



*Suffolk Minerals & Waste Local Plan
Modifications
Habitats Regulation Assessment
(including Appropriate Assessment)*

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Non Technical Summary.

The Landscape Partnership was commissioned by Suffolk County Council to undertake a Habitats Regulations Assessment (HRA) for the Suffolk Minerals and Waste Local Plan following publication of Main Modifications in September 2019 during the Examination in Public. This followed a Habitats Regulations Assessment in November 2018 of the Plan at Draft Submission Stage.

Main Modifications most pertinent to HRA were

- the removal of a proposed quarry extension at Wangford, policies MP2(g) and MS7: Wangford (main Modification 38) so this allocation no longer needs to be assessed
- inclusion of a reference to Natura 2000 sites in policy GP4 (Main modification 6)
- references to Breckland Special Protection area for the allocation at Barnham, policy MS2 (Main Modification MM33)
- references to Breckland Special Protection area for the allocation at Cavenham, policy MS4 (Main Modification MM35)
- references to Stour and Orwell Special Protection area for the allocation at Tattingstone, policy MS6 (Main Modification MM37)
- reference to Minsmere – Walberswick SPA/Ramsar and Sandlings SPA for the allocation at Sizewell, policy WS1 (Main Modification MM43).

The objectives of the HRA were to identify if there was likely to be a significant effect upon any European site, and if so whether it could be ascertained that there would be no adverse affect upon the integrity of any European site.

Allocations for mineral extraction at Barnham and Cavenham were found to be likely to have a significant effect on European sites. However, an assessment of potential impacts found evidence to demonstrate that the Local Plan would have no adverse affect upon the integrity of any European site.

1 Introduction

1.1 Commission

1.1.1 The Landscape Partnership was commissioned by Suffolk County Council to carry out a Habitats Regulations Assessment of the Suffolk Minerals and Waste Local Plan.

1.2 The Local Plan being assessed

1.2.1 The plan being assessed is 'Suffolk Minerals and Waste Local Plan, Submission Draft June 2018' as modified by proposed Main Modifications and Additional Modifications September 2019 published by Suffolk County Council. The Minerals and Waste Local Plan was written by Suffolk County Council.

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

- Suffolk Minerals Core Strategy (adopted 2008)
- Suffolk Minerals Site Specific Allocations (adopted 2009)
- Suffolk Waste Core Strategy (adopted 2011)

1.2.3 The SWMLP takes a positive approach to minerals and waste development that reflects the presumption in favour of sustainable development.

1.2.4 Minerals are vital for continued economic growth including house building. Besides indigenous land-won sand and gravel, the supply of aggregates to Suffolk is made up from sand & gravel imported from surrounding counties, imported crushed rock, marine dredged sand & gravel, and indigenous and imported recycled construction, demolition & excavation waste.

1.2.5 The SMWLP has allocated ten sites for the extraction of sand and gravel sufficient to supply 9.300 Mt over the Plan period to the end of 2036. Policy also states that the County Council will seek to maintain a landbank of permitted reserves of at least 7 years based upon the average of the last ten years' sales.

1.2.6 Although there are significant quantities of Local Authority Collected Waste, Commercial & Industrial Waste, Construction, Demolition & Excavation Waste, and Hazardous Waste managed within Suffolk, the Suffolk Waste Study concluded that there is no immediate shortfall in waste management capacity for these waste streams. Applications for new facilities would however be considered in the normal way.

1.2.7 Only one site for waste development has been allocated at Sizewell "A" Nuclear Power Station, for the treatment and temporary storage of radioactive material removed as part of decommissioning. Future waste development proposals not allocated in the plan would be considered against criteria-based policies.

1.2.8 Policies for the consideration of planning applications for minerals and waste development have been refreshed, as have safeguarding policies to protect minerals and waste development and minerals resources from other forms of competing development.

1.2.9 In this document, the plan or project being assessed is the Suffolk Minerals and Waste Local Plan, Submission Draft June 2018 with Main Modifications and Additional Modification September 2019, and the competent authority is Suffolk County Council which is required to decide whether or not to adopt this Plan.

1.2.10 Main Modifications most pertinent to HRA were

- the removal of a proposed quarry extension at Wangford, policies MP2(g) and MS7: Wangford (main Modification 38)
- inclusion of a reference to Natura 2000 sites in policy GP4 (Main modification 6)

- references to Breckland Special Protection area for the allocation at Barnham, policy MS2 (Main Modification MM33)
- references to Breckland Special Protection area for the allocation at Cavenham, policy MS4 (Main Modification MM35)
- references to Stour and Orwell Special Protection area for the allocation at Tattingstone, policy MS6 (Main Modification MM37)
- reference to Minsmere – Walberswick SPA/Ramsar and Sandlings SPA for the allocation at Sizewell, policy WS1 (Main Modification MM43).

1.3 Reporting standards

- 1.3.1 This report was written in compliance with British Standard 42020:2013 'Biodiversity — Code of practice for planning and development' and the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct.
- 1.3.2 This report was prepared in accordance with the CIEEM 'Guidelines for Ecological Report Writing' as updated December 2017¹.
- 1.3.3 The report was prepared by Nick Sibbett. The report was reviewed by Dr Jo Parmenter, Director of The Landscape Partnership.
- 1.3.4 Assessment was undertaken against current legislation and policy, and in accordance with standard guidance. The recent 'People over Wind' judgement in the European Court of Justice, which states that mitigation could not be considered in the consideration of likely significant effect, has informed this report.

1.4 The Habitats Regulations Assessment process

- 1.4.1 The Conservation of Habitats and Species Regulations 2017 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.
- 1.4.2 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.
- 1.4.3 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 that does have an adverse impact on a European site, imperative reasons of over-riding public interest must be demonstrated, and there should be no alternatives to the scheme
- 1.4.4 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 follow the 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 CIEEM (2017) Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester

- 1.4.5 *Stage One of the HRA is 'Likely significant Effect'* sometimes referred to as '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.
- 1.4.6 *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 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.
- 1.4.7 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.
- 1.4.8 *Stage Three of the HRA is 'Alternative solutions'*. If the competent authority is unable to ascertain that the proposed activity would not have an adverse affect upon the integrity of a European site, it would normally refuse to permit the project or adopt a plan. The competent authority may look for alternative solutions, e.g. a different location for development or a different way of achieving the same desired outcome, and advise that the alternative solution is preferred instead of the plan or project being assessed.
- 1.4.9 *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, and no alternative solutions, 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 decide if it wishes to intervene.
- 1.4.10 This HRA does not account for any changes to legislation which might occur in the near future as legislative change and its timescale is currently uncertain.

1.5 Consultation and iteration

- 1.5.1 A previous draft of a Habitats Regulations Assessment written by Suffolk County Council (August 2018) was previously opened to public consultation. Advice from consultees, especially advice from Natural England, Suffolk Wildlife Trust and RSPB, on that draft is gratefully acknowledged. Appendix 1 of that draft is re-used as Appendix 1 of this report. The assistance of Andrew Murray-Wood, Senior Ecologist at Suffolk County Council, is gratefully acknowledged.
- 1.5.2 An early draft of the November 2018 HRA report was shared with Natural England, Suffolk Wildlife Trust and RSPB for comment, on 24th October 2018. Each of these three organisations helpfully provided comments on 31st October 2018.
- 1.5.3 A Habitat Regulations Assessment of Suffolk Minerals and Waste Local Plan, draft submission stage June 2019 was written by The Landscape Partnership in November 2018. The HRA was submitted to the Inspector to be included in his Examination in Public. During the examination hearing, the HRA was discussed with comments received from Natural England, RSPB and other stakeholders.

2 Assessment of Likely Significant Effect

2.1 European sites potentially affected

2.1.1 The Minerals and Waste Local Plan covers the whole county, and so all European Sites in Suffolk are potentially affected. Proposals for a minerals and/or waste site might arise anywhere in the county and so no European sites in Suffolk can be discounted.

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

2.1.3 Although the Appropriate Assessment process only legally applies to European sites, Government Policy in the National Planning Policy Framework is to apply the same protection to Ramsar sites and to sites proposed for all three designations.

2.1.4 Ramsar sites in Suffolk are

- Minsmere-Walberswick
- Redgrave and South Lopham Fens
- Deben Estuary
- Alde-Ore Estuary
- Broadland
- Stour and Orwell Estuaries

2.1.5 Special Areas of Conservation in Suffolk are

- Alde-Ore and Butley Estuaries
- Benacre to Easton Bavents Lagoons
- Orfordness-Shingle Street
- Staverton Park and The Thicks, Wantisden
- Waveney and Little Ouse Valley Fens
- Dew's Ponds
- Minsmere to Walberswick Heaths and Marshes
- The Broads
- Breckland
- Rex Graham Reserve

2.1.6 Special Protection Areas in Suffolk are

- Breckland
- Minsmere-Walberswick
- Benacre to Easton Bavents
- Alde-Ore Estuary
- Sandlings
- Deben Estuary
- Broadland
- Stour and Orwell Estuary

- 2.1.7 Southern North Sea candidate SAC/SCI and Outer Thames Estuary SPA are marine sites found off the Suffolk Coast.
- 2.1.8 Some of the designated sites' boundaries overlap, where areas of land have multiple designations. For example, Benacre to Easton Bavents SPA and Benacre to Easton Bavents Lagoons SAC overlap, although overlapping designations do not always have exactly similar boundaries and can include significantly different areas of land in similarly-named European sites.
- 2.1.9 The Minerals and Waste Local Plan shows the location of these sites, on its Key diagram (page 16 of the plan) excluding marine European sites. Details of European sites in the general area of allocations are provided in Appendix 1.

2.2 Connected to the management of European sites

- 2.2.1 The Plan is not necessary for, or connected with, the nature conservation management of any European sites.

2.3 Likely significant effects

- 2.3.1 Potential likely significant effects on European site arising from mineral and waste sites, during commissioning, operation and decommissioning, could include
- Loss of land within these designated sites
 - Disturbance to internationally important bird populations or other species for which the European site is designated, from noise, light, or movement from within the minerals / waste site or from increased traffic levels
 - Pollution from emissions, such as nitrogen oxides, sulphur, dust, or other emissions to air, or discharges to water
 - Change in groundwater levels or surface water flows, from dewatering, or drainage
 - Any other effect on a site-specific basis
- 2.3.2 Policies may have a likely significant effect if the policy encourages a proposal to arise which might have an impact on a European site, or if it fails to control a potential impact near a European site.
- 2.3.3 The distance of a minerals or waste site, whether allocated or not, from a European site influences the potential impacts. For example, a minerals or waste site several miles from a European site is unlikely to impact a European site, whereas a minerals or waste site within a European site is much more likely to have a significant effect. A significant effect could be positive or negative, and short-term or permanent, but identifying a likely significant effect does not necessarily mean that there would be an adverse affect upon the integrity of the European site. Identification of a likely significant effect is a basic check, following which an appropriate assessment will considering more detail the potential impacts and allow for mitigation measures, before coming to a conclusion.
- 2.3.4 Each policy within the Local Plan is considered in Appendix 2, with a determination of likely significant effect alone or in combination with other policies.

2.4 In-combination effects

- 2.4.1 Other plans or projects that might act in combination with the Suffolk Minerals and Waste Local Plan to have an impact upon European sites include
- Development within Local Plans of all seven District/Borough Councils in Suffolk
 - Development within any Neighbourhood Plans in the vicinity of any proposed minerals or waste site
 - Policies and consents of other regulators e.g. Environment Agency with respect to water abstraction licencing or the Office of Nuclear Regulation with respect to nuclear power stations.

- 2.4.2 The Norfolk Minerals and Waste Local Plan Review, proposed minerals sites (summer 2018) contains no sites in Breckland SPA, with one proposed site 0.9km distant from part of the SPA supporting stone-curlew habitat. The proposed site was considered to have no unacceptable impacts and no cumulative effects are considered to occur.

2.5 Conclusion of Likely Significant Effect

- 2.5.1 Likely significant effects, requiring further assessment, were determined to occur (Appendix 2) for Policy MP2; proposed sites for sand and gravel extraction with respect to sites M2 Barnham & M4 Cavenham, and individual policies (MS2, MS4) for those two sites. No other policies or other site allocations are likely to have a significant effect. The proposed allocations are scattered across the County and no cumulative likely significant effects have been identified for the majority of allocations; there might be a cumulative effect from the two sites within Breckland SPA due to the scale and character of the sites which will be further considered below.
- 2.5.2 An Appropriate Assessment is required, which should consider the effect of the Policies on European sites in the context of the mitigation which is embedded in the Plan. The Appropriate Assessment is below.

3 Appropriate Assessment

3.1 Mitigation embedded in the Local Plan

- 3.1.1 GP4 has been modified to explicitly recognise European sites. The modified policy states that minerals and waste development will be acceptable so long as the proposals, adequately assess (and address where applicable) any potentially significant adverse impacts including cumulative impacts on European sites.
- 3.1.2 This secures the protection of European sites from any new planning applications. Any proposal that would have an adverse affect upon the integrity of any European site would fail this policy test, and not be permitted.
- 3.1.3 In practice, if there was even slight potential for an application to give rise to impact upon a European site, the Local Planning Authority would be required to carry out a Habitats Regulations Assessment to provide certainty.
- 3.1.4 The Local Plan does not normally provide specific detail that would be expected to be found within planning applications, which is why detailed restoration specification isn't in the policy. However, for planning applications in the Barnham or Cavenham allocations to be permitted they would need to satisfy policy GP4 and the Habitats Regulations, so it is clear that a restoration to high quality nesting habitat for stone-curlew would be an essential part of those applications.

3.2 Appropriate Assessment of Policy MP2/MS2, site M2 Barnham

- 3.2.1 The European sites within and around the proposed allocation are shown on page 55 of the Local Plan (pagination refers to the June 2018 submission draft).
- 3.2.2 Land shaded in purple is all part of Breckland Special Protection Area, designated for breeding populations of stone-curlew, nightjar and woodlark. These species all nest on heathland, with different species requiring various vegetation structures of heathland for their nesting. Stone-curlew and woodlark nest on short grassland, whereas nightjar nest in long grass, heather or scrub. Stone-curlew also nest on arable land, whereas the other species no not (or only very rarely). On the map on page 55, the majority of land within the SPA to the south of Elveden Road including all the proposed allocation, is arable land and therefore suitable for stone-curlew only. All land to the north of Elveden Road is heathland and is suitable for all three SPA bird species. All these birds migrate into this country in spring, breed, and then return in autumn to Mediterranean countries.
- 3.2.3 Land shaded purple on the map on page 55, north of Elveden Road, is also within Breckland Special Area of Conservation, designated for chalk grassland and heather heathland habitats.
- 3.2.4 Likely significant effects on Breckland SPA of the proposed minerals allocation at Barnham could include a reduction in stone-curlew population size resulting from
- Loss of land used for stone-curlew nesting
 - Loss of land used for stone-curlew foraging
 - Disturbance to stone-curlew nesting within or close to the allocation site
- 3.2.5 Likely significant effects on Breckland SAC of the proposed minerals allocation at Barnham could include deterioration of habitat caused by
- Dust covering vegetation
 - Air pollution, especially nitrogen oxide deposition from vehicles

Mitigation embedded in the local plan for this site

- 3.2.6 Policy MS2 includes several policy statements that would provide mitigation for significant effects on Breckland SPA, which are

a) the seasonal working of the minerals to avoid the Stone Curlew nesting season

g) provision of a phased working and restoration scheme that is sympathetic to the Special Landscape Area, the and Brecks landscape and the Special Protection Area

j) potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Farmland/Little Heath/Thetford Heaths SSSI, Gorse Grassland CWS, Thetford Heath NNR, European Protected Species (Bats and Great Crested Newt), Priority Species, other Protected Species, Priority Habitats (Lowland Heath) including the provision of a project level Habitats Regulations Assessment, that would make clear the broad avoidance and/or mitigation measures and robust monitoring, identified at a strategic level that will be required and that restoration will ensure delivery of a net biodiversity gain long term, specifically with regard to the Breckland Special Protection Area

k) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m and to the Special Protection Area

l) the provision of measures to mitigate noise

Evidence from the planning application for the permitted Barnham quarry

3.2.7 Barnham Quarry, situated within the centre of the proposed allocation, was given planning permission in 2012 by Suffolk County Council under reference SE/2012/0782 & F/2012/0367. Further details may be found on the Council's website at <http://suffolk.planning-register.co.uk/Search/Advanced> using reference number SE/2012/0782. A Habitats Regulations Assessment accompanied the application, which concluded that the temporary loss of arable land for stone-curlew nesting was insignificant in the scale of the whole SPA especially considering crop rotations, the distance to heathland north of the road and a screening bund to reduce disturbance, and the minimal time that people would be present on foot as opposed to within vehicles. Vehicular use, especially on frequently used and expected routes causes very little disturbance compared to people on foot. The timing of the start of extraction would be prior to the start of the nesting season.

3.2.8 Restoration of the site would be to heathland managed to suit stone-curlew nesting. Because stone-curlews nest at a higher density on heathland than they do on arable land, a net long-term benefit to the SPA would occur following restoration of the site.

3.2.9 The minerals extraction started, but soon stopped as the market for the sand and gravel was lost. Subsequent applications were made in 2014 (SE/14/2211 Variation of condition application - Excavation of up to 14.9 ha of agricultural land to provide up to 400,000 tonnes of aggregate material over a period of 4.5 years, with no extraction taking place in the period from April to September in any one year) and in 2018 (SCC\0055\18VOC) to further extend the timescale for the extraction. These subsequent applications included a restriction on seasonality of extraction, with no extraction to take place from April to September to coincide with the stone-curlew nesting season. Applications were approved.

Evidence of quarrying impacts in Breckland SPA, from the existing Cavenham Quarry

3.2.10 Cavenham Quarry was operating for many years before Breckland SPA was designated, and may be used as an example of quarrying in the SPA which can inform the situation at Barnham. Standard operating practice is to restore the land to heathland suitable for stone-curlew, for those parts of the site where the restoration is above the water table. Over the decades, many planning applications have been made which provide evidence of this. For example, in 2016 an application was made for a quarry extension onto previously unworked land under reference SCC\0124\16F. The ecological impact assessment and HRA², which can be found on the Council's planning website, demonstrated that land of relatively low value for nesting SPA birds was to be quarried

² Wilkinson Associates (April 2016) Western Extension to Cavenham Quarry ECOLOGICAL IMPACT ASSESSMENT REPORT

then restored to a heathland of higher value for stone-curlew nesting. The report showed that previously restored land was used by stone-curlew for nesting, showing that restoration does achieve that benefit. The development was permitted. The extension permission at Cavenham Quarry has no seasonal constraints to working. This may be because there is a history of providing stone-curlew habitat on restored land, and this higher quality habitat is already in place prior to the extension being implemented

- 3.2.11 This evidence shows that minerals extraction does successfully convert land of lower value to stone-curlew to land of higher value to stone-curlew.

Consideration of temporary loss of land to stone-curlew during the operational phase

- 3.2.12 Breckland Farmland SSSI (by far the largest SSSI component of Breckland SPA used by stone-curlew) covers over 13,000ha and the allocation sites are a tiny percentage of that area. Within that SSSI, the various crop types planted each year varies from year to year, with no need for consent from NE. As different crops vary in their suitability for stone-curlew nesting (eg onions are preferred to winter wheat), land suitability over the 13,000 ha of SSSI fluctuates from year to year. The total area of arable land in the allocations at Barnham and Cavenham is 226ha, less than 1.8% of the total area of the SPA and minor in comparison to year to year fluctuations in crop type.

- 3.2.13 The Minerals and Waste Local Plan anticipates that the Barnham allocation would take 30 years to extract. This is evidence that it is very likely that the allocations would be extracted in several phases thus reducing the temporary loss of land to stone-curlew to much less than the allocation area at any one time; details would be secured at planning application stage. After the first phase of restoration is complete, the high-quality nesting habitat created would more than balance losses resulting from the next phase of quarrying. The location of stone-curlew nests would be assessed as part of the planning application HRA. If temporary loss of arable land might result in the loss of a frequently-used nest site then the planning application HRA could, for example, propose the provision of nest plots in mitigation.

Assessment of impacts

- 3.2.14 Assessment of potential impacts are tabulated below.

Potential impact	Assessment	Evidence
Temporary loss of land for stone-curlew nesting and foraging prior to the first restoration to provide higher-quality habitat for nesting	The temporary loss is insignificant in the context of the SPA	Previous Barnham Quarry approval. Cavenham Quarry approvals. Policy MS2j
Disturbance to stone-curlew in or close to the active site	Most activity is in vehicles, which are much less disturbing than people on foot. The scheme can be designed to reduce visibility of people on foot eg by layout of welfare facilities etc. Restriction to seasonality of working	Previous Barnham Quarry approval. Policy MS2a
Beneficial restoration to provide higher quality habitat for the long term compared that which is lost	A positive impact would occur from restoration. The importation of inert fill would raise the land above the water table where necessary to ensure a dry-land restoration over much of the site rather	Previous Barnham Quarry approval. Cavenham Quarry approvals. Policy MS2g, j

	than providing predominantly wetland or open water.	
Noise disturbance to stone-curlew	Noise would be controlled by addressing it within a noise assessment	Policy MS2l
Dust or air pollution reaching Breckland SAC to the north of the proposed allocation	The existing permitted quarry was found to be acceptable on these matters and nothing exists to indicate otherwise for the proposed extension.	Previous Barnham Quarry approval Policy MS2k refers to dust or air pollution risk to the SPA only, which is much less sensitive than Breckland SAC immediately to the north of the allocation.

3.2.15 At Barnham Quarry there is as yet no restored land suitable for stone-curlew. After the first phase of restoration to the existing quarry, where high quality stone-curlew habitat is to be created, there would be somewhere for any displaced stone-curlews to go, and therefore seasonal working of future phases is not necessary. It is considered that the policy requiring seasonal working is unnecessary after the first phase of restoration and the Local Plan could be amended accordingly during its next review.

3.2.16 This assessment was made with the location of recent nests on the proposed allocation available to the author, although this information is not included here because it may expose future nests to an increased risk of eggs being stolen.

3.2.17 **A further modification is required to Policy MS2k, so that the dust and air pollution assessment also considers risk to Breckland SAC.** This is because Breckland SAC is more sensitive to these impacts than the SPA.

3.2.18 It is assessed that all measures are in place, subject to modifying MS2k to include the SAC, to ascertain that there would be no adverse affect upon the integrity of any European site, and a long-term benefit to Breckland SPA would occur for the proposed allocation at Barnham. Details of the development would be secured through a planning application (which itself would be subject to HRA) consistent with the information in this report.

3.3 Appropriate Assessment of Policy MP2/MS4, site M4 Cavenham

3.3.1 The European sites within and around the proposed allocation are shown on page 66 of the Local Plan.

3.3.2 Land shaded in purple is all part of Breckland Special Protection Area, designated for breeding populations of stone-curlew, nightjar and woodlark. These species all nest on heathland, with different species requiring various vegetation structures of heathland for their nesting. Stone-curlew and woodlark nest on short grassland, whereas nightjar nest in long grass, heather or scrub. Stone-curlew also nest on arable land, whereas the other species no not (or only very rarely). On the map on page 66, the land includes arable land (proposed of the quarry extension), existing restored and working quarry, and heathland of Cavenham Heath. The land north of the proposed extension, where labelled 'Cavenham Heath' and 'Cavenham Heath National Nature Reserve', is heathland within Breckland SAC.

3.3.3 Likely significant effects on Breckland SPA of the proposed minerals allocation at Cavenham could include a reduction in stone-curlew population size resulting from

- Loss of land used for stone-curlew nesting
- Loss of land used for stone-curlew foraging
- Disturbance to stone-curlew nesting within or nearby to the allocation site

3.3.4 Likely significant effects on Breckland SAC of the proposed minerals allocation at Barnham could include deterioration of habitat caused by

- Dust covering vegetation
- Air pollution, especially nitrogen oxide deposition from vehicles

3.3.5 Cavenham Quarry was operating for many years before Breckland SPA was designated. Standard operating practice is to restore the land to heathland suitable for stone-curlew, for those parts of the site where the restoration is above the water table³. Over the decades, many planning applications have been made which provide evidence of this. For example, in 2016 an application was made for a quarry extension onto previously unworked land under reference SCC\0124\16F. The ecological impact assessment and HRA⁴, which can be found on the Council's planning website, demonstrated that land of relatively low value for nesting SPA birds was to be quarried then restored to a heathland of higher value for stone-curlew nesting. The report showed that previously restored land is used by stone-curlew for nesting, showing that restoration does achieve that benefit. The development was permitted.

3.3.6 This evidence shows that minerals extraction does successfully convert land of lower value to stone-curlew to land of higher value to stone-curlew.

Mitigation embedded in the local plan for this site

3.3.7 Policy MS4 for Cavenham includes several policy statements that would provide mitigation for significant effects on Breckland SPA and Breckland SAC, which are

b) a phased restoration scheme appropriate to the Brecks Landscape and the Breckland Special Protection Area;

e) potential impacts upon nature conservation interest including Breckland SPA, Breckland SAC, Breckland Farmland SSSI, Ancient Woodland CWS, Cavenham Heath NNR, RNR, watercourses, European Protected Species (Bats), Priority Species, Priority Habitats, Stone Curlew, Woodlark and Nightjar;

f) the provision of an air quality assessment which considers the potential impacts of increased dust and pollutant concentration associated with the extraction and infilling process, the potential for cumulative impacts, and which defines the mitigation and monitoring which will be implemented at the site to minimise the risk at residential properties within 250m and to the Breckland Special Protection area;

g) the provision of measures to mitigate noise.

Consideration of temporary loss of land to stone-curlew during the operational phase

3.3.8 Breckland Farmland SSSI (by far the largest SSSI component of Breckland SPA used by stone-curlew) covers over 13,000ha and the allocation sites are a tiny percentage of that area. Within that SSSI, the various crop types planted each year varies from year to year, with no need for consent from NE. As different crops vary in their suitability for stone-curlew nesting (eg onions are preferred to winter wheat), land suitability over the 13,000 ha of SSSI fluctuates from year to year. The total area of arable land in the allocations at Barnham and Cavenham is 226ha, less than 1.8% of the total area of the SPA and minor in comparison to year to year fluctuations in crop type.

3.3.9 The Minerals and Waste Local Plan anticipates that the Barnham allocation would take 30 years to extract; no similar figure is given for Cavenham allocation but it is noteworthy that the 2016 quarry extension application was for 10ha which would take 6 years to extract plus four years for

3 For example, see <https://www.mineralandwastepanning.co.uk/quarry-firms-major-biodiversity/article/1116136> and <http://www.allen-newport.co.uk/the-environment-m> accessed on 23rd October 2018

4 Wilkinson Associates (April 2016) Western Extension to Cavenham Quarry ECOLOGICAL IMPACT ASSESSMENT REPORT

restoration, giving an idea of typical extraction rates and phase sizes. This is good evidence that it is very likely that the allocations would be extracted in several phases thus reducing the temporary loss of land to stone-curlew to much less than the allocation area at any one time; details would be secured at planning application stage. The provision of high-quality nesting habitat through planned restoration has already provided more nesting habitat than that which would be temporarily lost.

Assessment of impacts – proposed quarry extension and import of inert fill

3.3.10

Assessment of potential impacts of the proposed quarry extension and proposed site for the importation of inert fill to restore previously worked areas to heathland are tabulated below.

Potential impact	Assessment	Evidence
Temporary loss of land for stone-curlew nesting and foraging	The temporary loss is insignificant in the context of the SPA	Previous Barnham Quarry approval. Cavenham Quarry approvals. Policy MS4e
Disturbance to stone-curlew in or close to the active site	Most activity is in vehicles, which are much less disturbing than people on foot. The scheme can be designed to reduce visibility of people on foot eg by layout of welfare facilities etc. Existing restored heathland for displaced stone-curlew	Established practice at Cavenham Quarry. Established practice at Cavenham Quarry. Policy MS4e
Beneficial restoration to provide higher quality habitat for the long term compared that which is lost	A positive impact would occur from restoration. The importation of inert fill would raise the land above the water table where necessary to ensure a dry-land restoration is possible rather than providing wetland or open water.	Previous Barnham Quarry approval. Cavenham Quarry approvals. Policy MS4e
Noise disturbance to stone-curlew	Noise would be controlled by addressing it within a noise assessment	Policy MS4g
Dust or air pollution reaching Breckland SAC to the north of the proposed allocation	Dust and air pollution would be controlled by addressing it in an assessment; the dust assessment is targeted at residential properties only but to satisfy policy GP4 the assessment must be extended to minimise risk to the SAC. The existing permitted quarry was found to be acceptable on these matters and nothing exists to indicate otherwise for the proposed extension.	Policy MS4f refers to dust or air pollution risk to the SPA only, which is much less sensitive than Breckland SAC immediately to the north of the allocation. Previous approvals

3.3.11 This assessment was made with the location of recent nests on the proposed allocation available to the author, although this information is not included here because it may expose future nests to an increased risk of eggs being stolen.

3.3.12 **It is recommended that policy MS4e is further modified, to make it consistent with policy MS2k** with respect to restoration for the avoidance of doubt. In policy MS4e, after the word 'nightjar, it is recommended to add '*including the provision of a project level Habitats Regulations Assessment, that would make clear the broad avoidance and/or mitigation measures and robust monitoring, identified at a strategic level that will be required and that restoration will ensure delivery of a net biodiversity gain long term, specifically with regard to the Breckland Special Protection Area*. **A further modification is required to Policy MS4f, so that the dust and air pollution assessment also considers risk to Breckland SAC.** This is because Breckland SAC is more sensitive to these matters than the SPA.

3.3.13 It is assessed that all measures are in place subject to the two further modifications to ascertain that there would be no adverse affect upon the integrity of any European site, and a long-term benefit to Breckland SPA would occur for the proposed allocation at Cavenham. Details of the development would be secured through as planning application (which itself would be subject to HRA) consistent with the information in this report.

3.4 Appropriate Assessment of any cumulative effects of Policy MP2/MS2, site M2 Barnham and Policy MP2/MS4, site M4 Cavenham

3.4.1 It is theoretically possible that an insignificant effect at each one of the allocations could, when both allocations are considered together, result in an overall significant effect leading to loss of nesting ability and an adverse affect on the integrity of Breckland SPA. However, it is considered that the small size of even the combined allocations compared to the size of the SPA, and the phased extraction and restoration, would not combine to have an adverse affect on the integrity of Breckland SPA. The provision of stone-curlew nesting habitat as part of phased restoration would nullify any potential cumulative impacts.

3.5 Assessment of other Main Modifications and Additional Modifications

3.5.1 Other Main Modifications not specifically referred to in this document have been assessed. None of these Main Modifications have any influence on impact pathways to any European site. Similarly, Additional Modifications have all been assessed and none have any influence on any impact pathways to any European site. It is assessed that likely significant effects on European sites are not altered.

3.6 In-combination effects

3.6.1 No other plans or projects have been identified which would have effects in combination with the Suffolk Minerals and Waste local Plan.

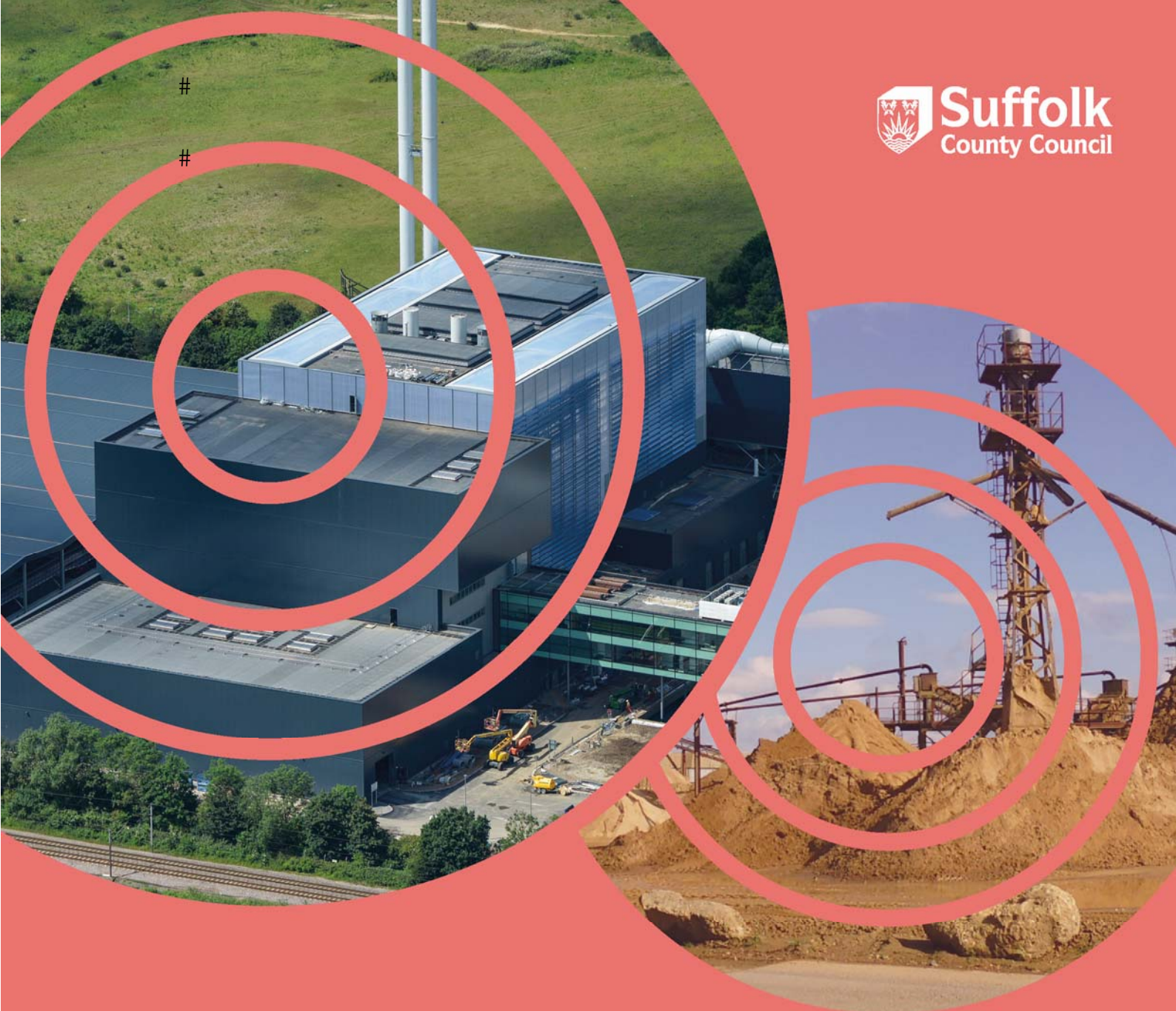
3.7 Summary of proposed further modifications

3.7.1 Further modifications proposed in this HRA are summarised in the table below for completeness

Policy	Proposed modification summary	Section of report
MS2	Addition of Breckland SAC to the receptors for potential dust and air pollution	Section 3.2
MS4k	Add provision for restoration etc specifically with regard to the Breckland Special Protection Area'	Section 3.3
MS4f	Addition of Breckland SAC to the receptors for potential dust and air pollution	Section 3.3
WS1	Addition of Minsmere Heath and Marshes SAC to list of potential receptors	Appendix 2

3.8 Conclusion of the assessment

- 3.8.1 It is ascertained that the Suffolk Minerals and Waste Local Plan will have no adverse affect upon the integrity of any European site.. This applies to the Local Plan acting alone or in combination with any other plan or project and is subject to the further modifications proposed above.



*Suffolk Minerals & Waste Local Plan
Modifications
Habitats Regulation Assessment
(including Appropriate Assessment)
Appendix 1 – Designated Sites*

**September
2019**



**The Conservation of Habitats and Species
Regulations 2017**

Regulation 63 Assessment

Re: The Suffolk Minerals & Waste Local Plan

August 2018

Strategic Habitats Regulations Assessment

**Appendix One:
Designated Sites
Details**

Appendix One:

Designated Sites Details

Set out below are the pertinent details of the various Natura 2000 Sites where the proposals detailed in the Suffolk Minerals & Waste Local Plan may result in potential impacts upon their features of Conservation Interest.

The full information for each site is available on-line from JNCC and Natural England but links have been provided.

Site:	Page No:
The Benacre to Easton Barents Lagoons Special Area of Conservation	3
The Benacre to Easton Barents Special Protection Area	4
The Breckland Special Area of Conservation	5
The Breckland Special Protection Area	7
The Minsmere to Walberswick Heaths and Marshes Special Area of Conservation	9
The Minsmere - Walberswick Special Protection Area	11
The Minsmere – Walberswick Ramsar Site	13
The Stour and Orwell Estuaries Special Protection Area	13
The Stour and Orwell Estuaries Ramsar Site	16
The Outer Thames Estuary Special Protection Area	17

The Benacre to Easton Bavents Lagoons Special Area of Conservation:

Extract from **Benacre to Easton Bavents Lagoons SAC** Citation:

For further details see:

<http://publications.naturalengland.org.uk/publication/6349053717643264>

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

Citation for Special Area of Conservation (SAC)

Name: Benacre to Easton Bavents Lagoons

Unitary Authority/County: Suffolk

SAC status: Designated on 1 April 2005

Grid reference: TM524830

SAC EU code: UK0013104

Area (ha): 366.93

Component SSSI: Benacre to Easton Bavents SSSI

Site description:

Benacre to Easton Bavents Lagoons is a series of percolation lagoons on the east coast of England. The lagoons (the Denes, Benacre Broad, Covehithe Broad and Easton Broad) have formed behind shingle barriers and are a feature of a geomorphologically dynamic system. Sea water enters the lagoons by percolation through the barriers, or by overtopping them during storms and high spring tides. The lagoons show a wide range of salinities, from nearly fully saline in South Pool, the Denes, to extremely low salinity at Easton Broad. This range of salinity has resulted in a series of lagoonal vegetation types, including beds of Narrow-Leaved Eelgrass *Zostera angustifolia* in fully saline or hypersaline conditions, beds of Spiral Tasselweed *Ruppia cirrhosa* in brackish water, and dense beds of Common Reed *Phragmites australis* in freshwater. The site supports a number of specialist lagoonal species.

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:

- Coastal lagoons*

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

**European Site Conservation Objectives for
Benacre to Easton Bavents Lagoons
Special Area of Conservation
Site Code: UK0013104**

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

Qualifying Features:

H1150. Coastal lagoons*

* denotes a priority natural habitat or species

The Benacre to Easton Bavents Special Protection Area:

*Extract from **Benacre to Easton Bavents SPA Citation:***

For further details see:

<http://publications.naturalengland.org.uk/publication/4750287944286208>

**European Site Conservation Objectives for
Benacre to Easton Bavents Special Protection Area (a Marine Site)
Site Code: UK9009291**

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;

The conservation objective for the internationally important populations of the regularly occurring Annex 1 bird species:

Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 bird species, under the Birds Directive, in particular:

- Shingle

- Shallow coastal waters

The Breckland Special Area of Conservation:

Extract from Breckland SAC Citation:

For further details see:

<http://publications.naturalengland.org.uk/publication/6145904885104640>

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

Citation for Special Area of Conservation (SAC)

Name: Breckland

Unitary Authority/County: Norfolk, Suffolk

SAC status: Designated on 1 April 2005

Grid reference: TL862948

SAC EU code: UK0019865

Area (ha): 7548.06

Component SSSI: Barnhamcross Common SSSI, Berner's Heath, Icklingham SSSI, Bridgham and Brettenham Heaths SSSI, Cavenham - Icklingham Heaths SSSI, Cranwich Camp SSSI, Deadman's Grave, Icklingham SSSI, East Wretham Heath SSSI, Field Barn Heaths, Hilborough SSSI, Foxhole Heath, Eriswell SSSI, Gooderstone Warren SSSI, Grime's Graves SSSI, Lakenheath Warren SSSI, RAF Lakenheath SSSI, Stanford Training Area SSSI, Thetford Golf Course and Marsh SSSI, Thetford Heaths SSSI, Wangford Warren and Carr SSSI, Weather and Horn Heaths, Eriswell SSSI, Weeting Heath SSSI

Site description:

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

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

Breckland is the most extensive surviving area of the rare *Festuca ovina* – *Hieracium pilosella* – *Thymus praecox* (Sheep’s-Fescue – Mouse-Ear-Hawkweed – Wild Thyme) grassland type. The grassland is rich in rare species typical of dry, winter-cold, continental areas, and approaches the features of grassland types in central Europe more than almost any other semi-natural dry grassland found in the UK.

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

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

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:

- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). (Alder woodland on floodplains) *
- European dry heaths
- Inland dunes with open *Corynephorus* and *Agrostis* grasslands. (Open grassland with Grey-Hair Grass and Common Bent Grass of inland dunes)
- Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation. (Naturally nutrient-rich lakes or lochs which are often dominated by pondweed)
- Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*). (Dry grasslands and scrublands on chalk or limestone)

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

- Great Crested Newt *Triturus cristatus*

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

European Site Conservation Objectives for

Breckland Special Area of Conservation Site Code: UK0019865

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

Qualifying Features:

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

* denotes a priority natural habitat or species.

Breckland Special Protection Area:

Extract from Breckland SPA Citation:

For further details see:

<http://publications.naturalengland.org.uk/publication/4572292419944448>

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

Name: Breckland

Unitary Authority/County: Norfolk, Suffolk

Component SSSI: Breckland SPA encompasses all or parts of: Barnham Heath Site of Special Scientific Interest (SSSI); Barnhamcross Common SSSI; Berner's Heath, Icklingham SSSI; Breckland Farmland SSSI; Breckland Forest SSSI; Bridgham and Brettenham Heaths SSSI; Cavenham-Icklingham Heaths SSSI; Cranberry Rough, Hockham SSSI; Cranwich Camp SSSI; Deadman's Grave, Icklingham SSSI; East Wretham Heath SSSI; Eriswell Low Warren SSSI; Field Barn Heaths, Hilborough SSSI; Foxhole Heath, Eriswell SSSI; Gooderstone Warren SSSI; Grimes Graves SSSI; How Hill Track SSSI; Lakenheath Warren SSSI; Little Heath, Barnham SSSI; Old Bodney Camp SSSI; Rex Graham Reserve SSSI; Stanford Training Area SSSI; Thetford Golf Course and Marsh SSSI; Thetford Heaths SSSI; Wangford Warren and Carr SSSI; Weather and Horn Heaths, Eriswell SSSI; Weeting Heath SSSI; and West Stow Heath SSSI.

Site description: The Breckland of Norfolk and Suffolk lies in the heart of East Anglia on largely sandy soils of glacial origin. In the nineteenth century the area was termed a sandy waste, with small patches of arable cultivation that were soon abandoned. The continental climate, with low rainfall and free-draining soils, has led to the development of dry heath and grassland communities. Much of Breckland has been planted with conifers throughout the twentieth century, and in part of the site, arable farming is the predominant land use. The remnants of dry heath and grassland which have survived these recent changes support heathland breeding birds, where grazing by rabbits and sheep is sufficiently intensive to create short turf and open ground. These breeding birds have also adapted to live in forestry and arable habitats. Woodlark *Lullula arborea* and Nightjar *Caprimulgus europaeus* breed in clear-fell and open heath areas, whilst Stone Curlews *Burhinus oedichnemus* establish nests on open ground provided by arable cultivation in the spring, as well as on Breckland grass-heath.

Size of SPA: The SPA covers an area of 39433.66 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 I species:	Count and season:	Period:	% GB population:
Stone Curlew <i>Burhinus oedichnemus</i>	115 pairs – breeding	5 year mean (1994 – 98)	60.1% GB
Nightjar <i>Caprimulgus europaeus</i>	415 males – breeding	Count as at 1998	12.2% GB
Woodlark <i>Lullula arborea</i>	430 pairs – breeding	Count as at 1997	28.7% GB

Non-qualifying species of interest: The SPA regularly supports small numbers (less than 1% of the GB population) of wintering Hen Harrier *Circus cyaneus* and breeding Goshawk *Accipiter gentilis*, both of which are listed in Annex I to the Birds Directive.

Status of SPA: Breckland was classified as a Special Protection Area on 21 September 2006.

European Site Conservation Objectives for:

Breckland Special Protection Area Site Code: UK9009201

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.

Qualifying Features:

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

Minsmere to Walberswick Heaths and Marshes Special Area of Conservation:

Extract from Minsmere to Walberswick Heaths and Marshes SAC Citation:

For further details see:

<http://publications.naturalengland.org.uk/publication/5360166388105216>

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora Citation for Special Area of Conservation (SAC)

Name: Minsmere to Walberswick Heaths and Marshes

Unitary Authority/County: Suffolk

SAC status: Designated on 1 April 2005

Grid reference: TM468682

SAC EU code: UK0012809

Area (ha): 1265.52

Component SSSI: Minsmere to Walberswick Heaths and Marshes SSSI

Site description:

Lowland dry heaths occupy an extensive area of this site on the east coast of England, which is at the extreme easterly range of heath development in the UK. The heathland is predominantly Heather – Western Gorse (*Calluna vulgaris* – *Ulex gallii*) heath, usually more characteristic of western parts of the UK. This type is dominated by Heather, Western Gorse and Bell Heather *Erica cinerea*.

Shingle beach forms the coastline at Walberswick and Minsmere. It supports a variety of scarce shingle plants including Sea Pea *Lathyrus japonicus*, Sea Campion *Silene maritima* and small populations of Sea Kale *Crambe maritima*, Grey Hair-Grass *Corynephorus canescens* and Yellow Horned-Poppy *Glaucium flavum*. A well-developed beach strandline of mixed sand and shingle supports annual vegetation. Species include those typical of sandy shores, such as Sea Sandwort *Honckenya peploides* and shingle plants such as Sea Beet *Beta vulgaris* ssp. *maritima*.

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
- European dry heaths
- Perennial vegetation of stony banks. (Coastal shingle vegetation outside the reach of waves)

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**

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

Minsmere-Walberswick Special Protection Area:

Extract from Minsmere-Walberswick SPA Citation:

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 *Botaurus stellaris* (presumed to represent 5 breeding pairs; 22% of the British breeding population) ; 15 breeding female Marsh Harriers *Circus aeruginosus* (20% of British) ; 47 pairs of Avocet *Recurvirostra avosetta* (12% of British) ; 32 pairs of Little Tern *Sterna albifrons* (1% of British): and 24 pairs of Nightjar *Caprimulgus 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 *Anas strepera* (4% of British); 73 pairs of Teal *A. crecca* (1% of British): and 23 pairs of Shoveler *A. clypeata* (2% of British). Also notable is a nationally important breeding population of Bearded Tit *Panurus biarmicus* (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 *Anser albifrons albifrons* (2% of the British wintering population); 90 Gadwall *Anas strepera* (1% of British), and 100 Shoveler *Anas clypeata* (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 *Anas querquedula*, Marsh Harrier, Water Rail *Rallus aquaticus*, Cetti's Warbler *Cettia cetti* and

Savi's Warbler *Locustella luscinioides*. Also notable is an assemblage of wintering waterfowl including, in addition to species listed above, Bewick's Swan *Cygnus columbianus*, Wigeon *Anas penelope*, Teal *Anas crecca*, Avocet; Spotted Redshank *Tringa erythropus*; and Redshank *Tringa totanus*.

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.

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.**

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)

Minsmere-Walberswick Ramsar Site:

Extract from: Ramsar Wetlands Site Information Sheet:

For further details see: <http://jncc.defra.gov.uk/pdf/RIS/UK11044.pdf>

Minsmere-Walberswick Ramsar Site

Ramsar Criterion 1:

The site contains a mosaic of marine, freshwater, marshland and associated habitats, complete with transition areas in between. Contains the largest continuous stand of reedbeds in England and Wales and rare transition in grazing marsh ditch plants from brackish to fresh water.

Ramsar Criterion 2:

This site supports nine nationally scarce plants and at least 26 red data book invertebrates.

Supports a population of the mollusc *Vertigo angustior* (Habitats Directive Annex II; British Red Data Book Endangered), recently discovered on the Blyth Estuary river walls.

An important assemblage of rare breeding birds associated with marshland and reedbeds including:

Botaurus stellaris, *Anas strepera*, *Anas crecca*, *Anas clypeata*, *Circus aeruginosus*, *Recurvirostra avosetta*, *Panurus biarmicus*

General ecological features:

This composite Suffolk coastal site contains a complex mosaic of habitats notably, areas of marsh with dykes, extensive reedbeds, mud flats, lagoons, shingle, woodland and areas of lowland heath.

The site supports the largest continuous stand of Reed *Phragmites australis* in England and Wales and nationally rare transition in grazing marsh ditch plants from brackish to fresh water. The combination of habitats create an exceptional area of scientific interest supporting nationally scarce plants, RDB invertebrates and nationally important numbers of breeding and wintering birds.

Stour and Orwell Estuaries Special Protection Area:

Extract from Stour and Orwell Estuaries SPA Citation:

For further details see:

<http://publications.naturalengland.org.uk/publication/6069687402102784>

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 <i>Recurvirostra avosetta</i>	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 <i>Tringa totanus</i>	2,588 individuals – autumn passage	5 year peak mean 1995/96 – 1999/2000	2.0% <i>britannica</i>
Dark-bellied Brent Goose <i>Branta bernicla bernicla</i>	2,627 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.2% <i>bernicla</i> , Western Siberia (breeding)
Pintail <i>Anas acuta</i>	741 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.2% North-western Europe (non-

			breeding)
Grey Plover <i>Pluvialis squatarola</i>	3,261 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.3% Eastern Atlantic (non-breeding)
Knot <i>Calidris canutus islandica</i>	5,970 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.3% <i>islandica</i>
Dunlin <i>Calidris alpina alpina</i>	19,114 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	1.4% <i>alpina</i> , Western Europe (non-breeding)
Black-Tailed Godwit <i>Limosa limosa islandica</i>	2,559 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	7.3% <i>islandica</i>
Redshank <i>Tringa totanus</i>	3,687 individuals - wintering	5 year peak mean 1995/96 – 1999/2000	2.8% <i>britannica</i>

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.

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.**

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

Stour and Orwell Estuaries Ramsar Site:

Extract from: Ramsar Wetlands Site Information Sheet:

For further details see: <http://jncc.defra.gov.uk/pdf/RIS/UK11067.pdf>

Stour and Orwell Estuaries Ramsar Site

Ramsar Criterion 2:

Contains seven nationally scarce plants: Stiff Saltmarsh-Grass *Puccinellia rupestris*; Small Cord-Grass *Spartina maritima*; Perennial Glasswort *Sarcocornia perennis*; Lax-Flowered Sea Lavender *Limonium humile*; and the Eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*.

Contains five British Red Data Book invertebrates: the Muscid Fly *Phaonia fusca*; the Horsefly *Haematopota grandis*; two Spiders, *Arctosa fulvolineata* and *Baryphema duffeyi*; and the Endangered Swollen Spire Snail *Mercuria confusa*.

Ramsar Criterion 5:

Assemblages of international importance:

Species with peak counts in winter:

63017 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6:

Species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

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

Species with peak counts in winter:

Dark-Bellied Brent Goose, *Branta bernicla bernicla*, 2627 individuals, representing an average of 1.2% of the population (5-year peak mean 1995/96-1999/2000)

Northern Pintail, *Anas acuta*, NW Europe 741 individuals, representing an average of 1.2% of the population (5-year peak mean 1995/96-1999/2000)

Grey Plover, *Pluvialis squatarola*, E Atlantic/W Africa -wintering 3261 individuals, representing an average of 1.3% of the population (5-year peak mean 1995/96-1999/2000)

Red Knot, *Calidris canutus islandica*, W & Southern Africa (wintering) 5970 individuals, representing an average of 1.3% of the population (5-year peak mean 1995/96-1999/2000)

Dunlin, *Calidris alpina alpina*, W Siberia/W Europe 19114 individuals, representing an average of 1.4% of the population (5-year peak mean 1995/96-1999/2000)

Black-Tailed Godwit, *Limosa limosa islandica*, Iceland/W Europe 2559 individuals, representing an average of 7.3% of the population (5-year peak mean 1995/96-1999/2000)

Common Redshank, *Tringa totanus totanus*, 3687 individuals, representing an average of 2.8% of the population (5-year peak mean 1995/96-1999/2000)

General ecological features:

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

Outer Thames Estuary Special Protection Area:

For further details see: <http://publications.naturalengland.org.uk/publication/3233957>

Summary of draft Conservation Objectives and Advice on Operations for the Outer Thames Estuary Special Protection Area (SPA)

This advice is based on information on the Special Protection Area (SPA) presented in Natural England's and the Joint Nature Conservation Committee's (JNCC) "Departmental Brief: Outer Thames Estuary SPA document (Version May 2010) (1). Natural England and JNCC's conservation objectives and advice on operations is site and feature specific, and has been developed using the best available scientific information and expert interpretation as at July 2012. The advice is generated through a coarse grading of sensitivity and exposure of the site's interest feature and its supporting habitat to physical, chemical and biological pressures associated with human activity. Sensitivity and exposure have been combined to provide a measure of the vulnerability of the interest feature to operations which may cause damage or deterioration, and therefore may require management.

The exact impact of any operation will be dependent upon the nature, scale, location and timing of events. This advice on operations for the Outer Thames Estuary SPA site will be kept under review and will be periodically updated to reflect changes in both sensitivity and exposure.

The Conservation Objective for the Outer Thames Estuary Special Protection Area is, subject to natural change(2), maintain(3) or enhance the Red-Throated Diver population (*Gavia stellata*) and its supporting habitats in favourable condition(4)

The interest feature Red-Throated Diver will be considered to be in favourable condition only when both of the following two conditions are met:

- (i) The size of the Red-Throated Diver population is at, or shows only non-significant fluctuation around the mean population at the time of designation of the SPA to account for natural change;
- (ii) The extent of the supporting habitat within the site is maintained.

Management actions should enable the **Annex I feature *Gavia stellata* (wintering Red-Throated Diver) and its supporting habitat in the Outer Thames Estuary** to

maintain or enhance its population and extent of supporting habitat for the foreseeable future. This will require assessment and management of human activities likely to affect these adversely, and of activities likely to impact the functioning of natural processes upon which the feature is dependent.

To fulfil the conservation objectives for the **Annex I feature *Gavia stellata* and its supporting habitat**, the relevant and competent authorities for this area are advised to manage human activities within their remit such that they do not result in deterioration or disturbance, or impede the restoration of this feature through any of the following:

- i) **Physical loss** of habitat by removal (e.g. capital dredging, harvesting, coastal and marine development)
- ii) **Physical damage** by physical disturbance or abrasion of habitat (e.g. extraction)
- iii) **Non-physical disturbance** through noise or visual disturbance (e.g. shipping, wind turbines)

iv) **Toxic contamination** by introduction of synthetic and/or non-synthetic compounds (e.g. polychlorinated biphenyls (PCBs), pollution from oil and gas industry, shipping);

v) **Non-toxic contamination** to prey species only by changes in e.g. turbidity (e.g. capital and maintenance dredging);

vi) **Biological disturbance** by selective extraction of species (e.g. commercial fisheries) and non-selective extraction (e.g. entanglement with netting and wind turbine strike)

The advice describes the above impacts and activities for both the habitat and prey species of the Red-Throated Divers and on the Red-Throated Divers themselves.

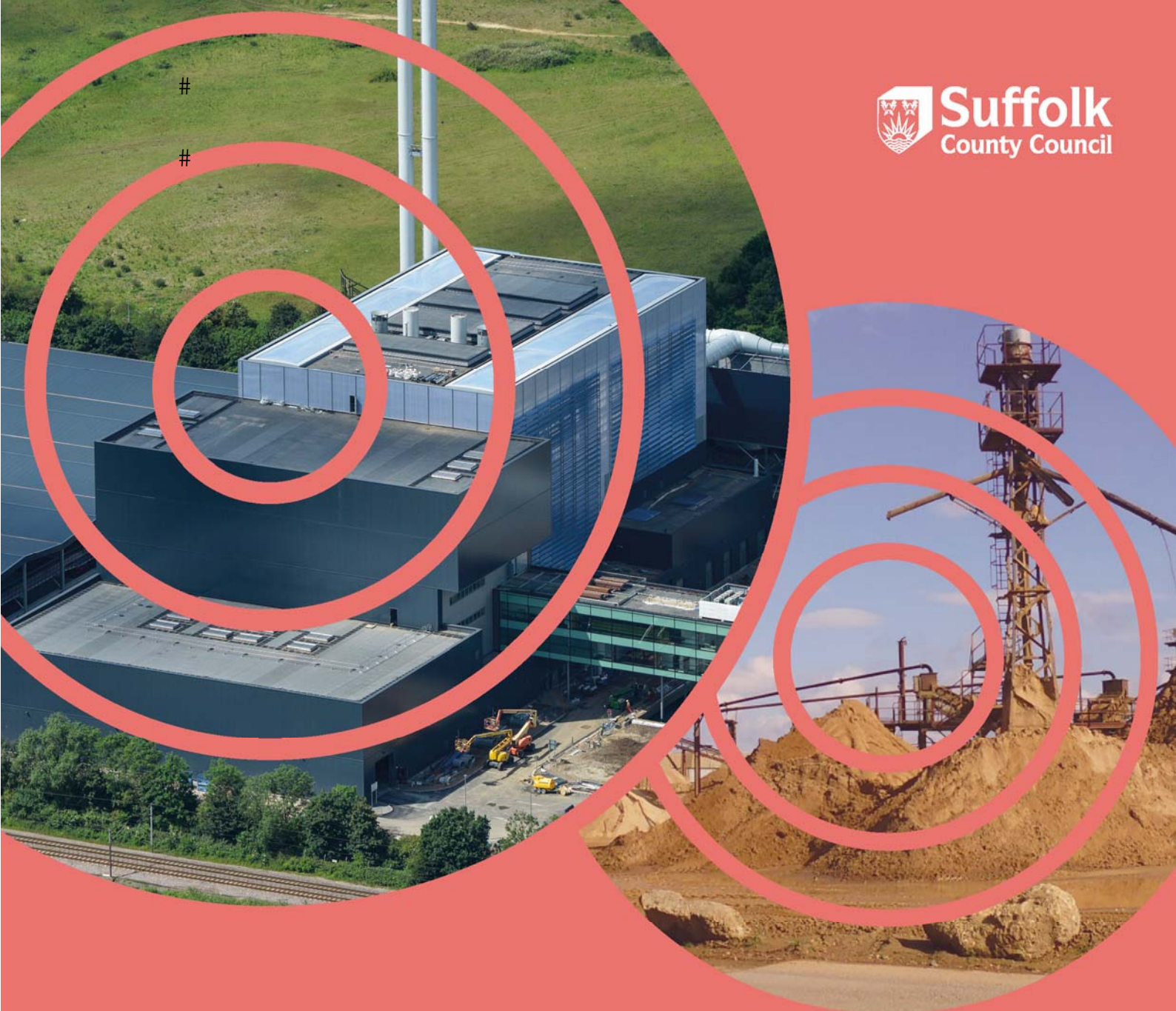
Notes:

(1) http://www.naturalengland.org.uk/Images/Thames-brief_tcm6-21728.pdf

(2) “Natural change” means changes in the species or habitat which are not a result of human influences. Human influence on the Red-Throated Diver population is acceptable provided that it is proved to be/can be established to be compatible with the achievement of the conditions set out under the definition of favourable condition. A failure to meet these conditions, which is entirely a result of natural process will not constitute unfavourable condition, but may trigger a review of the definition of favourable condition.

(3) “Maintain” is used here because existing evidence suggests the feature to be in favourable condition, and the objective is for it to remain so. Existing activities are deemed to be compatible with the conservation objectives if current practices are continued at current levels and in the absence of evidence that current activities are significantly affecting the Red-Throated Diver population or its habitat. However, it must be borne in mind that gradually damaging activities can take time to show their effects. If evidence later shows an activity to be undermining the achievement of the conservation objectives, then the Red-Throated Diver population will be deemed to be in unfavourable condition.

(4) Favourable Condition – Relates to the maintenance of the structure, function, and typical species for that feature within the site.



*Suffolk Minerals & Waste Local Plan
Modifications
Habitats Regulation Assessment
(including Appropriate Assessment)
Appendix 2 – Screening of policies*

**September
2019**

Likely Significant Effect of policies

This Appendix reviews the various Policies within the Suffolk Minerals and Waste Local Plan and assesses whether or not such policies may result in a Likely Significant Effect upon the features of the relevant Natura 2000 sites.

Policy	Summary	Comments	Likely Significant Effect alone?
Policy GP1: Presumption in favour of sustainable development	<p>The County Council will take a positive approach to minerals and waste development that reflects the presumption in favour of sustainable development.</p> <p>Planning applications that accord with the site allocations and policies in this Plan will be approved without delay, unless material considerations indicate otherwise.</p>	<p>National Planning Policy Framework (2018) states that the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a European site is being planned or determined. This removes potential for policy GP1 to result in a permission which could cause harm to a European site.</p> <p>A proposal that does not accord with policy GP4 would not be approved. Harm to a European site would be a material consideration indicating an outcome other than approval.</p>	No
Policy GP2: Climate change mitigation and adaptation	<p>New minerals and waste management facilities should through their construction and operation minimise their potential contribution to climate change through reducing carbon and methane emissions, incorporate energy and water efficient design strategies and be adaptable to future climatic conditions.</p>	<p>There is no impact pathway to any European site. There are general environmental benefits of this policy which might contribute to the conservation of European sites in a very minor way.</p>	No
Policy GP3: Spatial strategy	<p>Preference will be given to proposals for minerals and waste development in accordance with the Key Diagram where individual sites are well related to the Suffolk Lorry Route Network (or rail network or navigation) major centres of population and do not have potentially significant adverse impacts upon features of environmental importance (natural or man-made) or endanger human health.</p>	<p>The policy has no impact pathway to any European site. It does not allocate any particular sites for development.</p>	No

Policy	Summary	Comments	Likely Significant Effect alone?
Policy GP4: General environmental criteria	<p>Minerals and waste development will be acceptable so long as the proposals adequately access and address the potentially significant adverse impacts upon a number of topics, including biodiversity.</p> <p>Proposals should where applicable meet or exceed the appropriate national or local guidelines for each criterion, including reference to any hierarchy of importance, and also comply with other policies of the development plan.</p>	<p>GP4 has been modified to explicitly recognise European sites.</p> <p>The revised policy says that minerals and waste development will be acceptable so long as the proposals, adequately assess (and address where applicable) any potentially significant adverse impacts including cumulative impacts on European sites.</p> <p>This secures the protection of European sites from impacts arising through any planning applications.</p>	No
Policy MP1: Provision of land won for sand and gravel	<p>The County Council will allocate sites for the extraction of sand and gravel sufficient to supply 9.300 Mt over the Plan period to the end of 2036. It will also seek to maintain a landbank of permitted reserves of at least 7 years.</p>	<p>This Policy sets the amount of sand and gravel required during the plan period but in itself has no impact pathway to any European site.</p>	No
MP2: Proposed sites for sand and gravel extraction and Policy MS1	<p>The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map.</p> <p>Site M1 Barham</p>	<p>This site is at sufficient distance from any European site that no impacts are likely to occur.</p>	No
MP2: Proposed sites for sand and gravel extraction and Policy MS2	<p>The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map.</p> <p>Site M2 Barnham</p>	<p>This site is within Breckland SPA and close to Breckland SAC. Further assessment is needed.</p>	Yes
MP2: Proposed sites for sand and gravel extraction and Policy MS3	<p>The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map.</p> <p>Site M3 Belstead</p>	<p>This site is at sufficient distance from any European site that no impacts are likely to occur.</p>	No

Policy	Summary	Comments	Likely Significant Effect alone?
MP2: Proposed sites for sand and gravel extraction and Policy MS4	The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map. Site M4 Cavenham	This site is within Breckland SPA and close to Breckland SAC. Further assessment is needed.	Yes
MP2: Proposed sites for sand and gravel extraction and Policy MS5	The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map. Site M5 Layham	This site is at sufficient distance from any European site that no impacts are likely to occur.	No
MP2: Proposed sites for sand and gravel extraction and Policy MS6	The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map. Site M6 Tattingstone	This site is at sufficient distance from any European site that no impacts are likely to occur. References to Stour and Orwell Special Protection area are added to policy MS6 Tattingstone. Any planning application will need to address potential impacts on the SPA.	No
MP2: Proposed sites for sand and gravel extraction and Policy MS7	Site M7 Wangford	The Wangford site is removed to reflect impacts on AONB.	No
MP2: Proposed sites for sand and gravel extraction and Policy MS8	The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map. Site M8 Wetherden	This site is at sufficient distance from any European site that no impacts are likely to occur.	No
MP2: Proposed sites for sand and gravel extraction and Policy MS9	The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map. Site M9 Wherstead	This site is at sufficient distance from any European site that no impacts are likely to occur.	No

Policy	Summary	Comments	Likely Significant Effect alone?
MP2: Proposed sites for sand and gravel extraction and Policy MS10	<p>The County Council will grant planning permission for sand and gravel extraction from within the following site, as shown on the proposals map.</p> <p>Site M10 Worlington</p>	<p>This site is over 2.5km from Breckland SPA and over 5km from Breckland SAC. It is over 4km from Fenland SAC (Cambridgeshire). It is at sufficient distance from any European site that no impacts are likely to occur.</p>	No
MP3: Borrow pits	<p>Borrow pits to provide sand and gravel to serve major civil engineering projects will be acceptable as long as:</p> <ul style="list-style-type: none"> • they are within 10 km of the project site; • the borrow pit is worked and restored as part of the project; • they comply with the general environmental criteria Policy GP4. 	<p>There are no allocations for borrow pits in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary.</p>	No
MP4: Agricultural and public supply reservoirs	<p>Proposals for the extraction of minerals (which would involve the removal of mineral off site) to enable the construction of a reservoir for agriculture, flood alleviation and/or public water supply.</p>	<p>There are no allocations for reservoirs in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary.</p>	No
MP5: Cumulative environmental impacts and phasing of workings	<p>Where a proposed minerals site is considered acceptable (in its own right) but the cumulative impact of a proposal in conjunction with other existing, permitted or allocated minerals sites or other development in the proximity is considered unacceptable, the proposal may be considered acceptable if phased so that one site follows the completion of the other or it can be demonstrated that the adverse cumulative impacts can be adequately mitigated.</p>	<p>The cumulative impact of allocations in this plan is considered for each allocation. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites (including cumulative impacts), including a Habitats Regulations Assessment where necessary.</p>	No

Policy	Summary	Comments	Likely Significant Effect alone?
MP6: Progressive working and restoration	<p>Proposals for new mineral workings should be accompanied by a scheme for the progressive working and restoration of the site throughout its life.</p> <p>Preference will be given to restoration proposals that incorporate a net gain for biodiversity.</p>	<p>This Policy may reduce the operational impact of allocated sites where progressive working and restoration is important to avoid impacts. Restoration to achieve a net gain to biodiversity might in some cases be beneficial to European sites.</p> <p>For all allocated sites, the assessment of those sites includes these matters. For any other proposals which might arise, these matters will be considered as part of the assessment of that proposal.</p> <p>In itself this policy has no impact on any European site.</p>	No
MP7: Aftercare	<p>Where the proposed restoration is to an agriculture, forestry, amenity or ecology after-use following minerals extraction, an outline aftercare strategy of five years or more is required prior to the determination of the planning application.</p>	<p>In itself this policy has no impact on any European site and might in some cases be beneficial to European sites</p>	No
MP8: Concrete batching plants and asphalt plants	<p>Proposals for concrete batching plants or asphalt plants at sand and gravel quarries must stipulate the proportion of indigenous sand and gravel that will be used in the production of ready mixed concrete or asphalt.</p> <p>Any proposals for concrete batching plants or asphalt plants that are County matters must also comply with the environmental criteria set out in Policy GP4.</p>	<p>The policy has no impact pathway in itself to any European site. It does not allocate any particular sites for concrete batching plants or asphalt plants.</p> <p>Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites (including cumulative impacts), including a Habitats Regulations Assessment where necessary.</p>	No

Policy	Summary	Comments	Likely Significant Effect alone?
MP9: Safeguarding of port and rail facilities, and facilities for the manufacture of concrete and asphalt:	<p>When proposals are made which would result in the loss of or might potentially compromise the use of:</p> <ul style="list-style-type: none"> • an existing, planned or potential rail head, wharf or associated storage, handling or processing facilities for the bulk transport of minerals, , and/or; • an existing, planned or potential site for concrete batching; • applicants will be required to demonstrate that those sites no longer meet the needs of the aggregates industry. 	<p>The policy has no impact pathway in itself to any European site.</p>	<p>No</p>
MP10: Minerals consultation and safeguarding areas	<p>The County Council will safeguard:</p> <ul style="list-style-type: none"> • those Minerals Safeguarding Areas located within the Minerals Consultation Areas identified on the Proposals Map from proposed development in excess of five hectares which is not in accordance with the Development Plan. 	<p>The policy has no impact pathway in itself to any European site.</p>	<p>No</p>
Policy WP1: Management of waste (Mt)	<p>The County Council anticipates the described annual levels of waste arisings for which appropriate waste management facilities will be granted planning permission.</p>	<p>This Policy in itself has no impact pathway to any European site.</p>	<p>No</p>

<p>Policy WP2: Proposed site for radioactive waste management and Policy WS1</p>	<p>The County Council will grant planning permission for radioactive waste management on the following specific site, as shown on the proposals map:</p> <p>Site W1 Sizewell A Nuclear Power Station</p>	<p>The allocation site consists largely of existing buildings within Sizewell A Power Station. The nearest European site is Sandlings SPA around 950m to the south-west. Various woodlands are located in the intervening land, providing screening. Sandlings SPA is designated for breeding woodlark and nightjar, which nest on heathland and in clearings in plantation woodland.</p> <p>Minsmere-Walberswick Ramsar, Minsmere to Walberswick Heaths and Marshes SAC and Minsmere-Walberswick SPA are approximately 1.1km to the north, with the nearest point being a sand dune system. Many buildings within Sizewell A Power Station and woodland screen the European site from the proposed allocation.</p> <p>The character of the allocation site, the distance from the allocation site to European sites and woodland screens suggest that there would be no disturbance or other impacts upon the European sites. No other pathways of impact have been identified.</p> <p>Policy WS1 has been modified to include proposals addressing likely adverse impacts (either individually or in combination with other developments) on the notified special interest features of Sizewell Marshes SSSI, Suffolk Shingle Beaches CWS, Minsmere-Walberswick Heaths & Marshes SSSI, Minsmere-Walberswick SPA/Ramsar, Sandlings SPA, Leiston-Aldeburgh SSSI, on European and UK protected species, UK priority species, and the preservation of the flora and fauna associated with the established sand dunes on Sizewell Beach including protected species such as Adders, unless there is an overriding need. The modification fails to mention Minsmere to Walberswick Heaths and Marshes SAC which is co-located with Minsmere-Walberswick Ramsar/SPA in the vicinity of allocation site WS1 and it is recommended that for the avoidance of doubt this SAC is also included in the modification. It is recommended that after 'Minsmere-Walberswick SPA/Ramsar, that 'Minsmere –</p>	<p>No</p>
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Policy	Summary	Comments	Likely Significant Effect alone?
		Walberswick Heaths and Marshes SAC' is inserted.	
<p>Policy WP3: Existing or designated land-uses potentially suitable for waste development</p>	<p>General waste management facilities (other than landfill sites and waste water treatment facilities) may be acceptable within the following areas:</p> <ul style="list-style-type: none"> • land in existing waste management use; • land in existing general industrial use (B2) or in existing storage or distribution use (B8 use); • land allocated for B2 and B8 purposes in a local plan • within or adjacent to agricultural and forestry buildings; • agricultural and forestry land; • brownfield land; • former airfields; • waste water treatment facilities; • current and former mineral workings. <p>Proposals must also comply with the environmental criteria set out in Policy GP4.</p>	<p>There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary.</p>	<p>No</p>

Policy	Summary	Comments	Likely Significant Effect alone?
<p>Policy WP4: Household waste recycling centres</p>	<p>Household waste recycling centres may be acceptable within purpose designed or suitably adapted facilities on land within the land uses identified within Policy WP3.</p> <p>Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration activity is taking place on site. Any temporary planning permissions will be linked to the time limits relating to the landfill activities on site.</p> <p>Where it can be demonstrated that no suitable sites consistent with Policy WP3 are available within the area to be served by the household waste recycling centre, household waste recycling centres may be acceptable on other sites provided these are consistent with Policy GP4 and are accessible to the public.</p>	<p>There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary.</p>	<p>No</p>
<p>Policy WP5: Open air composting</p>	<p>Open air composting facilities may be acceptable on land within the uses identified within Policy WP3.</p> <p>Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.</p> <p>Proposals must also comply with the environmental criteria set out in Policy GP4.</p>	<p>There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary.</p>	<p>No</p>
<p>Policy WP6: In-vessel composting facilities</p>	<p>Enclosed composting facilities may be acceptable on land within the uses identified within Policy WP3.</p> <p>Proposals for such facilities at landfill sites may be considered acceptable on a temporary basis whilst landfilling and restoration is taking place on site.</p>	<p>There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary.</p>	<p>No</p>

Policy	Summary	Comments	Likely Significant Effect alone?
Policy WP7: Anaerobic digestion	Anaerobic digestion facilities may be acceptable on land within the uses identified within Policy WP3; or integrated with waste water treatment plants.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP8: Proposals for recycling or transfer of inert and construction, demolition and excavation waste	Proposals for recycling or transfer of inert and construction, demolition and excavation waste will be acceptable on land within the uses identified within Policy WP3.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP9: Waste transfer stations, materials recycling facilities, end of life vehicle facilities and waste electrical and electronic equipment recovery facilities	Waste transfer stations, material recycling facilities, end of life vehicle facilities and waste electrical and electronic equipment recovery facilities may be acceptable within purpose designed or suitably adapted facilities on land within the uses identified within Policy WP3.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP10: Residual waste treatment facilities	Residual waste treatment facilities may be acceptable where the proposed facility is on land within the land-uses set out in Policy WP3, and the proposals meet the environmental criteria set out in Policy GP4.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP11: Approval of sites for disposal of inert waste by landfilling or landraise	Additional void space or areas of landraising for the deposit of inert waste may be acceptable under certain circumstances	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No

Policy	Summary	Comments	Likely Significant Effect alone?
Policy WP12: Disposal of non-hazardous or hazardous waste by landfilling or landraising.	Additional void space or areas of landraising for the deposit of non-hazardous or hazardous waste may be acceptable where no alternative form of waste management can be made available to meet the need.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP13: Mining or excavation of landfill waste	The mining or excavation of landfill waste will be considered favourably in certain circumstances	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP14: Waste water treatment facilities	New or extended waste water treatment facilities may be acceptable where such proposals aim to improve the quality of discharged water or reduce the environmental impact of operation.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP15: Transfer, storage, processing & treatment of hazardous waste	Facilities for the transfer, storage, processing and treatment (including incineration) of hazardous waste will be acceptable on certain types of land.	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP16: Treatment and storage of radioactive waste at Sizewell nuclear power stations	Planning permission for the treatment and/or interim storage of radioactive waste at Sizewell nuclear power stations may be granted within the licensed area subject to the applicant demonstrating certain matters	Policy WP2, with an individual allocation, is assessed separately. There are no other allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No
Policy WP 17: Design of waste management facilities	Waste management facilities will be considered favourably in certain circumstances	There are no allocations in the Plan. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No

Policy	Summary	Comments	Likely Significant Effect alone?
Policy WP18: Safeguarding of waste management sites	The County Council will seek to safeguard existing sites and sites proposed for waste management use as shown on the Proposals & Safeguarding Maps	There are no existing waste sites known to have a likely significant effect on any European site. Policy GP4 makes it clear that any proposal which might arise would be properly considered with respect to any impacts on European sites, including a Habitats Regulations Assessment where necessary	No

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