanying watersports. There is occasional disturbance to the site by water and jet skiers. This is controlled by a wardening scheme.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK01 (NNR)	64.8
UK04 (SSSI/ASSI)	100.0

JNCC is a statutory adviser to UK Government and devolved administrations

JNCC
Joint Nature Conservation Committee

Orfordness - Shingle Street

Site details

Country	England
Unitary Authority	Suffolk
Centroid*	TM440486
Latitude	52.08138889
Longitude	1.561388889
SAC EU code	UK0014780
Status	Designated Special Area of Conservation (SAC)
Area (ha)	901.19

* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

Location of Orfordness - Shingle Street SAC/SCI/cSAC

General site character

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (25%)
Salt marshes, Salt pastures, Salt steppes (15%)
Shingle, Sea cliffs, Islets (40%)
Improved grassland (18%)
Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) (2%)

Boundary map and associated biodiversity information on the NBN Gateway.

Natura 2000 data form for this site as submitted to Europe (PDF format, size 30kb).

Interactive map from MAGIC (Multi-Agency Geographic Information for the Countryside).

Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

Annex I habitats that are a primary reason for selection of this site

1150 Coastal lagoons * Priority feature

Note: not a marine feature as occur landward of Highest Astronomical Tide Orfordness – Shingle Street encompasses a series of percolation **lagoons** on the east coast of England, and, together with Benacre to Easton Bavents and The Wash and North Norfolk Coast, forms a significant part of the percolation lagoon resource concentrated in this part of the UK. The lagoons at this site have developed in the shingle bank adjacent to the shore at the mouth of the Ore estuary. The salinity of the lagoons is maintained by percolation through the shingle, although at high tides sea water can overtop the shingle bank. The fauna of these lagoons includes typical lagoon species, such as the cockle *Cerastoderma glaucum*, the ostracod *Cyprideis torosa* and the gastropods *Littorina saxatilis tenebrosa* and *Hydrobia ventrosa*. The nationally rare starlet sea anemone *Nematostella vectensis* is also found at the site.

1210 Annual vegetation of drift lines

Orfordness is an extensive shingle spit some 15 km in length and is one of two sites representing **Annual vegetation of drift lines** on the east coast of England. In contrast to Minsmere to Walberswick Heaths and Marshes, drift-line vegetation occurs on the sheltered, western side of the spit, at the transition from shingle to saltmarsh, as well as on the exposed eastern coast. The drift-line community is widespread on the site and comprises sea beet *Beta vulgaris* ssp. *maritima* and orache *Atriplex* spp. in a strip 2-5 m wide.

1220 Perennial vegetation of stony banks

Orfordness is an extensive shingle structure on the east coast of England and consists of a foreland, a 15 km-long spit and a series of recurves running from north to south on the Suffolk coast. This spit has been selected as it supports some of the largest and most natural sequences in the UK of shingle vegetation affected by salt spray. The southern end of the spit has a particularly fine series of undisturbed ridges, with zonation of communities determined by the ridge pattern. Pioneer communities with sea pea *Lathyrus japonicus* and false oat-grass *Arrhenatherum elatius* grassland occur. Locally these are nutrient-enriched by the presence of a gull colony; elsewhere they support rich lichen communities. The northern part of Orfordness has suffered considerable damage from defence-related activities but a restoration programme for the shingle vegetation is underway.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

Not applicable.

Annex II species that are a primary reason for selection of this site

Not applicable.

Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

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NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type A **1.2 Site code** UK9020286

1.3 Compilation date 200108 **1.4 Update**

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Sandlings**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	200108
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 26 33 E	52 04 44 N

2.2 Site area (ha) 3391.8 **2.3 Site length (km)**

2.5 Administrative region

NUTS code	Region name	% cover
UK403	Suffolk	100.00%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	X				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population				Site assessment			
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A224	*Caprimulgus europaeus*		109 P			B		C	
A246	*Lullula arborea*		154 P			B		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	1.5
Bogs. Marshes. Water fringed vegetation. Fens	0.9
Heath. Scrub. Maquis and garrigue. Phygrana	14.6
Dry grassland. Steppes	11.5
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	0.1
Other arable land	
Broad-leaved deciduous woodland	10.6
Coniferous woodland	57.6
Evergreen woodland	
Mixed woodland	1.4
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	1.8
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Geomorphology & landscape:

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

Caprimulgus europaeus	3.2% of the GB breeding population Count as at 1992
Lullula arborea	10.3% of the GB breeding population Count as at 1997

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

4.3 Vulnerability

Sandlings SPA comprises six SSSIs. Sandlings Forest SSSI, the largest of these, is dominated by commercial forestry. Within the forest, large areas of open ground suitable for woodlark and nightjar were created by storm damage in 1987. Maintenance of open areas in the future relies on clear felling as the main silvicultural practice and the maintenance of some areas earmarked for woodlark and nightjar habitat. These objectives are included in the East Anglia Forest District Strategic Plan.

On the heathland SSSIs, lack of traditional management has resulted in the heathland being subjected to sucessional changes with the consequent spread of bracken, shrubs and trees. This is being addressed through habitat management work under the Countryside Stewardship Scheme and Tomorrows Heathland Heritage, and is resulting in the restoration of more typical heathland habitat favourable to both nightjar and woodlark.

Human influences on the site include the frequent presence of travellers' caravans. This is a longstanding problem, and a variety of mechanisms are utilised to keep them from the heathland; the digging of trenches and construction of earth barriers around the borders of sites is proving effective.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

Staverton Park and The Thicks, Wantisden

Site details

Country	England
Unitary Authority	Suffolk
Centroid*	TM356509
Latitude	52.10583333
Longitude	1.440833333
SAC EU code	UK0012741
Status	Designated Special Area of Conservation (SAC)
Area (ha)	81.45

* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

General site character

Broad-leaved deciduous woodland (100%)

Boundary map and associated biodiversity information on the NBN Gateway.

Natura 2000 data form for this site as submitted to Europe (PDF format, size 30kb).

Interactive map from MAGIC (Multi-Agency Geographic Information for the Countryside).

Location of Staverton Park and The Thicks, Wantisden SAC/SCI/cSAC

Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

Annex I habitats that are a primary reason for selection of this site

9190 Old acidophilous oak woods with Quercus robur on sandy plains

This site is representative of **old acidophilous oak woods** in the eastern part of its range, and its ancient oaks *Quercus* spp. have rich invertebrate and epiphytic lichen assemblages. Despite being in the most 'continental' part of southern Britain, the epiphytic lichen flora of this site includes rare and Atlantic species, such as *Haemotomma elatinum*, *Lecidea cinnabarina*, *Thelotrema lepadinum*, *Graphis elegans* and *Stenocybe septata*. Part of the site includes an area of old holly *Ilex aquifolium* trees that are probably the largest in Britain. The site has a very well-documented history and good conservation of woodland structure and function.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

Not applicable.

Annex II species that are a primary reason for selection of this site

Not applicable.

Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.

Appendix 4

European Site Conservation Objectives for Staverton Park and The Thicks, Wantisden Special Area of Conservation Site code: UK0012741

With regard to the natural habitats and/or species for which the site has been designated ('the Qualifying Features' listed below);

Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Subject to natural change, to maintain or restore:

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

Qualifying Features:

H9190. Old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each habitat or species of a Special Area of Conservation (SAC). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving favourable conservation status for those features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

European Site Conservation Objectives for Orfordness – Shingle Street Special Area of Conservation Site code: UK0014780

With regard to the natural habitats and/or species for which the site has been designated ('the Qualifying Features' listed below);

Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Subject to natural change, to maintain or restore:

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

Qualifying Features:

H1150. Coastal lagoons*

H1210. Annual vegetation of drift lines

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

* denotes a priority natural habitat or species (supporting explanatory text on following page)

This is a European Marine Site

This site is a part of the Alde Ore & Butley European Marine Site. These conservation objectives should be used in conjunction with the Regulation 35 Conservation Advice Package, for further details please contact Natural England's enquiry service at enquiries@naturalengland.org.uk, or by phone on 0845 600 3078, or visit the Natural England website at: http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx

* Priority natural habitats or species

Some of the natural habitats and species listed in the Habitats Directive and for which SACs have been selected are considered to be particular priorities for conservation at a European scale and are subject to special provisions in the Directive and the Habitats Regulations. These priority natural habitats and species are denoted by an asterisk (*) in Annex I and II of the Directive. The term 'priority' is also used in other contexts, for example with reference to particular habitats or species that are prioritised in UK Biodiversity Action Plans. It is important to note however that these are not necessarily the priority natural habitats or species within the meaning of the Habitats Directive or the Habitats Regulations.

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each habitat or species of a Special Area of Conservation (SAC). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving favourable conservation status for those features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

European Site Conservation Objectives for Alde, Ore and Butley Estuaries Special Area of Conservation Site code: UK0030076

With regard to the natural habitats and/or species for which the site has been designated ('the Qualifying Features' listed below);

Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Subject to natural change, to maintain or restore:

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

Qualifying Features:

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each habitat or species of a Special Area of Conservation (SAC). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving favourable conservation status for those features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

European Site Conservation Objectives for Alde–Ore Estuary Special Protection Area Site Code: UK9009112

With regard to the individual species and/or assemblage of species for which the site has been classified ('the Qualifying Features' listed below);

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features:

A081 *Circus aeruginosus*; Eurasian marsh harrier (Breeding)
A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)
A132 *Recurvirostra avosetta*; Pied avocet (Breeding)
A151 *Philomachus pugnax*; Ruff (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
A183 *Larus fuscus*; Lesser black-backed gull (Breeding)
A191 *Sterna sandvicensis*; Sandwich tern (Breeding)
A195 *Sterna albifrons*; Little tern (Breeding)

Additional Qualifying Features Identified by the 2001 UK SPA Review:

Seabird assemblage
Waterbird assemblage

This is a European Marine Site

This site is a part of the Alde Ore & Butley European Marine Site. These conservation objectives should be used in conjunction with the Regulation 35 Conservation Advice Package, for further details please contact Natural England's enquiry service at enquiries@naturalengland.org.uk, or by phone on 0845 600 3078, or visit the Natural England website at: http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each bird feature for a Special Protection Area (SPA). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the Birds Directive for those features. On the first page of this document there may be a list of 'Additional Qualifying Features identified by the 2001 UK SPA Review'. These are additional features identified by the UK SPA Review published in 2001 and, although not yet legally classified, are as a matter of Government policy treated in the same way as classified features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

European Site Conservation Objectives for Hamford Water Special Protection Area Site Code: UK9009131

With regard to the individual species and/or assemblage of species for which the site has been classified ('the Qualifying Features' listed below);

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features:

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
A052 *Anas crecca*; Eurasian teal (Non-breeding)
A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)
A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
A195 *Sterna albifrons*; Little tern (Breeding)

Additional Qualifying Features Identified by the 2001 UK SPA Review:

A140 *Pluvialis apricaria*; European golden plover (Non-breeding)
A151 *Philomachus pugnax*; Ruff (Non-breeding)
Waterbird assemblage

This is a European Marine Site

This site is a part of the Hamford Water European Marine Site. These conservation objectives should be used in conjunction with the Regulation 35 Conservation Advice Package, for further details please contact Natural England's enquiry service at enquiries@naturalengland.org.uk, or by phone on 0845 600 3078, or visit the Natural England website at: http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each bird feature for a Special Protection Area (SPA). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the Birds Directive for those features. On the first page of this document there may be a list of 'Additional Qualifying Features identified by the 2001 UK SPA Review'. These are additional features identified by the UK SPA Review published in 2001 and, although not yet legally classified, are as a matter of Government policy treated in the same way as classified features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

European Site Conservation Objectives for Deben Estuary Special Protection Area Site Code: UK9009261

With regard to the individual species and/or assemblage of species for which the site has been classified ('the Qualifying Features' listed below);

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features:

A046a *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)

A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)

This is a European Marine Site

This site is a part of the Deben Estuary European Marine Site. These conservation objectives should be used in conjunction with the Regulation 35 Conservation Advice Package, for further details please contact Natural England's enquiry service at enquiries@naturalengland.org.uk, or by phone on 0845 600 3078, or visit the Natural England website at: http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx

Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each bird feature for a Special Protection Area (SPA). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the Birds Directive for those features. On the first page of this document there may be a list of 'Additional Qualifying Features identified by the 2001 UK SPA Review'. These are additional features identified by the UK SPA Review published in 2001 and, although not yet legally classified, are as a matter of Government policy treated in the same way as classified features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

European Site Conservation Objectives for Sandlings Special Protection Area Site Code: UK9020286

With regard to the individual species and/or assemblage of species for which the site has been classified ('the Qualifying Features' listed below);

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features:

A224 *Caprimulgus europaeus*; European nightjar (Breeding)

A246 *Lullula arborea*; Woodlark (Breeding)

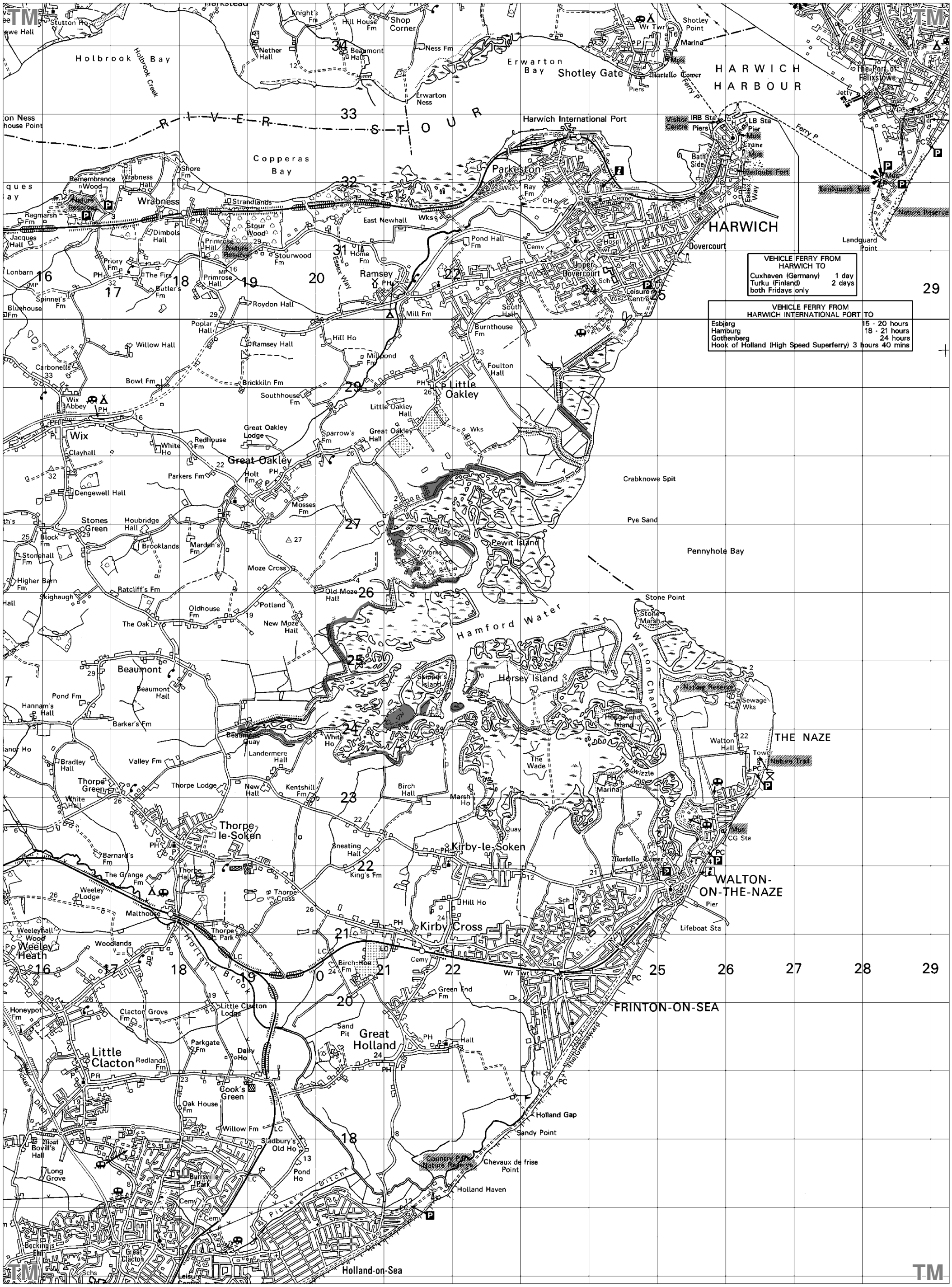
Explanatory Notes: European Site Conservation Objectives

European Site Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or competent authority is required to make an Appropriate Assessment under the relevant parts of the respective legislation.

These conservation objectives are set for each bird feature for a Special Protection Area (SPA). Where the objectives are met, the site can be said to demonstrate a high degree of integrity and the site itself makes a full contribution to achieving the aims of the Birds Directive for those features. On the first page of this document there may be a list of 'Additional Qualifying Features identified by the 2001 UK SPA Review'. These are additional features identified by the UK SPA Review published in 2001 and, although not yet legally classified, are as a matter of Government policy treated in the same way as classified features.

This document is also intended for those who are preparing information to be used for an appropriate assessment by either the appropriate nature conservation body or a competent authority. As such this document cannot be definitive in how the impacts of a project can be determined. Links to selected sources of information, data and guidance which may be helpful can be found on Natural England's website. This list is far from exhaustive.

Appendix 5



candidate Special Area of Conservation

Hamford Water

Essex

candidate Special Area of Conservation
50.35 Hectares

This map relates to a site entered in the Register of European Sites for Great Britain.
Register reference number: UK0030377
Date of registration: 26 September 2013
Signed:

On behalf of the Secretary of State for Environment, Food and Rural Affairs.

EU Site Code: UK0030377
Version Number: 1
Longitude: 1° 13' 25" E
Latitude: 51° 54' 9" N
Projection: British National Grid
Area of SAC: 50.35 Hectares

Theme ID: 1475892
Grid Ref: TM217276
Version: 20130926
Plotted: 24/09/2013
PlotID: 1833

Scale 1:50000 at A3 Map 1 of 1

Grid North

0 1 2 3km
0 2500 5000 7500ft.

Candidate Special Area of Conservation Directive 92/43/EEC
Submitted to the EC by the Secretary of State for Environment, Food and Rural Affairs. Date: 26 September 2013

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NATURAL ENGLAND

Appendix 6

Screening of Ipswich Local Plan Core Strategy and Policies

Policy	Brief description	Likely to have a significant effect?	Reason
Core Strategy			
Strategic Spatial Approach			
Policy CS1: Climate Change	A comprehensive approach will be taken to tackling climate change and its implications.	No	This will not in itself affect any European sites. It will have general environmental benefits.
Policy CS2: The Location and Nature of Development	The location of residential and office development is centred primarily on the town centre and the north of the Borough, and secondly on the town's district centres; employment development is proposed for existing employment areas.	No	The locations of development are at sufficient distance that immediate land-take or changes to ecological functioning are unlikely to affect any European site. Recreational or other off-site impacts are unlikely to be caused by employment development, with any proposals which may cause air or water pollution emissions being closely regulated by Environment Agency. The scale of housing development is addressed separately.
Policy CS3: IP-One Area Action Plan	Preparation of an Area Action Plan for central Ipswich	No	Preparing a plan will not in itself affect any European site and the location of development is at some distance from a European site.
Policy CS4: Protecting our Assets	The Council is committed to protecting and enhancing the Borough's built, historical, natural and geological assets.	No	The policy protects natural assets, including European sites, from harmful development.
Policy CS5: Improving Accessibility	Development should minimise the need to travel and enable access on foot, by bicycle and by public transport.	No	This will not in itself affect any European sites. It will have general environmental benefits.
Policy CS6: The Ipswich Policy Area	Ipswich Borough Council recognises the importance of joint working and the coordination of planning policies around the fringes of Ipswich	No	This will not in itself affect any European sites; it may improve co-ordination between neighbouring authorities.

Live			
Policy CS7: The Amount of New Housing Required	The Council will allocate land to provide for at least an additional 5,909 dwellings net to be provided in the Borough by 2031. The Council will rely on windfall sites for a further 4,611 dwellings and will work with neighbouring local authorities to address housing need later in the plan period.	Yes	The large number of new dwellings will lead to a larger human population within Ipswich, which could have effects upon European sites some distance away.
Policy CS8: The Balance between Flats and Houses	The Council will plan for a mix of dwelling types to be provided.	No	This will not in itself affect any European sites
Policy CS9: Previously Developed Land Target	The Council will focus development on previously developed land first while recognising that greenfield land will need to be developed to meet its objectively assessed housing need and forecasted jobs growth.	No	This will not in itself affect any European sites – the location of development and amount of development are not prescribed in this policy but in other plans. Previously developed land is not found close to the European site within Ipswich.
Policy CS10: Ipswich Northern Fringe	Land at the Northern Fringe of Ipswich will form a key component of the supply of housing land in Ipswich during the plan period.	Yes	The location of development is at sufficient distance that immediate land-take or changes to ecological functioning is unlikely to affect any European site. The scale of development may have an effect due to recreational impacts on European sites at some distance, and is addressed with policy CS7. A 24.5ha Country Park is specified to be provided at an early stage of the development, as is 40ha of other public open space, and this will provide an alternative to recreation on European sites.
Policy CS11: Gypsy and Traveller Accommodation	Provision will be found within the Ipswich Policy Area for additional permanent pitches for Gypsies and Travellers.	No	No sites are allocated in this Plan document (although one or more sites may be allocated in the Site Allocations Plan) and the scale of the development is such that it is unlikely to affect any European sites

Policy CS12: Affordable Housing	All new developments of 10 dwellings or more (or on housing sites of 0.3ha or more) are required to include provision for affordable housing.	No	This will not in itself affect any European sites
Work			
Policy CS13: Planning for Jobs Growth	The Council will promote sustainable economic growth in the Ipswich Policy Area, with a focus on the delivery of jobs within the Borough. It will encourage the provision of in the region of 12,500 jobs between 2011 and 2031 by allocating land in various areas to be defined by Site Allocation Plan / Area Action Plans and in Nacton Road.	No	This will not in itself affect any European sites because no known impacts are caused by any existing employment areas; new employment development is likely to be within existing employment areas.
Policy CS14: Retail Development	The Council will promote high quality investment and development in Ipswich Central Shopping Area.	No	This will not in itself affect any European sites
Learn			
Policy CS15: Education Provision	Supports existing facilities and recognises the need for more facilities.	No	This will not in itself affect any European sites
Play			

Policy CS16: Green Infrastructure, Sport and Recreation	The Council will safeguard, protect~~,~~ and enhance biodiversity and the environment. Includes in summary: a) major new developments to include on-site public open spaces and wildlife habitat. b) supporting proposals or activities that protect, enhance or extend open spaces and sport and recreation facilities; c) working with partners to prepare and implement visitor management plans for key parts of European sites within the Suffolk Coast and Heaths AONB to be completed by 2015, and a plan for Orwell Country Park that will result in a reduced impact upon birds in the Orwell Estuary; d) supporting the Greenways Project; e) support the enhancement of canopy cover and ecological networks; f) working with partners to improve green infrastructure provision; g) working with partners to ensure the provision of a new country park in the urban fringe of north eastern Ipswich (see Policy CS10); h) promoting improved access to existing facilities where appropriate; and i) reviewing the town's estate of sports facilities to consider how they can best meet the needs of a growing population.	No	The policy contains significant measures to safeguard European sites from recreational impacts, such as provision and management of open spaces, a plan for Orwell Country Park to reduce visitor impact upon the Orwell Estuary (part of Stour and Orwell Estuaries SPA), and a new Country Park in the Ipswich northern fringe. Management plans for key parts of European sites is also included, to reduce impacts on those sites. Any significant effect is likely to be beneficial to European sites. Policy CS16 is directly connected with and necessary for the management of European sites, under the Conservation of Habitats and Species Regulations 2010 (Regulation 102(1)).

Infrastructure			
Policy CS17: Delivering Infrastructure	The Council will require all developments to meet the on- and off-site infrastructure requirements needed to support the development and mitigate the impact of the development on the existing community and environment. This includes a new Country Park.	No	This will not in itself affect any European sites; the policy provides mitigation for recreational impacts to European sites by providing a mechanism for a Country Park to be created as well as other infrastructure.
Policy CS18: Strategic Flood Defence	The Council will continue to work with partners to implement the Ipswich Flood Defence Management Strategy as a key piece of infrastructure needed to support regeneration in Ipswich.	No	This will not in itself affect any European sites; the flood defence study has previously been agreed and is not reliant on the Local Plan.
Policy CS19: Provision of Health Services	Policies for the existing Heath Road hospital site, the redundant St Clement's hospital site and possible need for future GP or other facilities.	No	This will not in itself affect any European sites due to the scale and location of the proposals.
Policy CS20: Key Transport Proposals	The Council supports the Travel Ipswich scheme, which will improve bus station provision, passenger information, shuttle bus provision and pedestrian links. The Council also supports the completion of the upgrading of the Felixstowe to Nuneaton rail line.	No	This will not in itself affect any European sites.
Development Management Policies			
Policy DM1: Sustainable Development	All new residential and non-residential buildings shall be required to achieve a high standard of environmental sustainability.	No	This will not in itself affect any European sites and will reduce the general environmental impacts of development compared to the absence of this policy.

Policy DM2: Decentralised Renewable or Low Carbon Energy	All new build development of 10 or more dwellings or in excess of 1,000 sq. m of other residential or non-residential floorspace shall provide at least 15% of their energy requirements from decentralised and renewable or low-carbon sources	No	This will not in itself affect any European sites and will reduce the general environmental impacts of development compared to the absence of this policy.
Policy DM3: Provision of Private Outdoor Amenity Space in New and Existing Developments	Garden and/or balcony sizes for new dwellings	No	This will not in itself affect any European sites
Policy DM4: Development and Flood Risk	Development will not be flooded, will not cause flood risk and will use sustainable drainage.	No	This will not in itself affect any European sites
Policy DM5: Urban Design Quality	The Council will require all new development to be well designed and sustainable.	No	This will not in itself affect any European sites
Policy DM6: Tall Buildings	Planning permission for tall buildings will be granted within the arc of land to the south-west of the town centre in the vicinity of Civic Drive and the Northern Quays of the Waterfront.	No	This will not in itself affect any European sites
Policy DM7: Public Art	Major developments shall include a substantial public art proposal.	No	This will not in itself affect any European sites
Policy DM8: Conservation Areas	The Council will seek to protect and enhance the character and appearance of conservation areas through adopted Conservation Area Appraisals and Management Plans.	No	This will not in itself affect any European sites
Policy DM9: Buildings of Townscape Interest	There is a presumption in favour of retaining and repairing buildings of local townscape interest.	No	This will not in itself affect any European sites

Policy DM10: Protection of Trees and Hedgerows	The Council will protect and ensure the care of trees and increase canopy cover in the interests of amenity and biodiversity.	No	This will not in itself affect any European sites
Policy DM11: Ipswich Skyline	Developments will only be permitted where they do not seriously disrupt a wooded skyline,	No	This will not in itself affect any European sites
Policy DM12: Extensions to Dwelling houses and Provision of Ancillary Buildings	Extension to, or development within the curtilage of a dwelling house	No	This will not in itself affect any European sites
Policy DM13: Small Scale Infill and Backland Residential Development	Proposals for small scale residential development involving infill, backland or severance plots will not be permitted unless certain criteria are met.	No	This will not in itself affect any European sites
Policy DM14: The Subdivision of Family Dwellings	Development involving the conversion of houses into flats, bedsits or houses in multiple occupation will be permitted if certain criteria are met.	No	This will not in itself affect any European sites – the scale of this type of development is expected to be small-scale in comparison to the overall amount of new housing proposed, so there would be no significant amount of increased population as a result of this policy.
Policy DM15: Travel Demand Management	Measures to reduce car use and promote cycling and public transport.	No	This will not in itself affect any European sites
Policy DM16: Sustainable Transport Modes	Measures to promote cycling and public transport.	No	This will not in itself affect any European sites
Policy DM17: Transport and Access in New Developments	Measures to reduce car use and promote cycling and public transport.	No	This will not in itself affect any European sites
Policy DM18: Car Parking	Standards for provision of car parking spaces.	No	This will not in itself affect any European sites
Policy DM19: Cycle Parking	Standards for provision of cycle parking.	No	This will not in itself affect any European sites
Policy DM20: The Central Shopping Area	The Council will support the town's vitality and viability by promoting and enhancing appropriate development in the Central Shopping Area.	No	This will not in itself affect any European sites

Policy DM21: District and Local Centres	The Council will support the retention and provision of local shops and community facilities within defined District and Local Centres.	No	This will not in itself affect any European sites
Policy DM22: Town Centre Uses Outside the Central Shopping Area	Within the Town Centre but outside the Central Shopping Area, the development of non-retail town centre uses, including leisure, recreation, culture and tourism uses, will be permitted	No	This will not in itself affect any European sites
Policy DM23: Retail Proposals outside Defined Centres	Retail proposals for more than 200 sq. m net floorspace in locations outside defined centres will only be permitted if the proposal can be demonstrated to be acceptable.	No	This will not in itself affect any European sites
Policy DM24: Affordable Housing	Affordable housing provision will be required in accordance with Core Policy CS12.	No	This will not in itself affect any European sites
Policy DM25: Protection of Employment Land	Sites and premises used and/or allocated for employment uses and defined Employment Areas will be safeguarded for employment.	No	This will not in itself affect any European sites
Policy DM26: Protection of Amenity	Development which could lead to significant adverse effects on the amenity or environment of neighbouring uses will not be permitted. Development which could itself be significantly adversely affected by the conduct of established or potentially noisy or polluting uses nearby will not be permitted	No	This will not in itself affect any European sites. The policy protects natural assets, including European sites, from harmful development.
Policy DM27: Non-residential Uses in Residential Areas	Non-residential uses in residential areas will be permitted where the proposed development meets certain critera.	No	This will not in itself affect any European sites

Policy DM28: Protection of Open Space, Sport and Recreation Facilities	Development involving the loss of open space, sports or recreation facilities will only be permitted if the lost facility is surplus or replaced.	No	This will not in itself affect any European sites
Policy DM29: Provision of New Public Open Space, Sport and Recreation Facilities	All residential developments, and non-residential developments of 1,000 sq. m floorspace or more, will be required to provide and/or contribute to public open spaces and sport and recreation facilities. In all major developments (10 dwellings or 1,000 sq. m non-residential development or more), at least 10% of the site area, or 15% in high density developments, should consist of on-site green space (useable by the public in relation to residential schemes)	No	This will not in itself affect any European sites. The policy contains measures to safeguard European sites from recreational impacts by providing alternative areas for public recreation.
Policy DM30: The Density of Residential Development	The density of new housing development in Ipswich is described.	No	This will not in itself affect any European sites. The total amount of new housing is more important than density (see policy CS7)
Policy DM31: Conserving Local Natural and Geological Interest	The Council will seek to conserve the nature conservation and geodiversity interest of County Wildlife Sites, Local Wildlife Sites and RIGS identified on the policies Map, veteran trees, and Suffolk Biodiversity Action Plan species and habitats	No	This will not in itself affect any European sites. The policy does not explicitly protect European sites, because European sites are protected by legislation (see also CS4). Some of the species and habitats which are protected may be present on European sites.
Policy DM32: Protection and Provision of Community Facilities	The Council will work with partners to ensure that a range of local community facilities is made available and retained to meet local needs.	No	This will not in itself affect any European sites

Appendix 7

New ONS population estimates for Suffolk published: June 30, 2011

The Office for National Statistics (ONS) published estimates of population at mid-2010 for Local Authorities in June 2011.

Key facts:

- The population of the whole of Suffolk at mid-2010 is now 719.5K, up 5.5K over the preceding estimate for mid-2009.
- Suffolk's rate of growth since 2001 is 7.4%, faster than England but not as fast as the Region or our neighbouring Counties.
- Ipswich continues to be the District in Suffolk with the largest population due to a large surplus of births over deaths and substantial moves from elsewhere in this Country.
- Growth across Suffolk during mid-2009 to mid-2010 has varied. The populations of Babergh and Waveney have again declined, whereas the other Districts have grown, by over 1,000 in the case of Forest Heath, Ipswich and St Edmundsbury.

Comment

- Forest Heath remains one of the fastest growing districts in the Country with an increase in population of nearly 15% since 2001. During this period, ONS has twice improved its methodology for allocating international migrants to each district with the outcome being monitored by both the County and District Council to see whether it is producing realistic estimates for Forest Heath. Although there is compelling evidence to support growth in the population (Electoral Register, house building, release of 400 ex-military homes to civilians) the components of this year's population increase that ONS has identified do not make any sense. Over the past year ONS believes there has been a reduction in the number of military personnel, 900 people have moved in from elsewhere in the Country and another 900 have moved there from abroad. Who the international movers are is in doubt as this flow includes military families yet the US records show little change.
- The impact of the recession is now apparent as the net number of people moving within this Country into Suffolk was at its lowest during mid-2008 to mid-2009.

Why these estimates are important for Suffolk County Council

- These estimates are used to calculate performance indicators where the denominator involves the population
- ONS will be revising these estimates later this year for comparison with the Census.

The table below summarises the changes. By including the Council's estimate of dwelling stock we can demonstrate how growth in Forest Heath compares with the rest of Suffolk.

Area	Total population @ mid-2001	Total population @ mid-2009 published June 2010	Total population @ mid-2010 published June 2011	Change in total population mid-2001 to mid-2010	Dwelling stock increase April 2001 to April 2010	Ratio of increases: population to dwelling stock
SUFFOLK	669,900	714,000	719,500	49,600	28,200	1.8
Babergh	83,500	85,800	85,600	2,000	2,600	0.8
Forest Heath	56,100	62,200	64,300	8,200	2,900	2.8
Ipswich	117,200	126,600	128,300	11,100	6,600	1.7
Mid Suffolk	87,000	94,200	95,000	8,000	4,300	1.8
St Edmundsbury	98,300	103,500	104,500	6,200	3,900	1.6
Suffolk Coastal	115,200	124,100	124,300	9,000	4,900	1.8
Waveney	112,500	117,700	117,500	5,000	3,000	1.7

All figures rounded independently

Point to note

The figures only refer to people who live in this Country for a year or more who are, according to the UN definition, residents.

Appendix 8

Nick Sibbett

From: Nick Sibbett
Sent: 06 January 2014 09:37
To: 'James Meyer'
Subject: RE: Ipswich Borough Council - Core Strategy Review and Site Allocations

Hi James, thanks for your email.

I found two sites in the Site Allocations which might have likely significant effect, which were the Country Park, and an allocation for dock expansion next to the SPA. All the other allocations were sufficiently far that there were no individual allocations which would affect the SPA, although cumulatively they could do. I am looking at the cumulative impact within the Core Strategy only to avoid duplication, on the basis that if the Core Strategy fails then the Site Allocations would also fail. Hope this clarification on process helps.

best regards

Nick

Nick Sibbett
Principal Ecologist

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From: James Meyer [redacted]
Sent: 19 December 2013 17:33
To: Nick Sibbett
Subject: RE: Ipswich Borough Council - Core Strategy Review and Site Allocations

Hi Nick,

Thanks for this and apologies for taking so long to get back to you. If its not too late we had the following comments on the screening you have done for the Ipswich BC Core Strategy Review and Site Allocations documents:

- For the Core Strategy review document we'd agree with your screening.
- For the Site Allocations document whilst we'd agree with you screening policies DM44 and DM46 in to the AA, we'd query why the policies for the allocation of individual sites have all been screened out? As I understand it the cumulative impact (particularly through recreational disturbance) of the individual site allocation policies would in principle be assessed through the relevant strategic housing allocation policy in the Core Strategy. However, would assessing the individual site allocations enable you to determine the contribution each site (or combinations of sites) would make to the level of impact? Or is it IBC's intention that all residential development will contribute to strategic mitigation (i.e. the provision of new 'country park' facilities)? If the latter is the case I can understand why individual sites would be screened out.

Hope that makes sense!

Kind regards

James

James Meyer
Conservation Planner

From: Nick Sibbett [mailto:nick.sibbett@tlp.uk.com]
Sent: 13 November 2013 17:06
To: Simone Bullion; James Meyer
Cc: Robert Hobbs
Subject: Ipswich Borough Council - Site Allocations

Dear Simone and James,

On behalf of Ipswich Borough Council I request your advice regarding the Conservation of Habitats and Species Regulations 2010 'likely significant effect', for the Ipswich Draft Site Allocations and Policies. The Local Plan document and our 'likely significant effect' report are attached.

I look forward to hearing from you in due course.

Best regards

Nick

Nick Sibbett
Principal Ecologist

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