

Draft Local Development Orders for Sites in Lowestoft/Ellough

Habitats Regulations Screening Report

January 2012



Waveney District Council
Serving the Community

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1. Introduction

- 1.1 This report presents the results of a screening process to determine whether the five Draft Local Development Orders for Lowestoft/Ellough (January 2012) are likely to have a significant effect on any site in the Natura 2000 network, and therefore whether full Appropriate Assessment will be required.
- 1.2 The Natura 2000 network provides protection for sites that are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Union. The network consists of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). SACs are sites of European importance for nature conservation designated under the Conservation of Natural Habitats and Wild Flora and Fauna Directive (92/43/EEC). SPAs are sites of European importance for nature conservation designated under the Conservation of Wild Birds Directive (70/409/EEC). Both types can also be referred to as European Sites. In accordance with Planning Policy Statement 9 – Biodiversity and Geological Conservation, Ramsar sites, or internationally important wetland habitats, have also been included in this Appropriate Assessment screening report.
- 1.3 The requirement to carry out Appropriate Assessment of land use plans is outlined in the Habitats Directive (92/43/EEC), and was transposed into English law in an amendment to the Habitats Regulations (SI No. 2716) in 2006.
- 1.4 Since 2006 there have been several amendments to the Regulations and these have now been consolidated into the Conservation of Habitats and Species Regulations 2010, (as amended in 2011). Regulation 78 sets out that a Local Development Order (LDO) may not grant planning permission for development which is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and is not directly connected with or necessary to the management of the site. If the local planning authority cannot conclude that the LDO is not likely to have a significant effect on such a site, they should make an appropriate assessment of the implications of the proposals for the site in view of the site's conservation objectives.
- 1.5 There are three stages to the Appropriate Assessment process.
 - Task 1: Determining whether a plan is likely to have a significant effect on a European site. This needs to take account of the likely impacts in combination with other relevant plans and projects. This assessment should be made using the precautionary principle.
 - Task 2: Carrying out Appropriate Assessment and ascertaining the effect on site integrity. The effects of the plan on the conservation objectives of sites should be assessed, to ascertain whether the plan has an adverse effect on the integrity of a European site.
 - Task 3: Identifying mitigation measures and alternative solutions. The aim of this task is to find ways of avoiding or significantly reducing adverse impacts, so that site integrity is no longer at risk. If there are still likely to be negative impacts, the option should be dropped, unless exceptionally it can be justified by imperative reasons of overriding public interest.

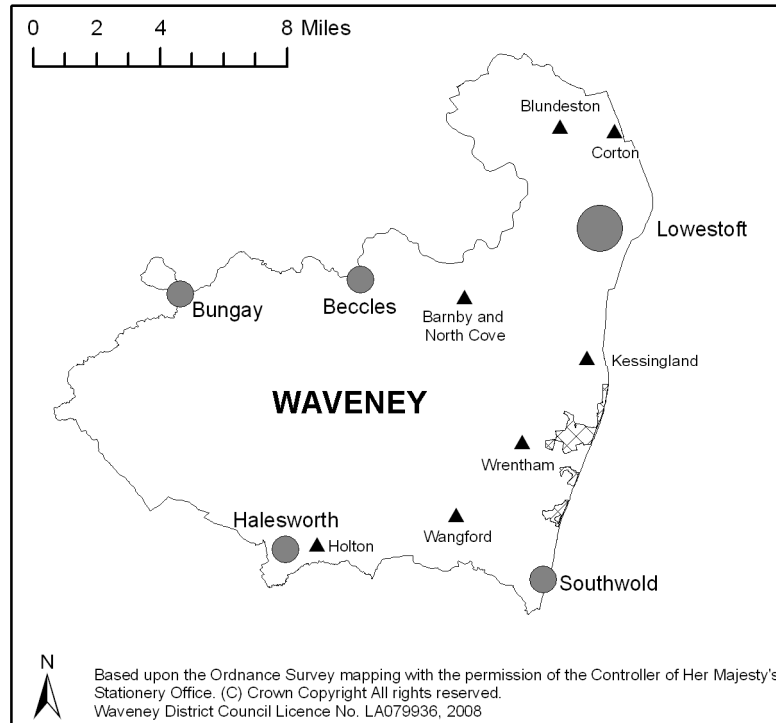
- 1.6 This screening report contains the results of task 1 in relation to the Local Development Orders. Tasks 2 and 3 are only required if the screening stage (task 1) concludes that there is likely to be a significant impact on a European site.
- 1.7 Sites included in this assessment are listed in Table 1. This includes sites wholly or partly within the District and selected sites close to its boundaries. The River Waveney flows through Waveney District and into the estuary at Breydon Water, so it is possible that any impact on water quality and flow rates could affect this site. Other sites outside the District have been included as they may be vulnerable to possible changes to groundwater, for example, or impacts on the water cycle in general.

Table 1. Natura 2000 sites covered by this screening report

	SAC name	SPA name	Ramsar name	Area (ha)	Location
1	Benacre to Easton Barents Lagoons			366.93	Wholly within Waveney, on the coast.
2		Benacre to Easton Barents		516.83	Wholly within Waveney, on the coast.
3	The Broads			5865.6	Partially within Waveney. Mostly in Norfolk, but extending into northern parts of the District.
4		Broadland		5462.4	Partially within Waveney. Mostly in Norfolk, but extending into northern parts of the District.
5			Broadland	5488.61	Partially within Waveney. Mostly in Norfolk, but extending into northern parts of the District.
6	Minsmere to Walberswick Heaths and Marshes			1265.52	Partially within Waveney. Mostly in Suffolk Coastal, but extending into southern, coastal parts of the District.
7		Minsmere to Walberswick		2018.92	Partially within Waveney. Mostly in Suffolk Coastal, but extending into southern, coastal parts of the District.
8			Minsmere to Walberswick	2018.92	Partially within Waveney. Mostly in Suffolk Coastal, but extending into southern, coastal parts of the District.
9	Dew's Ponds			6.74	Outside Waveney, in Suffolk Coastal District.
10	Waveney and Little Ouse Valley Fens			193.18	Outside Waveney, in Norfolk and Suffolk.
11			Redgrave and South Lopham Fens	127.09	Outside Waveney, in Norfolk and Suffolk.
12	Norfolk Valley Fens			616.21	Outside Waveney, in Norfolk.
13		Breydon Water		1202.94	Outside Waveney, in Norfolk.
14			Breydon Water	1202.94	Outside Waveney, in Norfolk.
15		Outer Thames Estuary		39,3734.18	Coastal and Offshore – North Kent to Norfolk

2. Background information - environmental features of Natura 2000 sites in and around Waveney

2.1. Benacre to Easton Bavents Lagoons SAC



Qualifying features (habitats/species)

- Coastal lagoons – one of the best areas in the UK.

Priority features

- Coastal lagoons
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Key environmental features that support site integrity

A series of percolation lagoons with a wide range of salinities, separated from the sea by shingle barriers. The site supports a number of specialist lagoonal species.

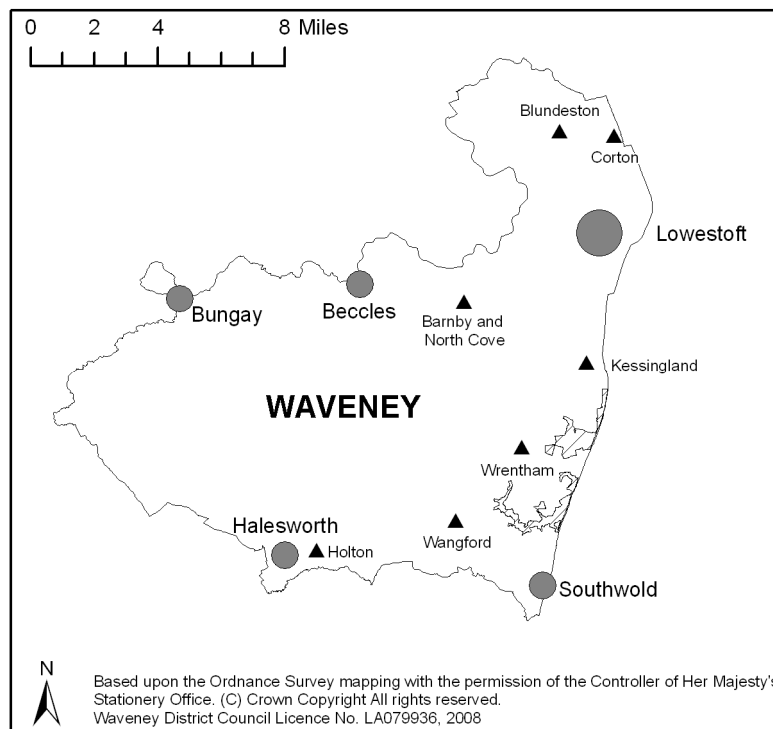
Vulnerability of site

The lagoons at the Denes were created through shingle extraction. Salinity is maintained through percolation and overtopping of the shingle barrier. No management input is required to maintain these lagoons. The lagoons at Benacre, Covehithe and Easton are natural and result from ponded streams behind shingle barriers. Seawater enters the lagoons through overtopping of the barriers during high tides. Natural sea level rise will lead to more frequent saltwater inundation – beneficial for some habitats but causing loss of others. Saline lagoons will migrate landward as the coastline erodes, so their existence should not be compromised in short to medium term. Management actions to reduce the rate of erosion are being addressed through the Shoreline Management Plan, and new lagoons have been created further from the coastline.

Conservation Objectives

- Subject to natural change, to maintain, in favourable condition, the lagoons.

2.2. Benacre to Easton Bavents SPA



Qualifying features (habitats/species)

- During the breeding season:
 - Bittern, *Botaurus stellaris* (5% of GB breeding population)
 - Marsh harrier, *Circus aeruginosus* (5.1% of GB breeding population)
 - Little tern, *Sterna albifrons* (0.9% of GB breeding population)

Key environmental features that support site integrity

Shingle barriers provide nesting habitat for Little tern; reed beds and grazing marsh provide breeding habitat for Bittern and Marsh harrier.

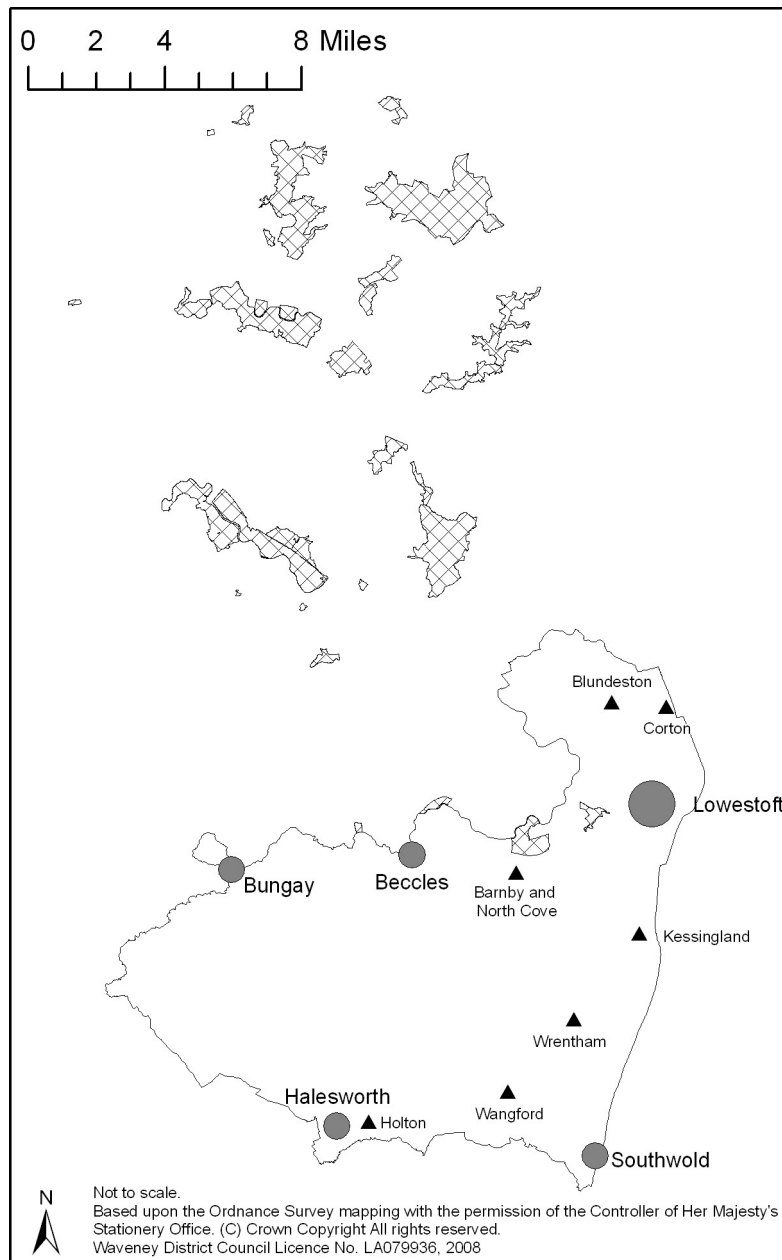
Vulnerability of site

As above.

Conservation Objectives

- Subject to natural change, to maintain, in favourable condition, the lagoons.
- To maintain, in favourable condition, the habitats for the populations of Annex 1 species (bittern, little tern and marsh harrier) of European importance, with particular reference to:
 - shingle;
 - shallow coastal waters;
 - standing water;
 - swamp; and
 - marginal and inundation communities.

2.3. The Broads SAC



Qualifying features (habitats/species)

- Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.
- Natural eutrophic lakes with Magnopotamion or Hydrochariton-type vegetation
- Transition mires and quaking bogs
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* (rare)
- Alkaline fens
- Alluvial forests with Alder, *Alnus glutinosa* and Ash, *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- Desmoulin's whorl snail, *Vertigo moulinsiana*
 - one of the best places in the UK for all of the above
- Fen orchid, *Liparis loeselii*

- one of only 3 outstanding localities in the UK.

Priority features

- Alluvial forests with Alder, *Alnus glutinosa* and Ash, *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* (rare)

Key environmental features that support site integrity

A mosaic of important and rare habitats, including open water, reedbeds, fens, grazing marshes and carr woodlands. These support a wide range of rare and local species of flora and fauna. The Demoulin's whorl snail is associated with flowing and standing water and ditch systems, while the fen orchid is found on calcareous and alkaline fens.

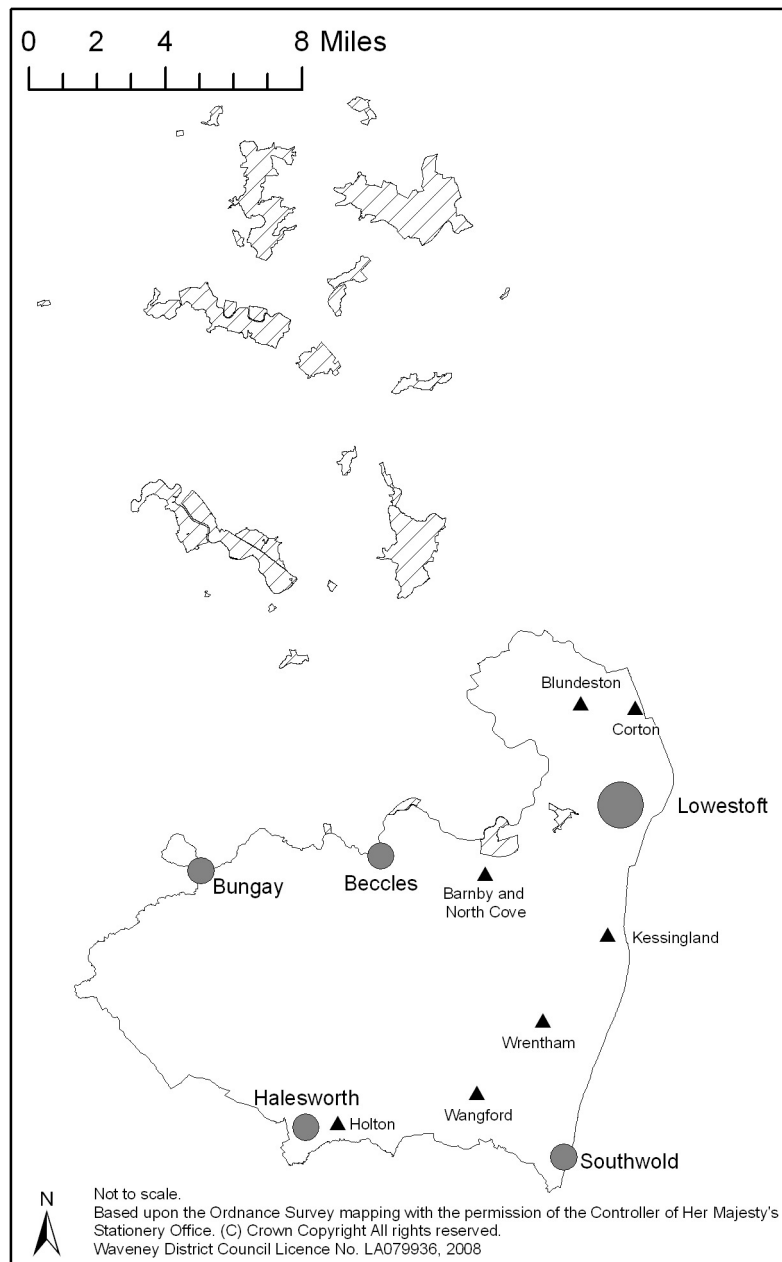
Vulnerability of site

The adverse effects of management neglect and natural succession during the 20th century are slowly being reversed through conservation and other management works undertaken by a number of bodies. Sea-level rise and reduced summer flows in the northern rivers (e.g. Bure) brought about by abstraction are resulting in increasing saline intrusion into the site and generally drier summer conditions. The site also suffers from eutrophication, primarily from sewage outfalls and to a lesser degree, agriculture. Some of the sewage works in the northern rivers are now phosphorus stripping and there is a programme of mud-pumping to remove enriched material from lakes, followed by biomanipulation. Pressure from tourism and recreation is now being considered by the Broads Authority. Water Level Management Plans and the Environmentally Sensitive Area scheme are starting to raise water levels, revert arable areas back to grass and encourage sensitive management particularly of the ditches, to address problems brought about by drainage in the past. Appropriate standards of flood defence are necessary for the wetland, and works are currently proceeding under the Environment Agency Broads Strategy.

Conservation Objectives

- To maintain, in favourable condition, the:
 - natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation;
 - alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*;
 - calcareous fens with *Cladium mariscus* and species of the *Carex davallianae* (Davall's sedge);
 - Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*);
 - hard oligo-mesotrophic waters with benthic vegetation of *Chara spp.*;
 - transition mires and quaking bogs; and
 - alkaline fens.
- To maintain, in favourable condition, the habitats for the population of:
 - Desmoulin's whorl snail;
 - otter; and
 - *Liparis loeselii* (Fen orchid).

2.4. Broadland SPA



Qualifying features (habitats/species)

- During the breeding season:
 - Bittern, *Botaurus stellaris* (at least 10% of GB breeding population)
 - Marsh harrier, *Circus aeruginosus* (10.2% of GB breeding population)
- Over winter:
 - Hen harrier, *Circus cyaneus* (2.9% of GB population)
 - Tundra (or Bewick's) swan, *Cygnus columbianus bewickii* (at least 8.2% of GB population)
 - Whooper swan, *Cygnus cygnus* (1.8% of GB population)
 - Gadwall, *Anas strepera* (0.8% of population)

Key environmental features that support site integrity

A mosaic of important and rare habitats, including open water, reedbeds, fens, grazing marshes and carr woodlands. These support a wide range of rare and local species of flora and fauna, and support breeding and over-wintering populations of a number of protected bird species.

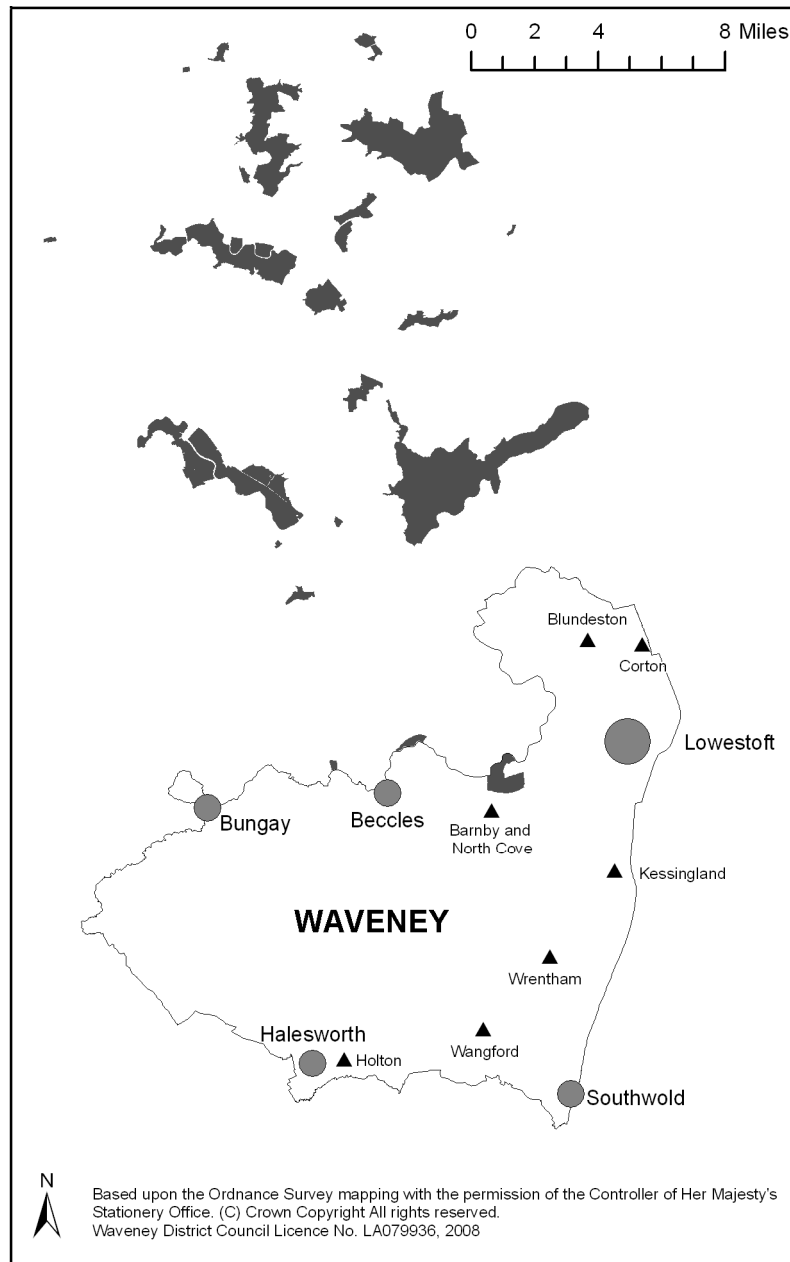
Vulnerability of site

As above.

Conservation Objectives

- To maintain, in favourable condition, the habitats for the populations of Annex 1 bird species (bittern, marsh harrier, hen harrier, Bewick's swan, whooper swan, ruff, avocet, golden plover and common tern) of European importance with particular reference to:
 - open water;
 - swamp;
 - fen and fen meadow;
 - reedbed;
 - lowland wet grassland with ditches and water bodies;
 - fen meadow with ditches and water bodies; and
 - saltmarsh.
- To maintain, in favourable condition, the habitats for the populations of migratory bird species (pink-footed goose, shoveler and gadwall) of European importance with particular reference to:
 - open water;
 - swamp;
 - fen;
 - fen meadow with ditches and water bodies; and
 - lowland wet grassland with ditches and water bodies.
- To maintain, in favourable condition, the habitats of the populations of waterfowl that contribute to the wintering waterfowl assemblage of the European importance with particular reference to:
 - open water;
 - swamp;
 - fen;
 - fen meadow with ditches and water bodies;
 - lowland wet grassland with ditches and water bodies;
 - wet woodland; and
 - water bodies.

2.5. Broadland Ramsar



Qualifying features (habitats/species)

- Ramsar criterion 2 - site supports a number of rare habitats and species including:
 - Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* (Calcium rich fen dominated by great fen sedge)
 - Alkaline fens (Calcium-rich springwater-fed fens)
 - Alluvial forests with Alder, *Alnus glutinosa* and Ash, *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) (Alder woodland on floodplains)
 - Desmoulin's whorl snail, *Vertigo moulinsiana*
 - Fen orchid, *Liparis loeselii*
 - Otter, *Lutra lutra*
 - Outstanding assemblages of rare plants and invertebrates

- Ramsar criterion 6 - species/ populations occurring at international levels of importance:
Tundra (or Bewick's) swan, *Cygnus columbianus bewickii*
 - Eurasian widgeon, *Anas penelope*
 - Gadwall, *Anas strepera strepera*
 - Northern Shoveler, *Anas clypeata*
 - Pink-footed goose, *Anser brachyrhynchus*
 - Greylag goose, *Anser anser anser*

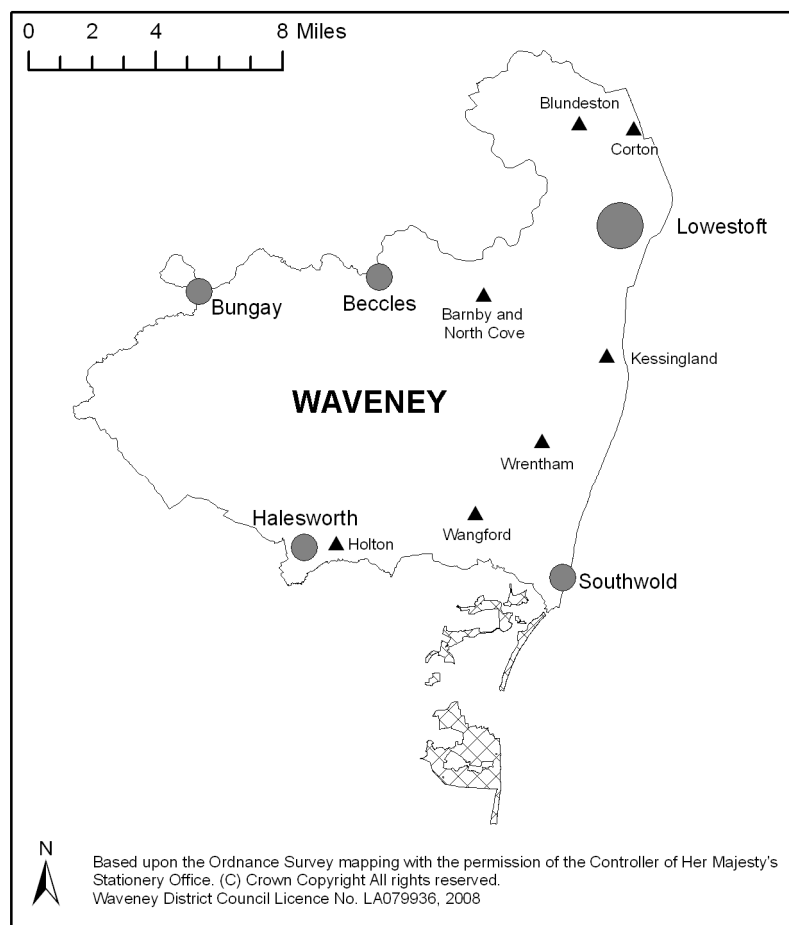
Key environmental features that support site integrity

A mosaic of important and rare habitats, including open water, reedbeds, fens, grazing marshes and carr woodlands. These support a wide range of rare habitats and species, including internationally important breeding and over-wintering populations of a number of bird species.

Vulnerability of site

As above. The site is not subject to adverse ecological change.

2.6. Minsmere to Walberswick Heaths and Marshes SAC



Qualifying features (habitats/species)

- Annual vegetation of drift lines (rare)
 - one of only 4 outstanding localities in the UK.
- European dry heaths
 - one of the best places in the UK

Priority features

- Coastal lagoons

Key environmental features that support site integrity

Deposits of shingle lying at or above mean high-water spring tides, with ephemeral vegetation cover consisting of annual or short-lived perennial species. Open, dry heathland occurs on freely-draining, acidic to circumneutral soils with generally low nutrient content. Ericaceous dwarf-shrubs dominate the vegetation.

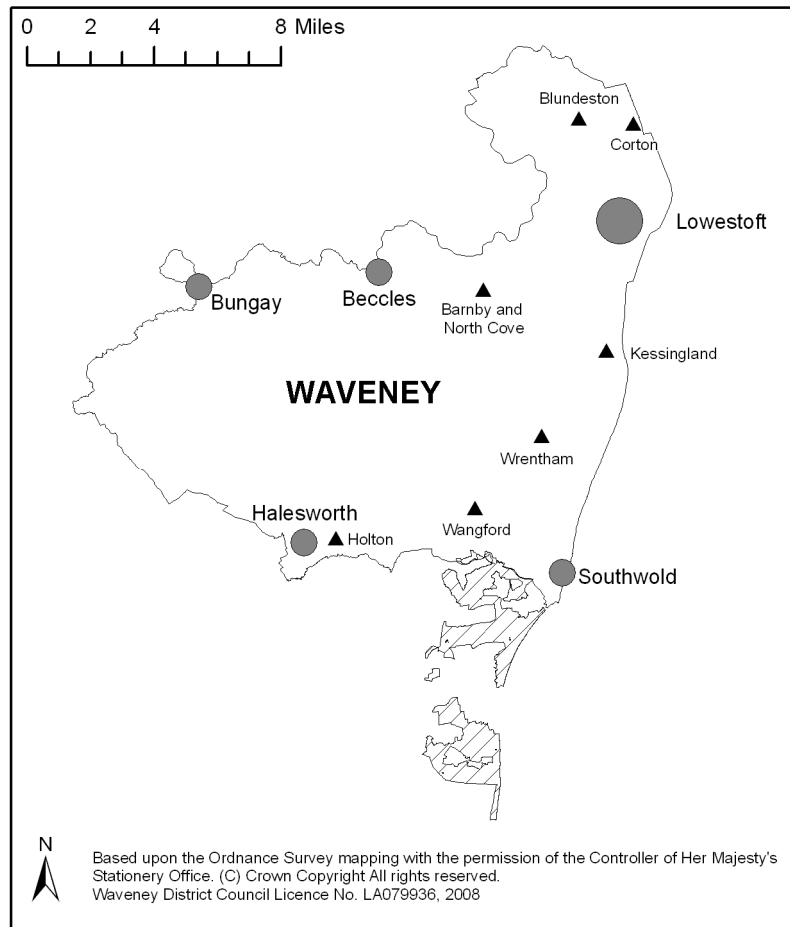
Vulnerability of site

Dry heaths were formed through, and are dependent upon, active management. Without grazing or cutting of heather, scrub and tree invasion onto the heaths is rapid and can be extensive. Bracken can also dominate large areas if suitable management has not been undertaken over the past decade. The heathland at Minsmere forms part of a RSPB reserve. The site management plan includes actions to ensure that open heathland is maintained and areas of scrub and bracken are cleared from former heath. Part is managed as Westleton Heath Nature Reserve. Annual vegetation of drift lines is maintained through the action of natural coastal processes upon the shoreline. The requirement for management is limited and is restricted to ensuring that significant human disturbance of the vegetated shore zone does not occur. This is addressed through the RSPB visitor management plan.

Conservation Objectives

- To maintain, in favourable condition, the:
 - annual vegetation of drift lines;
 - perennial vegetation of stony banks; and
 - European dry heaths.

2.7. Minsmere to Walberswick SPA



Qualifying features (habitats/species)

- During the breeding season:
 - Bittern, *Botaurus stellaris* (35% of GB breeding population)
 - European nightjar, *Caprimulgus europaeus* (0.7% of GB breeding population)
 - Marsh harrier, *Circus aeruginosus* (10.2% of GB breeding population)
 - Pied avocet, *Recurvirostra avosetta* (10.4% of GB breeding population)
 - Little tern, *Sterna albifrons* (1.2% of GB breeding population)
 - Northern shoveler, *Anas clypeata* (2.3% of GB population)
 - Common Teal, *Anas crecca* (4.9% of GB population)
 - Gadwall, *Anas strepera* (3.1% of GB population)
- Over winter:
 - Hen harrier, *Circus cyaneus* (2% of GB population)
 - Northern shoveler, *Anas clypeata* (1% of GB population)
 - Gadwall, *Anas strepera* (1.1% of population)
 - White-fronted goose, *Anser albifrons albifrons* (1.1% of GB population)

Key environmental features that support site integrity

A complex mosaic of habitats including marsh with dykes, reedbeds, mudflats, lagoons, shingle, woodland and lowland heath. These support breeding and over-wintering populations of a number of protected bird species.

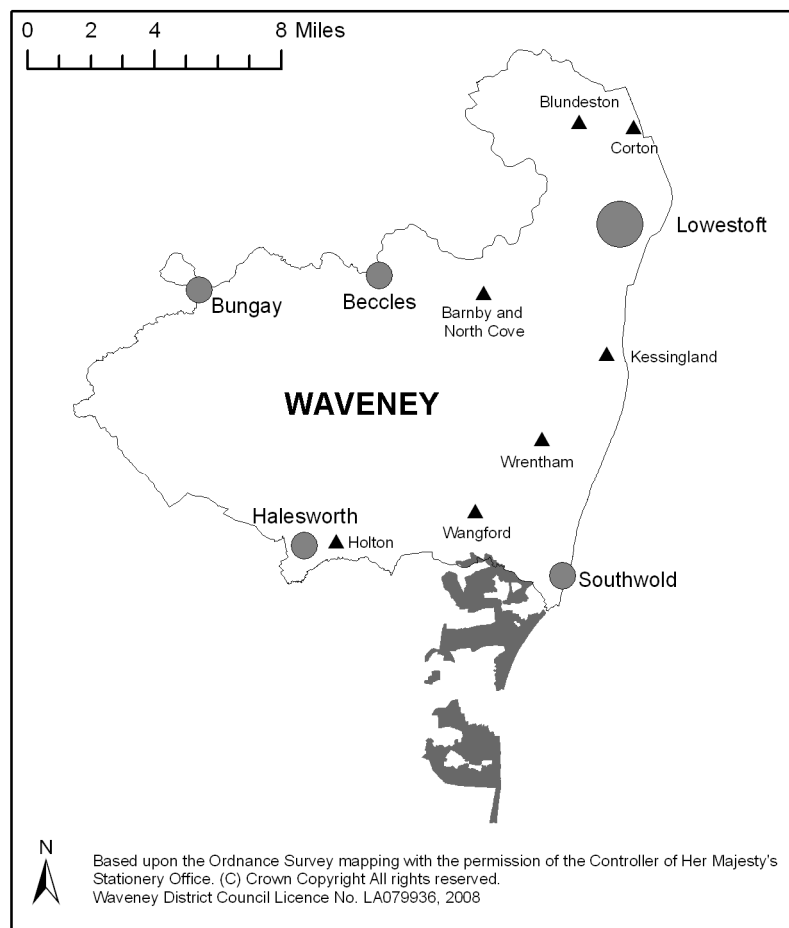
Vulnerability of site

As above. The coastline will be pushed back by natural processes, and this is being addressed in the Shoreline Management Plan. Alternative sites for reedbed creation are being sought to help offset possible future natural losses.

Conservation Objectives

- To maintain, in favourable condition, the habitats for the populations of Annex 1 species (bittern, nightjar and marsh harrier, avocet, little tern, shoveler, teal, and gadwall) and hen harrier.

2.8. Minsmere to Walberswick Ramsar



Qualifying features (habitats/species)

- Ramsar criterion 1 - site contains a mosaic of marine, freshwater, marshland and associated habitats, complete with transitional 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 - site supports a number of rare habitats and species including:
 - Nationally scarce plants and invertebrates.
 - A population of the mollusc *Vertigo angustior* (Narrow-mouthed whorl snail) on the Blyth estuary river walls.
 - An important assemblage of rare breeding birds associated with marshland and reedbeds, including:
 - Bittern, *Botaurus stellaris*
 - Gadwall, *Anas strepera* Common Teal, *Anas crecca*
 - Northern shoveler, *Anas clypeata*
 - Marsh harrier, *Circus aeruginosus*
 - Pied avocet, *Recurvirostra avosetta*
 - Bearded tit, *Panurus biarmicus*

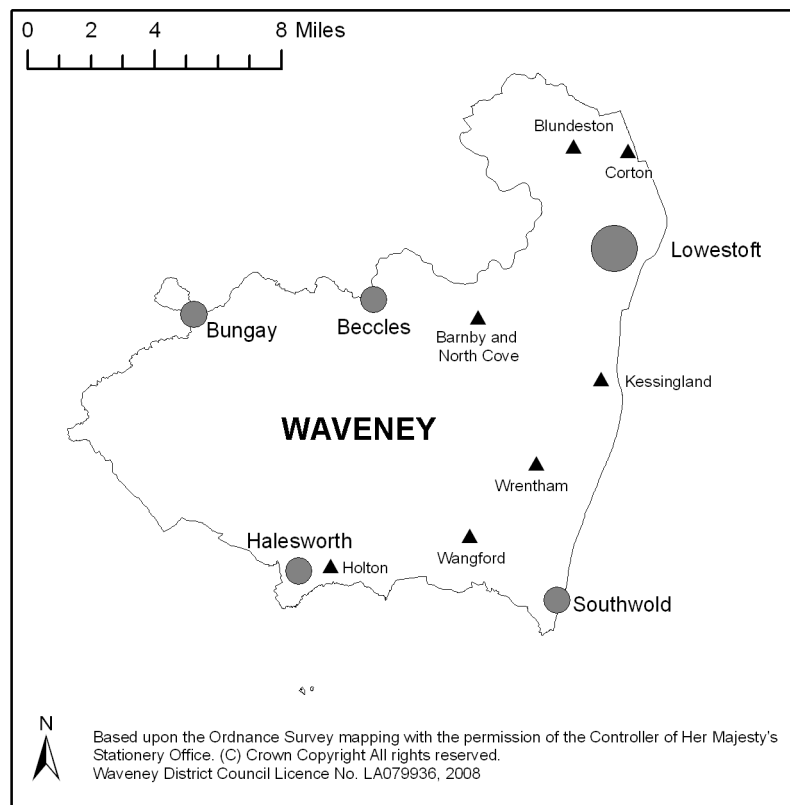
Key environmental features that support site integrity

A complex mosaic of habitats including marsh with dykes, extensive reedbeds, mudflats, lagoons, shingle, woodland and lowland heath. These support breeding and over-wintering populations of a number of rare and protected bird species.

Vulnerability of site

As above. Factors affecting the site's ecological character include erosion and coastal squeeze within the Blyth Estuary and recreational/tourism disturbance, including trampling damage to vegetated shingle and driftline communities, and disturbance of little tern nesting habitat. To mitigate erosion issues, Natural England provides advice in relation to flood and coastal protection management, which will inform the development of Estuary Strategies and second generation Shoreline Management Plans. To address recreational/tourism disturbance, Natural England will work with owners/occupiers and regulatory authorities to develop a strategy to manage visitor pressure on Suffolk vegetated shingle. These measures are likely to include temporary fencing and provision of boardwalks as well as measures to increase visitor awareness of the sensitivity of the shingle habitat (e.g. interpretation, wardening).

2.9. Dew's Ponds SAC



Qualifying features (habitats/species)

- Great crested newt, *Triturus cristatus*
 - one of the best areas in the UK.

Key environmental features that support site integrity

12 farm ponds, containing exceptionally high numbers of great crested newts on a regular basis.

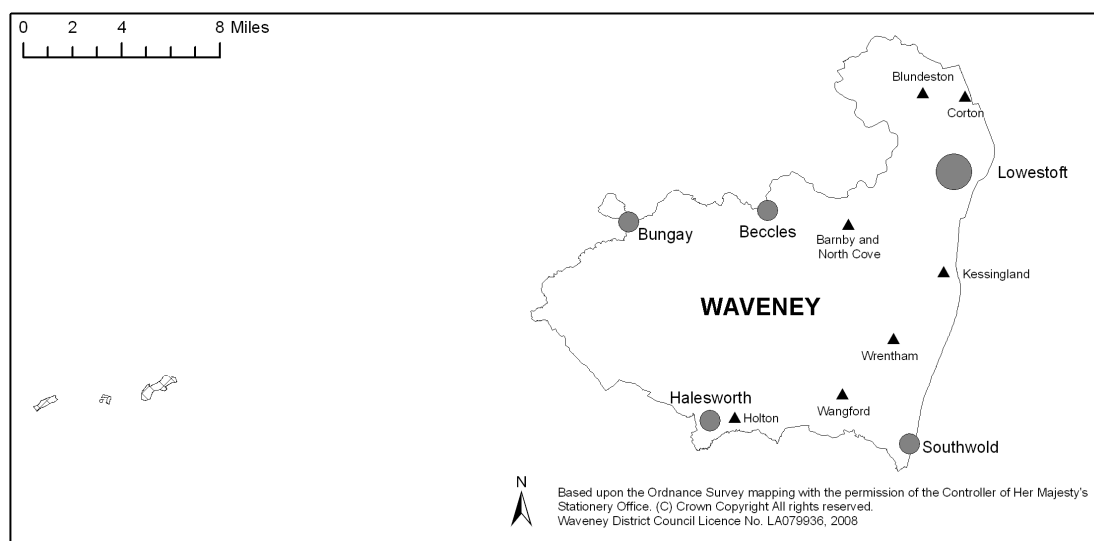
Vulnerability of site

The ponds and grasslands are in private ownership. The site is not vulnerable to water abstraction, flooding, diffuse agricultural pollution etc. and is in conservation management.

Conservation Objectives

- To maintain, in favourable condition, the habitats for the population of great crested newt.

2.10. Waveney and Little Ouse Valley Fens SAC



Qualifying features (habitats/species)

- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caerulea*)
- Calcareous fens with *Cladium mariscus* and the species of the *Caricion davallianae* (less than 1000ha in the UK)
- Demoulin's whorl snail, *Vertigo moulinsiana*
 - one of the best places in the UK for all of the above.

Key environmental features that support site integrity

This site represents *Molinia caerulea* – *Cirsium dissectum* fen-meadow associated with spring-fed valley fen systems in East Anglia, where *Molinia* grassland is very rare. The *Molinia* meadows are found here in conjunction with *Schoenus nigricans* – *Juncus subnodulosus* mire and calcareous fens with *Cladium mariscus*. Where the fen-meadow is grazed it is more species-rich, with frequent southern marsh-orchid *Dactylorhiza praetermissa*. This site occurs in the East Anglian centre of distribution of calcareous fens and contains very extensive *Cladium* beds, including managed examples, as well as stands in contact zones between small sedge mire and species-poor *Cladium*. The habitat type here occurs in a different hydrological situation to the Broads – spring-fed valley fen rather than flood-plain mire. This site is one of several representing Desmoulin's whorl snail *Vertigo moulinsiana* in East Anglia. At Weston Fen populations of this snail occur in a valley fen.

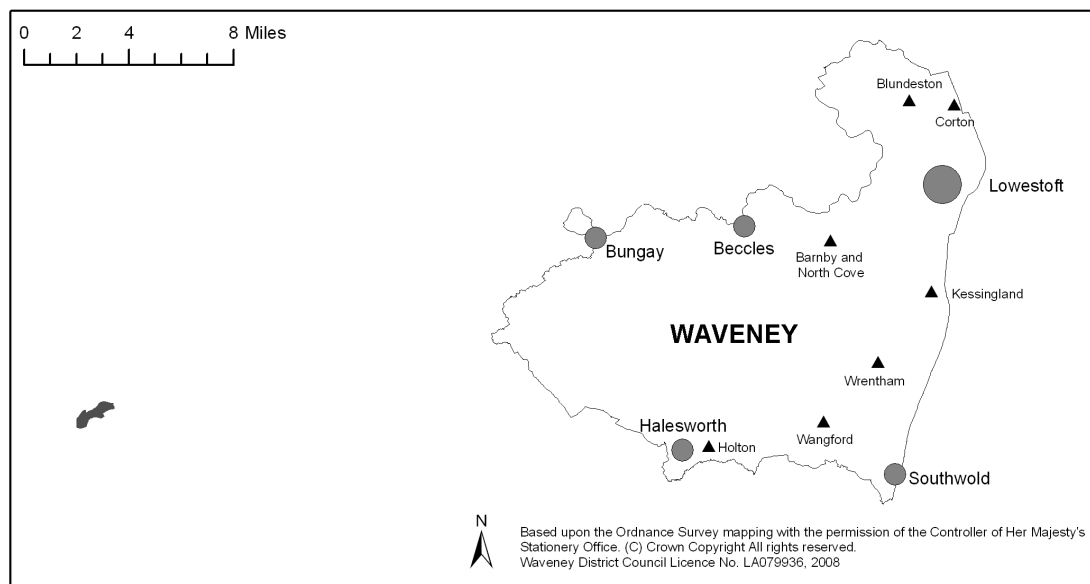
Vulnerability of site

Traditionally, peat was cut for fuel, sedge and reed were harvested for thatching, and the fen meadows were mown for hay. This management declined between 1940 and 1960. Water abstraction, over-deepening of local rivers and land drainage have reduced the groundwater inputs while increasing outflows from the fens. Consequently some areas of peat have undergone periods of drying and rotting which has released nutrients into the system and allowed scrub to progressively invade the fens. Funding has been used to encourage the reintroduction of grazing, relocate one borehole, address the over-deepening of one river, and clear rotted peat and scrub.

Conservation Objectives

- To maintain, in favourable condition, the:
 - Calcareous fens with *Cladium mariscus* and the species of the *Caricion davallianae*;
 - Molinia meadows on chalk, peat, clay or silt silt-laden soils (*Molinion caeruleae*);

2.11. Redgrave and South Lopham Valley Fens Ramsar



Qualifying features (habitats/species)

- Ramsar criterion 1 - The site is an extensive example of spring-fed lowland base-rich valley, remarkable for its lack of fragmentation.
- Ramsar criterion 2 - The site supports many rare and scarce invertebrates, including a population of the fen raft spider *Dolomedes plantarius*.
- Ramsar criterion 3 - The site supports many rare and scarce invertebrates, including a population of the fen raft spider *Dolomedes plantarius*. The diversity of the site is due to the lateral and longitudinal zonation of the vegetation types characteristic of valley mires.

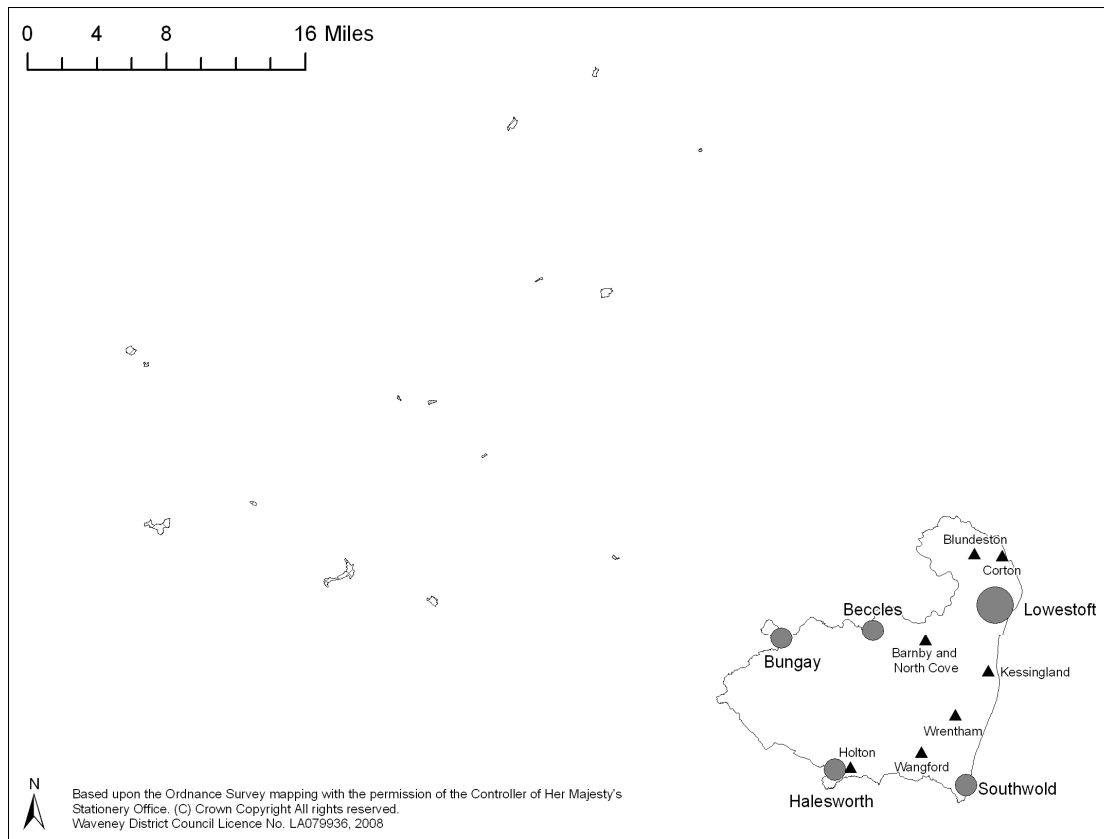
Key environmental features that support site integrity

Redgrave and Lopham Fen is an extensive area of spring-fed valley fen in the headwaters of the River Waveney. It is the largest fen in lowland England. The site is remarkable for its lack of fragmentation. The diversity of the site is due to the lateral and longitudinal zonation of the vegetation types characteristic of valley mires, such as dry birch woodland, scrub and carr, floristically-rich fen grassland, mixed fen, wet heath and areas of reed and saw sedge. The site supports many rare and scarce invertebrates, including a population of the fen raft spider *Dolomedes plantarius*.

Vulnerability of site

The site has been affected by dredging, eutrophication, and pollution from agricultural pesticides and fertilisers. It is hoped that catchment nutrient-loading will be investigated to address eutrophication and fertiliser pollution. However, the site is not reportedly subject to adverse ecological change.

2.12. Norfolk Valley Fens SAC



Qualifying features (habitats/species)

- Alkaline Fens
- Narrow-mouthed whorl snail, *Vertigo angustior*
- Demoulin's whorl snail, *Vertigo moulinsiana*
 - one of the best places in the UK for all of the above.

Key environmental features that support site integrity

A variety of valley-head spring-fed fens – very rare in the lowlands. Very ancient wetlands around pingos support a rich assemblage of rare species including Demoulin's whorl snail. A strong population of Narrow-mouthed whorl snail at Flordon Common occurs with yellow iris, which is maintained by light grazing.

Vulnerability of site

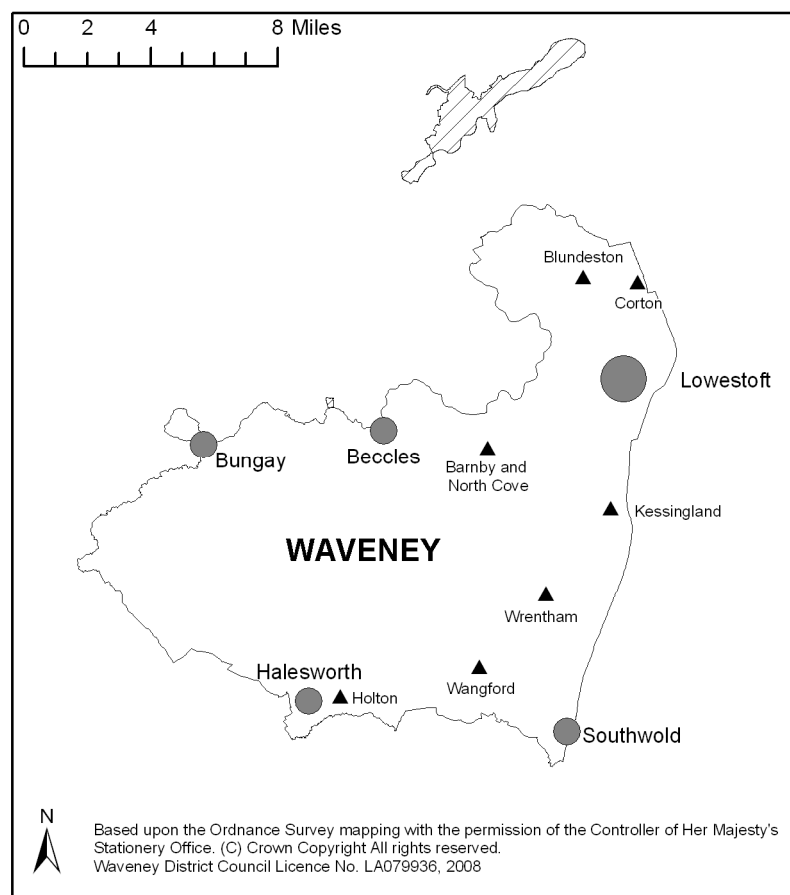
These alkaline fens are generally small in area and surrounded by intensively-farmed land. They are very vulnerable to reductions on the water table and a decrease in the volume of spring flows arising from groundwater abstraction. In recent decades scrub and woodland has spread due to the cessation of traditional cutting and grazing management and the drying-out of the fens. These sites are now largely isolated from the rural/agricultural economy of which they were once a part, and in many instances this traditional management has become uneconomic. Management agreements and payments including through Countryside Stewardship and Environmentally Sensitive Areas, help towards the reintroduction or promotion of the continued use of traditional management. Improved understanding of the water needs of these wetlands is required and is the subject of work by the Environment Agency and Natural England. Any effects of groundwater abstraction which

are identified will be addressed through appropriate licensing regimes, and the Environment Agency Review of Consents and Asset Management Plans.

Conservation Objectives

- To maintain, in favourable condition, the:
 - alkaline fens;
 - *Molinia* meadows on chalk, peat, clay or silt silt-laden soils
 - (*Molinia caerulea*);
 - European dry heaths;
 - Northern Atlantic wet heaths with *Erica tetralix*;
 - calcareous fens with *Cladium mariscus* and species of the Caricion
 - davallianae;
 - alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion alvae*); and semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
- To maintain, in favourable condition, the habitats for the population of:
 - Desmoulin's whorl snail; and
 - narrow-mouthed whorl snail.

2.13. Breydon Water SPA



Qualifying features (habitats/species)

- During the breeding season:

- Common Tern, *Sterna hirundo* (1.3% of GB breeding population)
- Over winter:
 - Tundra (or Bewick's) swan, *Cygnus columbianus bewickii* (5.6% of population in GB)
 - Eurasian Golden Plover, *Pluvialis apricaria* (2% of GB population)
 - Pied Avocet, *Recurvirostra avosetta* (3.3% of population in GB)
- On passage:
 - Ruff, *Philomachus pugnax* (7.7% of population in GB)

Key environmental features that support site integrity

An inland tidal estuary with extensive areas of mudflats exposed at high tide – the only tidal flats on the east coast of Norfolk. Extensive areas of floodplain grassland adjacent to the tidal areas. Smaller areas of saltmarsh. These habitats support internationally important assemblages of over-wintering wildfowl.

Vulnerability of site

The Breydon Water estuary is a robust ecosystem, the most sensitive feature being the high tide roost at its northern end. However efficient drainage, recent droughts and poor water management systems have adversely affected the wet grassland part of the site (Halvergate Marshes). A Water Level Management Plan and a feasibility study to overcome the water resource problems have been completed, and it is hoped that a scheme will commence to address this. The Environmentally Sensitive Area scheme has helped to raise water levels and encouraged sensitive management, particularly of the ditches. Appropriate standards of flood defence are required for the wet grassland part of the site, works are currently underway via the

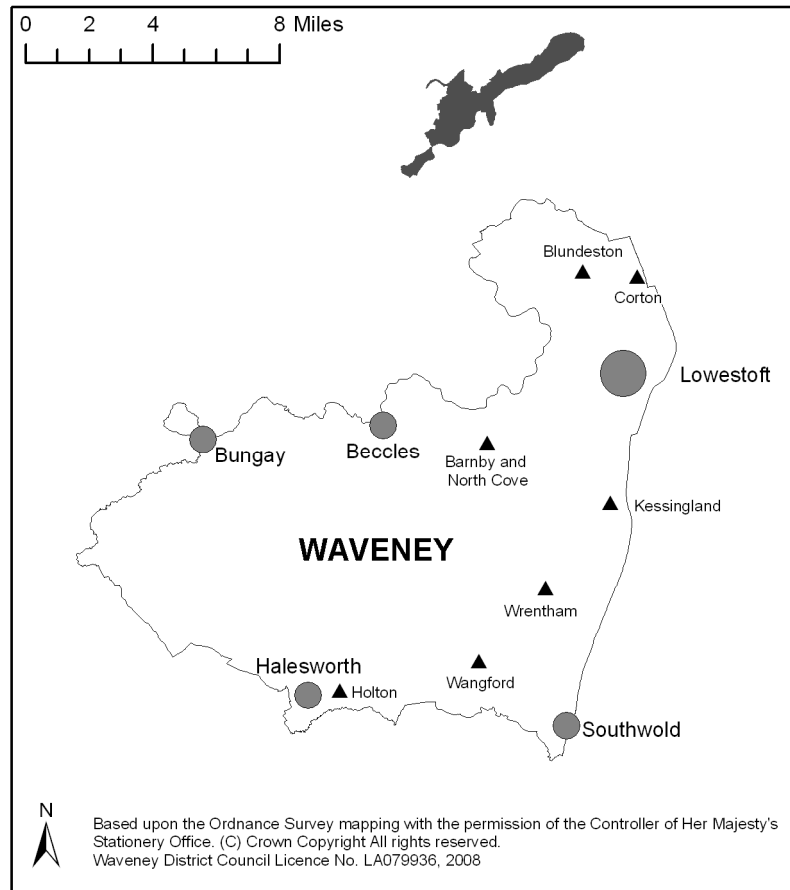
Environment Agency Broad Strategy. Breydon Water and its hinterland lie within the Broad, one of the family of National Parks. As such, it is largely free from development pressures. Future pressure for development may arise around the site, associated with Great Yarmouth, but regulation of such plans is covered by the Habitats Regulations 1994.

Conservation Objectives

- To maintain, in favourable condition, the habitats for the populations of *Annex 1* bird species (Bewick's swan, Avocet, Golden plover, Common tern and ruff) of European importance with particular reference to:
 - intertidal mudflats and estuary;
 - salt marsh; and
 - lowland wet grassland with ditches and water bodies.
- To maintain, in favourable condition, the habitats for the populations of migratory bird species (Lapwing) of European importance with particular reference to:
 - intertidal mudflats and estuary;
 - salt marsh; and
 - lowland wet grassland with ditches and water bodies.
- To maintain, in favourable condition, the habitats of the populations of waterfowl that contribute to the wintering waterfowl assemblage of European importance, with particular reference to:
 - intertidal mudflats and estuary;
 - salt marsh; and

- lowland wet grassland with ditches and water bodies.

2.14. Breydon Water Ramsar



Qualifying features (habitats/species)

- Ramsar criterion 5 - Assemblages of international importance: species with peak counts in winter, 68,175 waterfowl.
- Ramsar criterion 6 - Species/ populations occurring at levels of international importance:
 - Tundra (or Bewick's) swan, *Cygnus columbianus bewickii*
 - Northern Lapwing, *Vanellus vanellus*
 - (5 additional species identified for possible future consideration under criterion 6)

Key environmental features that support site integrity

An inland tidal estuary with extensive areas of mudflats exposed at high tide – the only tidal flats on the east coast of Norfolk. Extensive areas of floodplain grassland adjacent to the tidal areas. Smaller areas of saltmarsh. These habitats support internationally important assemblages of over-wintering wildfowl.

Vulnerability of site

As above. The site is not subject to adverse ecological change.

2.15. Outer Thames Estuary SPA



Qualifying features (habitats/species)

Over wintering:

Red-throated Diver *Gavia Stellata* (maximum count 6,486 individuals)

Key environmental features that support site integrity

The SPA is comprised of shallow coastal waters and areas in the vicinity of sub-tidal sandbanks that support red-throated diver prey, which includes small fish such as gadoids, sprat, herring and sand eel.

Vulnerability of site

The coastal waters and the habitats that support red-throated diver may be affected by the following activities:

- Physical loss of or damage to supporting habitat or habitat feature, including dredging or smothering with soil, siltation or abrasion.
- Visual or noise disturbance.
- Toxic contamination with pesticides, TBT, PCBs, heavy metals, hydrocarbons or radionuclides.
- Non-toxic contamination with nutrients, warmer water, sediments or changes in salinity.
- Introduction of pathogens or non native species.
- Accidental turbine strike, entanglement or bycatch.
- Extraction and removal of prey species (by commercial and recreational fishing).

Conservation objective

Subject to natural change, to maintain in favourable condition, the internationally important populations of the regularly occurring Birds Directive Annex I Species:

- Red-throated diver *Gavia Stellata* and its supporting habitats and prey species.

3. Local Development Orders

- 3.1 The Great Yarmouth and Lowestoft Enterprise Zone (EZ) was designated by the Government following a bid from the New Anglia Local Enterprise Partnership in early 2011. The Enterprise Zone is founded on creating economic growth through attracting businesses operating within the Energy, Offshore Engineering, Ports & Logistics sectors, and supporting services, into the six EZ sites within the two local authority areas.

Within Waveney there are four EZ sites:

- Mobb's Way, Lowestoft
- Ellough
- South Lowestoft Industrial Estate, Lowestoft
- Riverside Road, Lowestoft

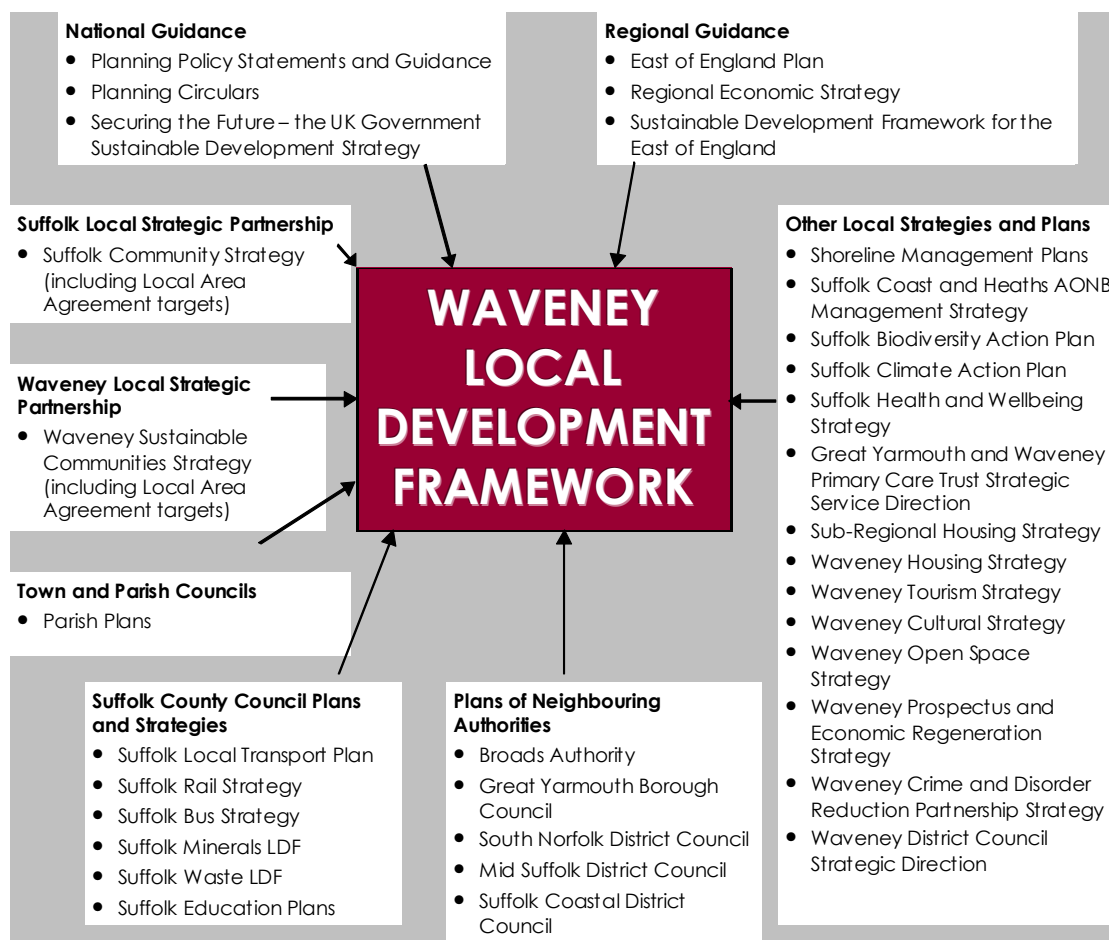
- 3.2 A condition of the EZ being designated was that planning controls are "simplified" for the areas covered by the EZ. The Government expectation is that a form of simplified planning regime shall be in place on commencement of the EZ which is the 1st April 2012. Various forms of simplified planning controls exist including, One Stop Shops to provide a single point of contact for developers, small business surgeries, MOU with statutory agencies, reduction of information sought for Planning applications, Planning Performance Agreements and Local Development Orders (LDOs). LDOs are generally considered to offer significant benefits and provide the most effective route for delivery of a simplified regime. Therefore, LDOs are being framed to facilitate delivery of the EZ.
- 3.3 Providing development is in accordance with all conditions contained in an LDO and construction accords with any associated design code, LDOs allow development to be undertaken without the need for submission of a formal planning application. One of the conditions to be contained within the LDOs is a requirement that the building should be occupied by a business operating within or supporting the target sectors. Where this is not the case development would not be in accordance with the LDO and planning permission will be required. Development permitted by an LDO must still comply with all other legislative requirements.
- 3.4 LDOs are being prepared to cover the whole of the EZ sites listed above, plus land adjacent in the case of the Riverside Road site. An LDO is also being prepared for the PowerPark area of Lowestoft given its priority focus for the key sectors. All these sites, with the exception of one or two small areas, are either allocated for employment use in the Site Specific Allocations document (adopted January 2011) or the Area Action Plan (recommended for adoption 25 January 2012) or have planning permission for employment use (Mobb's Way). Within the bounds of providing simplified planning procedures the proposed LDOs and design codes seek to implement the policy requirements already established by the Council.
- 3.5 The two above mentioned Development Plan Documents have already been subject to screening assessments that concluded in each case a full appropriate assessment was not required. It is envisaged that the type, nature and scale of development that takes place on the sites through the LDOs will be very similar to that envisaged in the Documents. In addition, development that requires an Environmental Statement under the Environmental Impact Assessment Regulations 2011 is excluded from the LDOs. However, as a precaution, for the following reasons the screening for the above sites has been reviewed:

1. The LDOs seek to simplify the planning approach to these sites and the implications need to be considered;
 2. The Habitats Regulations Screening undertaken for the Site Specific Allocations document was undertaken in 2009 and since then the Outer Thames Estuary SPA has been formally designated;
 3. The area covered by the South Lowestoft Industrial Estate extends beyond the allocations in the Site Specific Allocations Document (adopted January 2011)/existing industrial area. (The Ellough site extends beyond the Site Specific Allocation but the extension is part of the existing industrial estate).
- 3.6 At the time the Site Specific Allocations document was prepared the main part of the Mobb's Way, Oulton EZ/LDO site (3.2 ha) had planning permission. Therefore it was not included as a site allocation and did not undergo screening. More recently works have commenced to service the site. The smaller part of the LDO site (1.5ha) is part of the existing industrial estate area and currently in employment use for open storage. Given the status of this relatively small site, i.e. either in employment use or subject to planning permission for employment uses similar to those in the LDO and commenced in part, and the limitations in the LDO that exclude development requiring an Environmental Statement under the Environmental Impact Assessment Regulations 2010, it is not considered that screening for any potential impacts on Natura 2000 sites is necessary.
- 3.7 Section 5 sets down the screening assessments and the likely significant impacts on Natura 2000 sites that were undertaken as part of the preparation of the Site Specific Allocations and Area Action Plan documents. This is followed by a table considering any additional significant impacts based on the extent and content of the four LDOs (i.e. excluding Mobb's Way for the above reasons). The screening of the LDOs reveals no additional significant impacts on any of the Natura 2000 sites.

4. Other key plans and strategies

- 4.1 When considering future development in Waveney and formulating policies in the Core Strategy, Site Specific Allocations, Development Management Policies and Lake Lothing and Outer Harbour Area Action Plan, a range of other plans and strategies were taken into account. In turn, given the focus of the LDO sites on seeking to implement the Development Plan Policies, these plans and strategies have therefore indirectly influenced the preparation of the Local Development Orders. A selection of key documents is shown in Figure 1 below.

Figure 1. Key plans and strategies influencing the Waveney Local Development Framework



- 4.2 It has already been concluded that an Appropriate Assessment is not needed for the Site Specific Allocations document and more latterly the Area Action Plan in combination with other plans and strategies. This view was supported by Natural England.
- 4.3 The screening of the individual LDOs reveals that the potential impacts on Natura 2000 sites are no more significant than when the sites were previously screened as part of the preparation of the above Development Plan Documents. In terms of the cumulative impact together with other plans and strategies, the Council is not aware of any other more up-to-date and relevant strategies that would change the conclusions previously reached in terms of potential cumulative impact on Natura 2000 sites.
- 4.4 Therefore, having taken into account the screening of each LDO with it's limitations, conditions and design code and their likely impact together and with other plans and strategies it is concluded that there will not be a significant impact on any Natura 2000 site.

5. Assessment of likely effect of the Local Development Orders on Natura 2000 sites

The following table is an extract from the 'Habitats Regulations Screening Report – to accompany the Site Specific Allocations Proposed Submission (Final Draft) Document January 2010 (revised January 2011)', providing the screening assessment for the larger parts of the South Lowestoft Industrial Estate and Ellough Local Development Order areas. This report had concluded that **'the Site Specific Allocations are not considered to have any significant impact on European sites, either alone or in combination with other plans and strategies. Therefore it will not be necessary to carry out a full Appropriate Assessment.'** This view was supported by Natural England.

Extract from - Table 3. Likely significant impacts of the Site Specific Allocations

Site Specific Allocation	Assessment of potential impact on Natura 2000 sites	Natura 2000 sites that could possibly be affected by Site Specific Allocation	Likely significant effect identified from Site Specific Allocations DPD?	Likely significant effect identified in combination with other plans?	AA needed?
LOW2 Land south of South Lowestoft Industrial Estate, Gisleham	This greenfield site has been allocated for employment use adjacent to the South Lowestoft Industrial Estate and has been carried forward from the Waveney Interim Local Plan (2004). Site LOW2 is situated approximately one kilometre from the shoreline with the A12 located in between. Water containing pollutants reaching the coast through surface water run-off and infiltration should not be significant with pollution controls implemented in accordance with PPS23: Planning and Pollution Control. Hence, this is not expected to be detrimental to the Benacre to Easton Bavents Lagoons SAC and Benacre to Easton SPA sites to the south. It has been identified through previous planning applications that there is a need to increase the capacity of the main foul and surface water sewerage water systems and their associated pumping stations to cope with new development. The main access to the site is from the A12 and there will be an increase in the number of vehicles using the road network in the area. As infrastructure is already present new infrastructure development should be limited. Relative to the total number of vehicles using the road system in the area this increase is not expected to be significant.	Benacre to Easton Bavents Lagoons SAC, Benacre to Easton SPA	No	No	No

Site Specific Allocation	Assessment of potential impact on Natura 2000 sites	Natura 2000 sites that could possibly be affected by Site Specific Allocation	Likely significant effect identified from Site Specific Allocations DPD?	Likely significant effect identified in combination with other plans?	AA needed?
	Within the site specific policy accompanying the allocation, there are conditions that require landscaping and native planting that may increase biodiversity and landscape connectivity. Located approximately three miles east of the Broadland Ramsar, Broadland SPA and Broads SPA sites, there is unlikely to be and significant impact on these European sites.				
BEC1 Ellough Airfield	Site BEC1 is an allocation for employment use. It is brownfield land and is located in close proximity to existing employment uses. Previous planning permissions for employment uses have been granted on this site, however, none have been implemented. The Environment Agency requires pollution control measures for any development to prevent ground water contamination. The provision of employment land could increase the amount of HGV traffic travelling through Beccles Town Centre until development of the Beccles Southern Relief Road takes place. The requirement for a Transport Assessment will ensure traffic levels and potential impacts are adequately controlled and therefore limited. The increase in traffic volumes may have local impacts, however, overall the increase is likely to be relatively small when taking into consideration existing traffic volumes, and is unlikely to have any significant effect on Natura 2000 sites.	Broads SAC, Broadland SPA, Broadland Ramsar	No	No	No

The following table is an extract from the 'Habitats Regulations Screening Report of the Lowestoft Lake Lothing & Outer Harbour Area Action Plan Submission Document November 2010' providing the screening assessment for the Riverside Road and PowerPark Local Development Order areas. This report also concluded that **the sites are not considered to have any significant impact on European sites, either alone or in combination with other plans and strategies and that it would not therefore be necessary to carry out a full Appropriate Assessment.** Again, this view was supported by Natural England.

Extract from - Table 3. Likely significant impacts of policies and plans in the Lake Lothing & Outer Harbour AAP Draft Document

Policy or Plan	Description and assessment of potential impact on Natura 2000 sites	Sites that could possibly be affected by policy	Likely significant effect identified	Likely significant effect identified in	AA needed?
Strategic Site Proposals			No	No	No
SSP1 PowerPark	The establishment of an energy hub located around the outer harbour and existing industrial area north of Hamilton Dock around existing OrbisEnergy building. No change over existing situation and no predicted significant effect on Natura 2000 sites.	None	No	No	No
SSP3 Kirkley Waterfront and Sustainable Urban Neighbourhood	Comprehensive mixed-use redevelopment to create a new sustainable urban neighbourhood including housing, waterfront industry and employment uses, social and community facilities, open space, marina and retirement village. The site is adjacent to Oulton Broad at the southern end of the Broads SAC and Broadland SPA/Ramsar sites however no changes to the present situation are anticipated. There is potential for residents to visit Natura 2000 sites throughout the sub-region, however the impact of this has been assessed to be insignificant in the HRA of the Core Strategy.	All in table 1	No	No	No

Taking into account the above screening already undertaken and the position in relation to Mobb's Way, the following Table 3 provides a review of any additional significant impacts for each site.

Table 3. Likely additional significant impacts of the Local Development Orders over and above the findings of existing screening

Draft Local Development Order	Assessment of potential impact on Natura 2000 sites	Natura 2000 sites that could possibly be affected by the Local Development Order	Likely significant effect identified from Local Development?	Likely significant effect identified in combination with other plans?	AA needed?
South Lowestoft Industrial Estate	<p>The extent of the additional land over and above the Site Specific Allocation is primarily part of the existing industrial estate. The remaining area is not significant.</p> <p>This LDO includes a limitation to exclude Schedule 2 development under the Environmental Impact Assessment Regulations 2011.</p> <p>The LDO conditions and associated design code seek to control drainage, flood risk, potential land contamination, noise, design and traffic impact and so the impact of the anticipated employment uses are not predicted to have a significant effect on any Natura 2000 sites.</p>	Benacre to Easton Barents Lagoons SAC, Benacre to Easton SPA Outer Thames Estuary SPA	None	None	No
Ellough	<p>The extent of the additional land over and above the Site Specific Allocation is part of the existing industrial estate.</p> <p>This LDO includes a limitation to exclude Schedule 2 development under the Environmental Impact Assessment Regulations 2011.</p> <p>The LDO conditions and associated design code seek to control drainage, flood risk, potential land contamination, noise, design and traffic impact and so the impact of the anticipated employment uses are not predicted to have a significant effect on any Natura 2000 sites.</p>	Broads SAC, Broadland SPA, Broadland Ramsar	None	None	No

PowerPark	<p>This LDO includes a limitation to exclude Schedule 2 development under the Environmental Impact Assessment Regulations 2011.</p> <p>Since the previous screening for this site, the Outer Thames Estuary SPA designation has been confirmed. The PowerPark area has been in use for many years as an employment area. There are a wide range of existing employment uses. The allocation as a PowerPark, with a focus for energy and port related uses, will continue the employment nature of this area. The LDO conditions and associated design code seek to control drainage, potential land contamination, noise, design of buildings, traffic impact and height of wind turbines. So any potentially adverse impacts on the Red Throated Diver will be controlled. Therefore, the impact of the anticipated employment uses are not predicted to have a significant effect on any Natura 2000 sites.</p>	Outer Thames Estuary SPA	None	None	No
Riverside Road	<p>This LDO includes a limitation to exclude Schedule 2 development under the Environmental Impact Assessment Regulations 2011.</p> <p>This site is part of the Kirkley Waterfront and Sustainable Urban Neighbourhood Policy SSP3 of the Area Action Plan. The LDO conditions and associated design code seek to control drainage, flood risk, potential land contamination, noise, design and traffic impact and so the impact of the anticipated employment uses are not predicted to have a significant effect on any Natura 2000 sites.</p>	All in table 1	None	None	No

6. Summary and conclusions

The Local Development Orders seek to facilitate the delivery of development focused on and supporting the Energy, Offshore Engineering, Port and Logistics sectors. The type and nature of development is likely to be similar to that envisaged in the Development Plan policies that have already been screened and judged to have no significant impacts on Natura 2000 sites. Further consideration and screening of the LDO sites has taken place, in the light of variations with the allocated sites and changing circumstances since 2009. Given the limitations and conditions in the LDOs and the Design Code requirements it is still the view that no significant effects on Natura 2000 sites are envisaged.

In conclusion, the draft Local Development Orders are not considered to have any significant impact on European Sites or European Offshore Marine Sites, either alone or in combination with other plans and projects. A full Appropriate Assessment is therefore not required.

List of abbreviations

GB	Great Britain
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

Sources of background information

- Natura 2000 Standard Data Forms and Information Sheets on Ramsar Wetlands, at www.incc.gov.uk - Details of protected sites.
- East of England Regional Spatial Strategy Habitats Directive Assessment Report, December 2006, ERM Ltd, at www.gos.gov.uk/goee/docs/193657/193668/Part2 - Conservation objectives for protected sites.

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