Habitats Regulations Assessment

for

Suffolk Coastal District Preferred Options Site Allocations & Area Specific Policies Development Plan Document October 2015

October 2015



Quality control

Habitats Regulations Assessment

for

Suffolk Coastal District Preferred Options Site Allocations & Area Specific Policies
Development Plan Document October 2015

Prepared by:	Approved by:
Signature:	Signature:
N.E. Sibett	Tharr
Name: Nick Sibbett	Name: Dr Jo Parmenter
Title: Principal Ecologist	Title: Director
Date: 13 October 2015	Date: 13 October 2015
Client:	
Suffolk Coastal District Council Melton Hill	
Woodbridge	
IP12 1AU	
www.suffolkcoastal.gov.uk	

This report is BS 42020 compliant and prepared in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Technical Guidance Series *Guidelines for Ecological Report Writing* and Code of Professional Conduct.

The Landscape Partnership Ltd is a practice of Chartered Landscape Architects, Chartered Town Planners and Chartered Environmentalists, registered with the Landscape Institute and a member of the Institute of Environmental Management & Assessment & the Arboricultural Association.

The Landscape Partnership Limited Registered Office: Greenwood House 15a St Cuthberts Street Bedford MK40 3JG. 01234 261315 Registered in England No 2709001

Contents

Non	-technical summary	1
1 1.1 1.2 1.3 1.4 1.5	Introduction Plan to be assessed What are the Habitats Regulations? Habitats Regulations Assessment process Why is Appropriate Assessment required? European sites	2 2 2 3 3 4
2 2.1 2.2 2.3	European sites potentially affected European sites within Suffolk Coastal District European sites outside Suffolk Coastal District Other relevant Plans or Projects potentially affecting these sites	6 6 8 8
3 3.1 3.2 3.3 3.4 3.5 3.6 3.7	Likely significant effects of Site Allocations Document Policies on European sites Likely significant effects connected with the management of European sites Criteria for the screening of individual policies Habitats Regulations Assessment of the Suffolk Coastal Core Strategy and implication for assessment of policies in the Site Allocations Document Screening of individual policies Screening of the Document as a whole Screening of the Document in combination with other plans Screening of the Document for likely significant effects upon Outer Thames Estuary SPA	10 10 10 nent 10 11 13 13
4 4.1 4.2	Consultations Consultations with Natural England Consultations with others	15 15 15
5 5.1 5.2	Conclusions Conclusion of screening for likely significant effects of the Document alone Conclusion of screening for likely significant effects of the Document in-combination with other	16 16
	relevant plans	16

Figures

Location of European sites in study area and wider area 1.

Appendices

- Detailed information for European sites. Screening of individual policies
- 1. 2.

Non-technical summary

The Site Allocations and Area Specific Policies Document (hereinafter referred to as the Site Allocations Document) is one of a number of planning documents that together will implement strategic policies set out in the Suffolk Coastal District Local Plan – Core Strategy and Development Management Policies Document adopted July 2013 (hereinafter referred to as the Core Strategy).

This document assesses Suffolk Coastal District Preferred Options Site Allocations & Area Specific Policies Development Plan Document October 2015, in line with the Habitats Regulations 2010, to ascertain whether the policies within that Document and the guidance that it provides, are likely to have a significant effect upon any European sites.

It is currently considered that Preferred Policy SSP3 (land to the rear of Rose Hill, Saxmundham Road, Aldeburgh) is likely to have a significant effect on the Alde-Ore Estuary European sites as it is currently worded, due to potential impacts on the Alde-Ore Estuary, 300m distant. More detailed Appropriate Assessment is needed as the Site Allocation Document progresses. However, if the following two points are satisfactorily addressed then a conclusion of no likely significant effect may be reached;

- Clear information to show there could be no access on foot from the allocation site to the estuary nearby
- Updated policy to address design issues to avoid disturbance from on-site use of the development.

It is considered that Preferred Policy SSP31 (Snape Maltings) is likely to have a significant effect upon Alde-Ore Estuary European sites. An increase of accommodation, whether residential or holiday accommodation, and of tourism-related uses, is likely to result in an increase in recreational activity and an increase in disturbance to birds of the estuary. Residential accommodation increase could result in an increase in the local cat population, thus causing an increase in predation and predator disturbance to SPA birds. The tourism-related use might include a business which guides people on estuary walks, thus increasing disturbance. Any increase in car parking available for use by the public, whether charged for or free, would also potentially increase the number of people using the site as an entry point to estuary walks. A study of existing visitor disturbance to birds, looking at the amount and origin of visitor activity as well as the birds' response, is required for the estuary at least in the vicinity of Snape Maltings. This study, together with a more closely defined allocation, may or may not result in a conclusion that the allocation cannot be ascertained to have no adverse effect on the Alde-Ore Estuary European sites.

Preferred Policy SSP30 protects Deben Estuary European sites from new car parking provision within 1km, to prevent an increase in visitor activity causing disturbance to birds. This policy could be extended to all SPAs.

No other significant effects, alone or in combination with other plans, are likely to occur.

1 Introduction

1.1 Plan to be assessed

- 1.1.1 The Site Allocations and Area Specific Policies Document (hereinafter referred to as the Site Allocations Document) is one of a number of planning documents that together will implement strategic policies set out in the *Suffolk Coastal District Local Plan Core Strategy and Development Management Policies Document* adopted July 2013 (hereinafter referred to as the Core Strategy). The other planning policy documents are the Felixstowe Peninsula Area Action Plan which is being produced in parallel to this document, by Suffolk Coastal District Council and a range of neighbourhood plans being prepared by the relevant town and parish councils. The Core Strategy provides the strategic policy guidance for all of the documents which sit below it.
- 1.1.2 The following towns/parishes have passed a resolution to progress a neighbourhood plan, but have yet to apply for neighbourhood area designation, the first formal step in the process of neighbourhood plan preparation. Draft policies relating to each of these areas are therefore currently included within this Site Allocations Document:
 - Wickham Market
 - Saxmundham.
 - Aldeburgh, and
 - Aldringham cum Thorpe (Thorpeness).
- 1.1.3 This document assesses Suffolk Coastal District Preferred Options Site Allocations & Area Specific Policies Development Plan Document October 2015, in line with the Habitats Regulations 2010, to ascertain whether the policies within that Document and the guidance that it provides, are likely to have an adverse effect upon the integrity of any European sites.

1.2 What are the Habitats Regulations?

- 1.2.1 The Conservation of Habitats and Species Regulations 2010 are often abbreviated to the 'Habitats Regulations'. The Habitats Regulations interpret the European Birds Directive and Habitats Directive into English and Welsh law. For clarity, the following paragraphs consider the case in England only, with Natural England given as the appropriate nature conservation body. In Wales, the Countryside Council for Wales is the appropriate nature conservation body.
- 1.2.2 Special Protection Areas and Special Areas of Conservation are defined in the regulations as a 'European site'. The Regulations regulate the management of land within European sites, requiring land managers to have the consent of Natural England before carrying out management. Byelaws may also be made to prevent damaging activities and if necessary land can be compulsorily purchased to achieve satisfactory management.
- 1.2.3 The Regulations define competent authorities as public bodies or statutory undertakers. Competent authorities are required to make an appropriate assessment of any plan or project they intend to permit or carry out, if the plan or project is likely to have a significant effect upon a European site. The permission may only be given if the plan or project is ascertained to have no adverse effect upon the integrity of the European site. If the competent authority wishes to permit a plan or project despite a negative assessment, imperative reasons of over-riding public interest must be demonstrated, and there should be no alternatives to the scheme. The permissions process would involve the Secretary of State and the option of consulting the European Commission. In practice, there will be very few cases where a plan or project is permitted despite a negative assessment. This means that a planning application or indeed, a plan such as Leiston Neighbourhood Plan, has to be assessed and the assessment must either decide that it is likely to have no significant effect on a European site or ascertain that there is no adverse effect upon the integrity of the European site.

1.3 Habitats Regulations Assessment process

- 1.3.1 A Habitats Regulations Assessment is a step-by-step process which is undertaken in order to determine whether a project or plan will have a likely significant effect (LSE) upon a European site. Before a competent authority can authorise a proposal, they must carry out an Appropriate Assessment of a plan or project in line with procedure detailed in the Habitats Regulations. The whole procedure is called a Habitats Regulations Assessment, with the Appropriate Assessment being part of only one of four stages necessary to complete an HRA. The results of the HRA are intended to influence the decision of the competent authority when considering whether or not to authorise a proposal.
- 1.3.2 Stage One of the HRA is 'Screening'. Plans or projects will be investigated for their potential to have a likely significant effect upon a European site. Proposals that are found not likely to have a significant effect upon a European site will be 'screened out' at this stage and no further investigation will be required.
- 1.3.3 Stage Two of the HRA is the 'Appropriate Assessment and the Integrity Test'. The Competent Authority must undertake an Appropriate Assessment which seeks to provide an objective and scientific assessment of how the proposed project may affect the qualifying features and conservation strategies of a European site. The Competent Authority may undertake their own Appropriate Assessment using information provided by the project proposer. However, the Competent Authority must also consult the Statutory Nature Conservation Body in order to obtain their views on how the proposed activity may affect the integrity of the European sites' qualifying features and conservation objectives, and it is possible that they may adopt this Appropriate Assessment for their own purposes.
- 1.3.4 The UK Government accepts the definition for the 'integrity' of a site as 'the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which the site is (or will be) designated.'. Other factors may also be used to describe the 'integrity' of a site. The Competent Authority must conclude, using scientific evidence and a precautionary approach, that there will be no harm to the integrity of a European site, prior to authorising the proposed activity. Information provided in the Appropriate Assessment will be used when considering the Integrity test.
- 1.3.5 Stage Three of the HRA is 'Alternative solutions'. If the Competent Authority is unable to determine that the proposed activity would not have an adverse impact upon the integrity of a European site, it may refuse to authorise the proposed activity or consider 'alternative solutions' if there are imperative reasons of overriding public interest (IROPI). If the proposed activity cannot ensure that the integrity of a site is maintained, it is likely that the proposal will be refused or withdrawn, but if changes to the proposal can be made which would rectify this a fresh application could be submitted.
- 1.3.6 Stage Four of the HRA is 'Imperative reasons of overriding public interest and compensatory measures'. If the Competent Authority determines that there are imperative reasons of overriding public interest that outweigh the potential adverse impacts upon the integrity of the site, they may decide to consent the proposed activity. In this case, the Competent Authority must notify the Secretary of State (or equivalent if not in England) at least 21 days before authorisation so that the Government can notify them with their agreement to consent, or otherwise.

1.4 Why is Appropriate Assessment required?

- 1.4.1 The appropriate assessment process is required under the Conservation of Habitats and Species Regulations 2010. Regulation 102 states that
 - (1) Where a land use plan—
 - (a) is likely to have a significant effect on a European site 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 must, 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 specify.
- (3) They must also, if they consider it appropriate, take the opinion of the general public, and if they do so, they must 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 must 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 must provide such information as the appropriate authority may reasonably require for the purposes of the discharge of the obligations of the appropriate authority under this chapter.
- (6) This regulation does not apply in relation to a site which is—
- (a) a European site by reason of regulation 8(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
- 1.4.2 The plan-making authority, as defined under the Regulations, is Suffolk Coastal District Council and the appropriate nature conservation body is Natural England.
- 1.4.3 The Appropriate Assessment in this report is carried out on behalf of Suffolk Coastal District Council to allow them to decide whether to give effect to the plan under Regulation 102.

1.5 European sites

- 1.5.1 European sites (also known as Natura 2000/N2K sites) are sites that have been classified or designated by Defra/Welsh Ministers or Natural England/Natural Resources Wales, as Special Protection Areas (SPA) for those sites where birds are the special interest feature, and Special Areas of Conservation (SAC) where the habitats or species (other than birds) are the reason for designation.
- 1.5.2 Wetlands of International Importance, designated under the Ramsar Convention, Ramsar sites, are not European sites. There may often be considerable overlap between the special interest features and physical boundaries of Ramsar sites, with European sites. However, for the purposes of planning and development, Government policy, through the NPPF, states that Ramsar sites should be treated equally/in the same way as European sites. The same applies for sites under consideration for designation including potential Special Protection Area (pSPA), Site of Community Importance (SCI), Candidate Special Area of Conservation (cSAC) and proposed Ramsar sites. In summary, although Appropriate Assessment only legally applies to European sites, National Planning Policy provides further obligations to ensure that all those sites previously mentioned are subject to assessment. Therefore, for the purposes of this report, the term 'European site(s)' refers to all sites under assessment.
- 1.5.3 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.
- 1.5.4 European Marine Site (EMS) is a term that is often used for a SPA or SAC that includes marine components (i.e. land/habitats up to 12 nautical miles out to sea and below the Mean High Water

Mark). A European Marine Site does not have a statutory designation of its own but is designated for the same reasons as the relevant SPA or SAC, and because of this they are not always listed as a site in their own right, to save duplication. For the purpose of this document, a EMS is referred to as an Inshore SPA (or SAC) with Marine Components and it will be made clear if an SPA/SAC has marine components.

2.1 European sites within Suffolk Coastal District

- A search using Natural England's Interactive 'Magic Map' revealed that a number of European sites lie within or partially within Suffolk Coastal District; the area served by the Site Allocations Document. Each European site is listed below with a brief description of its qualifying features. The location of the European sites and others in a wider area is shown in Figure 01. More detailed information relating to each European site, including their citations and their Conservation Objectives is given in Appendix 1.
- Where a site has numerous overlapping designations, in text this is often summarised to 'European sites'. For example, Alde-Ore Estuary SPA / Ramsar / Inshore SPA with Marine Components, Alde-Ore and Butley Estuaries SAC/Inshore SAC with Marine Components, and Orfordness Shingle Street SAC / Inshore SAC with Marine Components are often summarised in text at 'Alde-Ore Estuary European sites'.

Minsmere - Walberswick SPA/Ramsar/Inshore SPA with Marine Components

2.1.3 The heathland, grazing marsh and reedbed habitats of this SPA are designated for supporting a number of rare or vulnerable (Article 4.1) Annex I bird species during the breeding season including, Bittern *Botaurus stellaris*, Nightjar *Caprimulgus europaeus*, Marsh Harrier *Circus aeruginosus*, Avocet *Recurvirostra avosetta*, Little Tern *Sterna albifrons* and over the winter, Hen Harrier *Circus cyaneus*. In addition the SPA is designated for supporting regularly occurring migratory (Article 4.2) species including Northern Shoveler *Anas clypeata*, Eurasian Teal *Anas crecca* and Gadwall *Anas strepera* during the summer, and Northern shoveler, Gadwall and Greater White-fronted Goose *Anser albifrons albifrons* over the winter.

Minsmere to Walberswick Heaths and Marshes SAC/Inshore SAC with Marine Components

- 2.1.4 There are two Annex I habitats that are qualifying features for this site: Annual vegetation of drift lines and, European dry heath. One of two areas of Annual vegetation of drift lines habitat on the east coast of England, this site is an extensive example of its type, supporting typical species such as sandwort *Honckenya peploides* and Sea Beet *Beta vulgaris* ssp. *maritima*.
- 2.1.5 Lowland European dry heath habitat covers a large part of this site and is at the extreme easternmost point of its range in the UK. On this site, the heath is typical of NVC type H8 *Calluna vulgaris Ulex gallii* which is more commonly associated with western England. This type of heath is dominated by Heather *Calluna vulgaris*, Western Gorse *Ulex gallii* and Bell Heather *Erica cinerea*.
- 2.1.6 Perennial vegetation of stony banks is an Annex I habitat that is present on site as a qualifying feature but is not a primary reason for its designation as a SAC. None the less, this habitat should be considered using the same assessment process as for those habitats which *are* primary reasons for selection.

Sandlings SPA

- 2.1.7 The Sandlings is a series of SSSI heathlands with habitats including acid grassland and heather-dominated plant communities. Lack of management in past years, along with the conversion to commercial conifer plantations and arable cultivation has resulted in remnants of heath that have been threatened with successional changes and bracken invasion. Recent initiatives are working towards restoration of the heathland habitats.
- 2.1.8 The Sandlings qualifies as an SPA under Article 4.1 of the Birds Directive due to the presence of Woodlark *Lullula arborea* and Nightjar *Caprimulgus europaeus* during the breeding season; both are species of European importance and listed in Annex 1 of the Directive. The Sandlings supports at least 3.2% of the GB breeding population of Nightjar and at least 10.3% of the GB breeding population of Woodlark.

2

¹ http://magic.defra.gov.uk/home.htm

Alde-Ore Estuary SPA / Ramsar / Inshore SPA with Marine Components

- 2.1.9 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.
- 2.1.10 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/Inshore SAC with Marine Components

2.1.11 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 / Inshore SAC with Marine Components

- 2.1.12 Orfordness Shingle Street SAC contains coastal lagoons, annual vegetation of drift lines and perennial vegetation of stony banks.
- 2.1.13 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.
- 2.1.14 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.
- 2.1.15 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.

Staverton Park and the Thicks SAC

2.1.16 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.

Deben Estuary SPA / Ramsar / Inshore SPA with Marine Components

- 2.1.17 The Deben Estuary is designated as SPA and as a Ramsar site. 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.
- 2.1.18 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 angustior*.

Stour and Orwell Estuaries SPA/Ramsar/Inshore SPA with Marine Components

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

Outer Thames Estuary Inshore SPA with Marine Components

2.1.20 This SPA is entirely marine and is designated because its habitats support 38% of the Great British population of over-wintering Red-throated Diver *Gavia stellata*, a qualifying species under Article 4.1 of the Birds Directive. The Outer Thames Estuary SPA covers vast areas of marine habitat off the east coast between Caister-on-Sea, Norfolk in the north, down to Margate, Kent in the south. The habitats covered by the SPA include marine areas and sea inlets where Red-throated Diver is particularly susceptible to noise and visual disturbance e.g. from wind farms and coastal recreation activities. Threats from effluent discharge, oil spillages and entanglement/drowning in fishing nets are significant.

2.2 European sites outside Suffolk Coastal District

2.2.1 The scale and location of the proposed development within the Site Allocation Document is such that there is unlikely to be any effect on sites outside Suffolk Coastal District. Consequently, sites outside the District need not be considered further.

2.3 Other relevant Plans or Projects potentially affecting these sites

- 2.3.1 In addition to a potential effect from the Site Allocations Document, the European sites may also be affected by a number of plans or projects, including other Local Plan documents of Suffolk Coastal District Council, and 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.
- Impacts at distance from proposed development are largely independent of the precise location of the development; for example if people resulting from a new residential development drive several miles to a European site, they would do so regardless of the exact location of the residential development. The cumulative impacts of all allocations were assessed in the assessment of the Suffolk Coastal Core Strategy. This assessment found that the Core Strategy had no adverse effect upon the integrity of any European site.
- 2.3.3 The assessment of the Site Allocation Document is largely restricted to the impact of Site Allocations within the District having a local effect upon European sites within the District boundary.
- 2.3.4 In the context of this Appropriate Assessment, the most relevant other plans or projects to be considered are

- Suffolk Coastal District Council Local Plan Core Strategy and Development Management Policies²
- Suffolk Coastal District Council Local Plan Felixstowe Peninsula Area Action Plan Preferred Options Document
- Adastral Park planning application east of Ipswich (Suffolk Coastal reference (ref C/09/0555) relevant to the implementation of Core Strategy policy SP20 and identified strategic levels of housing and employment growth.
- Neighbourhood plan of towns / parishes in Suffolk Coastal District. Rendlesham Neighbourhood Plan is made in respect of village centre and provision of allotments, and Leiston Neighbourhood Plan is at pre-submission stage. Neighbourhood Plans of other towns / parishes are at various but early stages in their production. These are listed in Appendix 1 of the Site Allocations Document.
- 2.3.5 The Felixstowe Peninsula Area Action Plan is at the same stage and is being progressed in the same timescale as the Site Allocations Document.
- 2.3.6 Other actions may also cause impact to European sites, such as management practices by landowners (with consent from Natural England), use by the general public (recreational pressure), existing developments, future (planned) developments and unplanned events, whether accidental, intentional or natural e.g. fires, storms, surges/flooding.

© The Landscape Partnership October 2015

² Suffolk Coastal District Council *Suffolk Coastal District Council Local Plan – Core Strategy and Development Management Policies* 5th July 2013

3 Likely significant effects of Site Allocations Document Policies on European sites

3.1 Likely significant effects connected with the management of European sites

3.1.1 It is considered that the Site Allocations Document is not necessary for, or connected with, the nature conservation management of any European sites.

3.2 Criteria for the 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 Habitats Regulations Assessment of the Suffolk Coastal Core Strategy and implication for assessment of policies in the Site Allocations Document

Core Strategy assessment

3.3.1 Habitats Regulations Assessment was undertaken for the Suffolk Coastal Core Strategy, which considered the cumulative effects of all development proposed in that Plan. It included an assessment of proposed development as set out in other Local Planning Authorities' Local plans. An Appropriate Assessment was produced by The Landscape Partnership in November 2011, and updated in June 2013 prior to Core Strategy adoption. The assessment is available on Suffolk Coastal District Council's website at

http://www.suffolkcoastal.gov.uk/yourdistrict/planning/policy/local-plan/core-strategy/ .

- 3.3.2 The Appropriate Assessment identified various mitigations for strategic allocations within the Core Strategy east of Ipswich, on the Felixstowe Peninsula and for all housing allocations in Suffolk Coastal and Ipswich in combination. Mitigations for strategic allocations east of Ipswich and on the Felixstowe Peninsula are being taken forward separately to the Site Allocations Document under consideration here. Mitigations for all housing allocations in Suffolk Coastal District and Ipswich combined were
 - The provision of a new Country Park (or similar high quality provision) to provide an alternative attraction for recreational activity for residents of existing and proposed new

- dwellings. This new Country Park will be designed so as to be attractive to dog walkers and others and include adequate provision for car parking, visitor facilities, dog bins, dogs off-leads areas etc
- 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 coordinated across the Coast & Heaths Area, and are likely to require a capital works programme, and on-site wardening.
- This mitigation is being taken forward. Firstly, a new Country Park is proposed within the Ipswich Garden Suburb, within Ipswich Borough. Its provision is secured through a policy in Ipswich Borough Council's Site Allocation Plan (see https://www.ipswich.gov.uk/localplan) and will be funded by developer contributions. Secondly, a Green Infrastructure plan is being considered by Suffolk Coastal District and Ipswich borough to address the visitor management measures. Thirdly, a country park type facility is also proposed as part of the Adastral Park planning application.

Implications for assessment of Site Allocations Document policies

3.3.4 The provision of those Core Strategy mitigations is satisfactory to demonstrate that the amount of housing allocated in the Suffolk Coastal Core Strategy would have no adverse impact on the integrity of any European site. The in-combination effect of site allocations in the Site Allocations Document has therefore been considered within the Core Strategy and need not be repeated in this document. Assessment of policies in the Site Allocations Document is therefore restricted to assessing each policy alone rather than in combination with others, unless there are specific circumstances suggesting otherwise.

3.4 Screening of individual policies

- 3.4.1 The table in Appendix 2 lists each policy, with a brief explanation of the policy, and an assessment of whether the policy is likely to have a significant affect upon a European site.
- 3.4.2 The assessment in Appendix 2 shows that the following Preferred Policies possibly could have a significant affect upon European sites
 - SSP3 Land to the rear of Rose Hill, Saxmundham Road, Aldeburgh
 - SSP31 Snape Maltings
- These policies are concerned with residential or tourism development close to Alde-Ore Estuary European sites. None of the areas of proposed development directly affect a European site; they are not within or adjacent to a European site, nor do they compromise the management techniques being used at any European site.
- 3.4.4 The assessment in Appendix 2 also notes an omission; Preferred Policy SSP30 protects the Deben Estuary from an increase in car parking which would result in increased recreational activity; however other European sites are not protected by such a policy.
- 3.4.5 These three policies are considered further below.

Policy SSP3 Land to the rear of Rose Hill, Saxmundham Road, Aldeburgh

- 3.4.6 The policy allocates 3ha of land at this location for the provision of a care home plus ten residential units. The site is just 300m from Alde-Ore Estuary European sites with potential for bird disturbance from increased recreation at the estuary side and from disturbance from the use of the buildings themselves.
- 3.4.7 There are no public rights of way shown on the Ordnance Survey 1:25,000 map leading from the vicinity of the proposed allocation to the estuary side; the nearest public footpaths which lead to the estuary originate some distance away. However, there are other tracks and paths shown in the vicinity of the proposed allocation which lead to or near to the estuary, and it is unclear (in this desk assessment) whether or not there is an accepted or unauthorised use of these paths which would be taken up by residents of the proposed allocation.

- 3.4.8 Further investigations are required to establish if there is any route to the estuary which could be used by residents of the proposed allocation; for example comments would be welcomed from any prospective developer of the site, landowner, and from neighbours as to this issue during the consultation on the Preferred Options Site Allocations Document.
- The development is partially masked for the estuary by existing low density housing between the allocation site and the estuary, but it is currently unclear how effective the existing housing is in that matter. The distance from the estuary is such that control of external lighting (of public and private spaces, and car headlights), landscape planting to effectively screen at least the areas of highest human activity, and provision of any public open space towards the northern part of the site would ensure no likely significant effect. It should be possible to design the development to meet these needs.
- 3.4.10 In summary, it is currently considered that Policy SSP3 is likely to have a significant effect on Alde-Ore Estuary European sites as it is currently worded, and more detailed appropriate assessment is needed as the Site Allocation Document progresses. However, if the following two points are satisfactorily addressed then a conclusion of no likely significant effect may be formed
 - Clear information to show there could be no access on foot from the allocation to the estuary nearby
 - Updated policy to address design issues to avoid disturbance from on-site use of the development

SSP31 Snape Maltings

- 3.4.11 An increase of accommodation, whether residential or holiday accommodation, and of tourism-related uses, are likely to result in an increase in recreational activity. Snape Malting is adjacent to the Alde-Ore Estuary European sites and there is a footpath network leading from the Maltings to both sides of the estuary. Walks are promoted widely via the Snape Maltings website, and by Suffolk Coast and Heaths AONB Unit which has published a book promoting walks on the estuary including the section at Snape Maltings.
- 3.4.12 It is currently unclear whether or not the existing activity from walkers and dog walkers alongside the Alde-Ore Estuary European sites causes unacceptable levels of disturbance to birds. The policy does not set limits on the amount of accommodation which is supported, and any increase in walkers arising from residential or holiday accommodation could increase disturbance to birds which a) remains below a threshold of damaging disturbance, b) increases existing disturbance currently below a damaging threshold to above a damaging threshold, or c) increase disturbance already above a damaging threshold. Which of these three scenarios is correct is unknown, and the scenarios may vary from season to season as visitor numbers fluctuate and bird sensitivity to disturbance fluctuates.
- 3.4.13 Residential accommodation increase could result in an increase in the local cat population, thus causing an increase in predation and predator disturbance to SPA birds. The tourism-related use might include a business which guides people on estuary walks, thus increasing disturbance. Any increase in car parking available for use by the public, whether charged for or free, would also potentially increase the number of people using the site as an entry point to estuary walks.
- In summary, the policy is likely to have a significant effect upon Alde-Ore Estuary European sites, in particular to bird disturbance to SPA-qualifying birds.
- 3.4.15 A study of existing visitor disturbance to birds, looking at the amount and origin of visitor activity as well as the birds' response, is required for the estuary at least in the vicinity of Snape Maltings. This study, together with a more closely defined allocation, may or may not result in a conclusion that the allocation cannot be ascertained to have no adverse effect on Alde-Ore Estuary European sites.

SSP30 Visitor management - Deben Estuary

3.4.16 Preferred policy SSP30 restricts new car parking provision within 1km of Deben Estuary SPA where it is available to the public, as the provision might result in increased recreational disturbance to

estuary birds. This was based on the Appropriate Assessment of the Core Strategy, which was with respect to walking distances primarily concerned with strategic allocations. The policy is effective, as far as it goes, for the Deben Estuary. However, there would be equal applicability to all SPAs within the plan area, which could be also harmed from an increase in recreational activity from new parking provision. Whilst this policy would not result in a likely significant effect on a European site, because there is no implicit support for car parking within 1km of other SPAs, there is an opportunity at the next stage of the Site Allocations Document to consider extension of its scope to all other SPAs in the plan area.

3.4.17 The policy regarding proposed improvements to access points such as slipways or jetties which would result in an increased level of recreational activity on the estuary needing to demonstrate no significant effect, is suitable.

3.5 Screening of the Document as a whole

3.5.1 Policies in the Site Allocation Document might have a minor cumulative effect, particularly to those policies identified as having a likely significant effect. The potential for bird disturbance at Aldeburgh (Preferred policy SSP3) and at Snape (Policy SSP31) both involve the same estuary, so birds within that estuary could receive a double dose of disturbance as they move within the estuary. The screening for the whole plan concludes that there would be a likely significant effect upon Alde-Ore Estuary as a result of policies SSP3 and SSP31. The Deben Estuary European sites is protected from additional public car parking within 1km from providing an increase in recreational disturbance, but other estuaries are not.

3.6 Screening of the Document in combination with other plans

Suffolk Coastal District Core Strategy & Development Management Policies

3.6.1 See Section 3.4 above.

Adastral Park Planning application (ref C/09/0555)

- 3.6.2 The Adastral Park planning application is intended to implement a strategic allocation in the Core Strategy (Policy SP20) which includes the creation of an Innovation Park with linked university provision, new community facilities, significant changes to the local road network, and a major housing development of 2,000 houses.
- 3.6.3 The Appropriate Assessment of the Core Strategy included assessment of the strategic allocation. The in-combination effects of the totality of development within Suffolk Coastal were considered within the assessment of the Suffolk Coastal Core Strategy and it is therefore considered that there would be no in-combination effects of some or all of the Neighbourhood Plans together with the Site Allocations Document. Note that the Adastral Park application requires its own Habitats Regulations Assessment to be undertaken before it could be permitted.

Suffolk Coastal District Felixstowe Peninsula Area Action Plan

3.6.4 It is considered that there would be no in-combination effects of this plan because the incombination effects of the totality of development within Suffolk Coastal were considered within the assessment of the Suffolk Coastal Core Strategy.

Neighbourhood Plans within Suffolk Coastal District

3.6.5 The Neighbourhood Plans are required to be consistent with the Core Strategy. The Core Strategy contained clear policy on the allocation of development to towns and parishes, which was fully considered in the Appropriate Assessment of the Core Strategy. The in-combination effects of the totality of development within Suffolk Coastal were considered within the assessment of the Suffolk Coastal Core Strategy and it is therefore considered that there would be no in-combination effects of some or all of the Neighbourhood Plans together with the Site Allocations Document. Note that Neighbourhood Plans are required to consider whether a Habitats Regulations Assessment would be required before those plans are made. For example, Leiston Neighbourhood Plan currently has a draft Habitats Regulations Assessment. The Rendlesham Neighbourhood Plan did not require one.

National Planning Policy Framework

3.6.6 The Suffolk Coastal District Core Strategy 2013 has been drawn up in accordance with guidance provided by the National Planning Policy Framework which provides the strategic context rather than having an in-combination effect.

3.7 Screening of the Document for likely significant effects upon Outer Thames Estuary SPA

- 3.7.1 The Outer Thames Estuary SPA is not considered within the SCDC Core Strategy and Development Management Policies document, therefore the impact of the policies within the Site Allocations Document upon this Special Protection Area need to be additionally assessed.
- 3.7.2 The Outer Thames Estuary is an SPA that is entirely marine and is designated for supporting overwintering populations of Red-throated Diver *Gavia stellata*. After breeding this species migrates to sheltered coasts and tends to stay within 12 miles of the coast. This makes it susceptible to disturbance from activities such as recreational boating and from construction and running of inshore-wind farms and construction of coastal development, as well as pollution from oil spillages and entanglement in fishing nets. The Outer Thames Estuary SPA is divided into three main parts, one of which falls within our study area; the section that abuts the Norfolk/Suffolk coastline from Caister-on-Sea, Norfolk to Woodbridge, Suffolk, lies directly adjacent to the Leiston Parish eastern boundary.
- 3.7.3 The Draft Conservation Objectives³ document for the Outer Thames Estuary SPA summarises operations which may cause deterioration or disturbance to Red-throated Diver populations. Damaging operations are categorised as:
 - Physical loss of supporting habitats e.g. offshore development, harvesting, disposal of dredging spoil
 - Physical damage to habitats e.g. dredging, anchoring, boating, siltation through runoff
 - Non-physical disturbance e.g. noise from boating activities, visual from recreation activities
 - Toxic contamination e.g. pesticides, PCBs, heavy metals, radionuclides
 - *Non-toxic contamination* e.g. nutrient loading from agricultural run-off and outfalls, organic loading from mariculture, thermal changes from power stations, changes in turbidity from dredging, changes in salinity from water abstraction
 - *Biological disturbance* e.g. introduction of non-native species, translocations, selective extraction of species through fishing, non-selective extraction of species through entanglement or wind-turbine strike, introduction of microbial pathogens
- 3.7.4 The policies within the Site Allocations Document do not include offshore development or agricultural/mariculture practices which would cause loss or damage or contamination of habitats used by Red-throated Diver. Although the development policies will facilitate an increase to the human population of Suffolk Coastal, and there may be a greater use of the coast adjacent to the Outer Thames Estuary SPA for recreational activities, it is not anticipated that these activities would disturb Red-throated Diver, which does not typically use waters close to the shore. In addition, the SPA boundary follows the edge of the coast including adjacent to towns such as Aldeburgh which remain SPA quality.
- 3.7.5 In conclusion it is considered that the policies within the Site Allocations Document do not pose a threat to the integrity of the Outer Thames Estuary SPA; there will be no likely significant effects upon this European site.

© The Landscape Partnership October 2015

³ JNCC/Natural England *Outer Thames Estuary Special Protection Area: Draft advice under Regulation 35(3) of The Conservation of Habitats and Species Regulations 2010 (as amended) and Regulation 18 of The Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended)* Version 3.7 March 2013

4 Consultations

4.1 Consultations with Natural England

4.1.1 Natural England is the statutory consultee for Habitats Regulations Assessments of Land-use Plans. The public consultation of the Preferred Options Site Allocations Document together with this document would be Natural England's first opportunity to advise on the Habitats regulations Assessment.

4.2 Consultations with others

4.2.1 Suffolk Coastal District may if it wishes consult the general public (including stakeholders such as nature conservation organisations) on Habitats Regulations Assessment. Suffolk /Coastal District Council wishes to consult the general public and the public consultation of the Preferred Options Site Allocations Document together with this document would be the general public's first opportunity to advise on this Habitats Regulations Assessment.

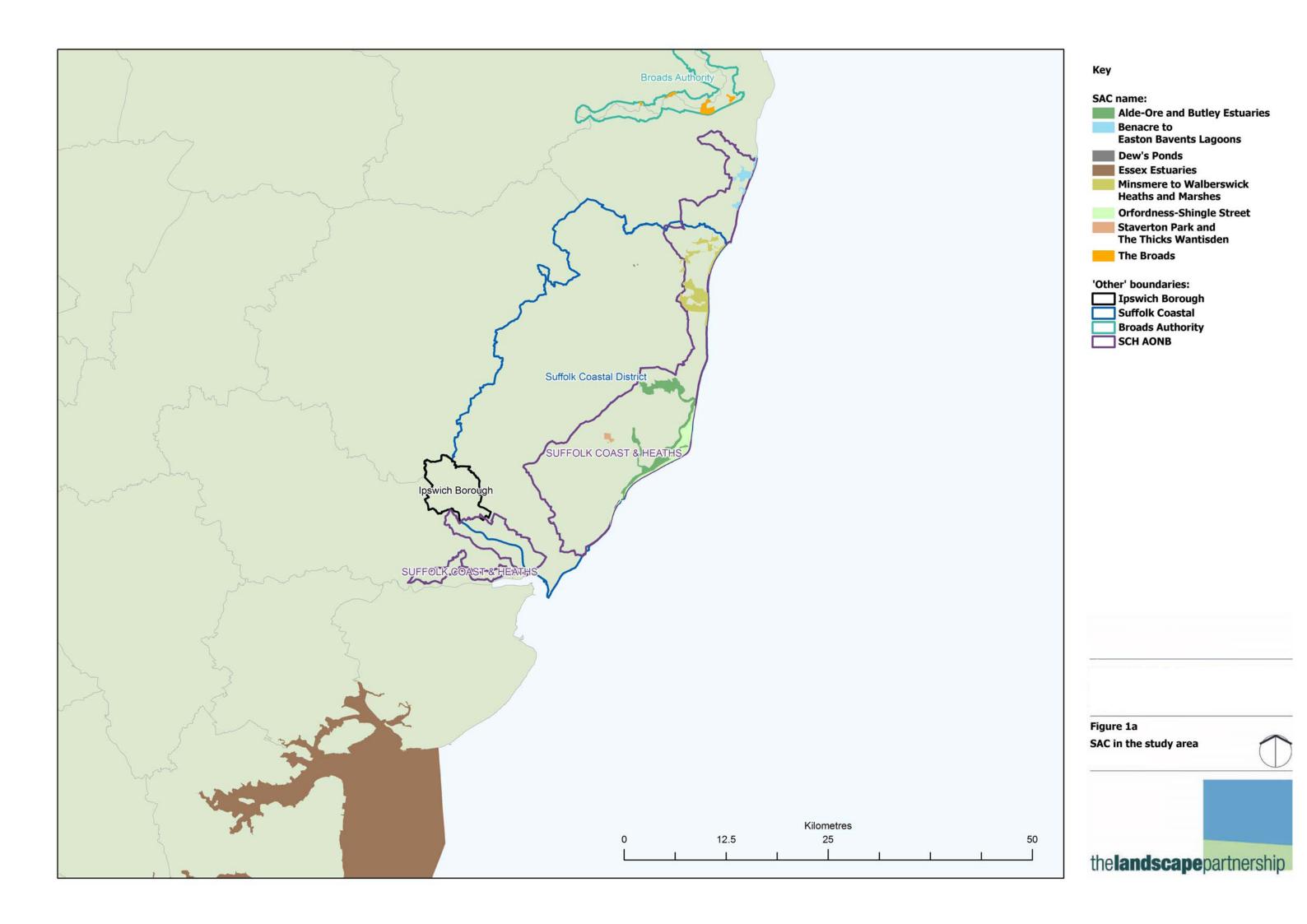
5 Conclusions

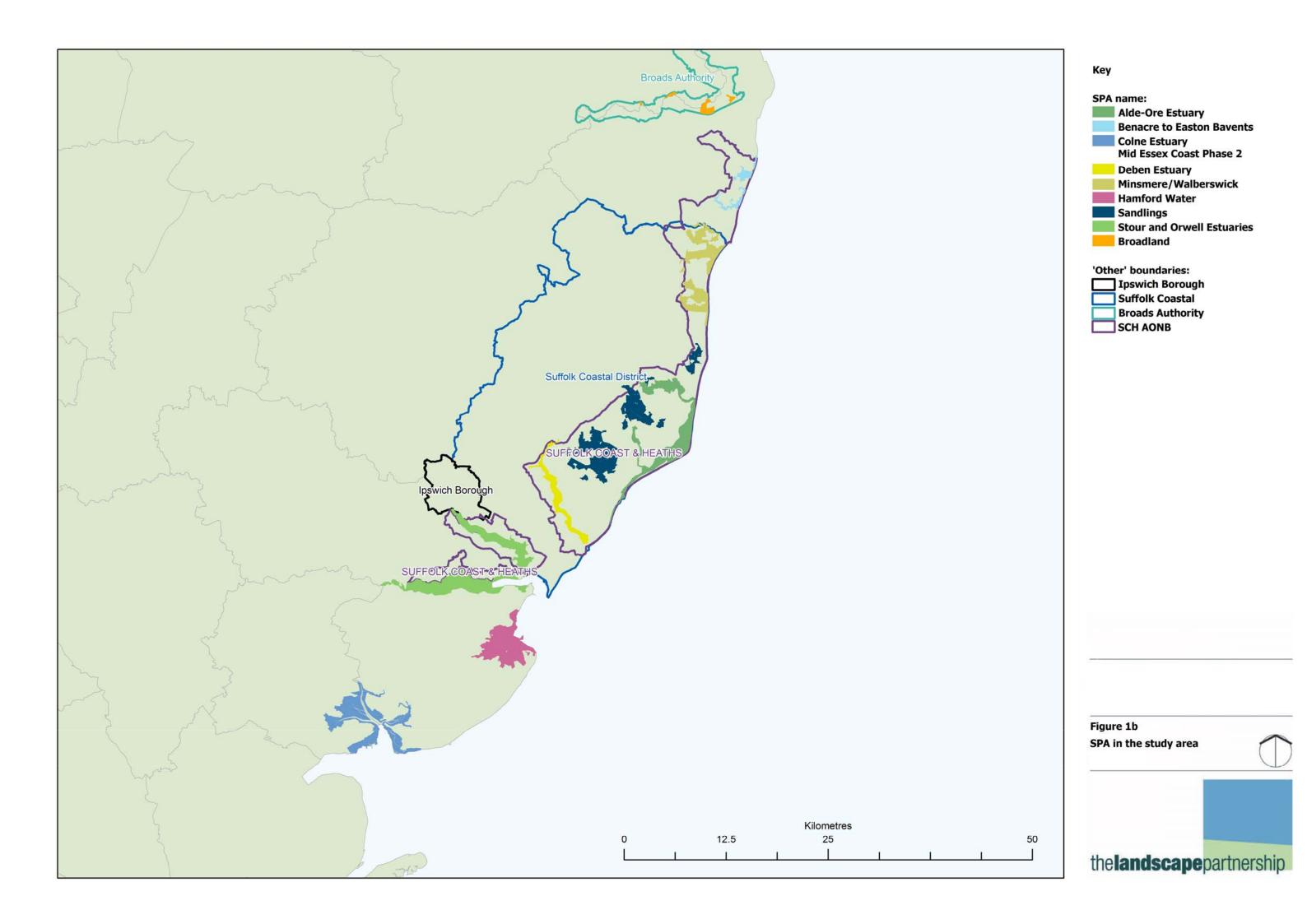
5.1 Conclusion of screening for likely significant effects of the Document alone

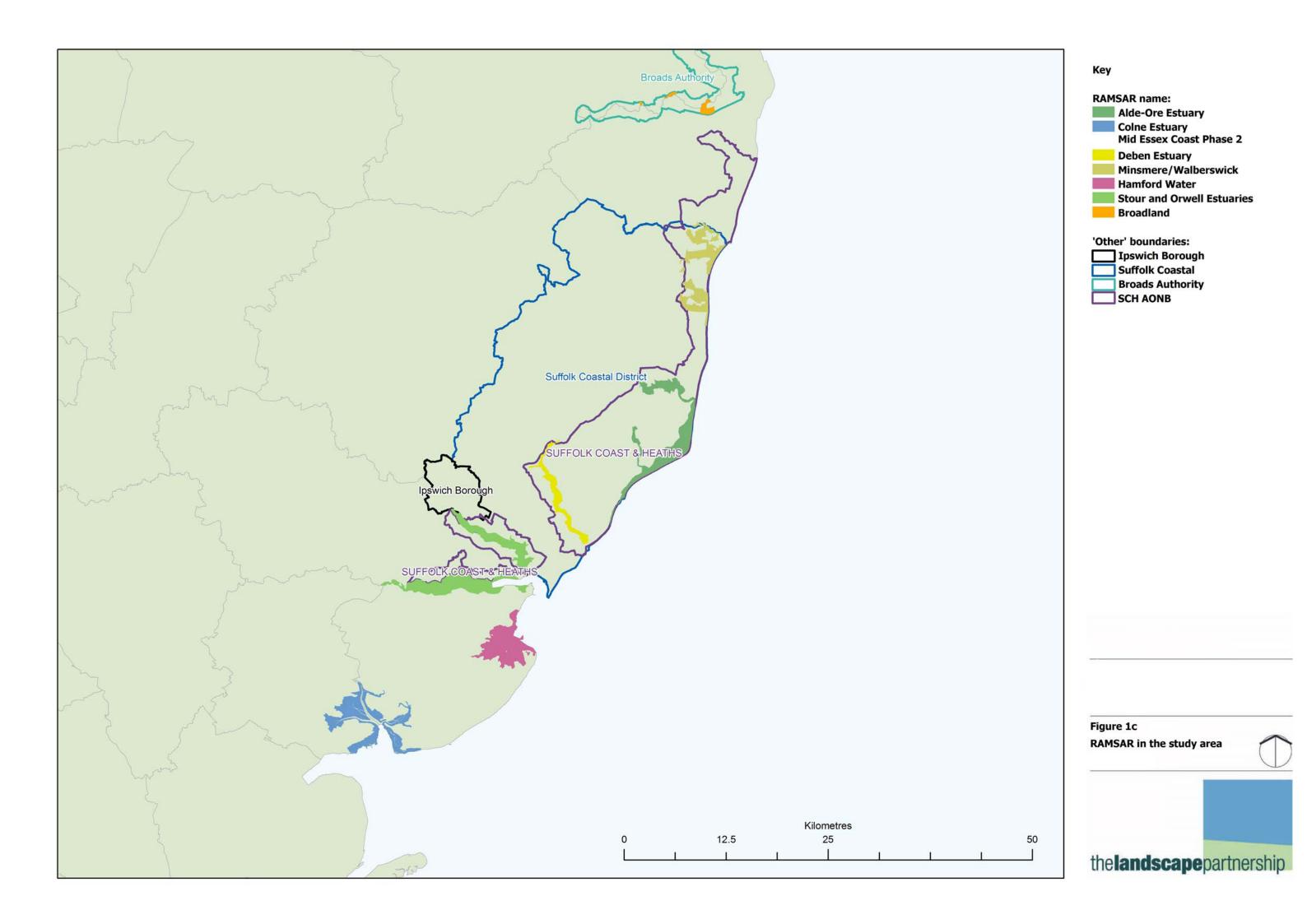
5.1.1 In conclusion it is considered that the Site Allocation Document as a stand alone document is likely to have a significant effect upon Alde-Ore Estuary European sites, with Preferred Policies SSP3 (land to the rear of Rose Hill, Saxmundham Road, Aldeburgh) and SSP31 (Snape Maltings) likely to have a significant effect by causing an increase in disturbance to SPA-qualifying birds using the estuary. For both policies, further information and / or study might be able to inform a subsequent conclusion of no adverse effect upon the integrity of the European site.

5.2 Conclusion of screening for likely significant effects of the Document in-combination with other relevant plans

5.2.1 There are no other plans which would have an effect on European sites in combination with the Site Allocation Document.







NATURA 2000

STANDARD DATA FORM

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

FOR SPECIAL ARE	AS OF CONSI	ERVATION (S	SAC)		
1. Site identification:					
1.1 Type B	1.2	Site code	UK003	30076	
			1		
1.3 Compilation date 200101	1.4	Update			
1.5 Relationship with other Natura 20	000 sites				
1.6 Respondent(s) International	al Designation	ns. JNCC. Pe	terborough		
110 Respondent(s)		,			
1.7 Site name Alde, Ore and Butle	ey Estuaries				
1.8 Site indication and designation cla	assification	dates			
date site proposed as eligible as SCI	200101	dates			
date confirmed as SCI	200412				
date site classified as SPA	200504				
date site designated as SAC	200304				
2. Site location:					
2.1 Site centre location					
longitude latitude					
01 34 08 E 52 06 06 N					
2.2 Site area (ha) 1561.53	2	2.3 Site len	igth (km)		
2.5 Administrative region					
NUTS code	Regio	on name		% co	ver
UK403 Suffolk				100	.00%
A C DI					
2.6 Biogeographic region	\neg				
Alnino Atlantio Romo	Co.	 ntinental	Magazanasi	o Modite	
Alpine Atlantic Borea	ii Co	numentai	Macaronesi	a Medic	erranean
3. Ecological information:					
3.1 Annex I habitats					
Habitat types present on the site and the si	te assessmen	t for them:			
Annex I habitat	% cover	Representati vity	Relative surface	Conservation status	Global assessment
Sandbanks which are slightly covered by sea water all	2	D			

the time

Estuaries	70	В	С	С	В
Mudflats and sandflats not covered by seawater at low tide	40	В	С	В	C
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	25	С	С	С	C

3.2 Annex II species

Population

Site assessment

	Resident		Migrator	y				
Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global

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	
Shingle. Sea cliffs. Islets	5.0
Inland water bodies (standing water, running water)	
Bogs. Marshes. Water fringed vegetation. Fens	
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, Sand, Shingle

Geomorphology & landscape:

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

4.2 Quality and importance

Estuaries

• for which this is considered to be one of the best areas in the United Kingdom.

Mudflats and sandflats not covered by seawater at low tide

• for which the area is considered to support a significant presence.

Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

for which the area is considered to support a significant presence.

4.3 Vulnerability

Past canalisation and erosion together with sea-level rise has resulted in the loss of much of the saltmarsh. There are plans for managed coastal retreat which in the long-term will result in the creation of saltmarsh.

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

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name: Alde, Ore and Butley Estuaries

Unitary Authority/County: Suffolk

SAC status: Designated on 1 April 2005

Grid reference: TM444509 SAC EU code: UK0030076

Area (ha): 1561.53

Component SSSI: Alde-Ore Estuary SSSI

Site description:

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 has extensive areas of saltmarsh and a reedbed community bordering intertidal mudflats. It 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.

The adjacent shingle and lagoon habitats are designated separately as the Orfordness-Shingle Street SAC.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats)

This citation relates to a site entered in the Register of European Sites for Great Britain.

Register reference number: UK0030076 Date of registration: 14 June 2005

Signed: Trew Salam

On behalf of the Secretary of State for Environment,

Food and Rural Affairs



EC Directive 79/409 on the Conservation of Wild Birds: Special Protection Areas

Alde-Ore Estuary (Suffolk)

The Alde-Ore Estuary proposed Special Protection Area (pSPA) is situated on the east coast of Suffolk between Aldeburgh in the north and Bawdsey in the south. The site comprises the estuary complex of the rivers Alde, Butley and Ore, including Havergate Island and Orfordness. The variety of habitats important for breeding and wintering birds includes vegetated shingle, intertidal mudflats, semi-improved grazing marsh, saltmarsh and saline lagoons.

The site includes the entire Alde-Ore Estuary SSSI, notified in 1985 (revised in 1992 under the Wildlife and Countryside Act, 1981). The Alde-Ore Estuary SSSI includes the Orfordness-Havergate NNR, the English Nature owned part of which has already been designated as Orfordness-Havergate SPA.

The site qualifies under Article 4.1 of the EC Birds Directive by sustaining nationally important numbers of the following Annex 1 species, marsh harrier Circus aeruginosus (breeding), avocet Recurvirostra avosetta (wintering and breeding) ruff Philomachus pugnax (wintering), sandwich tern Sterna sandvicensis (breeding) and little tern Sterna albifrons (breeding). Further Annex 1 species winter on site, including, bittern Botaurus stellaris, Bewick's Swan Cygnus columbianus, hen harrier Circus cyaneus, golden plover Pluvialis apricaria, and short-eared owl Asio flammeus. Mediterranean gull Larus melanocephalus, common tern Sterna hirundo and Arctic tern Sterna paradisaea breed on Havergate Island.

The site qualifies under Article 4.2 of the Directive by regularly supporting internationally important numbers of two migratory species. The Orfordness colony of breeding lesser black-backed gull *Larus fuscus graellsii*, represented in 1995, 12% of the British population and 8% of the world population of the *graellsii* race. The five year wintering peak mean 1989/90 to 1993/94 for redshank *Tringa totanus*, was 1,662 birds, representing 1.5 % of the British population and 1.1% of the east Atlantic flyway population.

The site supports over 1% of the British wintering population of the following (calculated from five year winter peak means 1989/90 to 1993/94), shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *Anas crecca*, black-tailed godwit *Limosa limosa*. In addition, the site supports over 1% of the British breeding population of, Gadwall *Anas strepera*, shoveler *Anas clypeata* and herring gull *Larus argentatus*.

The site also supports a notable assemblage of breeding and wintering wetland birds, in addition to the species mentioned above. Breeding species include, oystercatcher *Haematopus ostralegus*, ringed plover *Charadrius hiaticula*, lapwing *Vanellus vanellus* (also winter) black headed gull *Larus ridibundus* and barn owl *Tyto alba*. Wintering species include, cormorant *Phalacrocorax carbo*, European white-fronted goose *Anser abifrons albifrons*, brent goose *Branta bernicla*, pintail *Anas acuta*, grey plover *Pluvialis squatarola*, dunlin *Calidris alpina* and curlew *Numenius arquata*.

SPA Citation January 1996

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: 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:				
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:	1.	Name and address of the compiler of this form:	FOR OFFICE USE ONLY.	
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:			DD MM YY	
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:		Joint Nature Conservation Committee		
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:		Monkstone House		
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:		City Road	Designation date	Site Reference Number
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:		Peterborough	&	
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:		· · · · · · · · · · · · · · · · · · ·		
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:		-		
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:		Telephone/Fax: +44 (0)1733 - 562 626 / +44 (0)1	733 – 555 948	
Designated: 04 October 1996 3. Country:				
Designated: 04 October 1996 3. Country:				
Designated: 04 October 1996 3. Country:				
3. Country:	2.	Date this sheet was completed/updated:		
3. Country:		Designated: 04 October 1996		
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:	3.	Country:		
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:	٠.	•		
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:		<u> </u>		
 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: 	4.	Name of the Ramsar 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:		Alde–Ore Estuary		
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:		Designation of new Damcar site or undate of existing	ag cita:	
6. For RIS updates only, changes to the site since its designation or earlier update:	٥.	Designation of new Kamsar site of update of existing	ig site.	
6. For RIS updates only, changes to the site since its designation or earlier update:		. =====		
	Thi	is RIS is for: Updated information on an existing Rams	ar site	
	_	For RIS undates only, changes to the site since its d	lesignation or earlier	update:
	6.			

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

** 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

in the application of the Criteria, since the previous RIS for the site:

Ramsar Information Sheet: UK11002	Page 1 of 11	Alde–Ore Estuary

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 \checkmark -or- no \square ;
 - 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 $yes \checkmark$ -or- $no \Box$;

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 Information Sheet: UK11002 Page 2 of 11 Alde-Ore Estuary

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, 5790 apparently occupied nests, representing an W Europe/Mediterranean/W Africa average of 3.9% of the breeding population

(Seabird 2000 Census)

Species with peak counts in winter:

Pied avocet, Recurvirostra avosetta, 1187 individuals, representing an average of Europe/Northwest Africa

1.6% of the population (5 year peak mean

1998/9-2002/3)

2368 individuals, representing an average of 2% Common redshank, Tringa totanus totanus,

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

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, 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

Ramsar Information Sheet: UK11002 Page 3 of 11 Alde-Ore Estuary

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 southwestwards. 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
Е	Sand / shingle shores (including dune systems)	33.3
Н	Salt marshes	23.6
G	Tidal flats	17.7
M	Rivers / streams / creeks: permanent	9.8
Sp	Saline / brackish marshes: permanent	5.9

Тр	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

Mediterranean gull , Larus melanocephalus,

Europe

Sandwich tern, Sterna

(Thalasseus) sandvicensis sandvicensis, W Europe 3 pairs, representing an average of 1.9% of the GB population (5 year mean 1993-1997)

6 apparently occupied nests, representing an average of 5.5% of the GB population (Seabird 2000 Census)

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 1998/9-2002/2)

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:
- 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		+

Ramsar Information Sheet: UK11002 Page 7 of 11 Alde-Ore Estuary

Produced by JNCC: Version 3.0, 13/06/2008

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	+	

Ramsar Information Sheet: UK11002 Page 8 of 11 Alde-Ore Estuary

Produced by JNCC: Version 3.0, 13/06/2008

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

- Anon. (2002) Suffolk Coast and Estuaries Coastal Habitat Management Plan: Executive summary. English Nature, Peterborough (Living with the Sea LIFE Project) www.english-nature.org.uk/livingwiththesea/project_details/good_practice_guide/HabitatCRR/ENRestore/CHaMPs/SuffolkCoast/SuffolkCHaMP.pdf
- Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP, Davidson, NC & Buck, AL (eds.) (1998) Coasts and seas of the United Kingdom. Region 7 South-east England: Lowestoft to Dungeness. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)
- Beardall, CH, Dryden, RC & Holzer, TJ (1988) *The Suffolk estuaries: a report...on the wildlife and conservation of the Suffolk estuaries*. Suffolk Wildlife Trust, Saxmundham [accompanied by separate volume, *Suffolk estuaries bibliography*]
- Bratton, JH (ed.) (1991) British Red Data Books: 3. Invertebrates other than insects. Joint Nature Conservation Committee, Peterborough
- Buck, AL (ed.) (1993) An inventory of UK estuaries. Volume 5. Eastern England. Joint Nature Conservation Committee, Peterborough
- Cadbury, CJ & Morris, P (2002) Reserve focus Havergate Island NNR, Suffolk. British Wildlife, 14(2), 101-105
- Chandler, TJ & Gregory, S (eds.) (1976) The climate of the British Isles. Longman, London
- Covey, R (1998) Chapter 6. Eastern England (Bridlington to Folkestone) (MNCR Sector 6). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 179-198. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts.* British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Doody, JP, Johnston, C & Smith, B (1993) *Directory of the North Sea coastal margin*. Joint Nature Conservation Committee, Peterborough
- Downie, AJ & Barnes, RSK (1996) Survey of the brackish pools on the King's Marshes, Orfordness, Suffolk, 1994. *English Nature Research Reports*, No. **209**
- Fuller, RM & Randall, RE (1988) The Orford shingles, Suffolk, U.K. classic conflicts in coastline management. *Biological Conservation*, **46**, 95-114
- Hill, TO, Emblow, CS & Northen, KO (1996) Marine Nature Conservation Review Sector 6. Inlets in eastern England: area summaries. Joint Nature Conservation Committee, Peterborough (Coasts and seas of the United Kingdom. MNCR series)
- Hodges, M (1996) The National Trust Orfordness ornithological report. National Trust.
- May, VJ & Hansom, JD (eds.) (2003) Coastal geomorphology of Great Britain. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 28)
- McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ & Way, SF (eds.) (2004) *The Habitats Directive: selection of Special Areas of Conservation in the UK*. 2nd edn. Joint Nature Conservation Committee, Peterborough. www.jncc.gov.uk/SACselection
- Morris, RKA & Parsons, MA (1992) A survey of invertebrate communities on the shingle of Dungeness, Rye Harbour and Orford Ness *JNCC Report*. No. 77
- 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
- Ratcliffe, DA (ed.) (1977) A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Shirt, DB (ed.) (1987) British Red Data Books: 2. Insects. Nature Conservancy Council, Peterborough
- Sneddon, P & Randall, RE (1994) Coastal vegetated shingle structures of Great Britain: Appendix 3. Shingle sites in England. Joint Nature Conservation Committee, Peterborough
- Stewart, A, Pearman, DA & Preston, CD (eds.) (1994) Scarce plants in Britain. Joint Nature Conservation Committee, Peterborough
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.) www.jncc.gov.uk/UKSPA/default.htm
- Suffolk Wildlife Trust (1993) National Vegetation Classification of the saltmarsh of the Deben, Alde–Ore and Blyth estuaries, Suffolk. Suffolk Wildlife Trust, Ashbocking

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

Ramsar Information Sheet: UK11002 Page 11 of 11 Alde-Ore Estuary

Produced by JNCC: Version 3.0, 13/06/2008

NATURA 2000

STANDARD DATA FORM

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

FOR S	SPECIAL AREAS	S OF CONSI	ERVATION (S	SAC)		
1. Site identification:						
1.1 Type J]	1.2	Site code	UK90	09112	
				<u></u>		
1.3 Compilation date	199610	1.4	Update	19980)3	
1.5 Relationship with other	er Natura 200	0 sites				
U K 0 0 1 4	7 8 0	o sices				
1 (D 1 4(a)	T. 4 4 1	D	INCC D.	4		
1.6 Respondent(s)	International	Designation	is, JNCC, Pe	terborougn		
1.7 Site name Alde-C	re Estuary					
4.0 (%)		*.0*				
1.8 Site indication and ded date site proposed as eligible as		sification	dates			
date confirmed as SCI	SCI					
date site classified as SPA		199610				
date site designated as SAC						
2. Site location:						
2.1 Site centre location	1 444 1					
longitude 01 33 03 E	latitude 52 04 58 N					
01 33 03 E	32 013011					
2.2 Site area (ha) 24	116.87	2	2.3 Site len	igth (km)		
2.5 Administrative region	! I	D .			0/	
NUTS code	C££-11-	Regi	on name		% co	
UK403	Suffolk				100	.00%
2.6 Biogeographic region						
X						
Alpine Atlantic	Boreal	Co	 ntinental	Macaronesi	a Medite	erranean
_						
3. Ecological informat	ion:					
3.1 Annex I habitats						
			. 6			
Habitat types present on the s	ite and the site	assessmen	t for them:			
Annex I habitat		% cover	Representati	Relative	Conservation	Global
			vity	surface	status	assessment
		1		l		l

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		В	
A183	Larus fuscus		14070 P			A		С	
A151	Philomachus pugnax			3 I		С		С	
A132	Recurvirostra avosetta			766 I		A		В	
A132	Recurvirostra avosetta		104 P			A		В	
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 2% of the GB breeding population (Eastern Atlantic - breeding) 5 count mean, 1993-4,1996-8

Sterna sandvicensis 1.2% of the GB breeding population

(Western Europe/Western Africa) 5 year mean, 1992-1996

Over winter the area regularly supports:

Philomachus pugnax 0.4% of the GB population

(Western Africa - wintering) 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 11.3% of the breeding population

(Western Europe/Mediterranean/Western Africa) 5 year mean 1994-1998

Over winter the area regularly supports:

Tringa totanus 1.1% of the population

(Eastern Atlantic - wintering) 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	
	Joint Nature Conservation Committee		
	Monkstone House		
	City Road	Designation date Site Reference Number	
	Peterborough		
	Cambridgeshire PE1 1JY		
	UK		
	Telephone/Fax: +44 (0)1733 - 562 626 / +44 (0)1	733 – 555 948	
	Email: <u>RIS@JNCC.gov.uk</u>		
2.	Date this sheet was completed/updated:		
	Designated: 11 March 1996		
3.	Country:		
	UK (England)		
4.	Name of the Ramsar site:		
	Deben Estuary		
	Deben Estuary		
5.	Designation of new Ramsar site or update of existir	ng site:	
Thi	s RIS is for: Updated information on an existing Rams	ar site	
T 111	5 1415 15 101. Opunion information on an existing Rams	our site	
			_
6.	For RIS updates only, changes to the site since its d	lesignation or earlier update:	

Ramsar Information Sheet: UK11017 Page 1 of 9 Deben Estuary

b) Describe briefly any major changes to the ecological character of the Ramsar site, including

** 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.

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): $yes \checkmark$ -or- $no \square$;
 - 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 $yes \checkmark$ -or- $no \Box$;

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.

$\label{thm:qualifying Species/populations} \textbf{Qualifying Species/populations (as identified at designation):}$

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.

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	mud, sedimentary
Geomorphology and landscape	lowland, coastal, valley, intertidal sediments (including
	sandflat/mudflat), estuary
Nutrient status	eutrophic
рН	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

Ramsar Information Sheet: UK11017 Page 3 of 9 Deben Estuary

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
Н	Salt marshes	46.8
G	Tidal flats	36.8
F	Estuarine waters	15.3
U	Peatlands (including peat bogs swamps, fens)	1
Е	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

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-

307 individuals, representing an average of 1.9%

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)

200 337 2 :

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)

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		+

Ramsar Information Sheet: UK11017 Page 6 of 9 **Deben Estuary**

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

Anon. (2002) Suffolk Coast and Estuaries Coastal Habitat Management Plan: Executive summary. English Nature, Peterborough (Living with the Sea LIFE Project) www.english-nature.org.uk/livingwiththesea/project_details/good_practice_guide/HabitatCRR/ENRestore/CHaMPs/SuffolkCoast/SuffolkCHaMP.pdf

Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP, Davidson, NC & Buck, AL (eds.) (1998) *Coasts and seas of the United Kingdom. Region 7 South-east England: Lowestoft to Dungeness*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)

Beardall, CH, Dryden, RC & Holzer, TJ (1988) The Suffolk estuaries: a report...on the wildlife and conservation of the Suffolk estuaries. Suffolk Wildlife Trust, Saxmundham [accompanied by separate volume, Suffolk estuaries bibliography]

- Bratton, JH (ed.) (1991) British Red Data Books: 3. Invertebrates other than insects. Joint Nature Conservation Committee, Peterborough
- Buck, AL (ed.) (1993) An inventory of UK estuaries. Volume 5. Eastern England. Joint Nature Conservation Committee, Peterborough
- Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes.* Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)
- Carter, I (1994) Departmental Brief: the Deben Estuary proposed Special Protection Area and Ramsar site (926A). English Nature (Ornithology Section), Peterborough
- Covey, R (1998) Chapter 6. Eastern England (Bridlington to Folkestone) (MNCR Sector 6). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 179-198. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Davidson, NC, Laffoley, D d'A, Doody, JP, Way, LS, Gordon, J, Key, R, Pienkowski, MW, Mitchell, R & Duff, KL (1991) Nature conservation and estuaries in Great Britain. Nature Conservancy Council, Peterborough
- Doody, JP, Johnston, C & Smith, B (1993) *Directory of the North Sea coastal margin*. Joint Nature Conservation Committee, Peterborough
- Hill, TO, Emblow, CS & Northen, KO (1996) Marine Nature Conservation Review Sector 6. Inlets in eastern England: area summaries. Joint Nature Conservation Committee, Peterborough (Coasts and seas of the United Kingdom. MNCR series)
- McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ & Way, SF (eds.) (2004) *The Habitats Directive: selection of Special Areas of Conservation in the UK*. 2nd edn. Joint Nature Conservation Committee, Peterborough. www.jncc.gov.uk/SACselection
- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992–93 to 1998–99. WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- 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
- Pritchard, DE, Housden, SD, Mudge, GP, Galbraith, CA & Pienkowski, MW (eds.) (1992) *Important Bird Areas in the United Kingdom including the Channel Islands and the Isle of Man.* Royal Society for the Protection of Birds, Sandy
- Ratcliffe, DA (ed.) (1977) A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.) www.jncc.gov.uk/UKSPA/default.htm
- Suffolk Wildlife Trust (1993) National Vegetation Classification of the saltmarsh of the Deben, Alde–Ore and Blyth estuaries, Suffolk. Suffolk Wildlife Trust, Saxmundham

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

Ramsar Information Sheet: UK11017 Page 9 of 9 Deben Estuary

EC Directive 79/409 on the Conservation of Wild Birds: Special Protection Area

The Deben Estuary (Suffolk)

The Deben Estuary Special Protection Area (SP A) extends for about 18km from the mouth of the estuary at Felixstowe, on the east coast of Suffolk to near the tidal limit above Wilford Bridge. It is a relatively narrow and sheltered estuary with a limited amount of freshwater input and intertidal areas constrained by sea walls. Saltmarsh and intertidal mud flats occupy the majority of the site but there are also areas of reedswamp, unimproved neutral grassland and scrub. The estuary is largely surrounded by agricultural land.

The boundary of the SPA is coincident with the Deben Estuary SSSI, notified in 1991, and overlaps with the Ferry Cliff, and Sutton and Ramsholt Cliff geological SSSIs. The site includes all land above mean low water mark up to an inland boundary that follows variable features such as the upper limit of wetland habitat or the sea wall.

The site qualifies under Article 4.1 of the EC Birds Directive by regularly supporting nationally important numbers of avocet *Recurvirostra avosetta*, an Annex 1 species. The five year winter peak mean for the period 1988/89 to 1992/93 was 57 birds, representing 11.4% of the British population. Further Annex 1 species wintering on the site include golden plover *Pluvialis apricaria*, hen harrier *Circus cyaneus* and short-eared owl *Asio flammeus*.

The site qualifies under Article 4.2 of the Directive by regularly supporting internationally important numbers of dark-bellied geese, *Branta bernicula bernicula*, a regularly occurring migratory species. The five year winter peak mean for the period 1988/89 to 1992/93 was 1,889 birds, representing 2.1% of the British and 1.1% of the north-west European population. In addition the site supports nationally important numbers of the following migratory waterfowl (figures are five year winter peak means for the period 1988/89 to 1992/93): 1,046 shelduck *Tadorna tadorna* (1.4% of the British population); 252 grey plover *Pluvialis squatarola* (1.2% of British); 143 black-tailed godwit *Limosa limosa* (2.9% of British); and 1,454 redshank *Tringa totanus* (1.9% of British).

The site also supports a notable assemblage of breeding and wintering wetland birds in addition to the species mentioned above. Breeding species include shelduck, gadwall *Anas strepera*, teal *A. crecca*, shoveler *A. clypeata*, redshank, oystercatcher *Haematopus ostralegus*, ringed plover *Charadrius hiaticula* and snipe *Gallinago gallinago*. Wintering species include cormorant *Phalacrocorax carbo*, teal, pintail *Anas acuta*, wigeon *A. penelope*, goldeneye *Bucephala clangula*, coot *Fulica atra*, oystercatcher, ringed plover, dunlin *Calidris alpina*, snipe, curlew *Numenuis arquata*, turnstone *Areneria interpres* and twite *Carduelis flavirostris*. The estuary is more important for many species of waterfowl in years when severe weather reduces food resources available on the continent.

This citation / map relates to a site entered in the Register of European sites for Great Britain.

Register reference number UK 90092-01

Date of registration 25 JUG 1999

on behalf of the Secretary of State for the Environment

SPA Citation March 1996

NATURA 2000

STANDARD DATA FORM

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

FOR S	PECIAL AREAS	OF CONSI	ERVATION (S	SAC)		
1. Site identification:						
1.1 Type A		1.2	Site code	UK90	09261	
1.3 Compilation date	199603	1.4	Update	19980)3	
1.5 Relationship with other	er Natura 2000	0 sites				
1.6 Respondent(s)	International I	Designation	ns, JNCC, Pe	terborough		
1.7 Site name Deben	Estuary					
1.8 Site indication and des		sification	dates			
date site proposed as eligible as	SCI					
date confirmed as SCI						
date site classified as SPA	1	.99603				
date site designated as SAC						
2.1 Site centre location longitude 01 20 44 E 2.2 Site area (ha)	latitude 52 02 31 N	2	2.3 Site len	ngth (km)		
2.5 Administrative region		D •				
NUTS code	S 22.44	Kegi	on name		% co	
UK403	Suffolk				100	.00%
 2.6 Biogeographic region X Alpine Atlantic 3. Ecological information 3.1 Annex I habitats Habitat types present on the si 			ntinental t for them:	Macaronesi	a Medite	erranean
Annex I habitat		% cover	Representati	Relative	Conservation	Global
			vity	surface	status	assessment
		1	1	1		

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		В		C	
A132	Recurvirostra avosetta			95 I		В		В	

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 -

7.5% of the GB population 5 year peak mean 1991/92-1995/96

breeding)

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

Branta bernicla bernicla	0.8% of the population	
(Western Siberia/Western Europe)	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

EC Directive 79/409 on the Conservation of Wild Birds: Special Protection Area

MINSMERE-WALBERSWICK (SUFFOLK)

The Minsmere-Walberswick proposed SPA contains areas of grazing marsh, extensive reedbeds, the estuary of the River Blyth, and areas of lowland heath and woodland. The boundaries of the site follows those of the Minsmere-Walberswick Heath and Marshes.SSSI.

Minsmere-Walberswick qualifies under Article 4.1, by supporting, in summer, nationally important breeding populations of the following Annex 1 species: 5 booming male bitterns <u>Botauris stellaris</u> (presumed to represent 5 breeding pairs; 22% of the British breeding population); 15 breeding female marsh harriers <u>Circus aeruginosus</u> (20% of British); 47 pairs of avocet <u>Recurvirostra avosetta</u> (12% of British); 32 pairs of little tern <u>Sterna albifrons</u> (1% of British): and 24 pairs of nightjar <u>Caprimulgus</u> europaeus (1% of British).

The site qualifies also under Article 4.1 by regularly supporting, in winter, a nationally important wintering population of hen harrier *Circus cyaneus* (15 individuals, 2% of the British wintering population).

Minsmere-Walberswick qualifies under article 4.2 by supporting, in summer, in recent years, nationally important breeding populations of three regularly occurring migratory species: 24 pairs of gadwall <u>Anas strepera</u> (4% of British); 73 pairs of teal <u>A. crecca</u> (1% of British): and 23 pairs of shoveler <u>A. clvpeata</u> (2% of British). Also notable is a nationally important breeding population of bearded tit <u>Panurus biarmicus</u> (50 pairs, 8% of British).

The site qualifies also under Article 4.2 by supporting nationally important wintering populations of three migratory waterfowl. (average peak counts for the five year period 1985/86 to 1989/90): 100 European white-fronted geese <u>Anser albifrons albifrons</u> (2% of the British wintering population); 90 gadwall <u>Anas strepera</u> (1% of British), and 100 shoveler <u>Anas clypeata</u> (1% of British).

Minsmere-Walberswick is also of importance for an outstandingly diverse assemblage of breeding birds of marshland and reedbed habitats, including bittern, garganey <u>Anas querquedula</u>, marsh harrier, water rail <u>Rallus aquaticus</u>, Cetti's warbler <u>Cettia cetti</u> and Savi's warbler <u>Locustella lusciniodes</u>. Also notable is an assemblage of wintering waterfowl including, in addition to species listed above, Bewick's swan <u>Cyanus columbianus</u>, wigeon <u>Anas penelope</u>, teal <u>Anas crecca</u>, avocet; spotted redshank <u>Tringa erythropus</u>; and redshank <u>Tringa totanus</u>.

During severe winter weather Minsmere-Walberswick can assume even greater national and international importance as wildfowl and waders from many other areas arrive, attracted by relatively mild climate, compared with continental areas, and the abundant food resources available.

SPA Citation HTR December 1991 This citation / man relates to a site entered in the Register of European sites for Great Britain.

Register reference number UKOO 910....

Date of registration 25 AUG 1998

Signed State for the Environment

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name: Orfordness – Shingle Street

Unitary Authority/County: Suffolk

SAC status: Designated on 1 April 2005

Grid reference: TM440486 SAC EU code: UK0014780

Area (ha): Suffolk

Component SSSI: Alde-Ore Estuary SSSI

Site description:

Orfordness is an extensive shingle structure consisting of a foreland, a 15 km-long spit and a series of recurves running from north to south. It supports some of the largest and most natural sequences in the UK of shingle vegetation affected by salt spray. The southern end 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.

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 and comprises sea beet *Beta vulgaris* ssp. *maritima* and orache *Atriplex* spp.

The site also includes a series of percolation lagoons that 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.

The adjacent estuarine and intertidal habitats are designated separately as the Alde, Ore and Butley Estuaries SAC.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Annual vegetation of drift lines
- Coastal lagoons*
- Perennial vegetation of stony banks. (Coastal shingle vegetation outside the reach of waves)

Annex I priority habitats are denoted by an asterisk (*).

This citation relates to a site entered in the Register of European Sites for Great Britain.

Register reference number: UK0014780 Date of registration: 14 June 2005

Signed: Trew Salam

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



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)

1.0	JK DI ECIAL AKEA	AS OF CONSERVATION	(bhc)	
1 (0.4 • 1 4.6• 4.				
l. Site identification	1:			
1.1 Type K		1.2 Site co	de UK00147	80
				
1.3 Compilation date	199601	1.4 Update	e 200101	
1.5 Relationship with o		000 sites		
U K 9 0 0	9 1 1 2			
1 (Dogwandont(a)	Intermetions	1 Designations INCC	Datanhamayah	
1.6 Respondent(s)	International	l Designations, JNCC,	Peterborougn	
1.7 Site name Orf	ordness – Shingle	o Stroot		
1.7 Site name On	oruness – Sinngr	e Sirect		
1.8 Site indication and	designation cla	ssification dates		
date site proposed as eligible		199601		
date confirmed as SCI	, , , , , , , , , , , , , , , , , , , 	200412		
date site classified as SPA				
date site designated as SAC		200504		
2. Site location:				
2.1 Site centre location	1			
longitude	latitude			
01 33 41 E	52 04 53 N			
2.2 Site area (ha)	901.19	2.3 Site	length (km)	
2.5 Administrative reg	ion			
NUTS code		Region name		% cover
UK403	Suffolk			100.00%
2.6 Biogeographic regi	on	- —		
X				
Alpine Atlanti	c Boreal	l Continental	Macaronesia	Mediterranea
	4•			
3. Ecological inforn	iation:			

3.1 Annex I habitats

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

Annex I habitat	% cover	Representati vity	Relative surface	Conservation status	Global assessment
Coastal lagoons	3	В	С	В	В
Annual vegetation of drift lines	1.1	A	В	A	A

Perennial vegetation of stony banks	60.3	A	В	A	A

3.2 Annex II species

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)	25.0
Salt marshes. Salt pastures. Salt steppes	15.0
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	40.0
Inland water bodies (standing water, running water)	
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	18.0
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)	2.0
Total habitat cover	100%

4.1 Other site characteristics

Soil & geology:

Mud, Nutrient-poor, Sand, Shingle

Geomorphology & landscape:

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

4.2 Quality and importance

Coastal lagoons

• for which this is considered to be one of the best areas in the United Kingdom.

Annual vegetation of drift lines

- for which this is one of only four known outstanding localities in the United Kingdom.
- which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares.

Perennial vegetation of stony banks

for which this is considered to be one of the best areas in the United Kingdom.

4.3 Vulnerability

Vegetated shingle is a sensitive habitat. The site is managed to limit recreational pressures. Much of the interest is self-sustaining with little need for intervention. Natural coastal processes will lead to changes in the extent of lagoons at Shingle Street over time.

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

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 CONSI	ERVATION (S	AC)		
1. Site identification:					
1.1 True	1.2	Site code	TIKOO	20309	
1.1 Type	1.4	Site code	UK90	120309	
1.3 Compilation date 201008	1.4	Update	20110)2	
		o p and			
1.5 Relationship with other Natura 2000) sites				
U K 0 0 1 3 6 9 0					
U K 0 0 3 0 3 7 1					
1.6 Respondent(s) International I)esignation	ns INCC Per	erhorough		
1.0 Respondent(s)	2CSIGILATION	15, 31100, 10	croorougn		
1.7 Site name Outer Thames Estuary	<u> </u>				
	<u>'</u>				
1.8 Site indication and designation class	ification	dates			
date site proposed as eligible as SCI					
date confirmed as SCI date site classified as SPA 2	201008				
date site classified as SPA date site designated as SAC	01008				
date site designated as 5/10					
2. Site location:					
2.1 Site centre location					
longitude latitude 01 32 41 E 51 54 58 N					
01 32 41 E 31 34 36 N					
2.2 Site area (ha) 379268.14	\neg 2	.3 Site len	gth (km)		
			Sv. ()		
2.5 Administrative region					
NUTS	Region na	ame			%
code					cover
0 Marine					100.0%
2.6 Diagonamenhia magian					
2.6 Biogeographic region					
X D			, <u> </u>		
Alpine Atlantic Boreal	Col	ntinental	Macaronesi	a Medite	erranean
3. Ecological information:					
5. Ecological information.					
3.1 Annex I habitats					
		· • · •			
Habitat types present on the site and the site a	assessmen	t for them:			
Annex I habitat	% cover	Representati	Relative	Conservation	Global
		vity	surface	status	assessment
1	1	i l		1	1

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
A001	Gavia stellata			6466 I		A		C	

4. Site description:

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	100.0
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)	
Bogs. Marshes. Water fringed vegetation. Fens	
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	&	geol	logy:
------	---	------	-------

Gravel, Mud, Sand

Geomorphology & landscape:

Range of mobile sediments, Tidal current stream

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

Over winter the area regularly supports:

Gavia stellata 38% of the population in Great Britain (North-western Europe - wintering) peak mean over the period 1989-2006/07

ARTICLE 4.2 QUALIFICATION (79/409/EEC)

4.3 Vulnerability

The northernmost extent of the SPA contains some areas licenced for aggregate extraction and other prospecting areas. The site contains several constructed or consented offshore windfarms. There are proposals for extensions to several such windfarms. Furthermore, there is the possibility that new windfarms will be consented under Round 3. Certain shipping channels within the site have been and will continue to be subject to maintenance dredging. There may be a requirement for capital dredging in association with newly developed and future port developments. The Thames supports important commercial fisheries (as well as estuarine and marine recreational angling). There is also a well-established cockle harvesting industry. The potential impacts of many of these existing or future activities will be addressed through the relevant licence requirements and under the provision of the Habitats Regulations (including the review of consents process). Ongoing research associated with offshore windfarm development will improve understanding of the environmental factors influencing red-throated diver distribution and the extent of apparently suitable seabed habitat within the site.

Red throated divers are highly sensitive to non-physical disturbance by noise and visual presence during the winter. Locally, significant disturbance and displacement effects are predicted to arise from noise and visual impacts from wind farm construction, maintenance traffic and visually from the turbines themselves. Disturbance and displacement effects may also arise from shipping (including recreational boating) and boat movements associated with marine aggregate and fishing activities. Marine aggregates activities tend to be temporary and localised. Dredging and shipping activities are expected to be confined to existing shipping channels, which are already known to be avoided by divers. In all these cases it is expected that activity will be lowest during the winter months (when the birds are present) due to the limitations imposed by poor weather conditions. Prince's Channel (which runs through the southern area of the outer Thames SPA) carries a significant amount of vessel traffic in and out of ports in the inner Thames Estuary. Fisherman's Gat is also an active commercial shipping channel. In addition, smaller vessels use the shallower inshore channels across the site. The impacts of many of these existing or future activities will be addressed through the relevant licence requirements and under the provision of the Habitats Regulations. (including the review of consents process).

A number of operators discharge effluent into freshwater input sources upstream of the site and directly into coastal waters adjacent to the site. Direct discharges into the site include low levels of radionuclides and heavy metals. Deterioration of invertebrate and small fish populations as a result of large oil and chemical spills can have a significant impact on important food resources. Oil on the surface and in the water column would present a threat to diving and feeding seabirds. There is a considerable amount of shipping traffic within the site, mostly confined within recognise shipping channels. A small level of contamination will exist as a result of normal shipping activities. There is however, always the risk of a catastrophic spillage event from normal shipping traffic and there is in additional issue of ship-to-ship (s-t-s) oil transfers just off Southwold within 12nm.

Discharges to the freshwater environment upstream of the site will be subject to the requirements of relevant licencing. All major ports such as the Port of London will have oil spill contingency plans to deal with catastrophic events. All s-t-s transfers are well managed by the Maritime and Coastguard Agency (MCA).

Fishing activities within the site include: suction dredging for cockles, set and drift-net tramelling, drift gill netting, potting and a limited amount of beam trawling. Removal of fish and larger molluses can have a significant impact on the structure and functioning of benthic communities. Mechanisms for these activities to impact on red-throated divers may be a direct on indirect reduction in food availability. However, the overall level of exposure of red-throated divers to prey species depletion from biological disturbance is currently considered low. Any future significant changes to the way in which certain fishing activities, such as cockle suction dredging, are conducted (eg total catch, timing etc) will be assessed under the provision of the Habitats Regulations, and will in any case likely be subject to licence arrangements and by-law restrictions overseen by the Marine Management Organisation and/or local Inshore Fishery and Conservation Authority.

Entanglement in static fishing nets is an important cause of death for red-throated divers in the UK waters. Thus, static/passive fishing gear methods such as set gillnets and drift netting represent potentially the most serious direct risk from fishing activity to the birds themselves. Netting is widespread across the sandbanks, however this is seasonally focussed and occurs primarily at times of year outwith the period when the red-throated diver population is at its peak. The scale of the by-catch within the site is unknown. Therefore, consideration of any fishery management measures will need to be preceded by monitoring of the scale of the by-catch problem within the site itself.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK00 (N/A)	100.00

Appendix 2

EC Directive 79/409 on the Conservation of Wild Birds Special Protection Area (SPA)

Name: Outer Thames Estuary

Counties/Unitary Authorities: The SPA lies entirely in UK territorial waters adjacent to the following counties of Norfolk, Suffolk, Essex and Kent.

Boundary of the SPA: See SPA map. The landward boundary of the SPA generally follows mean low water mark or the boundaries of existing and potential SPAs, whichever is the furthest seaward. Intertidal mudbanks and sandbanks separated from the mainland coast by subtidal areas at mean low water are within the SPA boundary, except where they are within the boundaries of existing SPAs or SPAs.. The seaward boundary lies mostly within the 20m depth contour and marginally along the eastern edge of the proposed boundary extends beyond the 20-50 m contour.

Size of SPA: The SPA covers an area of 379,268.14 ha.

Site description: The Thames Estuary is located in the southern part of the North Sea on the east coast of England, between the counties of Norfolk (on the north side) and Kent (on the south) and extends as a broad opening into the North Sea. The SPA boundary is divided into three areas: the main part of the site is the outer part of the estuary (east of a line north from Sheerness, Kent to Shoebury Ness, Essex); a separate area extending south along the coast of E Norfolk (from Caister-on-Sea) to Woodbridge, Suffolk and lying mainly within the 12 nautical mile zone, except for two small areas which extend slightly into the 12 nm zone offshore from about Lowestoft; and a third area lying slightly further north and partly within 12 nm, but also with a larger area extending well beyond the 12 nm zone). The seaward boundary of the SPA lies partly within the 20m depth contour and marginally into the 20-50 m depth contour.

The Outer Thames Estuary SPA consists of areas of shallow and deeper water, high tidal current streams and a range of mobile sediments. Large areas of mud, silt and gravelly sediments form the deeper water channels, the main ones of which form the approach route to the ports of London and as such are continually disturbed by shipping and maintenance dredging. Sand in the form of sandbanks separated by troughs predominates in the remaining areas and the crests of some of the banks are exposed at mean low water. In the northern part of the site the main sandbanks are (north to south) Middle Cross Sand, Scroby Sands, Helm Sand, Newcombe Sand, Aldeburgh Napes, Aldeburgh Ridge, North Ship Head and Bawdsey Bank; in the southern part of the site the main sandbanks are Red Sand, Kentish Flats, West and East Barrow, Sunk Sand, Shingles, Long Sand, Margate Sand and Kentish Knock.

The seabed along the coast of Norfolk and Suffolk coast is of a similar composition to that in the main estuary with large shallow areas of mud, sand, silt and gravely sediments but, in the absence of main port areas within this area, there is less disturbance through shipping or dredging. The main sandbanks in this area are (from north to south) Dunwich Bank, Sizewell Bank, Aldeburgh Napes, Aldeburgh Ridge and Whiting Ridge.

The seabed and waters of the site provide an important habitat in the non-breeding season for red-throated divers *Gavia stellata* which visit the area to feed on the fish populations.

Qualifying species:

The site qualifies under **article 4.1** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain population of the following species listed in Annex I in any season:

Annex I species	Count and season	Period	% of GB population
Red-throated diver	6,466 individuals –wintering	1989 – 2006/07	38%
Gavia stellata	peak mean		

Principal bird data sources:

Cranswick, P.A., Hall, C., & Smith, L. 2003. Aerial surveys of birds in proposed strategic areas for offshore windfarm development, round 2: preliminary report, winter 2002/03. The Wildfowl and Wetlands Trust, Slimbridge.

O'Brien, S.H., Söhle, I., Dean, B.J., Webb, A. & Reid, J.B. 2008. A further assessment of the numbers and distribution of inshore waterbirds using the Greater Thames during the non-breeding season using additional data from 2005-2007. JNCC Report.

Percival, S., Cranswick, P., Hartley, C., Ford, J., Harding, I., Dodds, P. & Percival, T. 2004. Thames Estuary proposed offshore wind farm. Progress report on ornithological surveys August 2002 – December 2003. Ecology Consulting, Durham.

Webb, A., McSorley, C.A., Dean, B.J., O'Brien, S., Reid, J.B., Cranswick, P.A., Smith, L. & Hall, C. 2005. An assessment of the numbers and distribution of inshore aggregations of waterbirds using the Greater Thames during the non-breeding season. JNCC Report No.374, Peterborough.

Webb, A. & Reid, J.B. 2004. Guidelines for the selection of marine SPAs for aggregations of inshore non-breeding waterbirds. Unpublished consultation paper. JNCC. http://www.incc.gov.uk/PDF/comm04P05.pdf

EC Directive 79/409 on the Conservation of Wild Birds Citation for Special Protection Area (SPA)

Name: Sandlings

Unitary Authority/County: Suffolk

Consultation proposal: All or parts of Blaxhall Heath Site of Special Scientific Interest (SSSI), Leiston - Aldeburgh SSSI, Sandlings Forest SSSI, Snape Warren SSSI, Sutton & Hollesley Heaths SSSI and Tunstall Common SSSI have been recommended as a Special Protection Area because of their European ornithological importance. In particular, for their breeding populations of Nightjars *Caprimulgus europaeus* and Woodlarks *Lullula arborea*.

Site description: The Sandlings SPA lies near the Suffolk Coast between the Deben Estuary and Leiston. In the 19th century, the area was dominated by heathland developed on glacial sandy soils. During the 20th century, large areas of heath were planted with blocks of commercial conifer forest and others were converted to arable agriculture. Lack of traditional management has resulted in the remnant areas of heath being subject to successional changes, with the consequent spread of bracken, shrubs and trees, although recent conservation management work is resulting in their restoration. The heaths support both acid grassland and heather-dominated plant communities, with dependant invertebrate and bird communities of conservation value. Woodlark *Lullula arborea* and Nightjar *Caprimulgus europaeus* have also adapted to breeding in the large conifer forest blocks, using areas that have recently been felled and recent plantation, as well as areas managed as open ground.

Size of SPA: The SPA covers an area of 3,391.80 ha.

Qualifying species:

The site qualifies under **article 4.1** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex 1 species	Count and Season	Period	% of GB population
Nightjar	109 males - breeding	Count as a 1992	3.2% GB
Caprimulgus europaeus			
Woodlark Lullula arborea	154 pairs - breeding	Count as at 1997	10.3% GB

Bird figures from:

Morris, A., Burges, D., Fuller, R.J., Evans, A.D. & Smith, K.W. 1994. The status and distribution of nightjars *Caprimulgus europaeus* in Britain in 1992. A report to the British Trust for Ornithology. *Bird Study* **41**: 181-191.

Wotton, S.R. & Gillings, S. 2000. The status of breeding woodlarks in Britain in 1997. Bird Study 47: 212-224.

Status of SPA

Sandlings was classified as a Special Protection Area on 10 August 2001.



NATURA 2000

STANDARD DATA FORM

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

	FOR S	PECIAL AREA	S OF CONSI	ERVATION (S	SAC)		
1. Site identificat	tion:						
1.1 //		1	1.0	O'4 1	THZOO	20206	
1.1 Type	A		1.2	Site code	UK90	20286	
1.3 Compilation d	oto	200108	11	Update			
1.5 Comphanon u	aic	200100		Opuate			
1.5 Relationship wi	th othe	er Natura 200	00 sites				
]				
4 6 5			<u> </u>	nvaa n			
1.6 Respondent(s)		International	Designation	ıs, JNCC, Pe	terborough		
1.7 Site name	Sandlir	NGC					
1.7 Site name	Sanuin	igs					
1.8 Site indication a	and des	signation clas	ssification	dates			
date site proposed as eli							
date confirmed as SCI			200100				
date site classified as SP date site designated as S			200108				
date site designated as S	AC						
2. Site location:							
2.1 Site contro lega	tion						
2.1 Site centre loca longitude	uon	latitude					
01 26 33 E		52 04 44 N					
2.2 Site area (ha)	33	391.8	2	2.3 Site len	gth (km)		
2 5 A J:							
2.5 Administrative NUTS code	region		Dogi	on name		0/ 000	yo n
UK403		Suffolk	Kegi	он паше		% co	.00%
UK403		Surioik				100	.0070
2.6 Biogeographic r	egion						
	X						
Alpine Atl	antic	Boreal	Co	ntinental	Macaronesi	a Medite	erranean
		_					
3. Ecological info	ormat	ion:					
2.1 Annon I bab!	t a						
3.1 Annex I habita	LS						
Habitat types present o	on the si	ite and the site	e assessmen	t for them:			
Annex I habitat			% cover	Representati	Relative	Conservation	Global
				vity	surface	status	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			В		C	
A246	Lullula arborea		154 P			В		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:			

4.2 Quality and importance

Geomorphology & landscape:

ARTICLE 4.1 QUALIFICATION (79/409/EEC)

During the breeding season the area regularly supports:

Caprimulgus europaeus

3.2% of the GB breeding population

Caprimulgus europaeus

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 successional 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

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name: Staverton Park and The Thicks, Wantisden

Unitary Authority/County: Suffolk

SAC status: Designated on 1 April 2005

Grid reference: TM356509

SAC EU code: UK0012741

Area (ha): 81.45

Component SSSI: Staverton Park and The Thicks, Wantisden SSSI

Site description:

This site is representative of old oak *Quercus* spp. woods, and its ancient oaks 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.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

• Old acidophilous oak woods with *Quercus robur* on sandy plains. (Dry oak-dominated woodland)

This citation relates to a site entered in the Register

of European Sites for Great Britain. Register reference number: UK0012741 Date of registration: 14 June 2005

Signed: Trew Salam

On behalf of the Secretary of State for Environment,

Food and Rural Affairs



EC Directive 79/409 on the Conservation of Wild Birds Special Protection Area (SPA)

Name: Stour and Orwell Estuaries

Unitary Authority/County: Essex, Suffolk.

Site description: The Stour and Orwell estuaries straddle the eastern part of the Essex/Suffolk border in eastern England. The SPA is coincident with Cattawade Marshes Site of Special Scientific Interest (SSSI), Orwell Estuary SSSI and Stour Estuary SSSI. The estuaries include extensive mud-flats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. The mud-flats hold *Enteromorpha*, *Zostera* and *Salicornia* spp. The site also includes areas of low-lying grazing marsh at Shotley Marshes on the south side of the Orwell and at Cattawade Marshes at the head of the Stour. Trimley Marshes on the north side of the Orwell includes several shallow freshwater pools, as well as areas of grazing marsh, and is managed as a nature reserve by the Suffolk Wildlife Trust. In summer, the site supports important numbers of breeding avocet *Recurvirostra avosetta*, while in winter it holds major concentrations of waterbirds, especially geese, ducks and waders. The geese also feed, and some waders roost, in surrounding areas of agricultural land outside the SPA. The site has close ecological links with the Hamford Water and Mid-Essex Coast SPAs, lying to the south on the same coast.

Size of SPA: The SPA covers an area of 3,676.92 ha.

Qualifying species:

The site qualifies under **article 4.1** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex 1 species	Count and season	Period	% of GB population
Avocet Recurvirostra avosetta	21 pairs - breeding	5 year peak mean 1996 – 2000	3.6%



The site qualifies under **article 4.2** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season:

Migratory species	Count and season	Period	% of subspecies/population
Redshank Tringa totanus	2,588 individuals – autumn passage	5 year peak mean 1995/96 – 1999/2000	2.0% brittanica
Dark-bellied brent goose Branta bernicla bernicla	2,627 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.2% <i>bernicla</i> , Western Siberia (breeding)
Pintail Anas acuta	741 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.2% Northwestern Europe (non-breeding)
Grey plover Pluvialis squatarola	3,261 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.3% Eastern Atlantic (non-breeding)
Knot Calidris canutus islandica	5,970 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.3% islandica
Dunlin Calidris alpina alpina	19,114 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.4% <i>alpina</i> , Western Europe (non-breeding)
Black-tailed godwit Limosa limosa islandica	2,559 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	7.3% islandica
Redshank Tringa totanus	3,687 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	2.8% brittanica

Bird counts from: Wetland Bird Survey (WeBS) database.

Assemblage qualification:

The site qualifies under **article 4.2** of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season:

In the non-breeding season, the area regularly supports 63,017 individual waterbirds (5 year peak mean 1993/94 - 1997/98), including great crested grebe *Podiceps cristatus*, cormorant *Phalacrocorax carbo*, dark-bellied brent goose *Branta bernicla bernicla*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, gadwall *Anas strepera*, pintail *Anas acuta*, goldeneye *Bucephala clangula*, ringed plover *Charadrius hiaticula*, grey plover *Pluvialis squatarola*, lapwing *Vanellus vanellus*, knot *Calidris canutus islandica*, dunlin *Calidris alpina alpina*, black-tailed godwit *Limosa limosa islandica*, curlew *Numenius arquata*, redshank *Tringa totanus* and turnstone *Arenaria interpres*.

Non-qualifying species of interest: The SPA/Ramsar site as a whole, including the proposed extensions, is used by non-breeding marsh harrier *Circus aeruginosus*, hen harrier *Circus cyaneus*, merlin *Falco columbarius*, peregrine *Falco peregrinus*, short-eared owl *Asio flammeus* and kingfisher *Alcedo atthis* (all species listed in Annex I of the EC Birds Directive) in numbers of less than European importance (less than 1% GB population). It also supports breeding common tern *Sterna hirundo*, little tern *Sterna albifrons* and kingfisher (all listed in Annex I) in numbers of less than European importance.

Status of SPA:

- 1) Stour and Orwell Estuaries was classified as a Special Protection Area on 13 July 1994.
- 2) Extensions to the Stour and Orwell Estuaries SPA were classified on 19 May 2005.



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.

	F	(, _F ,		
1.	Name and address of	the compiler of this form:	FOR OFFICE USE ONLY.	
	UK Telephone/Fax: +4	E1 1JY E4 (0)1733 – 562 626 / +44 (0)1 E@JNCC.gov.uk	DD MM YY Designation date 1733 – 555 948	Site Reference Number
2.	Date this sheet was concentrated: 13 July Country:			
	UK (England)			
4.	Name of the Ramsar Stour and Orwell			
5. Thi	_	amsar site or update of existing Ram		
6. a) S	For RIS updates only Site boundary and area	, changes to the site since its (designation or earlier	update:

- ** 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:

Ramsar Information Sheet: UK11067	Page 1 of 11	Stour and Orwell Estuaries

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 \checkmark -or- no \square ;
 - 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 $yes \checkmark$ -or- $no \Box$;

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*.

Ramsar Information Sheet: UK11067 Page 2 of 11 Stour and Orwell Estuaries

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 2627 individuals, representing an average of 1.2% of the population (5-year peak mean bernicla,

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

Red knot, Calidris canutus islandica, W &

Southern Africa

(wintering)

Dunlin, Calidris alpina alpina, W Siberia/W

Europe

Black-tailed godwit, Limosa limosa islandica,

Iceland/W Europe

Common redshank, Tringa totanus totanus,

3261 individuals, representing an average of 1.3% of the population (5-year peak mean

1995/96-1999/2000)

5970 individuals, representing an average of

1.3% of the population (5-year peak mean

1995/96-1999/2000)

19114 individuals, representing an average of

1.4% of the population (5-year peak mean

1995/96-1999/2000)

2559 individuals, representing an average of

7.3% of the population (5-year peak mean

1995/96-1999/2000)

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

Ramsar Information Sheet: UK11067 Page 4 of 11 Stour and Orwell Estuaries

Н	Salt marshes	35
F	Estuarine waters	19.8
4	Seasonally flooded agricultural land	0.7
Е	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 oakdominated 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*, 638 individuals, representing an average of 2.1% Europe/Northwest Africa of the GB population (5-year peak mean 1995/96-1999/2000)

1999/2000)

Species with peak counts in winter:

Great crested grebe, *Podiceps cristatus*245 individuals, representing an average of 1.5% of the GB population (5-year peak mean 1995/96-

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)

Ramsar Information Sheet: UK11067 Page 5 of 11 **Stour and Orwell Estuaries**

Information Sheet on Ramsar Wetlands (RIS), page 6

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

1824 individuals, representing an average of 1.2% of the GB population (5-year peak mean 1995/96-1000/2000)

1999/2000)

(breeding)

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:
- 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.	+	

Ramsar Information Sheet: UK11067 Page 6 of 11 Stour and Orwell Estuaries

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

- Anon. (2002) Suffolk Coast and Estuaries Coastal Habitat Management Plan: Executive summary. English Nature, Peterborough (Living with the Sea LIFE Project) www.english-nature.org.uk/livingwiththesea/project_details/good_practice_guide/HabitatCRR/ENRestore/CHaMPs/SuffolkCoast/SuffolkCHaMP.pdf
- Armitage, MJS, Burton, NHK, Atkinson, PW, Austin, GE, Clark, NA, Mellan, HJ & Rehfisch, MM (2002) *Reviewing the impact of Agency permissions and activities on bird populations in Special Protection Areas: Level 1 interpretation.*British Trust for Ornithology, Thetford (BTO Research Report, No. 296)
- Ashelby, CW, Worsfold, TM & Fransen, CHJM (2004) First records of the oriental prawn *Palaemon macrodactylus* (Decapoda: Caridea), an alien species in European waters, with a revised key to British Palaemonidae. *Journal of the Marine Biological Association*, **84**(5), 1041-1050
- Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP, Davidson, NC & Buck, AL (eds.) (1998) *Coasts and seas of the United Kingdom. Region 7 South-east England: Lowestoft to Dungeness*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)
- Beardall, CH, Dryden, RC & Holzer, TJ (1988) The Suffolk estuaries: a report on the wildlife and conservation of the Suffolk estuaries. Suffolk Wildlife Trust, Saxmundham [accompanied by separate volume, Suffolk estuaries bibliography]
- Beardall, CH, Gooch, SM & Pilcher, R (1990) The intertidal invertebrate fauna of the Orwell estuary. *Transactions of the Suffolk Naturalists' Society*, **26**, 33-45
- Bratton, JH (ed.) (1991) British Red Data Books: 3. Invertebrates other than insects. Joint Nature Conservation Committee, Peterborough
- Buck, AL (ed.) (1993) An inventory of UK estuaries. Volume 5. Eastern England. Joint Nature Conservation Committee, Peterborough
- Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes.* Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)
- Cadbury, CJ & Olney, PJS (1978) Avocet population dynamics in England. British Birds, 71, 102-121
- Cayford, JT & Waters, RJ (1996) Population estimates for waders Charadrii wintering in Great Britain, 1987/88 1991/92. Biological Conservation, 77, 7-17
- Covey, R (1998) Chapter 6. Eastern England (Bridlington to Folkestone) (MNCR Sector 6). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 179-198. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Crewe, MD (1993) Suffolk birds 1992 Volume 42. Suffolk Naturalists' Society, Ipswich
- Crewe, MD (1994) Suffolk birds 1993 Volume 43. Suffolk Naturalists' Society, Ipswich
- Crewe, MD (1996) Suffolk birds 1995 Volume 45. Suffolk Naturalists' Society, Ipswich
- Crewe, MD (1997) Suffolk birds 1996 Volume 46. Suffolk Naturalists' Society, Ipswich
- Davidson, NC, Laffoley, D d'A, Doody, JP, Way, LS, Gordon, J, Key, R, Pienkowski, MW, Mitchell, R & Duff, KL (1991) Nature conservation and estuaries in Great Britain. Nature Conservancy Council, Peterborough
- Delany, S & Scott, D (2002) *Waterbird population estimates*. 3rd edn. Wetlands International, Wageningen (Global Series, No. 12) www.wetlands.org/pubs&/WPE.htm
- Doody, JP, Johnston, C & Smith, B (1993) *Directory of the North Sea coastal margin*. Joint Nature Conservation Committee, Peterborough
- Dyer, MF (2000) Stour and Orwell benthic survey 1997. (Contractor: Unicomarine, Letchworth) Unpublished eport to Harwich Haven Authority, Harwich (StrOrw97)

- French, JR, Watson, CJ, Moller, I, Spencer, T, Dixon, M & Allen, R (2001) Beneficial use of cohesive dredgings for foreshore recharge. In: *Proceedings of 35th MAFF Conference of River and Coastal Engineers, 5–7July 2000, Keele*, 11.10, 1-4. www.geog.ucl.ac.uk/ceru/projects_FR.stm
- Gibbons, DW, Reid, JB & Chapman, RA (1993) The new atlas of breeding birds in Britain and Ireland: 1988–1991. Poyser, London
- Hagemeijer, EJM & Blair, MJ (eds.) (1997) *The EBCC atlas of European breeding birds: their distribution and abundance*. Poyser, London
- Hill, TO, Emblow, CS & Northen, KO (1996) Marine Nature Conservation Review Sector 6. Inlets in eastern England: area summaries. Joint Nature Conservation Committee, Peterborough (Coasts and seas of the United Kingdom. MNCR series)
- Hoyo, J del, Elliot, A & Sargatal, J (eds.) (1996) Handbook of the birds of the world. Volume 3: Hoatzin to auks. Lynx Edicions, Barcelona
- Joint Nature Conservation Committee (1999) The Birds Directive selection guidelines for Special Protection Areas. Joint Nature Conservation Committee, Peterborough
- Lack, P (1986) The atlas of wintering birds in Britain and Ireland. Poyser, Calton
- Lowe, G (1998) Suffolk birds 1997 Volume 47. Suffolk Naturalists' Society, Ipswich
- Lowe, G (1999) Suffolk birds 1998 Volume 48. Suffolk Naturalists' Society, Ipswich
- Lowe, G (2000) Suffolk birds 1999 Volume 49. Suffolk Naturalists' Society, Ipswich
- Lowe, G (2002) Suffolk birds 2000 Volume 50. Suffolk Naturalists' Society, Ipswich
- Moser, M (1988) Limits to the numbers of grey plovers *Pluvialis squatarola* wintering on British estuaries: an analysis of long-term population trends. *Journal of Applied Ecology*, **25**, 473-485
- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992–93 to 1998–99. WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- 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
- Ogilvie, MA & the Rare Breeding Birds Panel (1996) Rare breeding birds in the United Kingdom in 1993. *British Birds*, **89**, 61-91
- Owen, M, Atkinson-Willes, GL & Salmon, DG (1986) Wildfowl in Great Britain. 2nd edn. Cambridge University Press Cambridge
- Piersma, T (1994) Close to the edge: energetic bottlenecks and the evolution of migratory pathways in knots. Unpublished PhD thesis, Rijksuniversiteit Groningen, Netherlands
- Prater, AJ (1981) Estuary birds of Britain and Ireland. Poyser, London
- Rafe, RW (1995) Suffolk birds 1994 Volume 44. Suffolk Naturalists' Society, Ipswich
- Ratcliffe, DA (ed.) (1977) A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Ridgill, SC & Fox, AD (1990) *Cold weather movements of waterfowl in western Europe* . International Waterfowl and Wetlands Research Bureau, Slimbridge (Special Publication, No 13)
- Rose, PM & Scott, DA (1997) *Waterfowl population estimates*. 2nd edn. Wetlands International, Wageningen (Wetlands International Publication, No. 44) www.wetlands.org/IWC/wpe2/WPE2-toc.htm
- Scott, DA & Rose, DA (1996) Atlas of Anatidae populations in Africa and western Eurasia. Wetlands International, Wageningen (Publication, No. 41)
- Shirt, DB (ed.) (1987) British Red Data Books: 2. Insects. Nature Conservancy Council, Peterborough
- Sneddon, P & Randall, RE (1994) Coastal vegetated shingle structures of Great Britain: Appendix 3. Shingle sites in England. Joint Nature Conservation Committee, Peterborough
- Snow, DW & Perrins, CM (1998) The birds of the western Palearctic. Volume 1: Non-passerines. Concise edn. Oxford University Press, Oxford
- Stone, BH, Sears, J, Cranswick, PA, Gregory, RD, Gibbons, DW, Rehfisch, MM, Aebischer, NJ & Reid, JB (1997) Population estimates of birds in Britain and in the United Kingdom. *British Birds*, **90**(1), 1-22
- Stour and Orwell Estuaries Group (1996) Stour and Orwell Estuaries management plan. Suffolk Coast and Heaths Project, Woodbridge
- Stour and Orwell Estuaries Management Group (2004) Stour and Orwell Estuaries management plan Stour and Orwell Estuaries Management Group, Woodbridge

Information Sheet on Ramsar Wetlands (RIS), page 11

- Stour and Orwell Estuaries Management Group (2004) *Stour and Orwell Estuaries website* Stour and Orwell Estuaries Management Group, Woodbridge. www.stourandorwell.org
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.) www.jncc.gov.uk/UKSPA/default.htm
- Tubbs, CR (1991) The population history of grey plovers *Pluvialis squatarola* in the Solent, southern England. *Wader Study Group Bulletin*, **61**, 15-21
- Worsfold, TM (2002) Combined intertidal and subtidal biotope report and maps for the Stour and Orwell estuaries. (Contractor: Unicomarine, Letchworth) Unpublished report to Harwich Haven Authority, Harwich (HHAComBiotope02)
- Wright, M (2000) Orwell estuary: systematic review of waterbirds incorporating a report on the effects of the Felixstowe Dock expansion on key wading species at Fagbury. *English Nature Research Reports*, No. **381**

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

Ramsar Information Sheet: UK11067 Page 11 of 11 Stour and Orwell Estuaries

Produced by JNCC: Version 3.0, 13/06/2008

NATURA 2000

STANDARD DATA FORM

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

FOR S	PECIAL AREAS	OF CONSI	ERVATION (S	SAC)				
1. Site identification:								
1.1 Type A		1.2	Site code	UK90	09121			
1.3 Compilation date	199407] 1.4	Update	20050)5			
1.5 Relationship with other Natura 2000 sites								
1.6 Respondent(s)	International I	Designation	ns, JNCC, Pe	terborough				
1.7 Site name Stour a	nd Orwell Estu	ıaries						
1.8 Site indication and des		sification	dates					
date site proposed as eligible as	SCI							
date confirmed as SCI								
date site classified as SPA	1	199407						
date site designated as SAC								
2.2 Site area (na)	latitude 51 57 16 N 576.92	2	2.3 Site len	ngth (km)				
2.5 Administrative region								
NUTS code		Regio	on name		% co	ver		
UK54	Essex				28.	.60%		
UK403	Suffolk				71.	.40%		
2.6 Biogeographic region X Alpine Atlantic 3. Ecological informate 3.1 Annex I habitats Habitat types present on the signal in the signal			ntinental t for them:	Macaronesia	a Medite	erranean		
Annex I habitat		% cover	Representati vity	Relative surface	Conservation status	Global assessmen		

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		В		C	
A050	Anas penelope			3979 I		С		C	
A051	Anas strepera			97 I		С		С	
A169	Arenaria interpres			690 I		С		C	
A046a	Branta bernicla bernicla			2627 I		В		С	
A067	Bucephala clangula			213 I		С		С	
A149	Calidris alpina alpina			19114 I		В		C	
A143	Calidris canutus			5970 I		С		С	
A137	Charadrius hiaticula				638 I	В		С	
A137	Charadrius hiaticula			372 I		В		С	
A156	Limosa limosa islandica			2559 I		A		С	
A160	Numenius arquata			2153 I		С		С	
A017	Phalacrocorax carbo			232 I		С		С	
A141	Pluvialis squatarola			3261 I		В		С	
A005	Podiceps cristatus			245 I		С		С	
A132	Recurvirostra avosetta		21 P			В		С	
A048	Tadorna tadorna			2955 I		В		С	
A162	Tringa totanus			3687 I		В		С	
A162	Tringa totanus				2588 I	В		С	

6242 I

4. Site description:

Vanellus vanellus

A142

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 1.2% of the population

(North-western Europe) 5-year peak mean 1995/96-1999/2000

Branta bernicla bernicla 1.2% of the population

(Western Siberia/Western Europe) 5-year peak mean 1995/96-1999/2000

Calidris alpina alpina 1.4% of the population

(Northern Siberia/Europe/Western Africa) 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 7.3% of the population

(Iceland - breeding) 5-year peak mean 1995/96-1999/2000

Pluvialis squatarola 1.3% of the population

(Eastern Atlantic - wintering) 5-year peak mean 1995/96-1999/2000

Tringa totanus 2.8% of the population

(Eastern Atlantic - wintering) 5-year peak mean 1995/96-1999/2000

On passage the area regularly supports:

Tringa totanus 2% of the population

(Eastern Atlantic - wintering) 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





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

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)

This is a European Marine Site

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

Explanatory Notes: European Site Conservation Objectives

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 (Version 2). This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014. Previous references to additional features identified in the 2001 UK SPA Review have also been removed.





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

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

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features as required by the provisions of Article 6(1) and 6(2) of the Directive.

These Conservation Objectives are set for each habitat or species of a <u>Special Area of Conservation</u> (<u>SAC</u>). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in Article 1 of the Habitats Directive.

Publication date: 30 June 2014 – version 2. This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014.





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

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

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features as required by the provisions of Article 6(1) and 6(2) of the Directive.

These Conservation Objectives are set for each habitat or species of a <u>Special Area of Conservation</u> (<u>SAC</u>). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in Article 1 of the Habitats Directive.

Publication date: 30 June 2014 – version 2. This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014.





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A046a *Branta bernicla*; Dark-bellied brent goose (Non-breeding) A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)

This is a European Marine Site

0845 600 3078.

This SPA is a part of the Deben Estuary European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Regulation 35 Conservation Advice document for the EMS. For further details about this please visit the Natural England website at: http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx or contact Natural England's enquiry service at enquiries@naturalengland.org.uk or by phone on

Explanatory Notes: European Site Conservation Objectives

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 (Version 2). This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014. Previous references to additional features identified in the 2001 UK SPA Review have also been removed.





European Site Conservation Objectives for Minsmere to Walberswick Heaths and Marshes Special Area of Conservation Site Code: UK0012809

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

H1210. Annual vegetation of drift lines

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

H4030. European dry heaths

This is a European Marine Site

This site is a part of the Minsmere–Walberswick 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

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features as required by the provisions of Article 6(1) and 6(2) of the Directive.

These Conservation Objectives are set for each habitat or species of a <u>Special Area of Conservation</u> (<u>SAC</u>). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in Article 1 of the Habitats Directive.

Publication date: 30 June 2014 – version 2. This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014.





European Site Conservation Objectives for Minsmere–Walberswick Special Protection Area Site Code: UK9009101

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A021	Botaurus stellaris; Great bittern (Breeding)
A051	Anas strepera; Gadwall (Non-breeding)
A051	Anas strepera; Gadwall (Breeding)
A052	Anas crecca; Eurasian teal (Breeding)
A056	Anas clypeata; Northern shoveler (Breeding)
A056	Anas clypeata; Northern shoveler (Non-breeding)
A081	Circus aeruginosus; Eurasian marsh harrier (Breeding)
A082	Circus cyaneus; Hen harrier (Non-breeding)
A132	Recurvirostra avosetta; Pied avocet (Breeding)
A195	Sterna albifrons; Little tern (Breeding)
A224	Caprimulgus europaeus; European nightjar (Breeding)
A394	Anser albifrons albifrons; Greater white-fronted goose (Non-breeding)

This is a European Marine Site

This SPA is a part of the Minsmere–Walberswick European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Regulation 35 Conservation Advice document for the EMS. For further details about this please visit the Natural England website at http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx or contact Natural England's enquiry service at enquiries@naturalengland.org.uk or by phone on 0845 600 3078.

Explanatory Notes: European Site Conservation Objectives

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 (Version 2). This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014. Previous references to additional features identified in the 2001 UK SPA Review have also been removed.





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A224 Caprimulgus europaeus; European nightjar (Breeding)

A246 Lullula arborea; Woodlark (Breeding)

Explanatory Notes: European Site Conservation Objectives

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 (Version 2). This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014. Previous references to additional features identified in the 2001 UK SPA Review have also been removed.





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

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

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

* 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

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment', including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the measures needed to conserve or restore the European Site and the prevention of deterioration or significant disturbance of its qualifying features as required by the provisions of Article 6(1) and 6(2) of the Directive.

These Conservation Objectives are set for each habitat or species of a <u>Special Area of Conservation</u> (<u>SAC</u>). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving Favourable Conservation Status for that species or habitat type at a UK level. The term 'favourable conservation status' is defined in Article 1 of the Habitats Directive.

Publication date: 30 June 2014 – version 2. This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014.





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

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

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

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

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

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

This is a European Marine Site

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

Explanatory Notes: European Site Conservation Objectives

These 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. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a <u>Special Protection Area (SPA)</u>. Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 (Version 2). This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014. Previous references to additional features identified in the 2001 UK SPA Review have also been removed.

Appendix 2: Screening of individual policies

Policy	Brief description	Likely to have a significant adverse effect?	Reason
Preferred Option Policy SSP1: New Housing Delivery 2015 - 2027	This policy provides a table that indicates the numbers of new units allocated to various settlements over the Plan period. The total number of allocations is 295 units. The purpose of this policy is to implement the Core Strategy Policy housing delivery	No	The provision of those Core strategy mitigations is satisfactory to demonstrate that the amount of housing allocated in the Suffolk Coastal Core Strategy would have no adverse impact on the integrity of any European site. The in-combination effect of site allocations in the Site Allocations Plan has therefore been considered within the Core Strategy and need not be repeated in this document
Preferred Option SSP2: Physical Limits Boundaries	In line with Core Strategy Policy SP19: Settlement Hierarchy, this policy confirms that new residential development will be directed to take place within the physical limits boundaries of those settlements which have been identified as a Major Centre, Town, Key and Local Service Centre. Development proposals for outside of these settlement limits will be strictly controlled in accordance with National Planning Policy and Core Policy SP29: The Countryside	No	This Policy states where any new development will be directed, and seeks to avoid development within the countryside and ensure development takes place in appropriate settlement locations. The Policy does not provide a cause for adverse impacts upon European sites in its own right. The Policy aims to keep development inside the Physical Limits Boundaries of each settlement so protecting the wider countryside (including locations near European sites) from any negative impacts that might result from new developments
Preferred Option SSP3 – Land rear of Rose Hill, Saxmundham Road Aldeburgh	Allocates 3ha of land at this location for care home plus residential development (10 units).	Yes	The site is just 300m from Alde-Ore Estuary European sites with potential for bird disturbance from increased recreation at the estuary side and from disturbance from the use of the buildings themselves
Preferred Option SSP4 Land at Mill Road Badingham	Allocates 0.53ha of land at this location for residential development (10 units).	No	Badingham is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP5 – Land Adjacent to Corner Cottages, Main Road, Benhall	Allocates 0.69ha of land at this location for residential development (10 units).	No	Benhall is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP6 – Land south of Brook Cottage, Benhall	Allocates 0.62ha of land at this location for residential development (5 units).	No	Benhall is at sufficient distance from any European site that no direct effects would occur from this allocation.

Policy	Brief description	Likely to have a significant adverse effect?	Reason
Preferred Option SSP7 – Land opposite Townsfield Cottages, Dennington	Allocates 0.6ha of land at this location for residential development (10 units).	No	Dennington is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP8 Land south of Ambleside, Main Road, Kelsale cum Carlton	Allocates 1.86ha of land at this location for residential development (20 units).	No	Kelsale cum Carlton is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP9 Land north of Mill Close, Orford	Allocates 0.82ha of land at this location for residential development (50 units).	No	Orford village is adjacent to the Alde-Ore Estuary European sites; however the size of the allocation and the existing high level of village and especially tourism activity is such that the recreational activity arising from the proposed housing (which might disturb birds on the estuary) would be less than significant.
Preferred Option SSP10 Land west of Garden Square Rendlesham	Allocates 5.05ha of land at this location for residential development (50 units).	No	The allocation is approximately 3km walk by footpath to the nearest part of Sandlings SPA, at Friday Street. That is beyond the distance that many walkers / dog walkers would regularly walk. Informal open space for dog walkers is also proposed.
Preferred Option SSP11 Land rear of 3 -33 Suffolk Drive, Rendlesham	Allocates 5.93ha of land at this location for residential development (100 units).	No	The allocation is beyond 1.5km walk by footpath of the nearest part of Sandlings SPA, at Friday Street. That is beyond the distance that many walkers / dog walkers would regularly walk. New open space to form an extension to the adjacent recreation ground is also proposed.
Preferred Option SSP12 – Land north-east of Street Farm, Saxmundham	Allocates 2.18ha of land at this location for residential development (60 units).	No	Saxmundham is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP13 - Site fronting Old Homes Road, Thorpeness	Allocates 0.4ha of land at this location for residential development (5 units).	No	The proposed allocation is within 250m of Sandlings SPA, which in that location is open access land and there is a nominal possibility of an increase in disturbance to nightjar and woodlark which are the qualifying bird species for which the SPA was designated. However, the size of the allocation and the existing high level of village and especially tourism activity is such that the recreational activity arising from the proposed housing (which might disturb birds on the SPA) would be less than significant.
Preferred Option SSP14 - Land south of Lower Road Westerfield	Allocates 1.64ha of land at this location for residential development (10 units).	No	Westerfield is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP15 – Land at Old Station Works, Main Road Westerfield	Allocates 3.65ha of land at this location for residential development (20 units) plus employment provision.	No	Westerfield is at sufficient distance from any European site that no direct effects would occur from this allocation.

Policy	Brief description	Likely to have a significant adverse effect?	Reason
Preferred Option SSP16 – Land at Street Farm, Witnesham (Bridge)	Allocates 0.7ha of land at this location for residential development (10 units).	No	Witnesham is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP17 – Land south of the primary school, Witnesham	Allocates 0.79ha of land at this location for residential development (10 units).	No	Witnesham is at sufficient distance from any European site that no direct effects would occur from this allocation.
Preferred Option SSP18 Ransomes, Nacton Heath	Land of approximately 30ha for new employment use.	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP19 – Land at Silverlace Green(former airfield) Parham	Land of approximately 2.24 ha of which 0.98ha remains vacant, for employment use.	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP20 former airfield Parham	Land of approximately 5.72 ha of which 1.67ha remains vacant, for employment use	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP21 former airfield Debach	Land of approximately 10.89 ha for employment use	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP22 Bentwaters Park, Rendlesham	and of approximately 390 ha for employment use	No	Employment land is generally of less impact to European sites than residential land. Sandlings SPA is adjacent and other European sites are in the vicinity. Detailed assessment of the recent masterplan permission (planning application ref C/10/3239) has demonstrated no likely significant effect on any European site. It is not impossible that further proposals might come forward which would require a project level HRA, but in principle the continued use within the constraints of the masterplan would have no impact on any European site
Preferred Option SSP23 Carlton Park, Main Road, Kelsale cum Carlton	Land of approximately 8ha of which 3ha remains vacant, for employment use	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP24 Levington Park, Levington	Land of approximately 3.29 ha for employment use	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP25 Riverside Industrial Estate, Border Cot Lane, Wickham Market	Land for employment use	No	Employment land is generally of less impact to European sites than residential land, and this site is sufficiently far from any European site for no impact to occur.

Policy	Brief description	Likely to have a significant adverse effect?	Reason
Preferred Option SSP26 Aldeburgh Town Centre	Defines the town centre and town centre uses	No	There is no mechanism in this policy which would cause a likely significant effect on any local European sites.
Preferred Option SSP27 Saxmundham Town Centre	Defines the town centre and town centre uses	No	There is no mechanism in this policy which would cause a likely significant effect on any local European sites.
Preferred Options SSP28 District Centres	Defines District Centres and their uses.	No	There is no mechanism in this policy which would cause a likely significant effect on any local European sites.
Preferred Option SSP29 Local Centres	Defines Local Centres and their uses.	No	There is no mechanism in this policy which would cause a likely significant effect on any local European sites.
Preferred Option SSP30 Visitor Management - Deben Estuary	Prevents new car parking with public access within 1km of the Deben Estuary, to prevent increased recreational activity on the estuary. Requires improvements to access points into the estuary such as jetties or slipways to demonstrate there would be no significant effect.	No	This policy protects Deben Estuary SPA from increased recreational activity which could disturb SPA birds; however there is a notable omission of other estuaries from this policy which could be addressed.
Preferred Option SSP31 Snape Maltings	Support to further use of Snape Maltings for arts, recreation and tourism-related uses with associated retail and craft activities and accommodation.	Yes	An increase of accommodation, whether residential or holiday accommodation, and of tourism-related uses, are likely to result in an increase in recreational activity. Snape Malting is adjacent to the Alde-Ore Estuary European sites and there is a footpath network leading from the Maltings to both sides of the estuary. Walks are promoted widely. The increase in recreational activity needs further consideration.
Preferred Options SSP32 Suffolk Showground – Trinity Park	Use and further development of the showground	No	This site is sufficiently far from any European site for no impact to occur.
Preferred Option SSP33 Parks and Gardens of Historic or Landscape Interest	Identifies specific parks and gardens and encourages their preservation and or enhancement	No	This policy has no interaction with any European sites except for Staverton Park and the Thicks SAC which is included as a specified park. The policy adds to the protection already provided by the SAC designation and will not result in any likely significant effect.
Preferred Option SSP34 Special Landscape Areas	Identifies Special Landscape Areas and advocates giving of special consideration to development impacts upon landscape.	No	This policy has no mechanism which might affect European sites
Preferred Option SSP35 Areas to be Protected from Development	Locations which make an important contribution to the setting of an area will be retained.	No	This policy has no mechanism which might affect European sites
Preferred Option SSP36 Newbourne: Former Land Settlement Association Holdings	Retention in horticultural or agricultural use of those parts of the former Land Settlement Association holdings shown on the Policies Map, not used or required in connection with the residential curtilages	No	This policy has no mechanism which might affect European sites

Policy	Brief description	Likely to have a significant adverse effect?	Reason
Preferred Option SSP37 The Garret Era Area, Aldeburgh	Refusal of proposals for enlargement of existing properties or sub-divide existing plots	No	This policy has no mechanism which might affect European sites
Preferred Option SSP38 - Coastal Change Management Area	Control of development, including coastal defence schemes, in the Coastal Change Management Area.	No	The policy is heavily based upon Environment Agency's shoreline Management Plan which itself is heavily influenced by the need to conserve European sites; however it would add clarity if the policy or supporting text were to emphasise that large lengths of coast are European sites or related to European sites, and that Habitats Regulations Assessment is likely to apply to developments affecting these lengths of coast.
Preferred Option SSP39 - Relocation and Replacement of Development Affected by Coastal Erosion Risk	Relocation and replacement of existing development further inland, where it is likely to be lost by coastal erosion	No	This policy has no mechanism which might affect European sites; the policy would be favourable on occasions where an alternative, of protecting land from erosion, might be damaging to a European site.