

# **Habitats Regulations Assessment (HRA) Methodology and Screening Report**

**Version screened:  
Proposed Submission Local Plan**

**April 2016**

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## Executive Summary

The purpose of a Habitats Regulations Assessment (HRA) is to assess the impacts of a land use plan, alone and in combination with the effects of other plans and projects, against the conservation objectives of relevant European Sites to determine whether it would adversely affect the integrity of these sites in terms of habitats and species.

Where potential significant negative effects are identified, alternative options should be examined to avoid any potential damaging effects.

The policies of the Central Lincolnshire Proposed Submission Local Plan have undergone Habitats Regulations Assessment (HRA) screening. The HRA screening process has considered the potential for likely significant effects from all the policies within the Central Lincolnshire Proposed Submission Local Plan. This HRA screening report documents this screening process through the series of assessment steps.

It was found that the Central Lincolnshire Local Plan mitigated against all of its own potential significant negative effects, which can be taken together with the positive mitigating impacts of other plans and projects which address, avoid or reduce potential significant negative effects on European Sites.

All elements of the Central Lincolnshire Proposed Submission Local Plan have therefore been 'screened out', and it can be concluded that the plan would not be likely to have a significant negative effect on a European Site alone, or in combination with other plans for projects. It is therefore recommended that no further assessment work is required.

Natural England will be consulted on this screening recommendation prior to the formal submission of the Local Plan to the Secretary of State for Communities and Local Government.

# 1. Introduction

## 1.1 [Background to the Central Lincolnshire Local Plan](#)

- 1.1.1 The City of Lincoln Council, North Kesteven and West Lindsey District Councils, and Lincolnshire County Council, known collectively as the Central Lincolnshire Authorities, are working together under the Central Lincolnshire Joint Strategic Planning Committee (CLJSPC) and through the Central Lincolnshire Local Plan Team to prepare a new Local Plan for Central Lincolnshire.
- 1.1.2 The Central Lincolnshire Local Plan area is the combined administrative local authority areas of the City of Lincoln, North Kesteven District and West Lindsey District Councils.
- 1.1.3 When adopted, the Local Plan will provide the planning framework to guide development in the Central Lincolnshire area until 2036. It will replace the current Local Plans for the City of Lincoln, North Kesteven and West Lindsey.
- 1.1.4 The formally established CLJSPC (the 'Joint Committee') is a statutory local planning authority. It is comprised of elected representatives from the City of Lincoln, North Kesteven District Council, West Lindsey District Council and Lincolnshire County Council and is responsible for agreeing local planning policy documents that relate to the delivery and management of development in Central Lincolnshire.
- 1.1.5 A Preliminary Draft version of the Central Lincolnshire Local Plan was subject to public consultation in October / November 2014. This version of the plan did not include figures for housing or job growth, nor identify any sites to meet housing or employment need.
- 1.1.6 Following the consultation, the draft of the Local Plan was revised in light of comments received, new evidence and changes to national policy and guidance. This revised draft, the Further Draft Local Plan, was subject to public consultation in October / November 2015.
- 1.1.7 The Further Draft Local Plan proposed the delivery of 36,960 new dwellings as well as employment growth and identified sites, including Sustainable Urban Extensions, which could meet these needs.
- 1.1.8 Following the consultation on the Further Draft Local Plan, revisions were made in light of comments received, latest evidence, and any updates to national policy and guidance. The Proposed Submission Local Plan retains the 36,960 dwelling target, and allocates sites for around 30,000 dwellings (some with existing permission) and assumes around 4,000 dwellings will come forward as windfall.
- 1.1.9 The timetable for the production of the Central Lincolnshire Plan can be found in the Local Development Scheme (June 2015) which is available on the Central Lincolnshire website.

## 1.2 Habitats Regulations Assessment: legislation and requirements

The Habitats Directive<sup>1</sup> states (Article 6, paragraphs (3), (4) and (5)):

- “3. Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.
4. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.
5. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

1.2.1 In accordance with the Habitats Directive, Local Planning Authorities preparing plans must assess the impacts of their plan, in combination with the effects of other plans and projects, and determine whether it would adversely affect the integrity of any European Site within or outside the plan area. This is known as a ‘Habitats Regulations Assessment’ (HRA).

1.2.2 The HRA process consists of two key exercises:

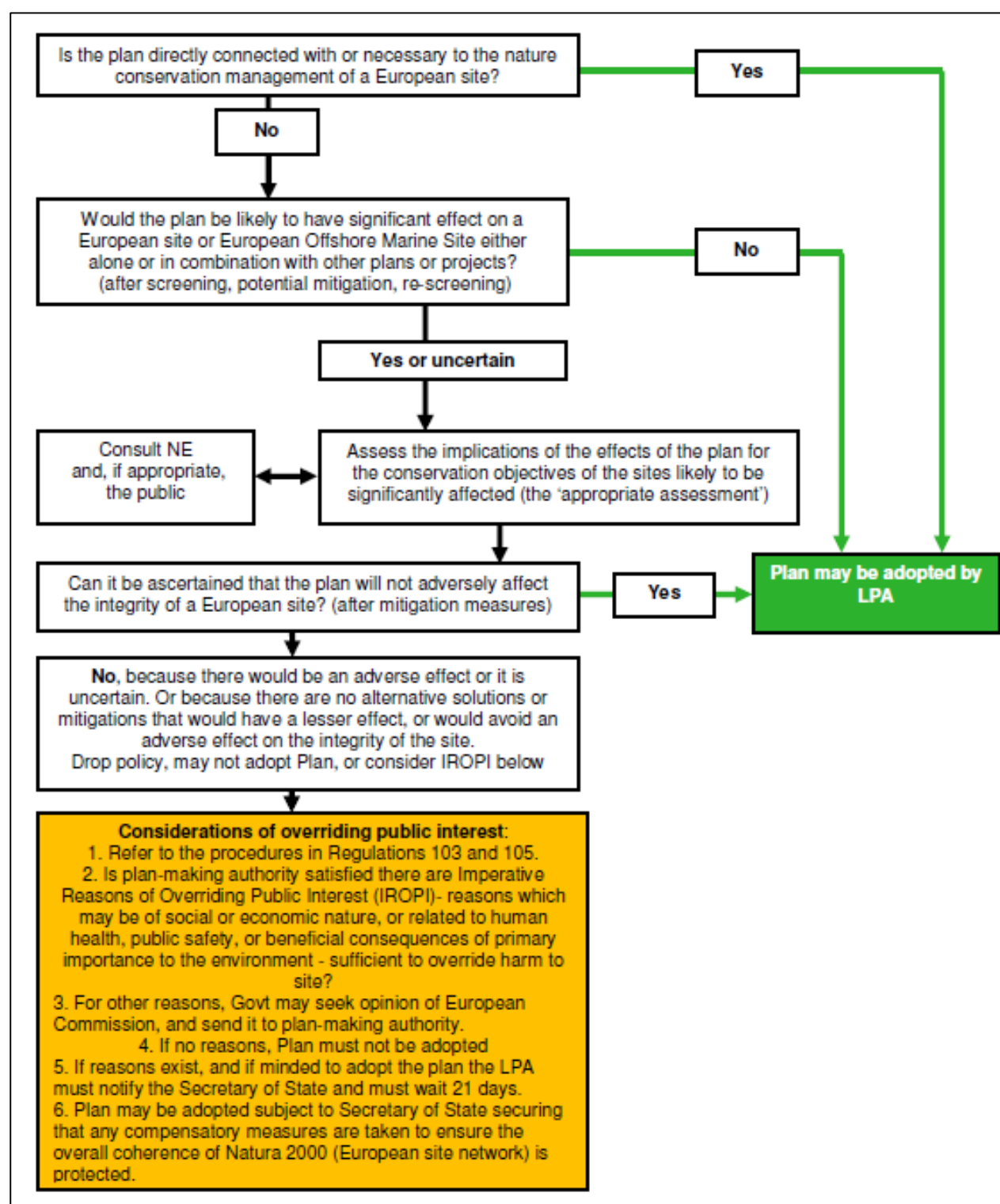
- 1) Screening: an initial ‘screening’ test to assess the predicted impacts of the Local Plan policies against the conservation objectives of the relevant European Sites and conclude whether the policies, either alone or in- combination with other plans and projects, have the potential for likely significant effects on European Sites.
- 2) Appropriate assessment (AA): this is only required where the screening process determines that the plan is likely to have a significant effect on a European Site. An appropriate assessment assesses the impacts of the proposed plan / policies against the conservation objectives of the relevant European Sites. Should the appropriate assessment identify significant negative effects, alternative plan options should be examined to avoid any potential damaging effects: the plan may only be adopted under such circumstances if there are imperative reasons of overriding public interest (IROPI).

1.2.3 Figure 1 below summarises the general procedural requirements of the 2010 Habitats Regulations.

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<sup>1</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. The Habitats Directive is primarily transposed in England under the Conservation of Habitats and Species Regulations 2010.

Figure 1: Habitats Regulations 2010- General Procedural Requirements



1.2.4 This report is an initial 'screening' assessment to identify the impacts of the policies in the Proposed Submission Local Plan against the conservation objectives of the European sites that could potentially be affected by the Plan. If this screening exercise reveals that the plan has the potential to have a significant negative effect on the integrity of a European site, an appropriate assessment must be undertaken.

1.2.5 European sites are:

- special areas of conservation (SACs);
- special protection areas (SPAs);
- sites of community importance (SCIs); and
- candidate SACs (cSACs).

The following are also treated as European sites in accordance with national policy<sup>2</sup>:

- potential SPAs (pSPAs);
- listed Ramsar sites; and
- proposed Ramsar sites.

Where the term 'European Sites' is used throughout this report, it is in reference to all of the above.

## 1.3 [Screening report: aims](#)

1.3.1 The aims of this screening report are to:

- 1) Outline the methodology used to screen the Central Lincolnshire Local Plan; and
- 2) Present the results of the HRA screening exercise.

1.3.2 To achieve these aims, this report:

- Identifies the relevant European sites considered;
- Identifies the conservation objectives for each of these sites;
- Assesses the potential effects of the Local Plan policies, both alone and in conjunction with each other; and
- Identifies any other plans and projects which, in combination with the Local Plan, may cumulatively impact upon a European site and provides a screening opinion on these.

## 2. Methodology

### 2.1 [Adopted screening approach](#)

2.1.1 Under the provisions of the Habitats Directive, as translated into UK law by the Habitats Regulations, a competent authority must carry out an assessment of whether a plan or project will significantly affect the integrity of any European Site, in terms of impacting the site's conservation objectives.

2.1.2 The Habitat Regulations do not prescribe a particular methodology for carrying out the assessment of plans, or how to report the outcomes of such assessments.

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<sup>2</sup> ODPM Circular 06/2005, para 5 (August 2005) and NPPF, para 118 (March 2012)

- 2.1.3 The term Habitats Regulation Assessment (HRA) is frequently used to encompass the decision making process as to whether the Plan should be subject to appraisal; the screening process for determining whether an 'appropriate assessment' is required; as well as any appropriate assessment that may be required. An appropriate assessment is only required where the plan-making body determines that the plan is likely to have a significant negative effect on a European site, either alone or in combination with other plans or projects, and the plan is not directly connected with or necessary to the management of the site.
- 2.1.4 The process of HRA is based on the application of the precautionary principle and therefore requires those undertaking the exercise to demonstrate that the plan will not have a significant impact on the European Site's conservation objectives. Evidence should be presented to allow a determination of whether the impacts of a land use plan against the conservation objectives of a European Site would adversely affect the integrity of that site. Where effects are considered uncertain, the potential for adverse impacts should be assumed.
- 2.1.5 During earlier work undertaken by the Central Lincolnshire (CL) Local Plan Team on the now withdrawn Core Strategy, the team were advised by David Tyldesley & Associates to use the latest general approaches and principles set out in the HRA guidance for Scotland. The Scottish HRA guidance, 'HRA of Plans - Guidance for Plan-Making Bodies in Scotland' (August 2010) was endorsed by various bodies, including the RTPI.
- 2.1.6 The CL Local Plan Team consider that the general principles and approaches set out in this approved Scottish Guidance are transferable, and can be applied to HRA in England, subject to minor revisions.
- 2.1.7 The CL Local Plan Team has therefore selected to use the general methodology set out in the HRA guidance for Scotland (August 2010), as the primary base for the approach to HRA of the Central Lincolnshire Local Plan. References have been revised appropriately to tailor it to the England Habitat Regulations 2010 and refer to Natural England rather than Scottish Natural Heritage.
- 2.1.8 The Habitats Regulations require the plan making/ competent authority to consult the appropriate nature conservation body, which is Natural England (NE). The plan-making authority (the Central Lincolnshire Joint Strategic Planning Committee) will consult Natural England for the purposes of the assessment, and will have regard to any representations made by them, within such reasonable time as the plan making authority specify.

## 2.2 Stages

- 2.2.1 The HRA process is detailed in Appendix A and is summarised in Table 1 below.



Table 1: Stages in HRA Process

<b>Stage A - Identify relevant European Sites and other plans and projects</b>	
<ol style="list-style-type: none"> <li>1) Identify European Sites to be considered in assessment;</li> <li>2) Gather information on these sites (qualifying interests; conservation objectives; condition of site);</li> <li>3) Identify other plans and projects which may, in combination with the Local Plan, cumulatively impact upon the European Sites identified.</li> </ol>	
<b>Stage B – Screening</b>	
Screening for likely significant effects	<ol style="list-style-type: none"> <li>1) Description of the Local Plan objectives.</li> <li>2) Screening of individual Local Plan policies: identify the potential effects of the Plan on the European Sites and determine if any of these effects are likely to be significant.</li> <li>3) Consider if the effects of the other plans and projects identified at Stage A are likely, in association with the Local Plan, to have any significant effects on the European Sites.</li> <li>4) Screening of Local Plan policies in combination with each other and the plans and projects identified at Stage A.</li> <li>5) If following step 4 significant effects remain likely, identify and apply mitigation measures.</li> <li>6) Re-screen.</li> <li>7) If after the above steps no significant effects are identified, consult Natural England on the screening recommendation that the further Appropriate Assessment stages of the HRA are not necessary.</li> <li>8) If, after step 6) one of the following applies, proceed to Stage C: <ul style="list-style-type: none"> <li>• significant effects are still likely; or</li> <li>• Natural England disagrees with the screening recommendation that an AA is not necessary; or</li> <li>• uncertainty exists.</li> </ul> </li> </ol>
<b>Stage C - Appropriate Assessment</b>	

Appropriate Assessment	<ol style="list-style-type: none"> <li>1) Evaluate impact of the Local Plan on European Sites in light of their conservation objectives.</li> <li>2) Where an option has been found to have a significant adverse effect on the integrity of a European site, consider how effects on site integrity could be avoided by changing the plan to adopt an alternative approach and / or identify mitigation measures which can be adopted to minimise or cancel out the adverse effect. If the significant negative effects can be removed or cancelled out, and subject to the positive outcome of consultation with Natural England, the Plan may be adopted.</li> <li>3) After mitigation measures have been exhausted and it is shown that the Plan is still likely to have potentially negative effects, and in absence of any other alternative solution: <ul style="list-style-type: none"> <li>• the relevant policy / approach should be dropped, and the remaining Plan policies (which would not have negative effects) proceed to adoption; or</li> <li>• the Plan should not be adopted; or</li> <li>• in exceptional circumstances, if the pursuit of an option is justified by 'imperative reasons of overriding public interest' (IROPI), consideration can be given to proceeding in the absence of alternative solutions. In such event, compensatory measures must be identified to offset negative impacts.</li> </ul> </li> <li>4) Consult Natural England on the outcome of the Appropriate Assessment.</li> </ol>
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2.2.2 For a Local Plan, the level of detail concerning the developments that will be delivered is usually insufficient to make a highly detailed assessment of the significance of effects. The HRA of the Local Plan is therefore proportionate to the general strategic level of the policies/proposals in the Plan.

## 2.3 [Screening categories](#)

2.3.1 Table 2 outlines the screening categories that will be used at Stage B to classify the potential effects of the Local Plan.

2.3.2 These screening categories will be used to 'screen out' policies / parts of the Plan not likely to have a significant effect on a European Site (such policies / aspects will be categorised as 'N1' – 'N7') and to 'screen in' policies / aspects of the Plan that have potential to have a significant effect on a European Site (such policies / parts will be categorised as 'P').

2.3.3 When considering significant effects, the European Court of Justice (2004, para 4.2.1 of 2010 Guidance) indicated that effects which would not undermine the conservation objectives of a European Site should not be regarded as significant: thus, where a policy / part of the Plan may potentially have a *positive* significant effect on a European Site, this policy / part can be 'screened out' because the impact would not be negative.

2.3.4 It is anticipated that the following activities could have significant adverse effects upon the integrity and/ or conservation objectives of a European Site:

- Increase in water abstraction levels (e.g. to supply new housing), which can impact upon river flow and water quality.
- Changes to groundwater flow as a result of foundations and buildings.
- Increased surface run off as a result of new non-permeable surfaces which can result in reduced water quality and pollution and lead to contamination of watercourses.
- An increase in waste water and pressure on sewage infrastructure can lead to reduced water quality.
- Additional take up of land, loss of permeable surfaces and alterations to topography may have flood risk impacts.
- Recreational activity and visitor pressure resulting in disturbance to habitats, air pollution caused by increased traffic movements, noise pollution and contamination.
- Increase in emissions and air pollution as a result of increased traffic movements (arising from construction and occupation).
- Changes to air quality which could affect vegetation and harm species.

Table 2: Screening categories for initial HRA screening of policies and objectives: categorising the potential effects of the plan

SCREENING CATEGORY	SCREENING TYPES
<b>'N' categories: screened out or eliminated elements of the Plan</b> Plan elements assessed as not likely to have a significant effect on a European Site if implemented.	
N1	<b>General policy statement</b> General strategy statements and general criteria based policies not likely to have a significant effect on a European Site can be screened out provided the policy does not promote development specific to land allocations.
N2	<b>Policy refers to projects that are not proposals generated by the plan and therefore excluded from the assessment</b> For example, policies which include references to transport / road proposals or infrastructure projects which are identified / provided for by another plan and possibly by another authority (and will thus have been subject to HRA for the other plan).
N3	<b>Policy intended to protect, conserve or enhance the natural (including biodiversity) built or historic environment</b> Policies intended to protect or enhance the natural or built environment, and such protection / enhancement will not be likely to have any negative effect on a European Site.
N4	<b>Policy itself will not lead to development or other change</b> Typically qualitative or design criteria policies which guide development or other kinds of change and cannot directly lead to development or change themselves. For example, a policy may protect minerals / housing / sports facilities from loss / change, but the policy itself does not provide for their positive extraction / growth / development or change.
N5	<b>Policy makes general provision for change / promotes development, but would have no conceivable effect on a</b>

	<p><b>European site</b> Policies that promote development, but have no likely significant (negative) effect because there is no link or pathway between the changes the plan policy may cause and the site's qualifying interests (changes such as direct land take, or indirect changes through the physical, chemical, hydrological, biological characteristics of a site). This category also covers a policy effect that would be a positive effect; or one that would not otherwise undermine the conservation objectives for the site.</p> <p>Note: the European Court of Justice (Waddenzee ruling C-127/02 of 07/09/04) has indicated that a plan's <i>positive</i> effects on a site cannot be regarded as 'significant' and can therefore be 'screened out'.</p>
N6	<p><b>Policy makes provision for change/ promotes development in specific areas, but would have no significant effect on a European site</b> Policies that could have effects that are trivial and that are not likely to be significant. Any potential effects via pathways / links would be trivial, or 'de minimis', or so restricted in scale or remote from a site that they would not undermine the conservation objectives for the site. For example, in the case of a policy focusing development in existing urban areas whereby the likelihood of the policy affecting an isolated relatively inaccessible European Site is remote, the policy effects can reasonably be screened out on the basis of a rational appraisal.</p>
N7	<p><b>Policy makes provision for change / promotes development, but effects on a European Site cannot be identified because the proposal is too general</b> These are very general / strategic policies or proposals which are too general to identify any effect as it is not known where, when or how the aspect of the plan may be implemented, or where any potential effects may occur, or which European Sites, if any, may be affected.</p> <p>These plan aspects may be very similar to the general policy statements screened under N1, but are different in that they promote overall change. For example, a policy which identifies a total figure for new housing, but which makes no reference to the locations at which the housing will be developed.</p>
<p><b>'P' category: screen in elements of the Plan</b> Plan elements considered likely to have a significant effect on a European site</p>	
P	<p><b>Policy / proposal / element of Plan with potential to have a likely significant effect and therefore subject to further assessment, including consideration of potential mitigation measures</b> Policies which have been identified as having likely significant effects and are therefore subject to further appraisal. Potential mitigation measures will be identified and considered, and the policy rescreened, with the possibility of being subject to Appropriate Assessment (at which further mitigation can be applied).</p>

2.3.5 The first stage in the assessment process is to establish whether the relevant plan should be subject to HRA.

2.3.6 In response to the initial question (in Figure 1) of "is the land use plan directly connected with or necessary to the nature conservation management of a European site", the Central Lincolnshire Local Plan is not directly connected with or necessary to the nature

conservation management of a European site. Furthermore, there are no European sites within the boundaries of Central Lincolnshire that the Local Plan would have any direct management or land use planning control over.

- 2.3.7 It is therefore necessary to proceed to the next HRA stages, to identify and scope out which European sites may potentially be affected by the Plan, gather the information about them, and 'screen' the Plan, in conjunction with other plans and projects, for likelihood of significant effects on a European site.

### 3. Stage A: Identifying Relevant European Sites and Other Plans

#### 3.1 Step 1) European Sites to be considered in assessment

3.1.1 Step 1 is to identify the European sites that should be considered in the assessment, based on likely plan impacts and pathways, with the aim of keeping the assessment proportional to the likelihood of significant effects.

3.1.2 There are no European Sites within the Central Lincolnshire area.

3.1.3 Table 3 shows the European Sites within 30km<sup>3</sup> of the Central Lincolnshire boundary. See Appendix B for map of the designations.

Table 3: European Sites within 30km of Central Lincolnshire boundary

Ref No.	Site Name	Designation
1	The Wash	SPA, Ramsar
2	The Wash and North Norfolk Coast	SAC
3	The Humber Estuary, Flats, Marshes and Coast	SPA, SAC, Ramsar
4	Baston Fen	SAC
5	Thorne and Hatfield Moors	Thorne Moor SAC; Hatfield Moor SAC; Thorne and Hatfield Moors SPA
6	Grimsthorpe Park	SAC
7	Birklands and Bilhaugh	SAC
8	Rutland Water	SPA, Ramsar
9	Saltfleetby-Theddlethorpe Dunes and Gibraltar Point	SAC
10	Gibraltar Point	SPA, Ramsar
11	Sherwood Forest Region	Prospective SPA

3.1.4 The term 'European Marine Sites' (EMS) in the Habitats Regulations collectively describes Special Areas of Conservation (SACs) under the Habitats Directive and Special Protection Areas (SPAs) designated under the Wild Birds Directive that are covered by tidal waters and protect some of the most important marine and coastal habitats and species of European importance. The nearest European Marine Sites (EMS) to Central Lincolnshire are:

- The Humber Estuary EMS - which collectively covers the Humber Estuary SAC and SPA
- The Wash and North Norfolk Coast EMS - which collectively covers the Wash SPA, the Wash and North Norfolk Coast SAC, and the Gibraltar Point SPA

3.1.5 As the overarching EMS designation collectively covers these existing SAC and SPA designations, assessment of potential impacts is considered under their constituent designations.

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<sup>3</sup> No set distance is prescribed guidance or regulations, however 30km is considered reasonable in this instance.

- 3.1.6 Housing, employment and infrastructure development and growth that arise from the Local Plan have the potential to generate a range of environmental impacts which, depending on their nature, magnitude, location and duration, can potentially have effects on European sites outside the Plan area, depending on the impact, pathway and vulnerabilities of the site. In order to assess whether any likely significant effects will impact upon the integrity of European Sites as a result of the Central Lincolnshire Local Plan or in combination with 'other plans', it is necessary firstly to identify potential impacts that could cause a likely significant effect on a European Site.
- 3.1.7 The potential impact types, and potential effects, that can arise from development growth resulting from the Local Plan are identified in Figure 2 below.

Figure 2: Potential General Impacts and Effects on European Sites

Potential Impact Types	Potential Effects That Can Arise
<b>Direct land take of sites: habitat and species fragmentation and loss</b>	<ul style="list-style-type: none"> <li>• Removal of green/ connecting corridors/ supporting habitat.</li> <li>• Changes to sediment patterns (rivers and coastal locations).</li> <li>• Introduction of invasive species (predation).</li> </ul> <p>► <b>This is not likely from Central Lincolnshire Local Plan provisions</b>, given the distance of the Central Lincolnshire area from European sites and that the area is not coastal: there will be no direct land take on European Sites.</p>
<b>Water Supply Levels</b>	<ul style="list-style-type: none"> <li>• Potential for reduced water levels arising from increase in water abstraction levels (volume) to provide supply (eg arising from new housing). This may lead to reduced water resources at European sites: changes to water levels can impact river flow and water quality.</li> <li>• Potential impact on groundwater in water cycle by foundations and buildings altering groundwater flow.</li> </ul>

<b>Water Quality Changes</b>	<ul style="list-style-type: none"> <li>• Potential for reduced water quality and pollution arising from potential increase in surface water run-off levels (volume) as a result of new developments, which can lead to contamination of watercourse links and reduced water quality at European sites.</li> <li>• Potential increase in accelerated run-off arising from new hard standing/non-permeable surfaces of new developments (eg roads, built areas).</li> <li>• Hydrological cycle impacts – additional take up of land, loss of permeable surfaces and topography alteration may impact on water cycle, potentially resulting in flood risk impacts and reduced water quality impacts in European Sites where connected by pathways.</li> <li>• Potential increase in volume of (waste) water discharges (consented), which can lead to reduced water quality at European sites*</li> <li>• Potential increase in pressure on sewage infrastructure network and capacity*</li> </ul> <p><i>* Changes potentially leading to water run off changes (via both surface and ground water), which could change the quality of water composition by transferring pollutants or effluent discharges from new constructions to water bodies. This increased pollution could alter and reduce the water quality entering the water network (e.g. rivers), and could have adverse effects on European Site habitats and species connected by pathways.</i></p>
<b>Recreational Disturbance</b>	<ul style="list-style-type: none"> <li>• Potential for increased disturbance arising from increased recreational activity/visitor pressure, as a result of new development/population increase.</li> <li>• Potential increased recreational disturbance to habitats and species as a result of development, if it significantly increases the number of people travelling and visiting European Sites.</li> <li>• Added potential pollution (including noise) and contamination because of a larger footfall.</li> </ul>
<b>Air Quality</b>	<ul style="list-style-type: none"> <li>• Potential for increased atmospheric pollution.</li> <li>• Increased traffic movements arising from construction and occupation of developments potentially leading to increased air pollution arising from increased vehicular movements and trips.</li> <li>• Potential for increase in emissions from new buildings.</li> <li>• Potential for noise and light pollution (from development and increased traffic).</li> <li>• Changes in the composition of air quality as a result of development or a significant increase in trips near the vicinity of a European Site could potentially cause air pollution that may damage vegetation and harm species living in these habitats.</li> </ul>

3.1.8 There is also a need to establish a set of particular pathways where potential impacts may be able to find a path to a European Site. Where no pathways exist to the



European Site, the potential impacts can be ruled out as they will not have a likely significant effect on the site.

- 3.1.9 Plans such as the Central Lincolnshire Local Plan can have spatial implications that extend beyond the plan boundaries. In particular, it is recognised that when considering the potential for effects on European sites, *distance in itself is not a definitive guide to the likelihood or severity of an impact*. Other factors such as inaccessibility/ remoteness, the prevailing wind direction, river flow direction, and ground water flow direction will all have a bearing on the relative distance at which an impact can occur. This means that a plan directing development some distance away from a European Site could still have effects on the site and therefore, needs to be considered as part of the HRA screening.
- 3.1.10 Therefore, rather than rely on distance alone, a more effective mechanism for considering the scope of the HRA is to use a 'source- pathway-receptor' model which focuses on whether there is a pathway by which impacts from the plan can affect the identified sensitivities/ vulnerabilities of European site(s)' environmental conditions.
- 3.1.11 Potential Pathways include:-
- Wind** – whether the potential impacts outlined above, specifically air quality can reach the European Sites via the prevailing wind.
  - River Network** – whether potential impacts, specifically water quality, and hydrology, are connected via the river network to the European Sites.
  - Water Supply** – the connectivity of the water supply in Central Lincolnshire i.e. reservoirs and the European Sites.
  - Roads** –European Sites in relation to the road network and the feasibility of air, noise and light pollution from increased traffic on the roads, due to a higher population or greater accessibility across Central Lincolnshire.
  - Species movement** – distance between Central Lincolnshire and the European Sites and the location of other important habitats within the boundary of the plan such as Sites of Special Scientific Interest (SSSI), Country Parks, Local Nature Reserves.

## 3.2 [Step 2\) Information on relevant European Sites](#)

- 3.2.1 Table 4 summarises the key information on each of the relevant sites: Appendix C provides further details on these sites.

Table 4: European Sites: Key Information

Ref No. and Site Name	Designation	Details
1. The Wash	SPA, Ramsar	<p><b>Qualifying features / interests:</b></p> <p><u>SPA</u> Annex I Birds and regularly occurring migratory birds. Breeding populations of Common Tern <i>Sterna hirundo</i>; Little Tern <i>Sternula albifrons</i>. Over-wintering populations of: Bartailed Godwit <i>Limosa lapponica</i>; Knot <i>Calidris canutus</i>; Black-tailed Godwit <i>Limosa limosa islandica</i>; Shelduck <i>Tadorna tadorna</i>; Bewick's Swan <i>Cygnus columbianus bewickii</i>; Pink-footed Goose <i>Anser brachyrhynchus</i>; Dark-bellied Brent Goose <i>Branta bernicula bernicula</i>; Pintail <i>Anas acuta</i>; Wigeon <i>Anas penelope</i>; Gadwall <i>Anas strepera</i>; Common scoter <i>Melanitta nigra</i>; Goldeneye <i>Bucephala clangula</i>; Oystercatcher <i>Haematopus ostralegus</i>; Grey Plover <i>Pluvialis squatarola</i>; Curlew <i>Numenius arquata</i>; Redshank <i>Tringa tetanus</i>; Knot <i>Calidris canutus</i>; Sanderling <i>Calidris alba</i>.</p> <p><u>Ramsar</u> Wetlands site designated for the following Criterion 1: a large shallow bay comprising extensive saltmarshes, major intertidal banks of sand, shallow water and deep channels. Criterion 3: the interrelationship between various components of the estuary combine to give high productivity. Criterion 5: an internationally important assemblage of wintering birds, regularly supporting 292,541 individuals. Criterion 6: internationally important populations of migratory species including Bartailed Godwit <i>Limosa lapponica</i>; Dunlin <i>Calidris alpina</i>; Oystercatcher <i>Haematopus ostralegus</i>; Grey Plover <i>Pluvialis squatarola</i>; Curlew <i>Numenius arquata</i>; Redshank <i>Tringa tetanus</i>; Knot <i>Calidris canutus</i>; Sanderling <i>Calidris alba</i>; Turnstone <i>Arenaria interpres</i>. Criterion 6: internationally important wintering populations of Bar-tailed Godwit <i>Limosa lapponica</i>; Pink-footed Goose <i>Anser brachyrhynchus</i>; Darkbellied Brent Goose <i>Branta bernicula bernicula</i>; Pintail <i>Anas acuta</i>; Dunlin <i>Calidris alpina</i>; Shelduck <i>Tadorna tadorna</i>.</p> <p><b>Conservation objectives:</b> To maintain the designated interest features in favourable condition (habitats and species). Note: The Wash is the largest estuarine system in Britain. It is fed by the Rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and overwintering site for migrant wildfowl and wading birds in eastern England.</p> <p><b>Site condition:</b> Favourable 68%; unfavourable recovering 32%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b> <u>Wash SPA and Ramsar</u></p> <ul style="list-style-type: none"> <li>Coastal squeeze: ecological vulnerability is closely linked to the physical environment. The intertidal zone is vulnerable to coastal squeeze as a result of land claim, coastal defence works and sea level rises. Intertidal habitats are potentially affected by changes in sediment budget caused by dredging and coastal protection. All coastal and tidal habitats are vulnerable to the effects of coastal protection works within the area. To be addressed by Joint SPA/SAC management scheme.</li> <li>Water abstraction and discharges from rivers (i.e. water resources and quality vulnerability). The estuary is fed by four large rivers. The volume and quality of water entering the Wash is dependent on the use made</li> </ul>

		<p>of these rivers for water abstraction and agricultural and domestic effluents. The Joint Nature Conservation Committee state that discharge consents and abstraction licenses (Environment Agency) will be reviewed by them under Habitats Regulations provisions.</p> <ul style="list-style-type: none"> <li>• Activities on two Air Weapons Ranges on site – controlled by management agreements and plans between MOD, DEFRA and Natural England.</li> <li>• Physical damage – coastal erosion; recreational pressure; extant quarrying.</li> <li>• Biological disturbance – short term risk of the introduction of invasive non-native plant species and fish.</li> <li>• Site management needs – JNCC states all these vulnerability issues and pressures are addressed in Wash Estuary Management Plan, Local Environment Agency Plans, and extended through the Marine Scheme of Management.</li> </ul>
2. The Wash and North Norfolk Coast	SAC	<p><b>Qualifying features / interests:</b> Annex I habitats: mudflats and sandflats not covered by sea water at low tide; sandbanks which are slightly covered by sea water all the time; coastal lagoons; large shallow inlets and bays; reefs; salicornia and other annuals colonising mud and sand; atlantic salt meadows (<i>Glauco- Puccinellietalia maritimae</i>); mediterranean and thermo- atlantic halophilous scrubs (<i>sarcocometea fruticosi</i>). Annex II species: common seal <i>Phoca vitulina</i>; Otter <i>Lutra lutra</i>.</p> <p><b>Conservation objectives:</b> To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b> Wash: favourable 68%; and unfavourable recovering 32% North Norfolk Coast: favourable 99%; and unfavourable recovering 1%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b> As for the Wash SPA and Ramsar site above, plus:</p> <ul style="list-style-type: none"> <li>• Seal populations – the area supports internationally important seal populations. These are vulnerable to disturbance and disruption of the marine ecosystem upon which they depend. As for item 1 above, JNCC states all such issues are addressed by the Marine Scheme of Management.</li> </ul>
3. The Humber Estuary, Flats, Marshes and Coast	SPA, SAC, Ramsar	<p><b>Qualifying features / interests:</b> <u>Humber Estuary SPA</u> Breeding populations of birds: Bittern <i>Botaurus stellaris</i>; Little Tern <i>Sternula albifrons</i>; Marsh Harrier <i>Circus aeruginosus</i>; Avocet <i>Recurvirostra avosetta</i>. Wintering populations of birds: Bittern <i>Botaurus stellaris</i>; Bar- tailed Godwit <i>Limosa lapponica</i>; Golden Plover <i>Pluvialis apricaria</i>; Avocet <i>Recurvirostra avosetta</i>; Hen Harrier <i>Circus cyaneus</i>; Dunlin <i>Calidris alpina</i> alpine; Knot <i>Calidris canutus</i>; Blacktailed Godwit <i>Limosa limosa islandica</i>; Redshank <i>Tringa tetanus</i>; Shelduck <i>Tadorna tadorna</i>. Passage populations of: Redshank; Knot; Dunlin; Black-tailed Godwit; and Ruff <i>Philomachus pugnax</i>. Internationally important assemblages of birds, regularly supporting 153,934 individuals, including: Darkbellied Brent Goose; Shelduck; Teal; Wigeon; Mallard; Pochard; Scaup; Goldeneye; Bittern; Lapwing; Ringed Plover; Oystercatcher; Avocet; Golden Plover; Grey Plover; Turnstone; Sanderling; Dunlin; Knot Bartailed Godwit; Black-tailed Godwit; Curlew; Whimbrel; Ruff; Greenshank; Redshank.</p> <p><u>Humber Estuary SAC (habitats and species)</u> Annex I habitats: estuaries; mudflats and sandflats not covered by sea water at low tide; sandbanks which are</p>

		<p>slightly covered by sea water all the time; coastal lagoons; Salicornia and other annuals colonising mud and sand; atlantic salt meadows (<i>Glauco Puccinellietalia maritima</i>); embryonic shifting dunes; shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'); fixed dunes with herbaceous vegetation ('grey dunes'); dunes with <i>Hippophae rhamnoides</i>.</p> <p>Annex II species: sea lamprey <i>Petromyzon marinus</i> River lamprey <i>Lampetra fluviatilis</i>; Grey Seal <i>Halichoerus grypus</i>.</p> <p><u>Humber Estuary Ramsar</u> Wetlands site designated for: Criterion 1: representative of a near natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sandflats, saltmarshes, and coastal brackish/saline lagoons Criterion 3: the second largest colony of grey seals <i>Halichoerus grypus</i> in England, and the most north-easterly breeding site for Natterjack Toad <i>Bufo calamita</i>. Criterion 5: an Internationally important assemblage of wintering birds, regularly supporting 153,934 individuals. Criterion 6- internationally important populations of the following species: Golden Plover, Knot, Dunlin, Blacktailed Godwit, Redshank, Shelduck, and Bar-tailed Godwit. Criterion 8: an important route for river lamprey <i>Lapetra fluviatilis</i> an sea lamprey <i>Petromyzon marinus</i> between the sea and their spawning areas. Note - the Humber Estuary is the second largest coastal plain estuary in the UK and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macro-tidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney.</p> <p><b>Conservation objectives:</b> To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b> Humber Estuary: favourable 8%; and unfavourable recovering 91%; and unfavourable declining 1%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b> <u>Humber Estuary SPA</u></p> <ul style="list-style-type: none"> <li>Physical damage – recreational activities (including use of off-road vehicles, dog walking, jet skiing, parasailing etc.) damage habitat which support qualifying birds species.</li> <li>Physical disturbance – disturbance to birds as a result of recreational activities and the local fisheries industry; over fishing also a known vulnerability as affects availability of food source for some birds.</li> <li>Coastal squeeze (i.e. sea level changes and coastal works): all coastal and tidal habitats are vulnerable to the effects of coastal protection works within the area.</li> <li>Physical disturbance – recreational activities disturb grey seals.</li> </ul> <p><u>Humber Estuary SAC</u></p> <ul style="list-style-type: none"> <li>Physical damage – recreational activities (including use of off-road vehicles, dog walking, jet skiing, parasailing etc.) are damaging habitats of qualifying importance.</li> </ul>
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<p>4. Baston Fen</p> <p><b>NOTE:</b>  <b>The Baston Fen SAC is scoped out of this HRA screening exercise for the following reasons:</b>  - The SAC is a 2km long linear drainage channel that is intensively managed by the Welland and Deeping Internal Drainage Board.  - It drains into a gravel drain: it is a counter drain</p>	SAC	<p><b>Qualifying features / interests:</b>  Annex II species that are a primary reason for selection of this site. 1149 Spined loach <i>Cobitis taenia</i>. The Counterdrain, a large drainage channel running alongside Baston Fen, contains high densities of spined loach <i>Cobitis taenia</i>. It is an example of spined loach populations in the Welland catchment. The patchy cover from submerged plants provides excellent habitat for the species.</p> <p>The Spined loach <i>Cobitis taenia</i> is a small bottom-living fish that has a restricted microhabitat associated with a specialised feeding mechanism. They use a complex branchial apparatus to filter-feed in fine but well-oxygenated sediments. Optimal habitat is patchy cover of submerged (and possibly emergent) macrophytes, which are important for spawning, and a sandy (also silty) substrate, into which juvenile fish tend to bury themselves. The Spined loach <i>Cobitis taenia</i> has an extremely wide distribution across Europe and Asia. Even with such a broad range and ecological niche it is generally regarded as threatened, if not rare, in Europe. In the UK, Spined loach <i>Cobitis taenia</i> appears to be restricted to just five east-flowing river systems in eastern England: the rivers Trent, Welland, Witham, Nene and Great Ouse, with their associated waterways (Perrow &amp; Jowitt 2000). Within these catchments it appears to occur patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches. Little is known about its occurrence in open water, although it is known from a number of small lakes and gravel-pits. With limited means of dispersal, the UK populations are largely genetically isolated from each other.</p> <p><b>Conservation objectives:</b>  To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b>  Favourable 65%; unfavourable recovering 35%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b></p>

<p>section running alongside and near to the River Glen but is not directly linked to the River.</p> <p>- There is not a direct permanent hydrological / watercourse pathway link between the SAC, the River Glen and potential impacts arising from the Central Lincolnshire area.</p>		<p>The Lincolnshire Biodiversity Action Plan (BAP) reports that the spined loach population in Lincolnshire appears to be healthy, and does not appear to be in serious danger, data having been collected for the past 20 years from routine fish surveys. The fish are found in only a few locations. While it does not appear to be in serious danger, however, "its apparently fragmented distribution in highly regulated rivers and drains means that it is potentially vulnerable to changes in river/land use". [Lincolnshire BAP2005-2007]</p> <p>Baston Fen SAC falls within the habitat type described as Rivers, Canals and Drains with the Lincs BAP (2006). The Lincolnshire BAP lists the following problems which are inherent with such high maintenance drainage systems, such as the Baston Fen SAC:</p> <ul style="list-style-type: none"> <li>• Water abstraction</li> <li>• Chemical enrichment and pollution</li> <li>• Navigational and flood defence structures and impoundments</li> <li>• Climate change</li> <li>• Land drainage and the management of waterways</li> <li>• Fishing and fish farming</li> <li>• Development within the floodplain</li> <li>• Loss of native fauna through swamping of introduced exotic species.</li> </ul> <p>Suitable Management : the BAP shows that the Environment Agency, together with partners including the Internal Drainage Boards, British Waterways, Lincolnshire Wildlife Trust and landowners, have ongoing programmes to ensure the safeguarding and management of the SAC as well as management and protection of the species.</p> <p><b>Natural England advised (10/7/2012) that Baston Fen is managed by the Internal Drainage Board and crucially is not hydrologically linked to the Central Lincolnshire area. Therefore no potential exists for hydrological impacts on this site. They agree that it is reasonable to scope this site out, and omit it from further consideration for the Local Plan.</b></p>
<p>5. Thorne and Hatfield Moors</p>	<p>Thorne Moor SAC; Hatfield Moor SAC; Thorne and Hatfield Moors SPA</p>	<p><b>Qualifying features / interests:</b></p> <p><u>Thorne Moor SAC</u> Annex I habitat: Degraded raised bog still capable of natural regeneration (bog habitat supports 1% of UK breeding Nightjar bird population).</p> <p><u>Hatfield Moor SAC</u> Annex I habitat: Degraded raised bog still capable of natural regeneration (bog habitat supports 1% of UK breeding Nightjar bird population).</p> <p><u>Thorne and Hatfield Moors SPA</u> Annex 1: bird breeding populations of Nightjar <i>Caprimulgus europaeus</i> (supports 1.8% of national population of Nightjar bird species).</p> <p><b>Conservation objectives:</b> All sites: to maintain the designated interest features in favourable condition (habitats and species).</p>

		<p><b>Site condition:</b>  Thorne Crowle and Goole Moors: unfavourable recovering 96%; unfavourable no change 3%; unfavourable declining 1%.  Hatfield Moors: favourable 1%; unfavourable recovering 92%; unfavourable no change 6%.</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b>  <u>Thorne Moor SAC:</u></p> <ul style="list-style-type: none"> <li>Physical damage – Peat extraction (although this is limited and to be addressed through review of current planning permission); overgrazing is also a known vulnerability of the site; inappropriate drainage and water abstraction from aquifer (consented by EA) and surrounding agricultural drainage (although this is addressable and managed through Water Level Management Plans). Scrub invasion being addressed by Site management statements, NNR management and WES agreements.</li> <li>Toxic contamination – Adverse changes in air quality, and in particular acid deposition is likely to contributing to the degradation of the raised bog habitats.</li> <li>Biological disturbance – Scrub encroachment (although this is currently managed).</li> </ul> <p><u>Hatfield Moor SAC:</u></p> <ul style="list-style-type: none"> <li>Physical damage – a large proportion of the site is unfavourable and is recovering from recent peat extraction; overgrazing is also a known vulnerability of the site; water abstraction from underlying aquifer (consented by Environment Agency) and surrounding agricultural drainage (although this is addressable and managed through Water Level Management Plans). Scrub invasion being addressed by Site Management Statements, National Nature Reserve management and Wildlife Enhancement Scheme agreements.</li> <li>Toxic contamination – poor air quality (and in particular acid deposition) is contributing to the degradation of the raised bog habitats.</li> <li>Biological disturbance – scrub encroachment (although this is currently under a management regime).</li> </ul> <p><u>Thorne and Hatfield Moors SPA</u></p> <ul style="list-style-type: none"> <li>Physical damage – a large proportion of the site is unfavourable and is recovering from recent peat extraction. Threats to nightjar habitat come from lack of management and re-wetting operations. This is being addressed by scrub clearance programme to create a variety of suitable nightjar habitats, incorporated into National Nature Reserve management plans. Overgrazing is also a known vulnerability of the site; water abstraction from underlying aquifer (consented by Environment Agency) and surrounding agricultural drainage (although this is addressable and managed through Water Level Management Plans).</li> <li>Toxic contamination – poor air quality (and in particular acid deposition) is contributing to the degradation of the raised bog habitats (site within 1km of M180 and 3km of M18). Housing increases in Central Lincolnshire and traffic levels may impact on air pollution and vegetation and nightjar habitat. Sites are approximately 25km distant from centres of Gainsborough and Lincoln).</li> <li>Biological disturbance – scrub encroachment (although this is currently under a management regime).</li> </ul>
	SAC	<p><b>Qualifying features / interests:</b>  Annex I Habitats - present as a qualifying feature but not the primary reason for selection of this site</p>

<p>6. Grimsthorpe Park</p> <p><b>NOTE:</b>  <b>The Grimsthorpe SAC is scoped out of this HRA screening exercise for the following reasons:</b></p> <ul style="list-style-type: none"> <li>- The SAC is a former quarry with grassland habitat.</li> <li>- It has no public access and no recreational pressure.</li> <li>- There is no direct hydrological / watercourse pathway link between the SAC and potential impacts arising from the Central Lincolnshire area.</li> </ul>		<p>Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>). <i>Festuco-Brometalia</i> grasslands are found on thin, well-drained, lime-rich soils associated with chalk and limestone. Most of these calcareous grasslands are maintained by grazing. A large number of rare plants are associated with this habitat, including purple milk-vetch <i>Astragalus danicus</i>, dwarf sedge <i>Carex humilis</i>, spotted cat's-ear <i>Hypochaeris maculata</i>, spring cinquefoil <i>Potentilla tabernaemontani</i>, pasqueflower <i>Pulsatilla vulgaris</i>, bastard-toadflax <i>Thesium humifusum</i> and the Annex II species 1654 early gentian <i>Gentianella anglica</i>, as well as various bryophytes and lichens. The invertebrate fauna is also noteworthy, and includes rarities such as the adonis blue <i>Lysandra bellargus</i> and silver-spotted skipper <i>Hesperia comma</i>.</p> <p>Annex II Species - primary reason for selection of this site- early entian (<i>Gentianella anglica</i>). Early entian <i>Gentianella anglica</i> is an annual plant, occurring in calcareous grassland, mainly on steep, south-facing slopes. It is a small purple petals flowering plant, for which this is considered to be one of the best areas in the United Kingdom. It grows on bare ground or in thin turf that is kept open by a combination of rabbit or sheep-grazing and trampling by livestock on thin droughted soils. It is nationally scarce, is found on grazed chalk grassland and favours close-cropped, chalk downland. Grimsthorpe is the most northerly outpost for <b>early gentian <i>Gentianella anglica</i></b>, with 2–3 colonies totalling several hundred plants in old oolitic limestone quarries.</p> <p><b>Conservation objectives:</b>  To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b>  Favourable 95%; unfavourable recovering 5%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b>  The site is vulnerable to sheep/cattle grazing and there is little scope for increasing the area of this habitat. The site is on the northern limit for Early Gentain (<i>Gentianella anglica</i>) in the UK, but not all of the site provides suitable conditions and there is little scope for increasing the area of suitable habitat here. As with other biennials, numbers of <i>G. anglica</i> vary dramatically from year to year, the highest recorded number being 400 individuals. Arrangements are in hand to enable the erection of electric fencing around the site so that it will be possible for light grazing with sheep or cattle to take place.  The entire parkland, including Elsea Pit, is managed under the terms of a management agreement with English Nature.</p> <p><b>Natural England advised (10/7/2012) that the Grimsthorpe Park site is not publically accessible and therefore any increase in population within the Central Lincolnshire administrative boundary cannot impact on this site. They agree that it is reasonable to scope this site out, and omit it from further consideration for the Local Plan.</b></p>
<p>7. Birklands and Bilhaugh</p>	<p>SAC</p>	<p><b>Qualifying features / interests:</b>  Annex I habitats: old acidophilous ancient lowland oak woods with common oak (<i>Quercus robur</i>) on sandy plains, for which it is one of only four known outstanding localities in the UK. It is notable for its rich invertebrate fauna, particularly spiders, and also for a diverse fungal assemblage.</p> <p>The SAC is two small areas of oak-birch woodland that lie within Sherwood Forest and Forest Country Park, both an important ecological and recreational resource.</p>



		<p><b>Conservation objectives:</b> To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b> Unfavourable recovering 97%; and unfavourable no change 3%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b></p> <ul style="list-style-type: none"> <li>Physical damage – susceptible to visitor/recreation pressure, which can damage/ erode fragile habitat.</li> <li>Air pollution – ecological elements present (such as diversity of lichen) are sensitive to changes in air quality and impacts from air pollution, particularly aerial nitrogen deposition.</li> <li>Water abstraction (less vulnerable) - the habitats present in this SAC are not specifically reliant on water, however the site could be vulnerable to stress if groundwater levels are significantly impacted. Abstraction from Sherwood Sandstone aquifer below site might impact on it – generally and potentially arising from new development. It is the role of Water Resource Management Plans which are produced by the water companies (in this case Severn Trent Water), to investigate in far greater detail the impact of water supply and demand on the natural environment. WRMPs are subject to scrutiny under the Habitats Directive. The local Sherwood Country Park Management Plan 1998 states that fluctuations in the water table seem unlikely to have significant effects on the vegetation here.</li> </ul>
8. Rutland Water	SPA, Ramsar	<p><b>Qualifying features / interests:</b></p> <p><u>SPA</u> Supports Annex I Birds and regularly occurring migratory birds (Article 4.2)- an Open water lagoon habitat supporting migratory and wintering populations of following bird species: Shoveler <i>Anas clypeata</i> ;Teal <i>Anas crecca</i>; Wigeon <i>Anas Penelope</i>;Gadwall <i>Anas strepera</i>; Tufted Duck <i>Aythya fuligula</i>;Goldeneye <i>Bucephla clangula</i>; Mute Swan <i>Cygnus olor</i>; Coot <i>Fulica atra</i>; Goosander <i>Mergus merganser</i>; Great Crested Grebe <i>Podiceps cristatus</i>.</p> <p>An internationally important assemblage of birds (Article 4.2): a wintering bird assemblage regularly supporting 25,037 waterfowl, including Great Crested Grebe, Wigeon, Gadwall, Teal, Shoveler, Tufted Duck, Goldeneye, Goosander and Coot.</p> <p><u>Ramsar</u> Designated for conservation for meeting: Criterion 5: assemblages of international importance- species with peak counts in winter - 19,274 waterfowl. Criterion 6: species/populations occurring at levels of international importance- qualifying species (with peak counts in spring/autumn) are: Gadwall - <i>Anas strepera</i>; Northern shoveler – <i>Anas clypeata</i>; Mute swan - <i>Cygnus olor</i>.</p> <p><b>Conservation objectives:</b> To maintain the designated interest features in favourable condition (habitats and species), with particular reference to open water habitat areas and surrounding marginal habitats. Also, to maintain aggregations, variety and assemblages of all bird and waterfowl species using site. Note: It is a man made storage reservoir owned by Anglian Water and managed by Leicester and Rutland Wildlife Trust.</p> <p><b>Site condition:</b></p>

		<p>Favourable 100%</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b>  No hazards reported affecting site's ecological character.  Vulnerable to: recreational pressure, changes in water level; nutrient inputs:</p> <ol style="list-style-type: none"> <li>1) Recreation &amp; management: the site is one of the most popular tourist attractions in the East Midlands. Fishing, walking water sports and cycling currently take place and the reservoir has been zoned to allow this to take place. Site is therefore managed for both recreational uses and nature conservation. Management of the site for its SPA interests is currently compatible with these recreation uses except in periods of drawdown. A revised strategy with Anglian Water Supplies (AWS) is intended to address this problem.</li> <li>2) Changes in Water Level: Rutland Water is a major source of urban water supply for East Midlands. Increased abstraction in the summer up to the current licensed limit may cause further and more extensive periods of drawdown which can effect populations of invertebrates. Water resources are managed through Anglian Water Water Resource Management Plan. Abstraction limits strictly controlled by Environment Agency to ensure integrity of SPA/Ramsar not compromised.</li> <li>3) Nutrient Inputs: the reservoir is filled from the River Nene and the River Welland. In the past phosphate levels have led to algal blooms. Although these have currently had little visible effects on the wildfowl, continued eutrophication could lead to an algal dominated system that may reduce the value of the area for both plant feeding and invertebrate feeding wildfowl. Phosphate inputs are being tackled through implementation of the Urban Waste Water Treatment Directive in the Nene catchment.</li> </ol> <p>(No rivers from within Central Lincolnshire are connected to the reservoir.)</p>
9. Saltfleetby-Theddlethorpe Dunes and Gibraltar Point	SAC	<p><b>Qualifying features / interests:</b>  Annex I habitats: shifting dunes along the shoreline with marram grass -Ammophila arenaria ('white dunes'); fixed dunes with herbaceous vegetation ('grey dunes'); dunes with sea buckthorn- ippophae rhamnoides; humid dune slacks; Embryonic shifting dunes.</p> <p><b>Conservation objectives:</b>  To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b>  S.T, Dunes: favourable 79%; unfavourable recovering 21%.  G. Point: favourable 60%; unfavourable recovering 31%; unfavourable declining 8%.</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b></p> <ul style="list-style-type: none"> <li>• Biological disturbance – invasive species such as nettles and ragwort due to adjacent intensive farming; over-grazing; scrub encroachment.</li> <li>• Physical damage - inappropriate visitor access and habitats trampling</li> </ul> <p>Site is a National Nature Reserve protected and carefully managed for visitor pressure by Natural England (see below for further information about Gibraltar Point).</p>
10. Gibraltar Point	SPA, Ramsar	<p><b>Qualifying features / interests:</b>  <u>SPA</u></p> <ul style="list-style-type: none"> <li>• Breeding populations of Little Tern Sternula albifrons;</li> </ul>

		<ul style="list-style-type: none"> <li>• Overwintering populations of Bar-tailed Godwit <i>Limosa lapponica</i>;</li> <li>• Grey Plover <i>Pluvialis squatarola</i>;</li> <li>• Sanderling <i>Calidris alba</i>.</li> </ul> <p><u>Ramsar</u></p> <ul style="list-style-type: none"> <li>• Criterion 1: Dune and saltmarsh habitat on site, representing all stages of colonisation and stabilisation</li> <li>• Criterion 2: An assemblage of wetland invertebrate species, including eight species listed as 'rare' in the British Red Data Book, and a further four listed as 'vulnerable'</li> <li>• Criterion 5: An internationally important assemblage of waterfowl, regularly supporting 53,072 birds over winter</li> <li>• Criterion 6: Internationally important bird populations of the following bird species: Grey Plover; Sanderling; Bartailed Godwit; Dark-bellied Brent Goose <i>Branta bernicula bernicula</i></li> </ul> <p><b>Conservation objectives:</b> To maintain the designated interest features in favourable condition (habitats and species).</p> <p><b>Site condition:</b> Favourable 60%; unfavourable recovering 31%; unfavourable declining 8%.</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b></p> <ul style="list-style-type: none"> <li>• Physical damage – dune, mudflat and saltmarsh habitats are vulnerable to changes in levels of sedimentation as a result of coastal protection schemes in the area; inappropriate visitor access is currently a problem with large numbers of tourists causing damage to habitats through trampling.</li> <li>• Non-physical disturbance – general disturbance to bird species from human activity in the area.</li> <li>• Biological disturbance – scrub invasion is a localised problem and restricting the spread of sea-buckthorn to inappropriate areas requires continuous management.</li> </ul> <p>The site coincides with the area declared as a National Nature Reserve, which is managed and protected for nature conservation by the local Wildlife Trust, overseen by Natural England. It supports a field station for education and research, an interpretative centre, guided tours and education. Adjacent land has been acquired for management as a nature reserve extension to aid the site. The existing and continuing active Recreation &amp; Site Management regimes continue to steer and mitigate for visitor pressures.</p>
11. Sherwood Forest Region	Prospective SPA	<p><b>Qualifying features / interests:</b> The primary reason for potential selection of the site is the presence of breeding populations of nightjar and woodlark birds.</p> <p><b>Conservation objectives:</b> Draft Objectives from Natural England: to maintain and, where not in favourable condition, to restore, the habitats supporting the breeding populations, and to avoid significant disturbance of the Annex 1 bird species of European importance (nightjar and woodlark) with particular reference to lowland heathland, acid grassland and rotational coniferous plantation.</p> <p><b>Site condition:</b> Not yet formally defined or designated.</p> <p><b>Site vulnerability (factors, pressures and trends to which site integrity is currently vulnerable):</b></p>

		<p>Natural England have indicated the sites may be vulnerable from the following impacts:</p> <ul style="list-style-type: none"> <li>(1) disturbance to breeding birds from people, their pets, noise, traffic and/or artificial lighting</li> <li>(2) loss, fragmentation and/or damage to breeding and/or feeding habitat</li> <li>(3) bird mortality arising from domestic pets and/or predatory mammals and birds</li> <li>(4) bird mortality arising from road traffic and/or wind turbines</li> <li>(5) pollution and/or nutrient enrichment of breeding habitats</li> </ul>
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### 3.3 Step 3) Plans and projects with the potential for in-combination effects on European Sites

- 3.3.1 The Local Plan also needs to be screened for the likelihood of combined effects with other plans and projects.
- 3.3.2 For the purpose of this HRA, 'other plans and projects' has included: national plans; the Core Strategies / Local Plans of local planning authorities that border Central Lincolnshire; water resource management plans; catchment flood management plans; catchment abstraction management strategies; and river basin management plans.
- 3.3.3 The plans and projects considered are listed below:

#### NATIONAL

- 1) National Planning Policy Framework (DCLG, 2012)

#### COUNTY PLANS

- 2) Lincolnshire County Council 4<sup>th</sup> Lincolnshire Local Transport Plan 2013/14 to 2022/23 (published April 2013)
- 3) Lincolnshire Minerals Local Plan (adopted 1991)
- 4) Lincolnshire Waste Local Plan (adopted 2006)
- 5) Lincolnshire Minerals and Waste Local Plan, Core Strategy and Development Management Policies (due to be considered for adoption on 20 May 2016. Will replace the Minerals Local Plan 1991 and the Waste Local Plan 2006)

#### LOCAL PLANS

- 6) Newark and Sherwood District Council Core Strategy (adopted March 2011)
- 7) Newark and Sherwood District Council Allocations and Development Management DPD (adopted July 2013)
- 8) South Kesteven District Council Core Strategy (adopted July 2010)
- 9) South Kesteven District Council Site Allocation and Policies DPD (adopted April 2014)
- 10) Bassetlaw District Council Core Strategy (adopted December 2011)
- 11) North Lincolnshire Council Core Strategy (adopted June 2011)
- 12) North Lincolnshire Council Housing and Employment Land Allocations DPD (adopted March 2016)
- 13) East Lindsey Local Plan (adopted 1995, amended 1999 and 2007)
- 14) South Holland District Council Local Plan (adopted 2006)
- 15) Boston Borough Council Local Plan (adopted 1999)
- 16) North East Lincolnshire Council Local Plan (adopted November 2003)

#### WATER STRATEGIES, PLANS AND STUDIES

- 17) Lower Trent and Erewash Catchment Abstraction Management Strategy (CAMS) (Feb 2013)
- 18) Witham CAMS (Feb 2013)
- 19) Grimsby, Ancholme and Louth CAMS (Feb 2013)
- 20) River Witham Catchment Flood Management Plan (CFMP) (Dec 2009)
- 21) River Trent CFMP (Dec 2009)
- 22) Grimsby and Ancholme CFMP (Dec 2009)
- 23) Louth Coastal CFMP (Dec 2009)

- 24) Anglian Water - Water Resources Management Plan (WRMP) (August 2014, effective April 2015 onwards)
- 25) Severn Trent Water Resources Management Plan (WRMP) (May 2014)
- 26) Anglian River Basin District River Basin Management Plan (update December 2015)

3.3.4 The assessment of the impacts of the Proposed Submission Central Lincolnshire Local Plan in combination with these plans and projects is set out at section 4.3 below.

## 4. Stage B: Screening

### 4.1 [Step 1\) Local Plan objectives](#)

- 4.1.1 The principle objectives of the Local Plan are outlined in section 2.5 'Our Objectives' of the Proposed Submission Local Plan and include the strategic objectives of:
- (a) Housing: To ensure that the housing stock meets the housing needs of the Central Lincolnshire area.
  - (b) Employment: To create and improve access to high quality employment and training opportunities for everyone within the Central Lincolnshire area.
  - (c) Local Economy: To encourage and support a competitive, diverse and stable economy and to protect and enhance Central Lincolnshire's hierarchy of centres to meet the needs of residents and visitors.
  - (d) Transport and Accessibility: To make efficient use of the existing transport infrastructure, reduce the need to travel by car, improve accessibility to jobs and services for all and to ensure that all journeys are undertaken by the most sustainable travel modes (particularly public transport, walking and cycling).
- 4.1.2 The other objectives relate to health; social equality and community; biodiversity and green infrastructure; landscape and townscape; built and historic environment; water; pollution; land uses and soils; waste; climate change effects and energy; climate change adaptation and flood risk.
- 4.1.3 To deliver these objectives, the Local Plan has identified a housing growth figure of 36,960 dwellings to be delivered over the plan period of 25 years. It is proposed that these will be distributed across the plan area in accordance with the distribution set out at policy LP3.

### 4.2 [Step 2\) Potential effects of the Local Plan on the European Sites: likely significant effects](#)

- 4.2.1 Table 7 presents the assessment of all the Local Plan policies as well as other key parts, for example the Vision, for likely significant effects on the European Sites identified at section 3 of this report. Table 5 below lists the aspects of the Central Lincolnshire Proposed Submission Local Plan that would not be likely to have a significant effect alone on a European Site (for the reasons explained in Table 7): these policies/ parts of the plan have therefore been 'screened out' from further assessment.

Table 5: Screened out Local Plan policies and proposals

Screening Category	Policies/ parts of the Local Plan in this category- 'screened out'
<b>N1</b> General policy statement	<ul style="list-style-type: none"><li>• Vision</li><li>• Objectives</li><li>• LP1 A Presumption in Favour of Sustainable Development</li><li>• LP2 The Spatial Strategy and Settlement Hierarchy</li><li>• LP6 Retail and Town Centres in Central Lincolnshire</li><li>• LP7 A Sustainable Visitor Economy</li><li>• LP12 Infrastructure to Support Growth</li><li>• LP15 Community Facilities</li><li>• LP17 Landscape, Townscape and Views</li></ul>

	<ul style="list-style-type: none"> <li>• LP18 Climate Change and Low Carbon Living</li> <li>• LP31 Lincoln's Economy</li> <li>• LP32 Lincoln's Universities and Colleges</li> </ul>
<b>N2</b> Policy refers to projects that are not proposals generated by the plan and therefore excluded from the assessment	<ul style="list-style-type: none"> <li>• LP36 Access and Movement within the Lincoln Area</li> </ul>
<b>N3</b> Policy intended to protect, conserve or enhance the natural (including biodiversity) built or historic environment	<ul style="list-style-type: none"> <li>• LP14 Managing Water Resources and Flood Risk</li> <li>• LP16 Development on Land Affected by Contamination</li> <li>• LP20 Green Infrastructure Network</li> <li>• LP21 Biodiversity and Geodiversity</li> <li>• LP22 Green Wedges</li> <li>• LP23 Local Green Space and other Important Open Space</li> <li>• LP25 The Historic Environment</li> </ul>
<b>N4</b> Policy itself will not lead to development or other change	<ul style="list-style-type: none"> <li>• LP9 Health and Wellbeing</li> <li>• LP10 Meeting Accommodation Needs</li> <li>• LP11 Affordable Housing</li> <li>• LP13 Accessibility and Transport</li> <li>• LP26 Design and Amenity</li> <li>• LP27 Main Town Centre Uses-Frontages and Advertisements</li> <li>• LP28 Sustainable Urban Extensions</li> <li>• LP29 Protecting Lincoln's Setting and Character</li> <li>• LP40 Gainsborough Riverside</li> <li>• LP41 Regeneration of Gainsborough</li> <li>• LP43 Protecting Sleaford's Setting and Character</li> <li>• LP47 Access and Movement within Sleaford</li> </ul>
<b>N5</b> Policy makes general provision for change / promotes development, but would have no conceivable effect on a European site	-
<b>N6</b> Policy makes provision for change / promotes development in specific areas, but would have no significant effect on a European site	<ul style="list-style-type: none"> <li>• LP33 Lincoln's City Centre Primary Shopping Area and Central Mixed Use Area</li> <li>• LP34 Lincoln's District and Local Shopping Centres</li> <li>• LP35 Lincoln's Regeneration and Opportunity Areas</li> <li>• LP37 Sub-division and multi-occupation of dwellings within Lincoln</li> <li>• LP42 Gainsborough Town Centre and Primary Shopping Area</li> <li>• LP45 Sleaford's Regeneration and Opportunity Areas</li> <li>• LP46 Sleaford Town Centre</li> <li>• LP49 Residential Allocations - Lincoln</li> <li>• LP50 Residential Allocations - Main Towns</li> </ul>



	<ul style="list-style-type: none"> <li>• LP51 Residential Allocations - Market Towns</li> <li>• LP52 Residential Allocations - Large Villages</li> <li>• LP53 Residential Allocations - Medium and Small Villages</li> <li>• LP55 Development in Hamlets and the Countryside</li> <li>• LP56 Gypsy and Traveller Allocations</li> </ul>
<b>N7</b> Policy makes provision for change / promotes development, but effects on a European site cannot be identified because the proposal is too general	<ul style="list-style-type: none"> <li>• LP4 Growth in Villages</li> <li>• LP8 Lincolnshire Showground</li> <li>• LP19 Renewable Energy Proposals</li> <li>• LP24 Creation of New Open Space, Sports and Recreation Facilities</li> <li>• LP57 Ministry of Defence Establishments</li> </ul>

4.2.2 At this initial screening stage, the following aspects of the Local Plan were considered to have the potential to have a significant effect on a European site (whether that be directly or indirectly) and have therefore been subject to further consideration (see section 4.4).

Table 6: Screened in Local Plan policies and proposals

Screening Category	Policies/ parts of the Local Plan which fall in this category and remain 'screened in'
<b>P</b> Policy / proposal / element of Plan with potential to have a likely significant effect and therefore subject to further assessment, including consideration of potential mitigation measures	<ul style="list-style-type: none"> <li>• LP3 Level and Distribution of Growth</li> <li>• LP5 Delivering Prosperity and Jobs</li> <li>• LP30 Lincoln Sustainable Urban Extensions</li> <li>• LP39 Gainsborough Sustainable Urban Extensions</li> <li>• LP44 Sleaford Sustainable Urban Extensions</li> <li>• LP48 Sustainable Urban Extensions - Allocations</li> <li>• LP54 Remaining Capacity on SUEs and Broad Locations for Future Growth</li> </ul>

Table 7: Initial screening of individual policies/ parts of the Proposed Submission Local Plan

Proposed Submission Local Plan policy / proposal	Screening assessment category (see table 2 for categories)	Initial screening assessment: potential effect and comments
Vision	N1	A general statement which sets the overarching vision for development in Central Lincolnshire: the location and quantity of development are set out in various policies. The vision would have no direct effect on a European Site because no development could occur through the vision itself, development would be implemented through the plan policies.
Our Objectives (strategic objectives)	N1	This set of strategic objectives promote change and provide a general approach for the area. The location and quantity of development are set out in later policies of the Plan. The general objectives would have no direct effect on a European Site because no development could occur through the objectives themselves, any development would be implemented through later policies in the plan.
Policy LP1 Presumption in Favour of Sustainable Development	N1	This 'headline' policy sets out the overarching plan commitment to sustainability as the basis for the area's growth and change. It confirms a commitment to the presumption in favour of sustainable development. The policy itself does not allocate a quantity of development or spatially locate any new development.
Policy LP2 The Spatial Strategy and Settlement Hierarchy	N1	<p>This policy sets out the spatial strategy for growth across the Central Lincolnshire area: specifically, it establishes a settlement hierarchy and identifies the settlements which fall within each of these categories. While the policy states that the location of new development will be 'assisted' by the hierarchy, it does not explicitly set out a quantity of growth, nor define how this development and growth will be distributed across the settlement hierarchy (these issues are addressed in policy LP3 Level and Distribution of Growth).</p> <p>Therefore, as the policy is a general statement and does not detail the growth strategy for each category of the settlement hierarchy, the policy itself is unlikely to have any likely significant effects on European Sites.</p>
Policy LP3 Level and Distribution of Growth	P	<p>This policy sets the housing growth figure of 36,960 dwellings and outlines the proposed distribution across Central Lincolnshire. The distribution proposed is: Lincoln Strategy Area around 64% of housing and employment development (23,654 dwellings); Gainsborough around 12% (4,435 dwellings); Sleaford around 12% (4,435 dwellings); and elsewhere around 12% (4,435 dwellings).</p> <p>The policy does not set a figure for employment land, but does state that an 'appropriate' amount should be delivered over the plan period.</p>

		<p>In the case of Lincoln, the priority for both residential and non-residential development is proposed as: urban regeneration; urban extensions; growth at existing settlements.</p> <p>In the case of Gainsborough, it is proposed that growth will be delivered through both urban regeneration and urban extensions, while in Sleaford urban extensions is the primary delivery method.</p> <p>The development of nearly 37,000 new homes and employment development may potentially have indirect adverse impacts on nearby European Sites, for example as a result of increased pressure for water abstraction and treatment, pressure for increased recreation space and an increase in the number of vehicle movements.</p> <p>There is the potential for the policy alone to have likely significant effects on European Sites, as a result of reduced water levels and quality, increased recreational disturbance and increased atmospheric pollution. The sustainable urban extension allocation policies (LP30, LP39, LP44) and the broad location for future growth policy (LP54) can also give rise to these potential effects. These potential effects are likely to have impacts in relation to: (i) Water Supply Levels Changes; (ii) Water Quality Changes; (iii) Recreational Disturbance; (iv) Air Quality Changes.</p> <p>The housing and employment allocations in the individual sustainable urban extension (SUE) policies provide growth in or adjoining the three main urban areas: the SUEs contribute to the overall figures for Central Lincolnshire set out in policy LP3. <b>As the SUE policies are components of the growth agenda set out in policy LP3, it is appropriate to undertake the general effects and mitigation measures assessment for these growth policies together: this is set out at section 4.4.</b></p>
Policy LP4 Growth in Villages	N7	<p>This policy only applies to settlements within categories 5 and 6 of the settlement hierarchy- medium villages and small villages. The policy sets out the anticipated level of growth in the villages over the plan period, ranging from 10 to 15% growth.</p> <p>While this policy specifies the anticipated level of housing growth at settlement level, it does not provide the specific locations for growth within these settlements (with the exception of Hemswell Cliff). In the case of Hemswell Cliff, policy LP4 does not set a percentage growth level, rather, it proposes growth through allocation: a residential allocation in Hemswell Cliff is allocated in policy LP53, Residential Allocations- Medium and Small Villages. The potential impacts of the Hemswell Cliff allocation is considered as part of the assessment of LP53 below.</p> <p>The potential impacts of the growth identified in this policy on European Sites are therefore not known as the exact location and nature of development are unknown.</p>

Policy LP5 Delivering Prosperity and Jobs	P	<p>This policy allocates 7 strategic employment sites which will deliver 111 hectares of employment land. It sets out the employment provision expected within the 8 SUEs, totalling 42 hectares. It also identifies established employment areas where the development of A2 / B1 / B2 / B8 use will be supported, and sets criteria in relation to: local employment sites; other employment proposals; expansion of existing businesses; and loss of employment sites and buildings to non-employment uses.</p> <p>There is potential for this policy alone to have likely significant effects on European Sites, as a result of reduced water quality, impacts on water supply, disturbance to habitats, and increased atmospheric pollution. <b>As policy LP5 is a component of the growth agenda set out in policy LP3, it is appropriate to undertake the general effects and mitigation measures assessment for these growth policies together, in combination with other plans and programmes: this is set out at section 4.4.</b></p>
Policy LP6 Retail and Town Centres in Central Lincolnshire	N1	<p>This policy makes provision for change, setting out a retail hierarchy, roles of centres, and a requirement for sequential site testing.</p> <p>This policy seeks to guide retail and other town centre uses so as to improve the vitality and viability of the various centres identified. No specific locations or quantities of development are allocated by this policy.</p> <p>Though the policy promotes change and development, the policy is not likely to have a significant effect on a European site because it does not allocate sites or specify the amount of growth within a particular locality.</p>
Policy LP7 A Sustainable Visitor Economy	N1	<p>A general policy which supports development and activities that will deliver high quality sustainable tourism, culture and leisure, including sporting attractions. The policy sets out some general criteria which proposals will be expected to meet and states a preference for development to be located within existing or proposed built up areas, unless exceptional circumstances justify otherwise.</p> <p>Though the policy promotes change and development, the policy is not likely to have a significant effect on a European site because it does not allocate sites or specify the amount of growth at a particular location.</p>
Policy LP8 Lincolnshire Showground	N7	<p>This policy sets out the type of development that would be supported on the Lincolnshire Showground site and sets out various criteria that such development would have to meet. It does not specify a quantity of development, though does state the maximum size of the supported types of development.</p> <p>Though it is known broadly where development would take place, the effects of this policy on European Sites cannot be identified because it is not known what type of development will occur, when it will occur, or how any proposal may be implemented, therefore it is not possible to anticipate the effects of this policy.</p>
Policy LP9 Health and Wellbeing	N4	<p>This policy sets out an approach for improving health and wellbeing by outlining how development proposals will be expected to promote, support and enhance both physical and mental wellbeing. It also specifies criteria for the development of new health care facilities.</p>

		However, the policy itself will not lead to development, neither allocating a quantum of development nor spatially locating any new development.
Policy LP10 Meeting Accommodation Needs	N4	<p>This policy requires residential development to maintain, provide or contribute to a mix of tenures, types and sizes. It also sets out what contribution housing developers will be expected to make in relation to dwellings with higher access standards and requires residential care accommodation to be located in settlements that fall within levels 1 to 4 of the settlement hierarchy.</p> <p>The policy itself will not result in development, therefore it could have no likely significant effect on a European Site.</p>
Policy LP11 Affordable Housing	N4	<p>This policy sets out the overall need for affordable housing over the plan period for the whole Central Lincolnshire area, and the qualifying site threshold size (which is consistent across the plan area) and the percentage of affordable housing required (which varies). It does not spatially locate any new development to specific sites, nor does it identify the exact tenure mix, instead specifying that this should be informed by latest government guidance and the Strategic Housing Market Assessment.</p> <p>This policy itself will not result in development, rather, it specifies a requirement that housing developments (on both allocated and non-allocated sites) will be expected to meet: the policy itself will therefore not result in significant effects on any European Sites.</p>
Policy LP12 Infrastructure to Support Growth	N1	<p>This policy makes provision for change, and seeks to ensure that all development proposals are supported by the necessary infrastructure, both on and off site.</p> <p>It focuses on seeking contributions from developers to deliver and finance the relevant infrastructure and services needed to support growth and new development. It does not allocate a quantity of development or spatially locate any new development.</p> <p>This policy is not likely to have a significant effect on European Sites, as the infrastructure development that would result from this policy is dependent on the development that would arise as a direct result of other policies (i.e. development on allocated sites) as well as development which would occur as a result of speculative development (of which the location is not known). While the locations of allocated sites are known, the exact infrastructure requirements associated with the development of these sites are unknown, due to the detailed proposals for the sites not yet being defined.</p>
Policy LP13 Accessibility and Transport	N4	This policy supports development which contributes towards an efficient and safe transport network. It sets out qualitative criteria in relation to strategic transport infrastructure; public and community transport infrastructure and services; walking and cycling infrastructure; parking provision; and general requirements.

		It does not allocate a quantum of development or spatially locate any new transport related development, therefore the policy alone is not likely to have a significant effect on European Sites.
Policy LP14 Managing Water Resources and Flood Risk	N3	<p>This policy sets out qualitative criteria for protecting the water environment and managing flood risk in the Central Lincolnshire area.</p> <p>It seeks careful management of water resources, in order to conserve their quality and value, and to address drainage and flooding issues.</p> <p>The policy does not allocate a quantity of development or spatially locate any new development. The protection afforded by this policy is therefore not likely to have any negative effects on a European Site.</p>
Policy LP15 Community Facilities	N1	The three aims of this policy are: to prevent the loss of existing community facilities; support new stand-alone facilities; and ensure that wider development proposals which generate a need for such facilities include provision as necessary. The policy does not promote development specific to land allocations, therefore the policy is not likely to have a significant effect on a European Site.
Policy LP16 Development on Land affected by Contamination	N3	This is a general policy statement which is intended to prevent adverse impact on the built and natural environment arising from the development of land potentially affected by contamination. The policy itself will not result in development as it does not set out a quantum of, nor the location of, new development and will therefore not result in any significant effects on European Sites.
Policy LP17 Landscape, Townscape and Views	N1	<p>This policy sets principles which aim to protect the character and setting of landscape features and existing views, as well as encourage developers to create new vistas wherever possible.</p> <p>The policy itself does not allocate a quantum of development or spatially locate any new development, rather, it makes provision for guiding change and so is unlikely to have any effect on a European Site.</p>
Policy LP18 Climate Change and Low Carbon Living	N1	<p>This policy encourages developers to consider how their proposal can reduce demand for resources, maximise resource efficiency, produce energy from decentralised or renewable infrastructure, or off-set carbon.</p> <p>The policy does not identify a quantity of development, make any allocations or set criteria for the determination of applications: rather, it is a general policy statement that encourages measures that address the cause and effects of climate change.</p> <p>Given the generality of this policy, the potential effects on European Sites are not likely to be significant.</p>
Policy LP19 Renewable Energy Proposals	N7	This policy sets out criteria for the determination of wind energy proposals, and considerations for all other forms of renewable energy.

		<p>Whilst no locations for renewable energy development are specifically identified, the policy could directly lead to renewable and low energy developments (though not wind energy developments). Likely effects are uncertain because it is not known where, when or how proposals may be implemented, or where any potential effects may occur, or which European Sites, if any, may be affected. Potential effects could include: habitat / species disturbance; impacts on air quality; and increased surface water run-off from increased areas of hard standing.</p>
Policy LP20 Green Infrastructure Network	N3	<p>This policy specifically seeks to enhance, create and manage multifunctional green space. The policy is a general policy statement that encourages improvements to the Green Infrastructure Network.</p> <p>The policy sets out criteria for the consideration of development proposals, and seeks to prevent development which would result in loss or harm to the green infrastructure network.</p> <p>This policy is not likely to have an adverse effect on European Sites and could result in positive effects.</p>
Policy LP21 Biodiversity and Geodiversity	N3	<p>This policy specifically seeks to protect the natural environment, including biodiversity and habitats, and also seeks enhancement where possible.</p> <p>The policy specifically states that “development proposals that will have an adverse impact on a European Site or cause significant harm to a Site of Specific Scientific Interest, located within or outside Central Lincolnshire, will not be permitted”.</p> <p>As the policy actively seeks to positively protect and enhance biodiversity and internationally designated sites, it is not likely to have a significant adverse effect on any European Site.</p>
Policy LP22 Green Wedges	N3	<p>This policy allocates green wedge areas and sets criteria for development within and directly adjacent to these areas. One of the aims of the green wedge designations is to conserve the open countryside.</p> <p>Together with policies LP20 (Green Infrastructure Network), LP21 (Biodiversity and Geodiversity) and LP23 (Local Green Space and Other Important Open Space), this policy promotes the Central Lincolnshire Green Infrastructure Strategy, which includes an improved green infrastructure network of corridors and open spaces. This is likely to increase habitat creation and recreational use of these areas, however none of the proposed green wedges are in close proximity to the identified European Sites. The policy is therefore very unlikely to have any potential adverse effects on European Sites.</p>
Policy LP23 Local Green Space and Other Important Open Space	N3	<p>This policy allocates areas as Local Green Space and rules out development of these sites in all but exceptional circumstances. It also identifies other areas of Important Open Space, and sets out considerations for their development.</p> <p>This policy is therefore very unlikely to have any potential adverse impacts on European Sites as it seeks to protect, conserve and enhance the natural environment.</p>

Policy LP24 Creation of New Open Space, Sports and Recreation Facilities	N7	This policy sets out the requirement for new development to provide open space, sports and recreation facilities. The effects of the policy on European Sites cannot be determined, as the space, sports and recreation development that would result from this policy are dependent on the development that would arise as a result of other policies (i.e. policies which allocate sites) as well as speculative development. While the site allocations are defined, the exact space/ sports/ recreation facilities requirements associated with the development of these sites are not known due to the detailed proposals for the sites not yet being defined.
Policy LP25 The Historic Environment	N3	A general criteria based policy setting out principles and expectations for the protection, conservation and enhancement of the historic environment. The policy itself would not directly lead to development, rather, it promotes measures intended to have a positive effect on the built environment and so it is not likely to have any adverse effects on European Sites.
Policy LP26 Design and Amenity	N4	A general criteria based policy setting out the principles and expectations for high quality design and the protection and improvement of amenity. The policy itself would not directly lead to development, rather, it promotes measures intended to have a positive effect on the built environment and the standard of development proposals, and so it is not likely to have any adverse effects on European Sites.
Policy LP27 Main Town Centre Uses - Frontages and Advertisements	N4	A general criteria based policy setting out the principles and expectations for frontages and advertisements. The policy itself would not directly lead to development, rather, it promotes measures intended to have a positive effect on the built environment and the standard of development proposals, and so it is not likely to have any adverse effects on European Sites.
Policy LP28 Sustainable Urban Extensions	N4	Policy LP28 sets out the qualitative criteria that sustainable urban extensions will be expected to achieve, including requirements for phasing and broad concept planning. The policy itself does not allocate a quantity of development or allocate the SUE sites. The policy would have no effect on European Sites because no development could occur through the policy itself: rather, development would be implemented through other policies in the plan.
Policy LP29 Protecting Lincoln's Setting and Character	N4	<p>This policy aims to protect and enhance Lincoln's natural and historic environment through a set of criteria. The criteria in this policy are general and the topics covered are addressed in more detail in other policies, namely LP7 A Sustainable Visitor Economy; LP17 Landscape, Townscape and Views; LP20 Green Infrastructure Network; LP21 Biodiversity and Geodiversity; LP22 Green Wedges; LP23 Local Green Space and Other Important Open Space; and LP25 The Historic Environment. However, the general criteria in policy LP29 highlight the particular issues for Lincoln in relation to each of these topics.</p> <p>The location and quantum of development for Lincoln are not set out in this policy – they are set out in later policies in the Lincoln chapter. The general criteria within this policy would have no direct effect on a European Site because no development could occur through this policy itself.</p>



Policy LP30 Lincoln Sustainable Urban Extensions	P	<p>This policy sets out various criteria for the development of the four sustainable urban extensions (SUEs) in Lincoln. The policy itself does not allocate the SUEs- this is done by policy LP48, Sustainable Urban Extensions- Allocations.</p> <p>The policy does however set the approximate housing numbers for each of these SUEs, namely the Western Growth Corridor, South East Quadrant, North East Quadrant and South West Quadrant. The other development principles included in this policy include, for example, the amount of employment land to be provided; specific reference to infrastructure (e.g. Lincoln Eastern Bypass); and access considerations.</p> <p>The development of this number of new homes and employment land on each of the sites may potentially have indirect adverse impacts on certain nearby European sites, for example as a result of increased pressure for water abstraction and treatment, pressure for increased recreation space and increased vehicle movements.</p> <p><b>As the SUE policies are components of the growth agenda set out in policy LP3, it is appropriate to undertake the general effects and mitigation measures assessment for these growth policies together: this is set out at section 4.4.</b></p>
Policy LP31 Lincoln's Economy	N1	<p>This policy sets out overarching principles for guiding development relating to Lincoln's economy. The policy does not identify a quantum of growth, nor where development will be located, rather it seeks to ensure that development which supports the economy protects and enhances various areas and attributes of Lincoln.</p> <p>As the policy is very generic, and will not itself result in development, the policy is unlikely to have any significant effects on a European Site.</p>
Policy LP32 Lincoln's Universities and Colleges	N1	<p>This policy supports development proposals which support the ongoing development of higher and further education establishments in Lincoln. This general policy is not likely to have a significant effect on a European Site.</p>
Policy LP33 Lincoln's City Centre Primary Shopping Area and Central Mixed Use Area	N6	<p>This policy defines a 'Central Mixed Use Area' and identifies the use classes of development that will be supported within this area and establishes general criteria.</p> <p>The policy does not specify a quantum of development for this area, nor does it indicate an acceptable use mix.</p> <p>As this policy relates to an existing urban area the likelihood of any development resulting from the policy affecting a European Site is remote.</p>

Policy LP34 Lincoln's District and Local Shopping Centres	N6	<p>This policy designates District Centres and Local Centres and outlines criteria that proposals within these areas will be expected to meet. The policy does not identify what type of, nor the quantity of, development that is expected within these designations.</p> <p>As this policy relates to existing urban areas the likelihood of any development resulting from the policy affecting a European Site is remote.</p>
Policy LP35 Lincoln's Regeneration and Opportunity Areas	N6	<p>This policy identifies four regeneration/ opportunity areas within Lincoln: it outlines the regeneration priorities within each of these areas, detailing what type of development will be supported and the key considerations for the development of these areas. It does not identify a quantum of development.</p> <p>The potential effects of this policy on European Sites are not likely to be significant given that the policy relates to existing urban areas.</p>
Policy LP36 Access and Movement with the Lincoln Area	N2	<p>This policy promotes a sustainable transport network in line with the Lincoln Integrated Transport Strategy. It sets out qualitative criteria in relation to transport measures that all new development should have regard to. While the policy refers to specific transport schemes, for example the Eastern Bypass and Park and Ride, these schemes are proposed through the Lincoln Integrated Transport Strategy which will have been subject to separate assessment and thus these strategies are not further assessed as part of the assessment of the Central Lincolnshire Local Plan.</p> <p>As the policy itself does not allocate a quantum of development or spatially locate any new transport schemes, the policy itself could have no conceivable effects on a European Site.</p>
Policy LP37 Sub-division and multi- occupation of dwellings within Lincoln	N6	<p>This policy sets out qualitative criteria in relation to the conversion and change of use of dwellings and buildings into flats or shared accommodation and supports purpose built accommodation subject to it meeting the criteria set out.</p> <p>The policy is not likely to have a significant effect on a European Site given that the policy relates to an existing urban area.</p>
Policy LP38 Protecting Gainsborough's Setting and Character	N4	<p>This policy aims to protect and enhance Gainsborough's natural and historic environment through a set of criteria. The criteria in this policy are general and the topics covered are addressed in more detail in other policies, namely LP7 A Sustainable Visitor Economy; LP17 Landscape, Townscape and Views; LP20 Green Infrastructure Network; LP21 Biodiversity and Geodiversity; LP22 Green Wedges; LP23 Local Green Space and Other Important Open Space; and LP25 The Historic Environment. However, the general criteria in policy LP38 highlight the particular issues for Gainsborough in relation to each of these topics.</p> <p>The location and quantum of development for Gainsborough are not set out in this policy – they are set out in later policies in the Gainsborough chapter. The general criteria within this policy would have no direct effect on a European Site because no development could occur through this policy itself.</p>

Policy LP39 Gainsborough Sustainable Urban Extensions	P	<p>This policy sets out considerations for the Gainsborough Southern Neighbourhood SUE and the Gainsborough Northern Neighbourhood SUE, which are allocated by policy LP48 Sustainable Urban Extensions- Allocations.</p> <p>For the Southern Neighbourhood SUE, the policy sets the approximate housing number of 2,500, and identifies that 1,400 of these are expected to come forward in the plan period. The policy also specifies that the SUE should provide sufficient employment land to accommodate 15,000sqm of B1 and B2 use, a Local Centre that can accommodate 2,000sqm of class A uses, and two primary schools.</p> <p>For the Northern Neighbourhood SUE, the policy sets the approximate housing number of 2,500, and identifies that 750 of these are expected in the plan period. The policy also specifies that the SUE should provide approximately 7 hectares of employment land for B1, B2 or B8 use, a Local Centre, as well as a primary school.</p> <p>This scale and type of development may have indirect adverse impacts on nearby European sites, for example as a result of increased pressure for water abstraction and treatment, disturbance to habitats, pressure for increased recreation space and increased vehicle movements.</p> <p><b>As the SUE policies are components of the growth agenda set out in policy LP3, it is appropriate to undertake the general effects and mitigation measures assessment for these growth policies together: this is set out at section 4.4.</b></p>
Policy LP40 Gainsborough Riverside	N4	<p>This policy requires that all relevant development proposals must assist in delivering a pedestrian and cycling corridor connecting Gainsborough's riverside area to settlements to the north and south and improving connectivity with other parts of the town. It sets out qualitative principles that proposals must adhere to, and does not allocate any specific development. The policy itself will not therefore lead to development, therefore it will have no potential adverse effects on any European Sites.</p>
Policy LP41 Regeneration of Gainsborough	N4	<p>This policy seeks that proposals relating to the regeneration of Gainsborough assist in meeting regeneration and investment objectives for Gainsborough.</p> <p>It sets qualitative criteria that proposals must have particular regard to.</p> <p>As the policy itself does not allocate a quantum of development or spatially locate any new development, the policy itself could have no conceivable effects on a European Site.</p>
Policy LP42 Gainsborough Town Centre	N6	<p>This policy designates the Gainsborough Town Centre and the Primary Shopping Area. It outlines qualitative criteria for determining applications within the town centre, and non-retail proposals within the primary shopping area.</p>

and Primary Shopping Area		The likelihood of development resulting from this policy affecting a European Site is remote given that the policy relates to an existing urban area.
Policy LP43 Protecting Sleaford's Setting and Character	N4	<p>This policy sets out various qualitative criteria aimed at protecting the setting and character of Sleaford.</p> <p>The criteria in this policy are general and the topics covered are addressed in more detail in other policies, namely LP7 A Sustainable Visitor Economy; LP17 Landscape, Townscape and Views; LP20 Green Infrastructure Network; LP21 Biodiversity and Geodiversity; LP22 Green Wedges; LP23 Local Green Space and Other Important Open Space; and LP25 The Historic Environment. However, these general criteria highlight the particular issues for Sleaford in relation to each of these topics.</p> <p>The location and quantum of development for Sleaford are not set out in this policy. The general criteria within this policy would have no direct effect on a European Site because no development could occur through this policy itself.</p>
Policy LP44 Sleaford Sustainable Urban Extensions	P	<p>This policy sets out considerations for the Sleaford South Quadrant SUE and the Sleaford West Quadrant SUE, which are allocated by policy LP48 Sustainable Urban Extensions- Allocations.</p> <p>The policy sets the approximate housing numbers for both of the SUEs: 1,450 dwellings are anticipated at the Sleaford South Quadrant and 1,400 dwellings at the Sleaford West Quadrant.</p> <p>Various other specific land uses are also proposed at the Sleaford South Quadrant, including a Local Centre which includes a health centre, community centre, retail units and other uses, and a primary school on a 1.8 hectare site.</p> <p>For the Sleaford West Quadrant, the other land uses which proposals will need to incorporate include: a 1 hectare Local Centre; 0.5 ha healthcare facility; 3ha B1 use class employment land; primary school on 1.8ha site; secondary school on 5.5.ha site; and 11ha of green infrastructure and public open space.</p> <p>The development of this number of new homes and employment land, and the various other land uses, within both of these extensions may potentially have indirect adverse impacts on nearby European sites, for example as a result of increased pressure for water abstraction and treatment, habitat disturbance, pressure for increased recreation space and increased vehicle movements.</p> <p><b>As the SUE policies are components of the growth agenda set out in policy LP3, it is appropriate to undertake the general effects and mitigation measures assessment for these growth policies together: this is set out at section 4.4.</b></p>
Policy LP45 Sleaford's	N6	This policy designates four opportunity areas within Sleaford and outlines the key principles for guiding development within these.

Regeneration and Opportunity Areas		<p>The policy promotes change and redevelopment in the specific areas, detailing the specific principles to be considered in the regeneration of the areas, though does not allocate a quantum of development.</p> <p>It is not considered likely that the policy will result in development that would have a significant adverse effect on a European Site because the policy focuses on the regeneration of existing urban areas so the likelihood of adverse effects on a European Site is low so it is considered reasonable to screen this policy out.</p>
Policy LP46 Sleaford Town Centre	N6	<p>This policy defines the Sleaford Town Centre and Primary Shopping Area. It outlines various criteria to guide development within both of these areas. While the policy details what use class of development will be supported, it does not state the exact mix of development that is required, nor does it specify a quantum of development.</p> <p>The likelihood of development resulting from this policy affecting a European Site is remote given that the policy relates to an existing urban area.</p>
Policy LP47 Access and Movement within Sleaford	N4	<p>This policy requires that proposals assist in meeting the objectives of the Sleaford Transport Strategy and Sleaford Masterplan.</p> <p>It highlights the qualitative criteria of these plans that proposals must have particular regard to.</p> <p>As the policy itself does not allocate a quantum of development or spatially locate any new development, the policy itself could have no conceivable effects on a European Site.</p>
Policy LP48 Sustainable Urban Extensions - Allocations	P	<p>This policy allocates eight sustainable urban extensions, which are also set out in policies LP30 (Lincoln SUEs), LP39 (Gainsborough SUEs) and LP44 (Sleaford SUEs).</p> <p>The policy identifies the indicative number of dwellings to be delivered at each SUE. This policy is considered likely to lead to potential development growth effects, and has the potential to effect European Sites.</p> <p><b>As the SUE policies are components of the growth agenda set out in policy LP3, it is appropriate to undertake the general effects and mitigation measures assessment for these growth policies together: this is set out at section 4.4.</b></p>
Policy LP49 Residential Allocations - Lincoln	N6	<p>This policy allocates 31 sites in Lincoln for housing development in addition to the SUEs. The policy only allocates sites with a capacity of 25 dwellings or more: the indicative dwelling figures for the sites range from 30 to 328, with the total number of dwellings to be delivered by these sites being 3,533.</p>

		The policy makes provision for development in specific areas, though the potential impacts of this development upon European Sites are not expected to be significant given the relatively small scale of some of the sites and that the development is focused within or adjacent to an existing urban area.
Policy LP50 Residential Allocations - Main Towns	N6	<p>This policy allocates 28 sites across the two Main Towns of Gainsborough and Sleaford for housing development (in addition to the SUEs). As for the Lincoln site allocations, the policy only makes provision for sites with a capacity of 25 or more dwellings. The sites range from an indicative capacity of 25 dwellings to 450 dwellings, with the total number of dwellings to be deliver by these sites anticipated at 3,533, comprising of 2,061 in Gainsborough and 1,472 in Sleaford.</p> <p>The policy makes provision for development in the specific areas identified, though the potential impacts of the development upon European Sites are not expected to be significant given the relatively small scale of some of the sites and that the development is focused within or adjacent to an existing urban areas.</p>
Policy LP51 Residential Allocations - Market Towns	N6	<p>This policy allocates sites for housing development (with capacity for 25 dwellings and over) in the Market Towns. 401 dwellings are allocated across 5 sites in Caistor while 551 dwellings across 7 sites are allocated in Market Rasen – 952 dwellings in total.</p> <p>The policy makes provision for development in the specific areas identified, though the potential impacts of the development upon European Sites are not expected to be significant given the relatively small scale of some of the sites and that the development is focused within or adjacent to existing market towns.</p>
Policy LP52 Residential Allocations - Large Villages	N6	<p>This policy allocates various sites (with capacity of 25 or more dwellings) in the Large Villages. There are 15 Large Villages within the Lincoln Area and five Large Villages within other areas outside the Lincoln Area.</p> <p>The allocations range from a capacity of 30 to 1250 dwellings, with a total anticipated delivery of 5,712 dwellings in the Lincoln Area, and 1,498 dwellings in other areas (7,210 dwellings in total).</p> <p>The policy makes provision for development in the specific areas identified, though the potential impacts of the development upon European Sites are not expected to be significant given the relatively small scale of some of the sites, that development is focused within or adjacent to existing settlements, and the distance of the villages from the relevant European Sites.</p>
Policy LP53 Residential Allocations – Medium and Small Villages	N6	<p>This policy allocates five sites for residential development: three within the Lincoln Strategy Area, two within the Non-Lincoln Strategy Area. The sites have a capacity of 401 dwellings collectively.</p> <p>The policy makes provision for development in the specific areas identified, though the potential impacts of the development upon European Sites are not expected to be significant given the relatively small scale of the sites, that development is focused within or adjacent to existing settlements, and the distance of the villages from the relevant European Sites.</p>

Policy LP54 Remaining Capacity on SUEs and Broad Locations for Future Growth	P	<p>This policy sets out the remaining capacity of the allocated SUE sites which is not expected to come forward in the plan period. This capacity may however be delivered in the plan period if SUE delivery is quicker than expected.</p> <p>The policy also identifies broad locations for future large scale housing development, which may be delivered if monitoring data shows a certain level of job and housing delivery. There is the potential for the policy alone to have likely significant effects on European Sites, as a result of reduced water levels and quality, increased traffic movements, habitat disturbance, increased recreational disturbance, and increased atmospheric pollution.</p>
Policy LP55 Development in Hamlets and the Countryside	N6	<p>This policy addresses various development considerations in rural areas and the countryside, including, for example, conversion of buildings for residential use, non-residential development, and agricultural diversification. The criteria based policy does not identify a quantity of development, nor the locations where development will be permitted. The policy makes provision for change, but any change is not likely to be major, and therefore it is unlikely that the policy will have likely significant effects on a European Site.</p>
Policy LP56 Gypsy and Traveller Allocations	N6	<p>This policy allocates sites for provision of pitches for Gypsies and Travellers and sets out qualitative criteria which will be used in determining proposals for the development of sites (both allocated and non-allocated) to meet Gypsy and Traveller needs.</p> <p>While the criteria-based elements of this policy will not lead to development, the allocation of sites and identification of the indicative level of development on each site means that there is potential for the policy to have effects on European Sites, as a result of reduced water levels and quality, increased recreational disturbance and increased atmospheric pollution. The development may also potentially have indirect adverse impacts on European Sites, for example as a result of increased pressure for water abstraction and treatment, pressure for increased recreation space and increased vehicle movements.</p> <p>However, given that the greatest indicative number of pitches for any one site is 6 and the potential total number of pitches across the whole of Central Lincolnshire is 17, it is considered that the potential effects of any development would be very restricted in scale and remote from any of the European Sites that they would not undermine the conservation objectives for the sites.</p>
Policy LP57 Ministry of Defence Establishments	N7	<p>This policy sets out a general strategic approach in support of development for MOD operational purposes and for managing former Ministry of Defence establishments which are surplus to requirement. This policy does not allocate a quantity of development or spatially locate any new development, therefore, the effects of the policy upon any European Sites are unknown.</p>

### 4.3 Step 3) Effects of other plans and projects in association with the Local Plan

4.3.1 This section (Step 3) considers if the effects of the other plans and projects identified at Stage A (see Step 3) are likely, in association with the Local Plan, to have any significant effects on the European Sites. Table 8 below summarises the findings of Step 3, which are detailed in Table 9.

Table 8: Summary of effects of other plans, policies and projects in-combination with the Central Lincolnshire Local Plan

<b>Plan / Policy / Project</b>	<b>Screening conclusion of 'in-combination' effects</b>
1- National Planning Policy Framework (2012)	No significant effects likely
2- 4 <sup>th</sup> Lincolnshire Local Transport Plan (2013)	No significant effects likely
3- Lincolnshire Minerals Local Plan (1991)	No significant effects likely
4- Lincolnshire Waste Local Plan (2006)	No significant effects likely
5- Lincolnshire Minerals and Waste Local Plan, Core Strategy and Development Management Policies (due to be considered for adoption 20 May 2016)	No significant effects likely
6- Newark and Sherwood District Council Core Strategy (2011)	No significant effects likely
7- Newark and Sherwood District Council Allocations and Development Management DPD (2013)	No significant effects likely
8- South Kesteven District Council Core Strategy (2010)	No significant effects likely
9- South Kesteven District Council Site Allocation and Policies DPD (2014)	No significant effects likely
10- Bassetlaw District Council Core Strategy (2011)	No significant effects likely
11- North Lincolnshire Council Core Strategy (2011)	No significant effects likely
12- North Lincolnshire Council Housing and Employment Land Allocations DPD (2016)	No significant effects likely
13- East Lindsey Local Plan (1995)	No significant effects likely
14- South Holland District Council Local Plan (2006)	No significant effects likely
15- Boston Borough Council Local Plan (1999)	No significant effects likely
16- North East Lincolnshire Council Local Plan (2003)	No significant effects likely
17- Lower Trent and Erewash CAMS (2013)	No significant effects likely
18- Witham CAMS (2013)	No significant effects likely
19- Grimsby, Ancholme and Louth CAMS (2013)	No significant effects likely
20- River Witham CFMP (2009)	No significant effects likely
21- River Trent CFMP (2009)	No significant effects likely
22- Grimsby and Ancholme CFMP (2009)	No significant effects likely
23- Louth Coastal CFMP (2009)	No significant effects likely
24- Anglian Water WRMP (2013)	No significant effects likely
25- Severn Trent Water Resources Management Plan (2014)	No significant effects likely



26- Anglian River Basin District River Basin Management Plan (2015)	No significant effects likely
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Table 9: Consideration of other plans, policies and projects with the potential for in-combination effects with the Central Lincolnshire Local Plan

NATIONAL	
1) National Planning Policy Framework (2012)	<p><b>Details:</b> The NPPF sets national level planning policy and is used to inform planning policy at the local level.</p> <p><b>HRA screening 'in-combination' conclusion:</b> It is reasonable to conclude that there are likely to be no significant effects on the European Sites as a result of the combined effects of the Central Lincolnshire Local Plan and the NPPF given that the NPPF sets out overarching national policy, and does not specify any development targets or locations for development in the plan area.</p>
COUNTY PLANS	
<p>2) Lincolnshire County Council 4<sup>th</sup> Lincolnshire Local Transport Plan 2013/14 to 2022/23 (April 2013)</p> <p>'LTP4'</p>	<p><b>Details:</b> The Local Transport Plan sets out how Lincolnshire County Council and its partners intend to improve transport over the period 2013 - 2023.</p> <p><b>HRA findings:</b> The proposals included in the Lincolnshire LTP4 were screened for their potential to have significant impacts on Natura 2000 sites. It was noted in the screening that the following effects may give rise to potential impacts: changes in air quality through pollution; increases in noise and light levels (as a result of vehicles, construction or new infrastructure); and changes in soil or water chemical composition (through road spray and construction activities).</p> <p>It was found that no significant impacts will directly result from the implementation of the LTP4. However, based on the findings of the HRA screening process, it was noted that possible significant impacts could arise from some specific schemes or projects implemented in accordance with the LTP4. There is also potential for multiple plans to have in-combination effects with schemes implemented in accordance with the LTP4. Because of this uncertainty, the potential for schemes to affect Natura 2000 sites included within the HRA should be considered again when carrying out further HRA work at the project level or when preparing more detailed lower tier plans. This is considered more appropriate because a greater level of detail will be available to make the assessment of the likelihood of significant effects occurring (potential impacts may be screened out or additional impacts taken into consideration once more information pertaining to the nature of the proposal or associated works is available) and further information will allow for more robust avoidance and mitigation measures to be designed and implemented, thereby reducing the overall impact of the proposal.</p> <p>Assuming the above recommendations are enacted, no significant impacts to Natura 2000 sites were considered likely as a result of implementing the Lincolnshire LTP4.</p>

	<p><b>HRA screening ‘in-combination’ conclusion:</b></p> <p>All policies in the Central Lincolnshire Local Plan have been screened out from further HRA, either because they had no likely significant effects or because any potential effects could be mitigated or avoided. It is therefore reasonable to conclude that there are likely to be no significant effects ‘in combination’ with LTP4.</p>
3) Lincolnshire Minerals Local Plan (adopted 1991)	No HRA was undertaken for the 1991 Minerals Local Plan as it was adopted prior to the European Habitat Regulations being enshrined into UK legislation. See details below regarding new Lincolnshire Minerals and Waste Local Plan.
4) Lincolnshire Waste Local Plan (adopted 2006)	No HRA was undertaken for the 2006 Waste Local Plan as it was adopted prior to the European Habitat Regulations being enshrined into UK legislation. See details below regarding new Lincolnshire Minerals and Waste Local Plan.
<p>5) Lincolnshire Minerals and Waste Local Plan, Core Strategy and Development Management Policies</p> <p>Due to be considered for adoption by Full Council on 20 May 2016</p>	<p><b>Details:</b></p> <p>The County Council is preparing the Lincolnshire Minerals and Waste Local Plan which, when adopted, will replace the Minerals Local Plan (1991) and the Waste Local Plan (2006). The Lincolnshire Minerals and Waste Local Plan will consist of two documents:</p> <ul style="list-style-type: none"> <li>• Core Strategy and Development Management Policies: This sets out the key principles to guide the future winning and working of minerals and the form of waste management development in the County. The development management policies set out the criteria against which planning applications for minerals and waste development will be considered.</li> <li>• Site Locations: Specific proposals and policies for the provision of land for mineral and waste development.</li> </ul> <p>The Core Strategy and Development Management Policies document was submitted to the Secretary of State on 5 June 2015. The independent examination was completed 22 February 2016 and the document is scheduled for consideration for adoption by Full Council on 20 May 2016.</p> <p><b>HRA findings:</b></p> <p>The HRA screening undertaken for the Pre-submission Draft of the Core Strategy and Development Management Policies document (Feb 2013), the subsequent September 2014 update and the subsequent December 2015 update determined that it has been possible to screen out the Policies within the Minerals and Waste Local Plan Publication Core Strategy and Development Management Policies document, largely due to the wording of Policy DM7 regarding the protection of internationally important biodiversity sites. The HRA screening concluded that no likely significant effects on European Sites, either alone or in combination with other projects and plans, will result from the implementation of the Plan.</p>

	<p><b>HRA screening ‘in-combination’ conclusion:</b> All policies in the Central Lincolnshire Local Plan have been screened out from further HRA, either because they had no likely significant effects or because any potential effects could be mitigated or avoided. It is therefore reasonable to conclude that there are likely to be no significant effects ‘in combination’ with the Core Strategy and Development Management Policies element of the Minerals and Waste Local Plan.</p>
<b>LOCAL PLANS</b>	
6) Newark and Sherwood District Council Core Strategy (March 2011)	<p><b>Details:</b> Housing: 14,800 between 2006 and 2026; 70% of this housing requirement will be distributed to the Newark Urban Area; 20% to the Service Centres and 10% to the Principal Villages.</p> <p>Employment land: 210-220 hectares between 2006 and 2026, distributed between the five areas of Newark area; Southwell area; Nottingham fringe area; Sherwood area; and Mansfield fringe area.</p> <p>Strategic sites:</p> <ul style="list-style-type: none"> <li>i) Land South of Newark – approx. 3,100 dwellings (2,200 of which to be constructed in the plan period to 2026); B2 and B8 employment land uses (38 hectares in the plan period); two local centres, comprising retail, service, employment and community uses; and associated green, transport and other infrastructure.</li> <li>ii) Land East of Newark approx. 1,600 dwellings; a local centre, comprising retail, service, employment and community uses; and associated green, transport and other infrastructure.</li> <li>iii) Land around Fernwood – approx. 3,200 dwellings (2,200 of which to be constructed in the plan period to 2026); a high quality, landscaped B1 Business Park for individual regional and national HQ and high tech businesses (15 hectares); a local centre, comprising retail, service, employment and community uses; and associated green, transport and other infrastructure.</li> </ul> <p><b>HRA findings:</b> The HRA concluded that, with mitigation measures as recommended in the screening report, the Core Strategy will not itself result in any change to or effect on any European Site and that an appropriate assessment was not required.</p> <p><b>HRA screening ‘in-combination’ conclusion:</b> The only European site that is within the scope of both this screening report for the Central Lincolnshire Local Plan and the HRA of the Newark and Sherwood Core Strategy is Birklands and Bilhaugh. Potential likely significant effects include recreational pressure issues. All policies in the Central Lincolnshire Local Plan have been screened out from further HRA, either because they had no likely significant effects or because any potential effects could be mitigated or avoided. It is reasonable to conclude that there are likely to be no significant effects on Birklands and Bilhaugh in-combination between the Central Lincolnshire Local Plan and Newark and Sherwood Core Strategy. The potential impacts from increased recreational pressures from new development in Central Lincolnshire are unlikely to have a significant effect on Birklands and Bilhaugh, due to the distance of this site from Central Lincolnshire (approximately 20km) and due to Local Plan policies LP20 Green</p>

	<p>Infrastructure Network and LP22 Green Wedges, which support the provision of well connected, multifunctional greenspaces and the delivery of strategic greenspaces. These measures will provide Central Lincolnshire residents with recreational opportunities and would help relieve any recreational pressure on greenspaces (including the Birklands and Bilhaugh SAC) outside the Central Lincolnshire area.</p>
<p>7) Newark and Sherwood District Council Allocations and Development Management DPD (July 2013)</p>	<p><b>Details:</b> This DPD sets out allocations of land for new housing, employment and other development in the main settlements in the District. It also sets out development management policies for use in the consideration of planning applications.</p> <p>Housing: new dwelling figures as per Core Strategy (14,800).</p> <p>Employment land: DPD meets the requirements for employment land provision as set out in the Core Strategy (211 - 220ha).</p> <p><b>HRA findings:</b> The HRA undertaken for the DPD (Sept 2012) concluded that the DPD would not, in itself, result in any change to or effect on any European site and that it can reasonably be concluded that there will be no likely significant effect (either alone or in combination) as a result of the DPD being implemented. An Appropriate Assessment of the DPD was therefore not required.</p> <p>The subsequent Habitats Regulations Review of the Final Modifications (Jan 2013) and HRA Retail Modifications Review (Feb 2013) concluded that no additional issues warranting further assessment were identified and that the amendments do not have any implications for the HRA as the DPD is considered to already provide sufficient safeguards in relation to European Sites.</p> <p><b>HRA screening 'in-combination' conclusion:</b> As all of the Central Lincolnshire Local Plan policies were also 'screened out', it is therefore reasonable to conclude that the Newark and Sherwood Allocations and Development Management DPD, in combination with the Central Lincolnshire Local Plan, will not have any adverse effects on a European Site.</p>
<p>8) South Kesteven District Council Core Strategy (July 2010)</p>	<p><b>Details:</b> Housing: 13,600 dwellings (2006 – 2026) distributed as so- Grantham 7,680; Stamford 1,140; Bourne 2,310; Deepings 870; Local Service Centres 1,000; Rural Areas 620.</p> <p>Employment Land: Grantham 90ha; Stamford 24ha; Bourne 50ha; Deepings 23ha; other sites 18ha- 205 ha in total.</p> <p><b>HRA findings:</b> The European Sites potentially affected by the South Kesteven Core Strategy (SKCS) were identified as: Baston Fen SAC; Grimsthorpe SAC; Rutland Water SPA and Ramsar; and Barnack Hills and Holes SAC. The HRA undertaken for the SKCS concluded that the policies within the SKCS DPD were not likely to have any significant effects on any Natura 2000 site and that there was no requirement to proceed to the next stage of an Appropriate Assessment.</p>

	<p><b>HRA screening ‘in-combination’ conclusion:</b> The only European site that is within the scope of both this screening report and the HRA of the SKCS is Rutland Water. Potential likely significant effects include recreational pressure issues.</p> <p>The potential impacts from increased recreational pressures from new development in Central Lincolnshire are unlikely to have a significant effect on Rutland Water. Rutland Water is some distance from Central Lincolnshire (approximately 16km) and has a site management plan to protect the site from damage or disturbance. The Central Lincolnshire Local Plan also offers mitigation: specifically, policies LP20 Green Infrastructure Network and LP22 Green Wedges, support the provision of well connected, multifunctional greenspaces and the delivery of strategic greenspaces. This will provide Central Lincolnshire residents with recreational opportunities and would help relieve any recreational pressure on greenspaces outside the Central Lincolnshire area.</p> <p>In light of the above, it is therefore reasonable to conclude that there are likely to be no significant effects on Rutland Water as a result of the in-combination effects of the Central Lincolnshire Local Plan and the South Kesteven Core Strategy.</p>
<p>9) South Kesteven District Council Site Allocation and Policies DPD (April 2014)</p>	<p><b>Details:</b> The Site Allocation and Policies DPD allocates land for specific types of development and includes policies to guide the way these sites are developed. The policies also provide the detailed framework to guide the scale, form and location of new employment and retail development, expanding upon the policies included in the Core Strategy.</p> <p>Housing: provision for 3902 dwellings (for remaining period 1 April 2013 – 31 March 2026. Of the Core Strategy figure of 13,620 dwellings, 4,833 had been built and 4,927 had planning permission).</p> <p>Employment land: in accordance with Core Strategy.</p> <p><b>HRA findings:</b> The Habitats Regulations Assessment of the Core Strategy identified the European Sites which may potentially be affected by its policies. It concluded that the Core Strategy policies are not likely to have any significant effects on any Natura 2000 site.</p> <p>The policies contained within the South Kesteven District Council Site Allocations and Policies DPD have been assessed, in accordance with the Habitats Directive, to determine whether there are likely to be any significant impacts arising from them on the European sites. With the exception of policy SAP2, the policies follow the locational strategy for the District set out in the Core Strategy. Consequently, the assessment found that the policies are unlikely to have significant impacts on the European Sites. Policy SAP2 is an exceptions policy which aims to enable the provision of affordable housing in areas of proven need. These areas will, of necessity, be outside the locational framework established in the Core Strategy. The policy criteria, however, do not allow for development to be located in areas which would affect European Sites. The assessment of the Site Allocation and Policies DPD concludes that the policies within the DPD are not likely to have any significant effects on any Natura 2000 site and that there is, therefore, no requirement to proceed to the next stage of an Appropriate Assessment.</p>

	<p><b>HRA screening ‘in-combination’ conclusion:</b> It can therefore be reasonably concluded that the South Kesteven Site Allocation and Policies DPD and the Central Lincolnshire Local Plan, in combination, will not lead to significant adverse effects on a European Site.</p>
10) Bassetlaw District Council Core Strategy (Dec 2011)	<p><b>Details:</b> Housing: 7,700 dwellings (2006 – 2026) distributed as so- Workshop 2,464; Retford 2,002; Harworth Bircotes 1,694; Carlton in Lindrick and Langold 308; Tuxford 308; Misterton 154; Rural Service Centres 770; other settlements 0.</p> <p>Employment Land: Worksop 48ha; Retford 21ha; Harworth Bircotes 37ha; 106 ha in total.</p> <p><b>HRA findings:</b> The Bassetlaw Core Strategy HRA considered Birklands and Bilhaugh SAC; Thorne and Hatfield Moors SACs and SPA; and the Sherwood Forest Region prospective SPA. The HRA concluded that the Core Strategy would not result in any adverse effects on the integrity of any of these European Sites.</p> <p><b>HRA screening ‘in-combination’ conclusion:</b> The European Sites that are within the scope of both this screening report and the HRA of the Bassetlaw Core Strategy are the Birklands and Bilhaugh SAC and the Thorne and Hatfield Moors SAC and SPA sites. Potential likely significant effects include recreational pressure and water quality and water abstraction issues. All policies in the Central Lincolnshire Local Plan have been screened out from further HRA, either because they had no likely significant effects or because any potential effects could be mitigated or avoided.</p> <p>It is reasonable to conclude that there are likely to be no significant effects on Birklands and Bilhaugh in-combination between the Central Lincolnshire Local Plan and Bassetlaw Core Strategy. The potential impacts from increased recreational pressures from new development in Central Lincolnshire are unlikely to have a significant effect on Birklands and Bilhaugh, due to the distance of this site from Central Lincolnshire (approximately 20km) and due to Local Plan policies LP20 Green Infrastructure Network and LP22 Green Wedges which support the provision of well connected, multifunctional greenspaces and the delivery of strategic greenspaces. These policies will provide Central Lincolnshire residents with recreational opportunities and would help relieve any recreational pressure on greenspaces outside the Central Lincolnshire area.</p> <p>In relation to water quality and abstraction, the Bassetlaw HRA identified that while the habitats present in Hatfield Moors and Birklands and Bilhaugh are not specifically reliant on water, they could be vulnerable to stress if subject to low groundwater levels. Birklands and Bilhaugh SAC is located over the Sherwood Sandstone Aquifer and Hatfield Moors sits on a bed of sand and gravel moraine that is part of the Sherwood Sandstone bedrock. Therefore extraction of water from this source could impact on these sites. The Anglian Water WRMP (2010) identified that the Sherwood Sandstone Aquifer supplies water to Lincoln, therefore any type of development in Lincoln that would lead to the need for water to be abstracted from the Sherwood Sandstone aquifer has the potential to negatively impact on Hatfield Moor and Birklands and Bilhaugh. However, the WRMP</p>

	<p>recognised potential growth in Lincoln, and a deficit in water supply to meet this growth, and proposed mitigation via a new Water Treatment Works in the River Trent Catchment.</p> <p>Planning permission for a new Anglian Water (AW) Water Treatment Works at Newton on Trent was granted by West Lindsey District Council on 18 April 2012 (Ref: 127585). This new Newton Water Treatment Works came into operation in July 2014. It has been planned and identified by AW (in their WRMP Feb 2010) to provide and maintain water supplies to cater for forecast deficits and future growth in the Lincoln area, through water abstraction from the River Trent. Anglian Water state they had considered a number of alternative solutions for addressing forecast water deficits in the Lincoln area including extending abstraction from the Sherwood Sandstone aquifer, but selected the new Lincoln water treatment works as the most “technically viable, cost effective, environmentally and socially responsible” option. Furthermore, further abstraction from the Sherwood Sandstone aquifer would have had the potential to negatively impact upon Hatfield Moors and Birklands and Bilhaugh European Sites, due to their potential vulnerability to low groundwater levels.</p> <p>Environment Agency limitations imposed on the water treatment works’ operation in their water Abstraction Licences will ensure impacts are controlled and the River Trent’s health (and thereby the River Humber’s) is maintained and safeguarded, including through limiting the water treatment work’s abstraction from the Trent when river flows and water levels are low. The water treatment works is in operation before the new Lincoln area growth identified in the CL Local Plan is implemented. Bassetlaw’s HRA concludes that it cannot be demonstrated that the plan will have any adverse effects on the integrity of any of the European sites included in the scope of their HRA screening report. Additionally, as stated above, the Anglian Water WRMP recognised a deficit in water supply to meet forecast Lincoln area growth in Central Lincolnshire, and therefore provided mitigation for impact on these sites by proposing a new Water Treatment Works in the River Trent Catchment, which is now in operation, instead of further abstraction from the Sherwood Sandstone aquifer. Overall, it is therefore reasonable to conclude that there are unlikely to be any significant in-combination effects on Hatfield and Thorne Moors sites between Central Lincolnshire Local Plan and Bassetlaw Core Strategy.</p>
<p>11) North Lincolnshire Council Core Strategy (June 2011)</p>	<p><b>Details:</b> Housing: target of 12,063 dwellings (at a rate of 754 dwellings per year over the period 2010 to 2026). The focus of major growth will be Scunthorpe with approx. 9,892 new dwellings. The Market Towns of Barton upon Humber, Brigg, Crowle, Epworth, Kirton in Lindsey and Winterton will provide over 2,171 new dwellings.</p> <p>Employment land: Scunthorpe 71 ha; Market Towns 10 ha (for small and medium scale employment opportunities); Sandtoft Business Park 58.5 ha (for a logistics and distribution park); approx 900 ha of land at the South Humber Bank Strategic Employment Site reserved for B1, B2 and B8 port related activities.</p> <p><b>HRA findings:</b> A Screening Report on the North Lincolnshire Core Strategy was completed in February 2010 which found that 8 of the 27 policies may lead to likely significant effects on the Humber Estuary SAC/SPA/Ramsar site, the Thorne Moor SAC, Hatfield Moor SAC and Thorne and Hatfield Moors SPA.</p>

An Appropriate Assessment (May 2010) assessed whether each development aspect outlined in the policies would have an adverse effect on the integrity of the international sites. A total of 29 development aspects were identified. Eight of these development aspects were determined not to lead to any adverse effects on the international sites. However, the remaining 21 development aspects of the eight policies were found to lead to adverse effects on the integrity of the international sites, without mitigation. Adverse effects arose from physical loss (e.g. the possible loss of intertidal habitats that birds from the Humber Estuary SPA and Ramsar may be using for foraging, loafing and roosting), physical damage (e.g. from abrasion caused by increased recreation levels) and non-physical disturbance (e.g. from noise, light and vibration during construction and operation of developments).

The AA concluded that, taking account of the effects of the implementation of appropriate mitigation measures, the Core Strategy DPD (alone or in combination with other projects and plans) would not lead to adverse effects on integrity of the Humber Estuary SAC, SPA or Ramsar site or the Thorne Moor SAC, the Hatfield Moor SAC or the Thorne and Hatfield Moors SPA.

**HRA screening ‘in-combination’ conclusion:**

The European Sites that are within the scope of both this screening report for the Central Lincolnshire Local Plan and the HRA of the North Lincolnshire Core Strategy are the Humber Estuary and Thorne and Hatfield Moors sites. Potential likely significant effects include water quality and water abstraction issues.

An increase in housing numbers will increase water demand and thus abstractions and may also lead to an increase in effluent from sewage works. The Humber Estuary sites are vulnerable to impacts through water abstraction, changes in water flow and changes to water quality. The Anglian Water WRMP (2010) recognised potential growth in Lincoln and a potential deficit in supply to meet this growth. It proposed a new Water Treatment Works in the River Trent Catchment which is now in operation and should avoid damaging designated sites. The North Lincolnshire Core Strategy AA highlighted that the conclusion of the Environment Agency Review of Consents process, in relation to existing abstraction licences, was that modifications could be made to those licences where modification was required, such that there would then be no adverse effect on the integrity on the Humber Estuary as a result of existing abstraction licences.

It is therefore reasonable to conclude that there are likely to be no significant effects on the Humber Estuary sites in-combination between the Central Lincolnshire Local Plan and North Lincolnshire Core Strategy.

It is also reasonable to conclude that there are unlikely to be any significant in-combination effects on the Thorne and Hatfield Moors sites between the Central Lincolnshire Local Plan and North Lincolnshire Core Strategy. The AA for North Lincolnshire states that water abstraction for residential use is not having a significant effect on the integrity of the Thorne and Hatfield Moors international sites.



<p>12) North Lincolnshire Council Housing and Employment Land Allocations DPD (2016)</p>	<p><b>Details:</b> The DPD allocates land for housing and employment development and includes policies to control the way these sites are developed. The sites allocated complement the adopted Core Strategy's approach to housing and employment growth.</p> <p><b>HRA findings:</b> The HRA undertaken for the DPD identified that the European sites relevant to the DPD were the Humber Estuary SPA, SAC, Ramsar site; Thorne and Hatfield Moors SPA, Thorne Moor SAC and Hatfield Moor SAC. The HRA Stage 1 Significance Test assessment identified that a Stage 2 assessment was required for some allocations as a result of their proximity to sites that have been designated for their international nature conservation interests.</p> <p>The allocations considered as part of the Appropriate Assessment were employment allocations SHBE-1, BARE-1 and NEWE-1. The Appropriate Assessment concluded that, with safeguards set in place, policies BARE-1, NEWE-1 and SHBE-1 will have no adverse effect on the integrity of the Humber SPA and Ramsar site in terms of polluting surface water discharges to, and disturbance of, SPA/ Ramsar habitats.</p> <p>The results of the Appropriate Assessment have been reflected in the policies of the specific site allocations.</p> <p><b>HRA screening 'in-combination' conclusion:</b> It can therefore be reasonably concluded that the North Lincolnshire Housing and Employment Land Allocations DPD and the Central Lincolnshire Local Plan, in combination, will not lead to significant adverse effects on a European Site.</p>
<p>13) East Lindsey Local Plan (adopted 1995, as amended 1999 and 2007)</p>	<p><b>Details:</b> The East Lindsey Local Plan (ELLP) was originally adopted in 1995 and guides development in the District. It contains two parts: part 1 contains the policies and the supporting text and part 2 contains various maps of the settlements. The Plan was updated in 1999 via a formal amendment, furthermore in 2007 some of the policies were 'saved' and those which were not were removed.</p> <p><b>HRA findings:</b> No HRA was undertaken for the 1995/1999 Local Plan as it was adopted prior to the European Habitats Regulations being enshrined into UK legislation (there was no requirement to undertake HRA of the 2007 exercise to establish which policies were still in conformity with the planning guidance at that time).</p> <p><b>HRA screening 'in-combination' conclusion:</b> Due to the fact that there is no HRA for the East Lindsey Local Plan, the effect of policies within the Central Lincolnshire Local Plan 'in-combination' with the policies in the East Lindsey Plan is uncertain. However, all policies in the Central Lincolnshire Local Plan have been screened out from further HRA: it is therefore reasonable to conclude that there are likely to be no significant effects 'in-combination'.</p>

<p>14) South Holland District Council Local Plan (2006)</p>	<p><b>Details:</b> Housing: 3170 dwellings (2004-2021) of which 2730 will be in urban areas and 440 in rural areas. Employment land: major employment sites allocated at Spalding 106 ha; Sutton Bridge 54ha; Long Sutton/ Little Sutton 12ha; Holbeach 10ha; Crowland 7ha; Donington 11ha.</p> <p><b>HRA findings:</b> No HRA was undertaken for the South Holland 2006 Local Plan.</p> <p><b>HRA screening ‘in-combination’ conclusion:</b> Due to the fact that there is no HRA for the South Holland Local Plan, the effect of policies within the Central Lincolnshire Local Plan ‘in-combination’ with the policies in the South Holland Plan is uncertain. However, all policies in the Central Lincolnshire Local Plan have been screened out from further HRA: it is therefore reasonable to conclude that there are likely to be no significant effects ‘in-combination’.</p>
<p>15) Boston Borough Council Local Plan (1999)</p>	<p><b>Details:</b> Housing: land allocated for 916 dwellings  Employment land: 93ha allocated</p> <p><b>HRA findings:</b> No HRA was undertaken for the 1999 Local Plan as it was adopted prior to the European Habitats Regulations being enshrined into UK legislation.</p> <p><b>HRA screening ‘in-combination’ conclusion:</b> Due to the fact that there is no HRA for the Boston Local Plan, the effect of policies within the Central Lincolnshire Local Plan ‘in-combination’ with the policies in the Boston Plan is uncertain. However, all policies in the Central Lincolnshire Local Plan have been screened out from further HRA: it is therefore reasonable to conclude that there are likely to be no significant effects ‘in-combination’.</p>
<p>16) North East Lincolnshire Local Plan (2003)</p>	<p><b>Details:</b> Housing: 2,000 dwellings (2001-2006)  Employment: various sites allocated</p> <p><b>HRA findings:</b> No HRA was undertaken for the North East Lincolnshire 2003 Local Plan.</p> <p><b>HRA screening ‘in-combination’ conclusion:</b></p>

	Due to the fact that there is no HRA for the North East Lincolnshire Local Plan, the effects of policies within the Central Lincolnshire Local Plan 'in-combination' with the policies in the North East Lincolnshire Local Plan is uncertain. However, all the policies in the Central Lincolnshire Local Plan have been screened out from further HRA: it is therefore reasonable to conclude that there are likely to be no significant effects 'in-combination'.
<b>WATER STRATEGIES, PLANS AND STUDIES</b>	
<b>Catchment Abstraction Management Strategies (CAMS)</b> Catchment Abstraction Management Strategies (CAMS) are strategies for the management of water resources at a local level. The CAMS seek to understand how much water the natural environment needs, how much water is available for abstraction, how much water is currently licensed to be used and whether this balances with what is available. Each area within the catchment is assigned a 'resource availability status' which indicates whether the catchment resources are in balance or not.	
17) Lower Trent and Erewash CAMS (Feb 2013)	<p>The River Trent is one of the three largest rivers in the United Kingdom. From its source to the Humber confluence, its length is 274km and, including all tributary CAMS catchments, it drains an area of more than 10,000km<sup>2</sup>. Within the Lower Trent &amp; Erewash (LT &amp; E) CAMS area, the River Trent is 174km long with its main tributaries including the rivers Derwent, Soar, Erewash, Leen, Greet, Devon, Idle, Torne and Eau and the Dover Beck. It enters the catchment immediately downstream of its confluence with the River Dove and flows steadily north eastwards until Newark where it turns northwards and continues until it flows into the River Humber at Trent Falls.</p> <p>Nottinghamshire is the principle county, with parts of Derbyshire, Leicestershire, Lincolnshire, South Yorkshire and North Lincolnshire incorporated. Nottingham in the south of the catchment is the principal urban area with a population estimated at 292,000 for the City and 657,000 in the greater Nottingham area. Other significant urban areas include Scunthorpe, Newark, Gainsborough and parts of greater Derby.</p> <p>Throughout the catchment, agriculture is the dominant land use accounting for more than 63% of the catchment area. Consequently, agriculture is vitally important to the CAMS area economy. Agriculture relies heavily on local surface and groundwater abstraction as part of its process, principally for irrigation.</p> <p>Industry, agriculture and water for public water supply places the biggest pressure on groundwater levels. However, the power generation sector exerts the biggest pressure on surface water. There are numerous power stations along the banks of the River Trent at various sites using vast quantities of water.</p> <p>There are a total of 529 abstraction licences in the Lower Trent and Erewash CAMS areas: 312 surface water, 217 ground water (source: Environment Agency).</p>
18) Witham CAMS (Feb 2013)	The Witham CAMS sets out how the Environment Agency will manage water abstraction. There are several designated sites of ecological and conservation importance within the Witham CAMS area that are water-dependent. The largest of these is The Wash which is designated as a Site of Special Scientific Interest (SSSI), a Special Protection Area, a Ramsar site, and forms part of the Wash and North Norfolk Coast marine Special Area of Conservation. The Witham CAMS area also includes a

	<p>number of water-dependent SSSI sites which could be affected by river flows and abstraction regimes, including Bardney Limewoods, Swanholme Lakes and Tattershall Carrs.</p> <p>The CAMS explains that the Wash SSSI was subject to an appropriate assessment for the Habitats Directive Review of Consents (HD RoC), which was completed in April 2007. The Wash SSSI was designated as a medium priority HD RoC site. It was concluded that existing water resources permissions do not have an adverse effect on the integrity of the site.</p> <p>The EA will assess new applications for abstraction licences to make sure they are not impacting on internationally important nature conservation sites. For the Witham CAMS the following Habitats Directives sites are considered: the Wash SPA and Ramsar site; and the Wash and North Norfolk Coast SAC.</p> <p>The Witham CAMS covers an area of around 3,160 km<sup>2</sup> and extends across a large part of southern and Central Lincolnshire. The River Witham rises south of Grantham, passes through Lincoln and drains in the Wash at Boston. Other significant rivers in the catchment include the Rivers Brant, Bain, Slea and Barlings Eau and the extensive drainage network in the East and West Fens north of Boston.</p> <p>There are 828 (513 surface and 315 ground) water abstraction licences in the Witham catchment greater than 20m<sup>3</sup>/day.</p>
19) Grimsby, Ancholme and Louth CAMS (Feb 2013)	<p>The Grimsby, Ancholme and Louth CAMS sets out how the Environment Agency will manage water abstraction. The CAMS area covers around 1,464km<sup>2</sup>. The catchment is largely rural in nature, with much of the land used for agriculture. Urban development accounts for a small proportion of the land use and is concentrated in the heavily industrialised area along the Humber Bank, in and around the towns of Grimsby, Immingham, Barton-upon-Humber. Other urban centres include Louth, Brigg and Market Rasen.</p> <p>The principal aquifers are the Lincolnshire Limestone and Lincolnshire Chalk. These are regionally important in terms of public water supply, industry and agriculture as well as supporting base flows to rivers and supporting local surface water features. Large demands are placed on the Limestone aquifer to meet public water supply demands in the north-west of the catchment whereas the Chalk aquifer supports industrial developments on the Humber Bank and the public water supply demands of Grimsby, Immingham and other conurbations in north-east of the catchment.</p> <p>The effects of existing abstraction licences have been assessed under the Habitats Directive and the EA will assess new applications to make sure they are not impacting on internationally important nature conservation sites. For the Grimsby, Ancholme and Louth CAMS the Humber Estuary SPA and SAC sites were considered as part of this assessment.</p> <p>There are a total of 480 (142 surface and 338 groundwater) abstraction licenses in the CAMS area (source: Environment Agency).</p>

<b>CAMS 'in-combination' screening conclusion</b>	No likely significant effects between the Central Lincolnshire Local Plan and the CAMS, as the CAMS set out how water resources will be managed: specifically, they set out how existing abstraction licences will be managed, and how water availability for further abstraction will be managed.
<b>Catchment Flood Management Plan (CFMP)</b> The Environment Agency has produced CFMPs for England and Wales to understand the scale and extent of flooding now and in the future, and set policies for managing flood risk within each catchment. Each CFMP sets out the EA's preferred plan for sustainable flood risk management over the next 50 to 100 years and considers all types of inland flooding, from rivers, groundwater, surface water and tidal flooding. CFMPs also include the likely impacts of climate change; the effects of how we use and manage land; how areas could be developed to meet our present day needs without compromising the ability of future generation to meet their own needs. CFMPs help the Environment Agency and their partners to plan and agree the most effective way to manage flood risk in the future.	
20) River Witham CFMP (Dec 2009)	<p>In the River Witham CFMP area, climate change was shown to have the greatest impact on flood risk.</p> <p>The CFMP divides the River Witham catchment into 8 subareas which have similar physical characteristics, sources of flooding and level of risk. Central Lincolnshire lies across 6 of these sub-areas: Upper Witham, Barlings, Bain and Upper Till; Grantham, Sleaford and Ancaster; Outer Lincoln North, Outer Lincoln South and Outer Horncastle; Lincoln; Limestone Ridge; and The Fens.</p> <p>The Upper Witham Barlings, Bain and Upper Till sub-area is identified as an area of low to moderate flood risk where the EA can generally reduce existing flood risk management actions. Any new development should be targeted to areas with lowest flood risk, must not increase risk to existing development and should provide opportunities to improve river environments.</p> <p>The Grantham Sleaford and Ancaster sub-area is an area of low to moderate flood risk where the EA are generally managing existing flood risk effectively. The planned approach includes working with planners to influence the location, layout and design of new and redeveloped property.</p> <p>The Outer Lincoln North, Outer Lincoln South and Outer Horncastle sub-area is an area of low to moderate flood risk where the EA will take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits. The key messages include the need to prevent development that would affect the ability of the floodplain to retain water and that storing water on the floodplain could reduce flood risk and provide environmental benefits.</p> <p>Within the Lincoln sub-area, the probability of river flood risk has been reduced in Lincoln by the construction of a major flood storage reservoir. The sub area includes areas of low, moderate and high flood risk where the flood risk is already being managed effectively but further actions may be needed to keep pace with climate change. Flood risk is expected to increase significantly in the future to people and property. It is therefore important to maintain the current level of flood risk into the future. The preferred approach is to manage the probability of river flooding by storing water on the floodplain upstream and the</p>

	<p>urban environment needs to be adapted to make it more resilient to flooding, for example as commercial sites are redeveloped, the location and layout of buildings could be designed to help reduce flood risk.</p> <p>Within the Limestone Ridge sub-area there is currently no flood risk and no active intervention (including flood warning and maintenance). The actions identified for this area include reducing flood risk management activities as the current activity to manage flooding is out of proportion with the level of flood risk and reducing bank and channel maintenance which will help naturalise rivers and improve the flow between the river and its floodplain. Any new development should be targeted to areas with the lowest flood risk, must not increase risk to existing development and should provide opportunities to improve river environments.</p> <p>Within the Fens sub-area there are areas of low, moderate or high flood risk where the EA is already managing the flood risk effectively but where further actions may be needed to keep pace with climate change. Flood risk is expected to increase in the future to people, property and the environment. In the short term it will be feasible and effective to maintain the existing flood defences at the current level of flood risk management. However, in the future the protection given by these defences may decline as future flooding is expected to become more intense. It may be difficult to maintain the current level of flood risk management into the future for all lowlying areas. Where it is technically, environmentally and economically viable, the policy is to undertake further activities to maintain the current level of flood risk management into the future.</p> <p>The CFMP identifies that The Wash Ramsar / SAC / SPA site is located downstream of the CFMP area boundary, however the River Witham and flood risk management activities can have an effect on this area.</p>
21) River Trent CFMP (Dec 2009)	<p>In the River Trent CFMP area, climate change is thought to have the greatest impact on flood risk. The CFMP divides the River Trent catchment into 10 sub-areas. Central Lincolnshire lies across 1 of these sub-areas: Shelford to Gainsborough.</p> <p>Within the Shelford to Gainsborough sub-area, flood risk in this sub area ranges from low to moderate to high. The Environment Agency is already managing the flood risk effectively but may need to take further actions to keep pace with climate change. Although flood risk is currently managed appropriately, it is expected to rise significantly in the long term. Key messages include the need to minimise the disruption to people, communities and commerce from flooding; the need to sustain and protect the historic environment and social heritage within the River Trent floodplain; and the need to sustain and increase the amount of Biodiversity Action Plan habitat along the Trent corridor and tributary streams.</p> <p>This CFMP could result in land management and flood risk management actions that could affect some of the European Sites identified at Table 3, including the Humber Estuary sites and Thorne and Hatfield Moors sites.</p>

<p>22) Grimsby and Ancholme CFMP (Dec 2009)</p>	<p>In the Grimsby and Ancholme CFMP area, climate change and urbanisation were shown to have the greatest impact on flood risk. The CFMP divides the Grimsby and Ancholme catchment into 5 sub-areas. Central Lincolnshire lies across 3 of these sub-areas: Ancholme, North Lincolnshire Wolds and Laceby; Ancholme Villages, Middle and Market Rasen and Barton and Barrow Upon Humber; and Ancholme Valley.</p> <p>Within the Ancholme, North Lincolnshire Wolds and Laceby sub-area river flooding is infrequent and the consequences of flooding are low. 41 properties within this sub-area were identified as at risk from the 1% annual probability river flood. This does not include flooding from IDB drains. The properties at risk are concentrated within Ancholme and Laceby. There is no grade two agricultural land at risk, but 8% of the grade three agricultural land is at risk from river flooding within this sub-area. Sections of the M180, A18, A631, A1077, A46, some railway, an electricity sub-station and two Sewage Treatment Works (STW) are also at risk. The area has been classed as a sub area of low to moderate flood risk where the EA can generally reduce existing flood risk management actions.</p> <p>Within the Ancholme Villages, Middle and Market Rasen and Barton and Barrow Upon Humber sub-area, 200 properties were identified as at risk from the 1% annual probability river flood. This does not include flooding from IDB drains. The Ancholme Villages include a number of settlements at risk of flooding from rivers and drains, some of which are embanked in their lower reaches before entering the River Ancholme. Rapid run-off during severe storms can cause flooding issues due to the size of the watercourses in some villages. In Middle and Market Rasen, the probability of flooding has been reduced by the construction of two upstream flood storage reservoirs. Some agricultural land, railway line and parts of the A631 are also at risk from the 1% annual probability river flood. Tables 8, 9 and 10 detail flood risk to people and property in this sub-area, this does not include flooding from IDB drains. The sub area is classed as being at low to moderate risk of flooding, and any new development or re-development should be resilient to all sources of flooding.</p> <p>Within the Ancholme Valley sub-area, there is a low risk to people and property located in villages, or in isolated areas scattered throughout the sub-area. 14 properties were identified as at risk from the 1% annual probability river flood. This does not include flooding from IDB drains. There is 50% of the grade two agricultural land and 60% of the grade three agricultural land at risk. There are some sections of railway and an electricity sub-station are also at risk from flooding within this sub-area. Table 14 details flood risk to people and property in this sub-area. Development that affects the ability of the floodplain to retain water should be prevented and maintenance work on rivers should aim to increase the capacity of the floodplain to retain water.</p>
<p>23) Louth Coastal CFMP (Dec 2009)</p>	<p>In the Louth Coastal CFMP area, climate change was shown to have the greatest impact on flood risk. The CFMP divides the Louth Coastal catchment into 7 sub-areas: Central Lincolnshire lies across 1 of these sub-areas, The Wolds.</p> <p>Within The Wolds sub area there are very few people and property at risk, located in isolated areas scattered throughout the rural region. 36 properties were identified as at risk from the 1% annual probability river flood. River flooding is infrequent and the consequence of flooding is low. There is no agricultural land at risk, but there is a Wastewater Treatment Works at risk in the 1% annual probability river flood.</p>

	<p>The key messages within The Wolds sub area include, where feasible, reducing flood risk management activities as the current activity to manage flooding is out of proportion with the level of flood risk; reducing bank and channel maintenance to help naturalise rivers and improve the flow between the river and its floodplain; and maintain flood warning infrastructure (such as river flow gauging stations) to ensure that an effective flood warning service can be provided throughout the catchment.</p>
<b>CFMPs 'in-combination' screening conclusion</b>	<p>No likely significant effects between the Central Lincolnshire Local Plan and the CFMPs, as both plans set out policies to manage flood risk which should mitigate any potential effects on European sites.</p>
<b>Water Resources Management Plan (WRMP)</b>	
24) Anglian Water WRMP (effective from April 2015)	<p>The WRMP sets out a 25 year strategy for managing water supply and demand.</p> <p>A HRA was undertaken for the 2015 WRMP, 'Habitats Regulations Assessment Tasks 1 &amp; 2' (December 2013). The 2013 report presents the results of the first stage of the HRA process, Task 1 Test of Likely Significance ('Screening'); and the second stage, the Task 2 Appropriate Assessment.</p> <p>The HRA screening undertaken for the WRMP scheme options identified the schemes with the potential for likely significant effects on European Sites: there were only two preferred schemes with potential for likely significant effects. These two schemes were NB2 / NB11 Norwich water reuse (which could affect River Wensum SAC and Broadland SPA/ Ramsar); and RHFA1 Ruthamford North RZ Transfer 1 (which could affect the Upper Nene Valley Gravel Pits SPA / Ramsar): these schemes were then subject to appropriate assessment (AA). The European Sites potentially affected by the schemes have not however been considered in the HRA of the Central Lincolnshire Local Plan because they are greater than 30km from the boundary of the Central Lincolnshire area, which is the geographical range considered in this assessment.</p> <p>Several of the non-preferred schemes were identified as having the potential to result in likely significant effects. Of these, the following were identified as having potential to affect European Sites that are within the scope of this HRA: schemes F1 Kings Lynn and Wisbech Water Reuse, F2 Kings Lynn desalinisation, H2 Heacham water reuse and H3 Wash desalinisation may all affect the Wash SPA / Ramsar and The Wash and North Norfolk SAC, while RHFA3 Rutland Dam Rising is likely to affect Rutland Water SPA / Ramsar. In respect of all five of these schemes, an appropriate assessment has not been undertaken as the schemes were not the preferred schemes. Rather, the HRA concluded that each scheme would be subject to appropriate assessment if taken forward due to the potential likely significant effects on the respective European Sites.</p> <p>Therefore, the in-combination effects of the WRMP and the Central Lincolnshire Local Plan are uncertain as appropriate assessment has not been undertaken for the WRMP schemes with the potential to have effects, however, schemes would be subject to appropriate assessment if they were taken forward therefore it is expected that suitable mitigation measures would be put in place.</p>



<p>25) Severn Trent Water Resources Management Plan (WRMP) (May 2014)</p>	<p>The plan explains proposals for making sure enough water is available, in the right place and at the right time, in an affordable and sustainable way over the next 25 years.</p> <p>The proposals are based on meeting the demand for water from the additional 1.6 million people expected to be living in the region over the next 25 years, and seek to replace approximately 85 million litres per day of licenced water abstraction that is no longer environmentally sustainable.</p> <p>The European Sites that the WRMP HRA considered which are also relevant to the Central Lincolnshire Local Plan were the Humber Estuary SAC, SPA and Ramsar and Rutland Water SPA and Ramsar.</p> <p>The HRA identified that Severn Trent Water's existing licensed abstraction sources have been reviewed through the Environment Agency's Review of Consents process. As a result, where it could not be concluded that abstractions would have no effects on European site integrity, mitigation measures, known as sustainability reductions, were identified to enable reductions in licence volumes so that the risk posed to designated sites is eliminated. Severn Trent Water has undertaken the first stage in the HRA process, screening, to identify potential likely significant effects on European site integrity from resource schemes on the constrained list. Schemes which would result in likely significant effects, or where an uncertain conclusion was reached about the likelihood of significant effects, were not selected for the Preferred Programme and therefore there was no need for Appropriate Assessment. However, should any of these schemes come back into consideration, further assessment would be required at project level and this has been highlighted. The HRA screening assessment of schemes that were included in the Preferred Programme concluded that, with mitigation taken into account, the Preferred Programme is not likely to have a significant effect on the integrity of any European sites. The HRA therefore concluded that Severn Trent Water's WRMP will have no likely significant effects on European sites and therefore no Appropriate Assessment of the plan is required.</p>
<p><b>WRMPs 'in-combination' screening conclusion</b></p>	<p>The preferred schemes of the Anglian Water WRMP and the Seven Trent WRMP are not likely to have significant effects on any of the European Sites that are relevant to the Central Lincolnshire Local Plan. Should the non-preferred schemes come forward, they would be subject to appropriate assessment as necessary, therefore the in-combination effects with the Central Lincolnshire Local Plan will be considered.</p> <p>Therefore it is reasonable to conclude that neither plan, in-combination with the Central Lincolnshire Local Plan, is likely to have significant effects in any European Site.</p>
<p>26) Anglian River Basin District River Basin Management Plan (update Dec 2015)</p>	<p>River Basin Management Plans were drawn up for river basin districts across England and Wales under the Water Framework Directive. They identify pressures on water resources and quality, and assess requirements for good ecological status across the RBMPs under Water Framework Directive. The Anglian District RBMP shows what this means for the current state of the water environment, and what actions will be taken to address the pressures. It sets out what improvements are possible and how the actions will make a difference to the local environment.</p>

	<p>The HRA of the River Basin Management Plan for the Anglian River Basin District (November 2009) concluded that the RBMP is not likely to have any significant negative effects on any European Sites alone or in combination with other plan or projects, therefore appropriate assessment was not necessary.</p> <p>The updated HRA (December 2015) also determined that the range of potential mitigation options available allow a conclusion that the RBMP is not likely to have any significant effects on any European Sites, alone or in combination with other plans or projects. Therefore there remains no requirement for appropriate assessment.</p> <p>This conclusion does not remove the need for later Habitats Regulations Assessment of any other plans, projects or permissions associated with or arising out of the measures identified within the RBMP.</p> <p><b>HRA screening ‘in-combination’ conclusion:</b> No likely significant effects ‘in-combination’ with Central Lincolnshire Local Plan.</p>
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#### 4.4 [Step 4\) Screening of the Local Plan policies in combination with each other and other plans and projects](#)

4.4.1 Table 7 identifies that the following policies have, at an initial screening, potential for significant adverse effects on the European Sites identified in Table 3:

LP3 Level and Distribution of Growth

LP5 Delivering Prosperity and Jobs

LP30 Lincoln Sustainable Urban Extensions

LP39 Gainsborough Sustainable Urban Extensions

LP44 Sleaford Sustainable Urban Extensions

LP48 Sustainable Urban Extensions- Allocations

LP54 Remaining Capacity on SUEs and Broad Locations for Future Growth

4.4.2 Policy LP3 sets and allocates the overall housing growth levels for the whole Central Lincolnshire area and distributes this growth and employment growth between the three main urban areas (where growth is to be focused) and elsewhere. Policy LP5 plans for employment growth and development. The individual detailed policies for the 8 proposed SUEs within the area will contribute towards the growth set out at LP3. As policy LP3 and the SUE policies, and policy LP3 and LP5, will be operating together to deliver development growth across the whole of Central Lincolnshire, with common potential likely significant effects, it is appropriate to undertake the assessment of the general effects and mitigation measures for these policies *together*. The following paragraphs address: (1) Water Supply Levels; (2) Water Quality Changes; (3) Recreational Disturbance; and (4) Air Quality.

#### 4.5 [Water Supply Levels](#)

4.5.1 Increased water abstraction for new development has the potential to impact on aquifers, surface and ground water, and reduce water levels, impacting on river flow and water quality to sites.

4.5.2 The level of development proposed in policy LP3 (and component SUE policies) and LP5, in-combination with development proposed in surrounding areas, has the potential to increase levels of water abstraction. Increased abstraction has the potential to lead to reduced water levels, which has the potential for likely significant effects on the identified European sites. The following plans and programmes have the potential to act in-combination with policies LP3 and LP5:

- County Plans: Lincolnshire County Council Local Transport Plan 4 (2013); Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies (due to be considered for adoption May 2016); and the current Lincolnshire Mineral Local Plan (1991); and Lincolnshire Waste Local Plan (2006).
- Local Plans for neighbouring districts: Newark and Sherwood; South Kesteven; Bassetlaw; North Lincolnshire; North East Lincolnshire; East Lindsey; South Holland; and Boston.
- Catchment Abstraction Management Strategies (CAM): The Lower Trent and Erewash; The Witham; The Grimsby, Ancholme and Louth.
- Catchment Flood Management Plans (CFMP): River Witham; River Trent; Grimsby and Ancholme; Louth Coastal.
- Water Resources Management Plans (WRMP): Anglian Water and Seven Trent.
- River Basin Management Plans (RBMP): Anglian District

- 4.5.3 As indicated in Table 9 (see section 4.3), the in-combination review found the above plans and programmes, in combination with the Central Lincolnshire Local Plan, are not likely to have significant adverse effects on the European sites considered. However it is worth referring to some of the mitigation measures applied in some of these external plans, as they relate to the control of water resources and quality within Central Lincolnshire in relation to sites.
- 4.5.4 *Catchment Flood Management Plans (CFMPs)* for the area set out policies for managing flood risk within the area, including mitigation measures to avoid adverse effects on the integrity of European sites.
- 4.5.5 In terms of planning for growth and use of water, the *Water Resources Management Plans (WRMPs)* for Anglian Water and Severn Trent Water take into account the effects of demand reduction measures and projected non household demand. Schemes in WRMPs were identified as being subject to HRA at project level.
- 4.5.6 *Catchment Abstraction Management Strategies* are prepared by the Environment Agency (EA) and set out how it will manage water resources in each catchment, how much is available and how it is licensed.
- 4.5.7 The impact of extracting water from the Trent Witham and Ancholme (rivers that flow into coastal Humber and Wash European Sites) is considered and controlled by the EA under their Abstraction Licence process.
- 4.5.8 The EA has an obligation to protect all designated Natura 2000 sites (sites designated under the Habitat Regulations). Under these Regulations, the EA will consider the impact of proposed abstractions on designated sites, and will assess existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites.
- 4.5.9 In the case of the Lower Trent and Erewash CAM, the Humber Estuary is partly dependent on direct flow contribution from the River Trent. Tributaries of the River Trent each contribute to flows into the Trent, and therefore on into the Humber Estuary. Effectively this means that every tributary of the River Trent must be managed using appropriate flow restrictions to ensure an appropriate flow contribution to the Humber Estuary, managing licences granted on the River Trent and its tributaries. The EA therefore recognise that water abstraction from the Trent could potentially have an impact (via flows) on the Humber Estuary designated European nature conservation sites. EA state that existing licences will be controlled and restricted, and new licence applications will be subject to strict rules, including strict conditions, or even *refusing* the abstraction licence.
- 4.5.10 This EA management approach to water abstraction licensing and protecting European Sites (eg arising from Anglian Water abstraction requests) means that water level management is strictly controlled by the CAMS and licensing regimes, a strong mitigating measure to maintain adequate water levels and flows to the coastal European sites linked to Central Lincolnshire by river flows.

#### *Local Plan Policies*

- 4.5.11 The Local Plan contains a number of policies that will help to mitigate the contribution of proposed development to the adverse in-combination effects on water resources. These include:
- Policy LP14, Managing Water Resources and Flood Risk. Criteria J of this policy requires proposed development to meet the Building Regulation water efficiency standard of 110 litres per occupier per day. This policy also specifies criteria for the protection of the water environment that proposals will be required to demonstrate

compliance with. These requirements are not limited to the water environment within the Central Lincolnshire area, and thus includes European Sites outside the area.

- Policy LP16, Development on Land Affected by Contamination, requires development proposals to take into account potential environmental impacts, including impacts on biodiversity, land, air and water that may arise from development of contaminated sites. Again, these impacts are not limited to the Central Lincolnshire area, and will include consideration of impacts upon the wider area.
- Policy LP18, Climate Change and Low Carbon Living, promotes the sustainable use of natural resources, including reducing demand for and use of water which should help reduce the demand from water arising from new development and protect water quality.
- The various SUE policies (LP28, LP30, LP39, LP44) outline considerations for the SUEs, including provision of recreational space and requirements in relation to flood and water, which should reduce recreational pressures on the European Sites outside the Central Lincolnshire area, and protect water quality. Furthermore, the requirement to deliver key facilities and services onsite, such as schools and shops, will assist in reducing both the number of car journeys and the distance travelled to access key services.

**4.5.12 It can reasonably be concluded, after taking into account the mitigation measures and considerations of other plans, that there will be no likely significant effects (alone or in combination) on water supply levels as a result of the Local Plan being implemented.**

## 4.6 Water Quality Changes

4.6.1 Increased waste water discharges (consented by Environment Agency), and increases in surface water run off arising from new built developments and loss of permeable surfaces may, through pollution and contaminants, reduce the quality of water entering the water network. The Environment Agency operates a control and licensing regime for water discharges, including close monitoring in order to manage the chemical and biological content of rivers.

4.6.2 The level of development proposed in policies LP3 and LP5 has the potential in-combination with development proposed in surrounding districts to increase pressure on sewerage capacity. This has the potential to lead to reduced water quality and therefore likely significant in-combination effects on the identified European sites. The plans and programmes identified under Water Supply Levels above also have the potential to act in-combination with the policies in the Local Plan to mitigate and reduce adverse effects that may reduce water quality.

4.6.3 The Water Cycle Studies for Gainsborough and Central Lincolnshire (covering the rest of Central Lincolnshire outside of Gainsborough) considered future development in relation to the housing targets as set out in the (now revoked) East Midlands Regional Spatial Strategy and focused on the proposed urban extensions to Lincoln, Gainsborough and Sleaford. The Central Lincolnshire Water Cycle Study concluded sewerage, sewage treatment and flood risk were the three parameters of the water cycle that presented the most significant constraint to development. In relation to the Gainsborough Water Cycle Study, sewerage and sewage treatment were the most significant constraint. The Central Lincolnshire Infrastructure Delivery Plan recognises these constraints and identifies investment in sewerage, sewers and drains as critical to the delivery of the Local Plan.

#### *Local Plan Policies*

- 4.6.4 The Local Plan currently contains a number of policies that will help to mitigate the contribution of proposed development to the adverse in-combination effects on water quality. These include:
- Policy LP14, Managing Water Resources and Flood Risk, specifies criteria for the protection of the water environment that proposals will be required to demonstrate compliance with. These requirements are not limited to the water environment within the Central Lincolnshire area, and thus includes European Sites outside the area.
  - Policy LP16, Development on Land Affected by Contamination, requires development proposals to take into account potential environmental impacts, including impacts on biodiversity, land, air and water, that may arise from development of contaminated sites. Again, these impacts are not limited to the Central Lincolnshire area, and will include consideration of impacts upon the wider area.
  - Policy LP18, Climate Change and Low Carbon Living, promotes the sustainable use of natural resources, including reducing demand for and use of water which should help reduce the demand from water arising from new development and protect water quality.
  - The various SUE policies (LP28, LP30, LP39, LP44) outline various considerations for the SUEs, including provision of recreational space and requirements in relation to flood and water, which should reduce recreational pressures on the European Sites outside the Central Lincolnshire area, and protect water quality. Furthermore, the requirement to deliver key facilities and services onsite, such as schools and shops, will assist in reducing both the number of car journeys and the distance travelled to access key services.
- 4.6.5 **It can reasonably be concluded, after taking into account the mitigation measures and considerations of other plans, that there will be no likely significant effects (alone or in combination) on water quality as a result of the Local Plan being implemented.**

### **4.7 Recreational Disturbance**

- 4.7.1 There is potential for increased visitor pressure and recreational activity arising from occupants of new housing within Central Lincolnshire seeking recreational open space and sites to visit close to home and further afield, including European sites (if open and available to visit).
- 4.7.2 The plans and programmes identified under Water Supply Levels above also have the potential to act in-combination with the policies in the Local Plan to mitigate and reduce adverse effects that may arise from increased recreational activity and visitor pressure from new occupiers travelling outside Central Lincolnshire to visit recreational space.
- 4.7.3 Sites potentially affected by recreational disturbance are: Rutland Water (approximately 60km from centre of Lincoln, 45km from centre of Sleaford, 80km from centre of Gainsborough); Saltfleetby -Theddlethorpe (approximately 55km from centre of Lincoln, 59km from centre of Sleaford, 70km from centre of Gainsborough); Gibraltar Point (approximately 60km from centre of Lincoln, 53km from centre of Sleaford, 80km from centre of Gainsborough); Birklands and Bilhaugh (approximately 35km from centre of Lincoln, 50km from centre of Sleaford, 30km from centre of Gainsborough). Newark and Sherwood have mitigated for local recreational pressure on Birklands and Bilhaugh by providing for alternative suitable accessible natural green space in their Core Strategy. For the other sites, recreational use and visits are, to a certain extent, recognised as part of the

site management of each site, and there are Management Plans, Management Groups, site work programmes and on site facilities and wardens (including Natural England and Local Wildlife Trusts) who manage these sites to reduce and avoid adverse effects from visitor pressure.

#### *Local Plan Policies*

4.7.4 The Local Plan currently contains a number of policies that will help to mitigate the contribution of proposed development to the potential adverse effects of recreational disturbance from visitors to the sites. These include:

- Policy LP3 Level and Distribution of Growth and policy LP6 Retail and Town Centres in Central Lincolnshire set out hierarchies in relation to housing and employment land, and to retail development respectively. These hierarchies establish a preference for existing urban centres which will support sustainable development and consequently assist in reducing the number of car journeys taken to access services and facilities and minimise distance travelled which will limit pollution as a result.
- Policy LP18, Climate Change and Low Carbon Living, promotes minimisation of the need to travel, which, in combination with the various policies relating to green infrastructure and SUEs, may reduce recreational pressure on European Sites.
- LP22, Green Wedges, allocates green wedges which have several functions including provision of a recreational resource, which may reduce recreational pressure on European Sites.
- LP24, Creation of New Open Space, Sports and Recreation Facilities, requires that proposals provide open space etc. on site in the first instance, which again may reduce recreational pressure on European Sites.
- LP29, Protecting Lincoln's Setting and Character, requires that proposals maintain and enhance the strategic green infrastructure network, which again may reduce recreational pressure on European Sites.
- The various SUE policies (including LP28, LP30, LP39, LP44) outline various considerations for the SUEs, including provision of recreational space and requirements in relation to flood and water, which should reduce recreational pressures on the European Sites outside the Central Lincolnshire area, and protect water quality. Furthermore, the requirement to deliver key facilities and services onsite, such as schools and shops, will assist in reducing both the number of car journeys and the distance travelled to access key services.
- LP43, Protecting Sleaford's Setting and Character, supports the development of the Sleaford East West Leisure Link, which again may reduce recreational pressure on European Sites.

4.7.5 **It can reasonably be concluded, after taking into account the mitigation measures and considerations of other plans, that there will be no likely significant effects (alone or in combination) resulting from recreational disturbance as a result of the Local Plan being implemented.**

## 4.8 Air Quality Changes

4.8.1 There is potential for increased atmospheric pollution arising from air pollutants associated with increased vehicular movement from business, residential and construction traffic associated with new housing and employment growth.

4.8.2 The construction of the proposed developments and associated infrastructure arising from LP3, LP5 and SUE policies, as well as the associated increase in traffic, has the potential to increase atmospheric pollution, and reduce air quality in and around European sites.

- 4.8.3 The plans and programmes identified under Water Supply Levels above also have the potential to act in-combination with the policies in the Local Plan to mitigate and reduce adverse effects that may arise from housing and employment development and increased vehicular traffic (and the air pollution/emissions that result from this growth and traffic) which might adversely affect the vegetation present in certain habitats.
- 4.8.4 For example, ecological elements within Birklands and Bilhaugh SAC, such as the diversity of lichen present, are sensitive to changes in air quality. It is important to establish the baseline background concentrations and to evaluate any local sources, such as road traffic, and background atmospheric nitrogen and acid deposition rates. It must be noted that in addition to road traffic sources, background pollutant concentrations may also be influenced by local industrial, and other, activities. Sources within 5km of a SAC include a petrol station mainly emitting benzene, 1, 3-butadiene and VOCs. The Newark and Sherwood Core Strategy HRA examined general potential impacts from pollution. Their analysis generally suggests that *existing point source pollution is more important than pollution associated with traffic on the road nearby* - the B6034. The Core Strategy DPD had no influence on existing point source pollution.
- 4.8.5 For industrial processes, the guidance that is used when assessing point source emissions is the IPPC H1 Guidance for the Environmental Assessment and Appraisal of BAT. Not all industrial processes/ emissions will require assessment. A simple screening tool is provided with the guidance to determine which pollutants emitted from a process are released in significant amounts and which are not. For those pollutants which are emitted in significant amounts, detailed modelling may be required if the process is located near to sensitive receptors/locations of relevant exposure. *The H1 document indicates that designated sites (including European sites) which are located within 10 km of the pollutant source should be considered as a sensitive receptor within an assessment. For major emitters (large power stations, refineries, or iron and steelworks) this distance increases to 15km.*
- 4.8.6 With regards to development associated with the Newark and Sherwood Core Strategy, the HRA considered there is the potential that further assessment will be required for new industrial processes located within *10km (or 15km for major scale emitters)* of the SAC. This may take the form of the simple screening exercise or more detailed modelling. It is assumed that for each of the proposed industrial processes an appropriate air quality assessment will need to be carried out in order to obtain an operating permit from the local authority or Environment Agency. It is also assumed that each process will implement appropriate mitigation measures to minimise their impact on European sites. The Newark and Sherwood Core Strategy HRA recommended that potential effects on European Sites associated with air quality from industrial processes are best considered at the HRA project level.
- 4.8.7 It is therefore appropriate to use this established local air quality impact assessment criteria (development within 10/15km distance) for HRA. Based on this, it is considered that as most of the European Sites lie more than 20km away from the centres of the main Central Lincolnshire urban areas where most new growth development is focused, local air quality impacts on European sites will be managed and mitigated by local habitats assessments on a project basis by the local planning authorities and therefore that there is unlikely to be a level of air quality reduction arising from the plan that will have significant adverse effects on the habitats of European sites.
- 4.8.8 Additionally local air quality within Central Lincolnshire is already monitored by the Councils on a periodic basis (as required by the 1995 Environment Act), with control exercised in certain Air Quality Management Areas (eg Lincoln).



#### *Local Plan Policies*

4.8.9 The Local Plan contains a number of policies that will help to mitigate potential adverse effects on air quality (e.g from increased vehicular traffic and emissions). These policies include:

- Policy LP3 Level and Distribution of Growth and policy LP6 Retail and Town Centres in Central Lincolnshire set out hierarchies in relation to housing and employment land, and to retail development respectively. These hierarchies establish a preference for existing urban centres which will support sustainable development and consequently assist in reducing the number of car journeys taken to access services and facilities and minimise distance travelled which will limit pollution as a result.
- Policy LP13, Accessibility and Transport, requires proposals to demonstrate that they minimise travel, maximise use of sustainable travel modes, and deliver walking and cycling infrastructure.
- Policy LP18, Climate Change and Low Carbon Living, promotes minimisation of the need to travel, which, in combination with the various policies relating to green infrastructure and SUEs, may reduce recreational pressure on European Sites.
- Policy P21, Biodiversity and Geodiversity, states that proposals that will have an adverse impact on a European Site or cause significant harm to a Site of Special Scientific Interest located within or outside Central Lincolnshire, will not be permitted. The policy also explicitly requires that all development should “protect, manage and enhance the network of habitats, species and sites of international, national and local importance (statutory and non-statutory) ... minimise impacts on biodiversity and geodiversity; and seek to deliver a net gain in biodiversity and geodiversity where possible”. Furthermore, the policy sets out requirements in relation to mitigation where there is potential for adverse effects. This policy requirement will ensure mitigation against the potential adverse effects that may result from the other policies identified as having potential likely significant effects upon a European Site. The desire to achieve net gain where possible has potential to result in positive effects on European Sites.

4.8.10 **It can reasonably be concluded, after taking into account the mitigation measures and considerations of other plans, that there will be no likely significant effects (alone or in combination) on air quality as a result of the Local Plan being implemented.**

## 4.9 Conclusion of Step 4

4.9.1 Considering the Local Plan policies in combination with one another and taking account of the considerations in relation to water supply levels, water quality changes, recreational disturbance and air quality, it is reasonable to conclude that the policies identified as having potential for likely significant effects (scored as ‘P’) in Table 7 can be ‘screened out’.

#### 4.10 Steps 5) and 6): mitigation measures and re-screening

- 4.10.1 The completion of Steps 2, 3 and 4 of Stage B, Screening, has identified that the Central Lincolnshire Local Plan policies, in combination with the other Local Plan policies and other relevant plans, policies and projects, are not likely to result in any significant negative effects on the European Sites identified at Stage A, Step 1.
- 4.10.2 As no policies remain likely to have significant negative effects, it is therefore not necessary to identify and apply mitigation measures (Step 5) and subsequently re-screen (Step 6).
- 4.10.3 The screening recommendation is therefore that the further Appropriate Assessment stage (Stage C) of the HRA is not necessary.

#### 4.11 Step 7) Consultation of Natural England

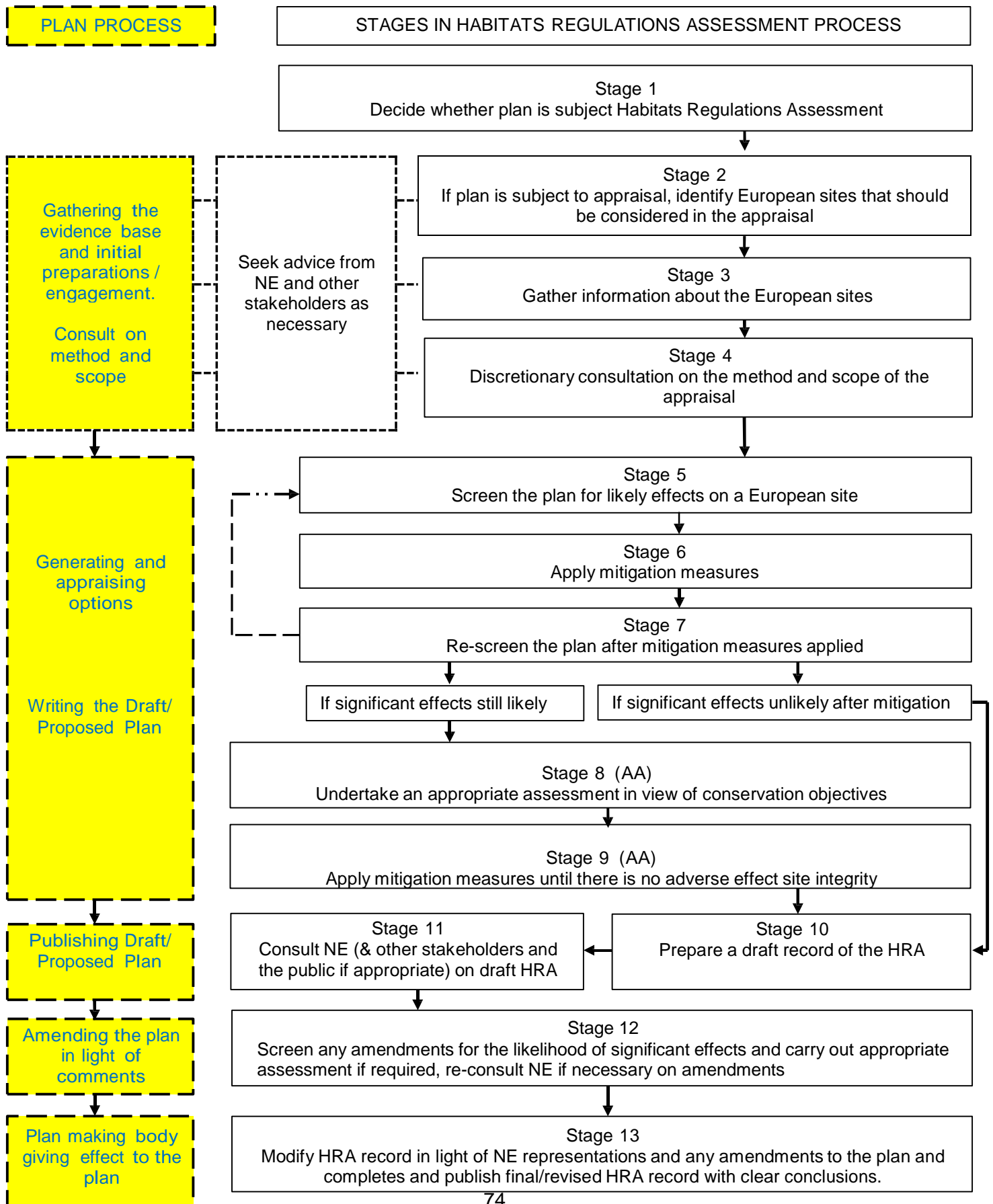
- 4.11.1 A HRA Methodology and Screening Report similar to this one was produced for the Further Draft Central Lincolnshire Local Plan. The Report concluded that Appropriate Assessment was not necessary because the Further Draft Local Plan, in combination with other relevant plans, policies and projects, was not likely to result in any significant adverse effects on the identified European Sites.
- 4.11.2 Natural England was consulted on this screening opinion. Their response expressing agreement with the recommendation of the report can be found at appendix D.
- 4.11.3 Natural England will be consulted on the screening recommendation in relation to the Proposed Submission version of the Local Plan, namely that that the further Appropriate Assessment stage is not necessary. This will take place at the same time as the consultation on the Proposed Submission Central Lincolnshire Local Plan, 15 April to 26 May 2016.

### **5. Future Stages**

#### 5.1 Submission Version Local Plan

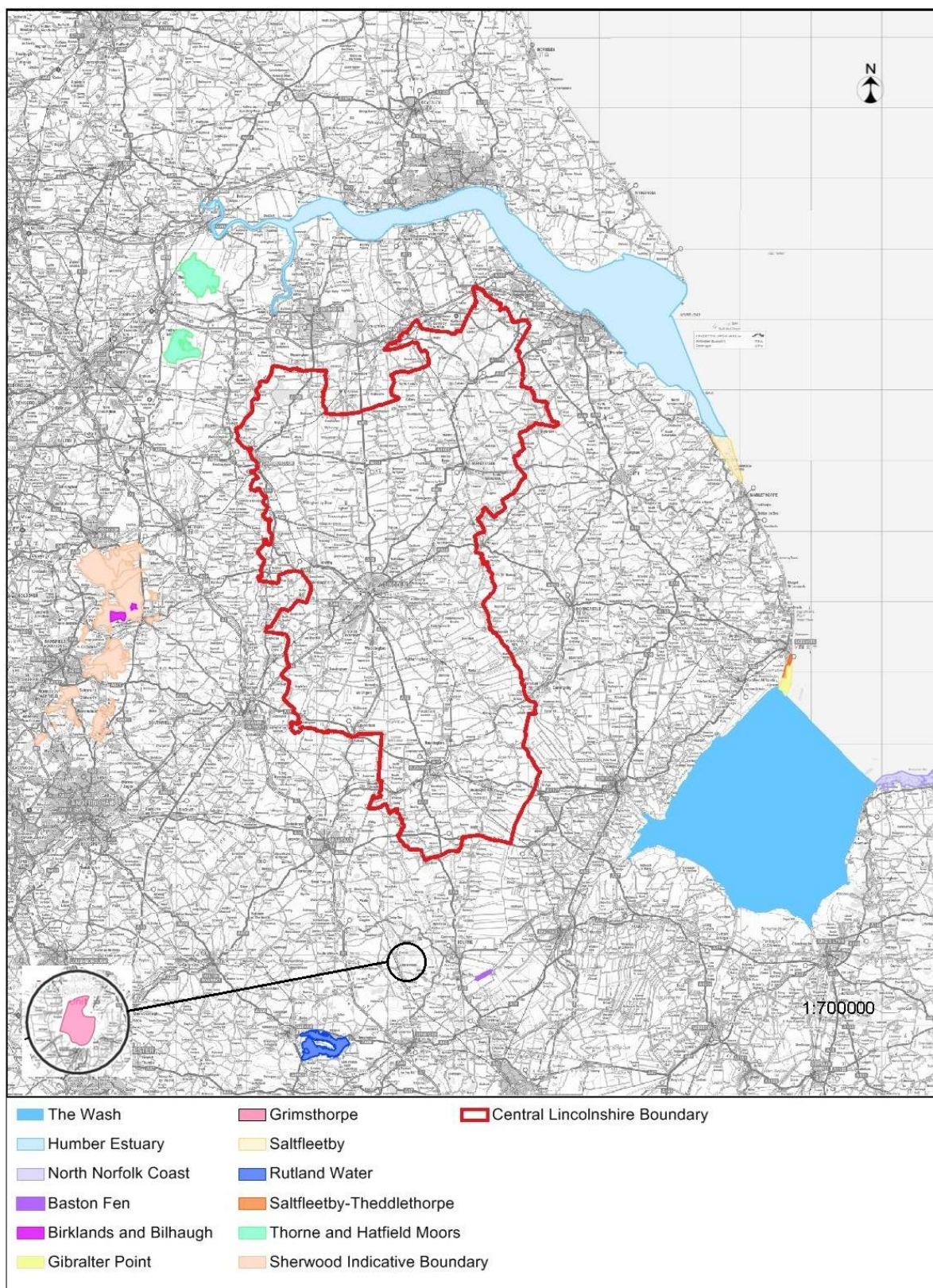
- 5.1.1 Following the consultation on the Proposed Submission Local Plan, the 'Submission Version' of the Local Plan will be formally submitted to the Secretary of State for Communities and Local Government who will appoint an Inspector who will hold an examination of the Plan (submission is scheduled for late June). Subject to Natural England's response to this HRA screening, a copy of this HRA report and Natural England's response will be submitted as evidence alongside the Local Plan.

# Appendix A: Key Stages of the Habitats Regulation Assessment Process for Plans





## Appendix B: Map of European Sites



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 Date 18 April 2013

## Appendix C: European Site Characterisations- Details of Potentially Affected European Sites near the Plan Area

### OVERVIEW

#### Long list of European Sites Potentially Affected

<u>No.</u>	<u>Site Name</u>	<u>International Site Designation</u>
1.	The Wash	SPA, Ramsar
2.	The Wash and North Norfolk Coast	SAC
3.	The Humber Estuary, Flats, Marshes and Coast	SPA, SAC, Ramsar
4.*	Baston Fen	SAC
5.	Thorne and Hatfield Moors (made up of: Thorne Moor SAC, Hatfield Moor SAC, and Thorne and Hatfield Moors SPA)	SPA, SAC
6.*	Grimsthorpe Park	SAC
7.	Birklands and Bilhaugh	SAC
8.	Rutland Water	SPA, Ramsar
9.	Saltfleetby-Theddlethorpe Dunes and Gibraltar Point	SAC
10.	Gibraltar Point	SPA, Ramsar
11.	Sherwood Forest Region	prospective SPA

\*Subsequently scoped out from further consideration – see site information for details.

#### Key to European Site Designations

**SAC** = Special Area of Conservation (under Habitats Directive – for Species and Habitats)

**SPA** = Special Protection Area (under Wild Birds Conservation Directive – for Birds)

**Ramsar** =Wetland Sites designated for conservation under 1971 Ramsar Convention (as internationally important wetland habitats)

**cSAC** = Candidate Special Area of Conservation

**prospective SPA** = prospective possible Special Protection Area

(An area within Sherwood Forest under DEFRA review and consideration for possible future classification as a SPA.)

#### Notes on Directives

SAC: Protected by 92/43/EEC 'Habitats' Directive, including: Annex I on Habitats, and Annex II on Species. Transposed into UK law (E & W) by the Conservation of Habitats and Species Regulations 2010 (2010 No 490).

SPA: Protected by 2009/147/EC, & EC 79/409/EEC (April 1979) Birds Directives.

Together SPAs and SACs comprise Natura 2000 sites - a European network of internationally important sites designated for their ecological status.

The UK government also gives International Ramsar sites an equivalent status, and expects them to be included within a Habitats Regulations Assessment (HRA).

## **Layout of Appendix**

All 11 of the sites listed above lay outside the Central Lincolnshire area. This Appendix sets out detailed Site Information for each of the sites. For each site, the Site Information is set out as follows:

### **Site Name, Designation(s) and Location**

#### **1. The Characteristics of the European site**

- (a) Brief Description
- (b) General site character
- (c) Primary Reasons for Designation

#### **2. Qualifying Features**

Including Information on Habitats and Species, and General Summary of Interest Features

#### **3. Conservation Objectives**

For SAC, SPA and Ramsar areas

#### **4. Site Condition Assessment - Favourable Condition Table**

Based on component SSSI where applicable

#### **5. Site Vulnerability (including pressures and trends)**

#### **6. Other Relevant plans or projects**



# 1. The Wash

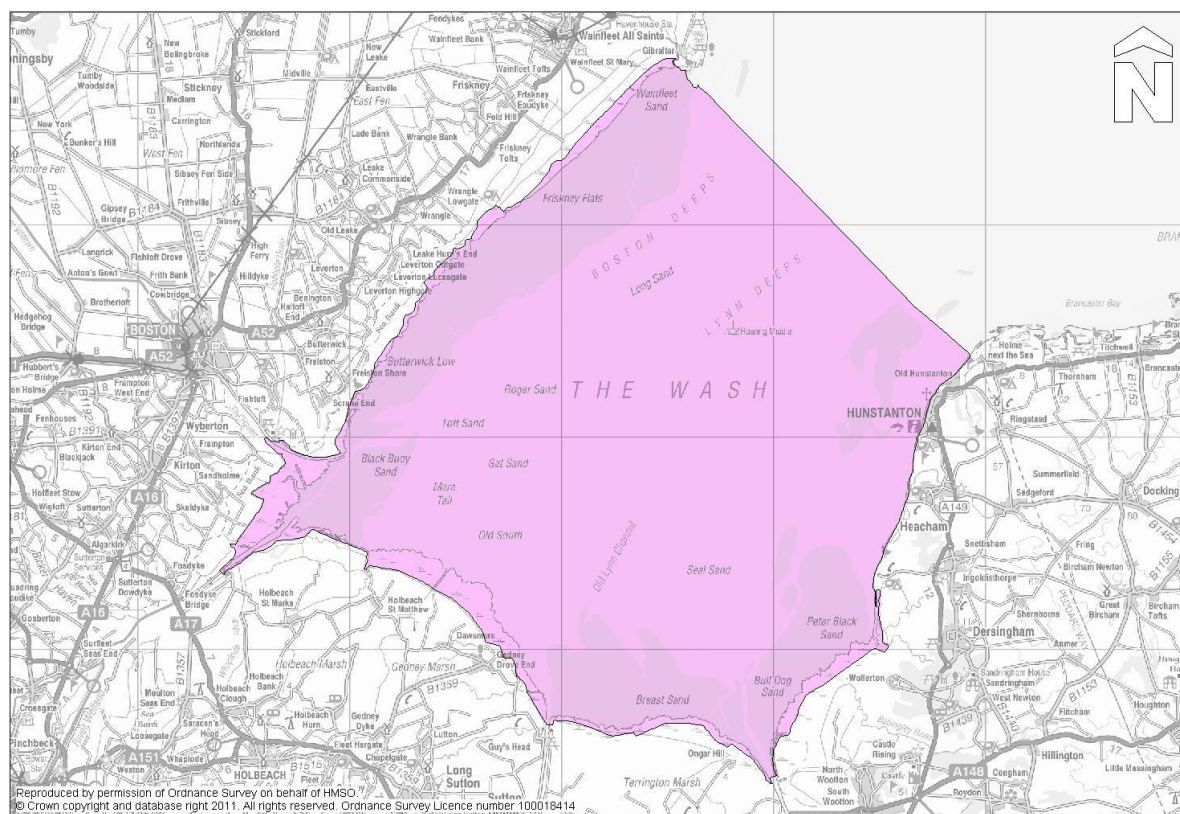
**Designation:** Special Protection Area (SPA), Ramsar

**Location:** Lincolnshire; Norfolk

**Easting:** 00 17 12 E

**Northing:** 52 56 16 N

**Area:** 62,211.66 ha



## 1. The Characteristics of the European site

### (a) Brief description

The Wash is a large shallow inlet and set of bays. It is the largest estuarine system in Britain. It is fed by the Rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and over-wintering site for migrant wildfowl and wading birds in eastern England.

### (b) General site character

#### Habitat classes:

Marine areas. Sea inlets (55%) Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (39%) Salt marshes. Salt pastures. Salt steppes (6%)

#### Other site characteristics:

Soil & geology:- Clay, Mud, Neutral, Sand, Sedimentary, Shingle

Geomorphology & landscape:- Coastal, Enclosed coast (including embayment), Estuary, Intertidal sediments (including sandflat/mudflat), Lowland, Subtidal sediments (including sandbank/mudbank)

### **(c) Primary Reasons for Designation**

SPA: The SPA regularly supports 21 species of birds, including breeding populations of - Common Tern and Little Tern, and overwintering populations of the rest. Regularly supports an Internationally Important Assemblage of birds, including an overwintering waterfowl population (400367 in 1998).

Ramsar: The site meets various Ramsar wetlands site Criteria:

- Criterion 1 – The entire Wash shallow bay, sandbanks and saltmarshes and its range of habitats;
- Criterion 3 – The inter-relationship between habitats and processes;
- Criterion 5 – Bird assemblage of international importance (winter);
- Criterion 6 – Various named bird species occurring at levels of international importance, plus grey seal.

## **2. Qualifying Features (SPA and Ramsar)**

### **(1) Annex I Birds and regularly occurring migratory birds not listed on Annex I (SPA)** (EC Wild Birds Directive Annex species)

- a) The SPA regularly supports 21 species of bird, including pintail (*Anas acuta*), gadwall (*Anas strepera*) and knot (*Calidris canutus*).
- b) This includes Breeding populations of: Common Tern (*Sterna hirundo*) and Little Tern (*Sternula albifrons*) (Article 4.1 Qualification – 79/409/EC).
- c) This also includes Over-wintering populations of: Bar-tailed Godwit (*Limosa lapponica*); Knot (*Calidris canutus*); Black-tailed Godwit (*Limosa limosa islandica*); Shelduck (*Tadorna tadorna*); Bewick's Swan (*Cygnus columbianus bewickii*); Pink-footed Goose (*Anser brachyrhynchus*); Dark-bellied Brent Goose (*Branta bernicula bernicula*); Pintail (*Anas acuta*); Wigeon (*Anas Penelope*); Gadwall (*Anas strepera*); Common scoter (*Melanitta Nigra*); Goldeneye (*Bucephala clangula*); Oystercatcher (*Haematopus ostralegus*); Grey Plover (*Pluvialis squatarola*); Curlew (*Numenius arquata*); Redshank (*Tringa tetanus*); Sanderling (*Calidris alba*) (Article 4.1 and 4.2 Qualification – 79/409/EC).
- d) The SPA regularly supports an Internationally Important Assemblage of birds, including an overwintering waterfowl population of 400367 (5 year peak mean 01/04/1998). (Article 4.2 Qualification – 79/409/EC).

### **(2) Ramsar Criterion**

The Ramsar Wetlands site is designated for conservation for meeting criteria:

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

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



*Criterion 5:* Bird assemblages of international importance, 292,541 waterfowl.

*Criterion 6:* Various named bird species/populations occurring at levels of international importance, plus grey seal

Ramsar Species:

- Wintering birds - pink-footed goose, brent goose, Shelduck, pintail, dunlin and bar tailed godwit.
- Breeding birds - oystercatcher, grey plover, knot, sanderling, curlew, redshank and ruddy turnstone.
- Grey seal.

### **(3) Interest Features of Site - General Summary** (to illustrate sensitivities of the international site)

Wash SPA: Wintering birds:

Bewicks swan, pink-footed goose, brent goose, pintail, wigeon, gadwall, common scoter, shelduck, goldeneye, knot, dunlin, sanderling, oystercatcher, black tailed godwit, bar tailed godwit, curlew, grey plover, turnstone, and redshank. Over winter the area regularly supports 400367 waterfowl.

Wash SPA: Breeding birds: little tern and common tern.

### **3. Conservation Objectives (SPA and Ramsar)**

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Coastal Saltmarsh
- Saline Lagoon
- Vegetated shingle
- Littoral sediment
- Sub-littoral sands and gravels
- Sabellaria reefs

#### Habitat Extent and Species Population Objectives – Summary:

- Coastal Saltmarsh - To maintain no decrease in extent from the established baseline, subject to natural change.
- Saline Lagoon- To maintain no reduction in extent of saline lagoon area.
- Littoral sediment -To maintain no decrease in extent of littoral sediment (inter tidal area).
- Sub-littoral sands and gravels -To maintain no change in extent of inshore sub littoral sediment habitat
- Sabellaria reefs - To maintain no change in extent of *Sabellaria spinulosa* reef allowing for natural succession / known cyclical change
- On Coastal Vegetated shingle -To maintain no decrease in extent from the established baseline subject to natural change.

- On Coastal Vegetated shingle -To maintain internationally important populations and Aggregations of Non Breeding Birds,- internationally important populations of individual species: Pink-footed Goose, Dark-bellied Brent Goose, Shelduck, Pintail, Oystercatcher, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Sanderling.
- On Coastal Vegetated shingle - To maintain internationally important Aggregations of non-breeding birds – greater than 20,000 waterfowl
- On Coastal Vegetated shingle -To maintain nationally important populations and Aggregations of non-breeding birds listed in Annex 1 of the Birds Directive:- of Bewick's Swan, Whooper Swan, Bar-tailed Godwit
- On Coastal Vegetated shingle -To maintain nationally important populations and Aggregations of breeding birds listed in Annex 1 of the Birds Directive:- of Common Tern, Little Tern
- On Coastal Vegetated shingle -To maintain exceptionally high breeding densities and Aggregation of non-Annex 1 breeding birds: of Redshank

#### 4. Site Condition Assessment - Favourable Condition Table

Component SSSI underpinning international site the Wash:

##### SSSI Condition Summary for the Wash (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
99.59%	67.98%	31.61%	0.00%	0.41%	0.00%

Source: Natural England

#### 5. Site Vulnerability (including pressure and trends)

Ecological vulnerability is closely linked to the physical environment. The intertidal zone is vulnerable to coastal squeeze as a result of land-claim, coastal defence works, sea-level rise and storm surges. Intertidal habitats are potentially affected by changes in sediment budget caused by dredging and coastal protection, construction of river walls and flood defence works. Activities affecting sediment budget and anthropogenic causes of coastal squeeze will be addressed through the management scheme being developed jointly for the SAC/SPA on this site.

The estuary is fed by 4 large rivers which drain a substantial area of Eastern England. The volume and quality of water entering the Wash is dependent on the use made of these rivers for water abstraction and agricultural and domestic effluents. Discharge consents and abstraction licenses (Environment Agency) will be reviewed under the provisions of the Habitats Regulations.

There are two Air Weapons Ranges within the site; activities on these ranges are covered by a Memorandum of Understanding between the Ministry of Defence and Department of the Environment, a Declaration of Intent between the Ministry of Defence and English Nature and by Site Management Statements with English Nature. There is a Nature Conservation Management Plan and Management Committee for one of the ranges.

All these issues have been addressed in the Wash Estuary Management Plan and by Local Environment Agency Plans and will be extended through the Marine Scheme of Management which is now in progress. (Source: JNCC UK SPA Data Form)

## **6. Other Relevant plans or projects**

- Development Plan Documents for Boston, East Lindsey, South Holland, Kings Lynn and West Norfolk and North Norfolk Authorities.
- Norfolk Local Transport Plan 2011 - 2026
- Broadland Rivers Catchment Flood Management Plan (Environment Agency, 2009)
- Adopted Shoreline Management Plans; The Kelling to Lowestoft Shoreline Management Plan (SMP) (August 2012) and North Norfolk SMP (2010)

## 2. The Wash and North Norfolk Coast

**Designation:** Special Conservation Area (SAC)

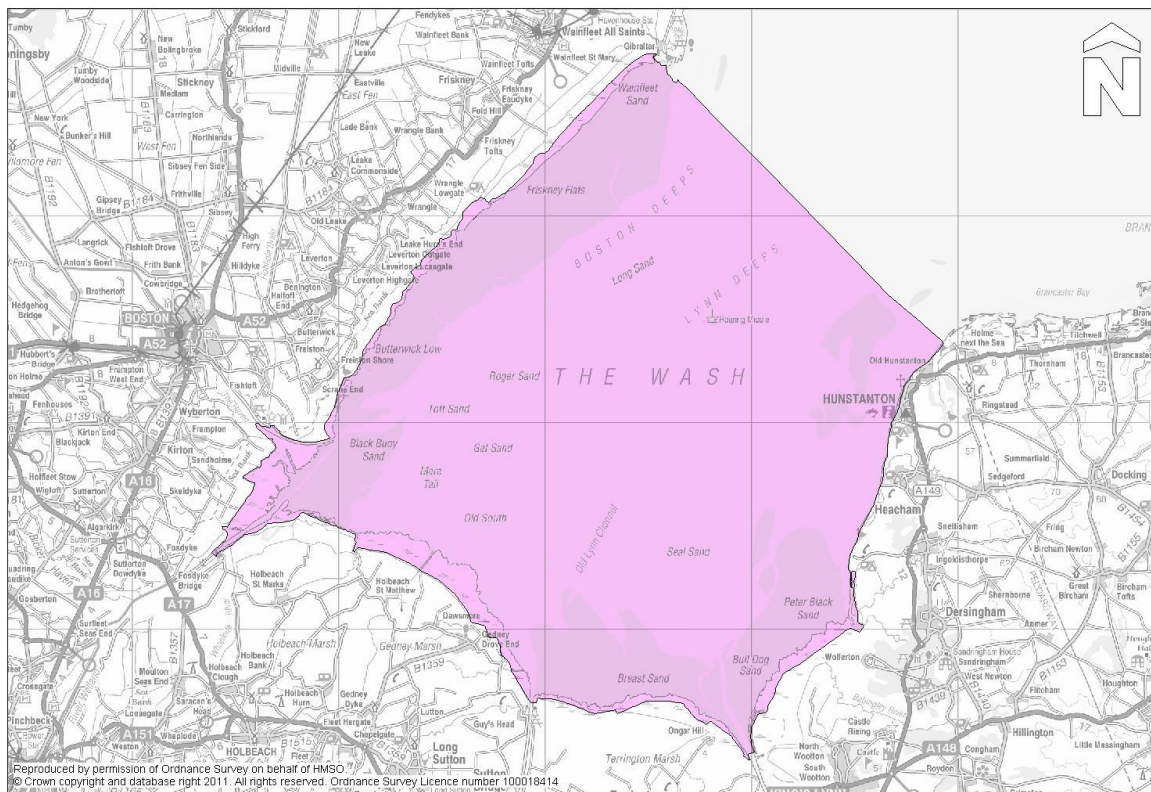
**Location:** Lincolnshire; Norfolk

**Longitude:** 00 19 05 E

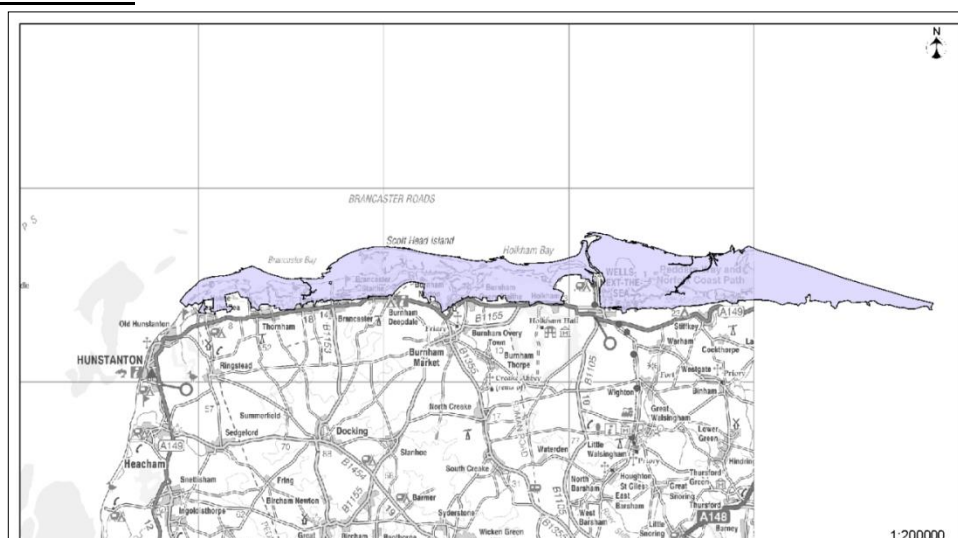
**Latitude:** 52 56 13 N

**Area:** 107761.28 ha

### The Wash



### North Norfolk Coast



## 1. The Characteristics of the European site

### (a) Brief description

The Wash is the largest estuarine system in Britain. It is fed by the Rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and over-wintering site for migrant wildfowl and wading birds in eastern England.

### (b) General site character

Habitat classes:

- Marine areas. Sea inlets (51%)
- Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (46%)
- Salt marshes. Salt pastures. Salt steppes (3%)

### (c) Primary Reasons for Designation

The Wash and North Norfolk Coast SAC has both habitats and species of European importance, namely: (a) Annex I Habitats: Mudflats and sandflats not covered by sea water at low tide; Sandbanks which are slightly covered by sea water all the time; Coastal lagoons; Large shallow inlets and bays; Reefs; Salt tolerant plants (*Salicornia*) and other annuals colonising mud and sand; Atlantic salt meadows (*Glauco- Puccinellietalia maritimae*); Mediterranean and thermo- Atlantic halophilous scrubs (*Sarcocometea fruticosi*); and (b) Annex II Species: Common seal (*Phoca vitulina*); Otter (*Lutra lutra*).

## 2. Qualifying Features

(Including EC Habitats Directive: Annex I Habitats and Annex II Species, and their relevant EU Code)

### (1) Annex I Habitats – The primary reason for selection of this site

#### 1110 - Sandbanks which are slightly covered by sea water all the time

On this site sandy sediments occupy most of the subtidal area, resulting in one of the largest expanses of sublittoral *sandbanks* in the UK. It provides a representative example of this habitat type on the more sheltered east coast of England. The subtidal sandbanks vary in composition and include coarse sand through to mixed sediment at the mouth of the embayment. Sublittoral communities present include large dense beds of brittlestars *Ophiothrix fragilis*. Species include the sand-mason worm *Lanice conchilega* and the tellin *Angulus tenuis*. Benthic communities on sandflats in the deeper, central part of the Wash are particularly diverse. The subtidal sandbanks provide important nursery grounds for young commercial fish species, including plaice *Pleuronectes platessa*, cod *Gadus morhua* and sole *Solea solea*.

#### 1140 - Mudflats and sandflats not covered by seawater at low tide

The Wash, on the east coast of England, is the second-largest area of intertidal flats in the UK. The sandflats in the embayment of the Wash include extensive fine sands and drying banks of coarse sand, and this diversity of substrates, coupled with variety in degree of exposure, means that there is a high diversity relative to other east coast sites. Sandy intertidal flats predominate, with some

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

### **1160 - Large shallow inlets and bays**

The Wash is the largest embayment in the UK, and represents *Large shallow inlets and bays* on the east coast of England. It is connected via sediment transfer systems to the north Norfolk coast. Together, the Wash and North Norfolk Coast form one of the most important marine areas in the UK and European North Sea coast, and include extensive areas of varying, but predominantly sandy, sediments subject to a range of conditions. Communities in the intertidal include those characterised by large numbers of polychaetes, bivalve and crustaceans. Sublittoral communities cover a diverse range from the shallow to the deeper parts of the embayments and include dense brittlestar beds and areas of an abundant reef-building worm ('ross worm') *Sabellaria spinulosa*. The embayment supports a variety of mobile species, including a range of fish and 1365 *Common seal* *Phoca vitulina*.

### **1170 - Reefs**

The Wash is the largest embayment in the UK with extensive areas of subtidal mixed sediment. In the tide-swept approaches to the Wash, with a high loading of suspended sand, the relatively common tube-dwelling polychaete worm *Sabellaria spinulosa* forms areas of biogenic reef. These structures are varied in nature, and include reefs which stand up to 30 cm proud of the seabed and which extend for hundreds of metres (Foster-Smith & Sotheran 1999). The reefs are thought to extend into The Wash where super-abundant *S. spinulosa* occurs and where reef-like structures such as concretions and crusts have been recorded. The site and its surrounding waters is considered particularly important as it is the only currently known location of well-developed stable *Sabellaria* reef in the UK. The reefs are particularly important components of the sublittoral as they are diverse and productive habitats which support many associated species (including epibenthos and crevice fauna) that would not otherwise be found in predominantly sedimentary areas. As such, the fauna is quite distinct from other biotopes found in the site. Associated motile species include large numbers of polychaetes, mysid shrimps, the pink shrimp *Pandalus montagui*, and crabs. *S. spinulosa* is considered to be an important food source for the commercially important pink shrimp *P. montagui* (see overview in Holt *et al.* 1998).

### **1310 - Salt tolerant plants (*Salicornia*) and other annuals colonising mud and sand**

The largest single area of this vegetation in the UK occurs at this site on the east coast of England, which is one of the few areas in the UK where saltmarshes are generally accreting. The proportion of the total saltmarsh vegetation represented by *Salicornia* and other annuals colonising mud and sand is high because of the extensive enclosure of marsh in this site. The vegetation is also unusual in that it forms a pioneer community with common cord-grass *Spartina anglica* in which it is an equal component. The inter-relationship with other habitats is significant, forming a transition to important dune, saltmeadow and halophytic scrub communities.

### **1330 - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)**

This site on the east coast of England is selected both for the extensive ungrazed saltmarshes of the North Norfolk Coast and for the contrasting, traditionally grazed saltmarshes around the Wash. The Wash saltmarshes represent the largest single area of the habitat type in the UK. The Atlantic salt meadows form part of a sequence of vegetation types that are unparalleled among coastal sites in the UK for their diversity and are amongst the most important in Europe. Saltmarsh swards dominated by sea-lavenders *Limonium* spp. are particularly well-represented on this site. In addition to typical lower and middle saltmarsh communities, in North Norfolk there are transitions from upper marsh to freshwater reedswamp, sand dunes, shingle beaches and mud/sandflats.

### **1420 - Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*).**

The Wash and North Norfolk Coast, together with the North Norfolk Coast, comprises the only area in the UK where all the more typically Mediterranean species that characterise *Mediterranean and thermo-Atlantic halophilous scrubs* occur together. The vegetation is dominated by a shrubby cover up to 40cm high of scattered bushes of shrubby sea-blite *Suaeda vera* and sea-purslane *Atriplex portulacoides*, with a patchy cover of herbaceous plants and bryophytes. This scrub vegetation often forms an important feature of the upper saltmarshes, and extensive examples occur where the drift-line slopes gradually and provides a transition to dune, shingle or reclaimed sections of the coast. At a number of locations on this coast perennial glasswort *Sarcocornia perennis* forms an open mosaic with other species at the lower limit of the sea-purslane community.

### **(2) Annex I Habitats - present as a qualifying feature but not the primary reason for selection of this site**

#### **1150 - Coastal Lagoons**

**Coastal lagoons** are areas of shallow, coastal salt water, wholly or partially separated from the sea by sandbanks, shingle or, less frequently, rocks. Lagoons show a wide range of geographical and ecological variation. This site encompasses a number of small percolation lagoons on the east coast of England; together with Orfordness - Shingle Street and Benacre to Easton Bavents, it forms a significant part of the percolation lagoon resource concentrated in this part of the UK. The most notable of the lagoons at this site are Blakeney Spit Pools, a lagoon system of six small pools between a shingle ridge and saltmarsh. The bottom of each pool is shingle overlain by soft mud. The fauna of the lagoons includes a nationally rare species, the lagoonal mysid shrimp *Paramysis nouveli*.

### **(3) Annex II Species - primary reason for selection of this site**

#### **1365 Common Seal *Phoca vitulina***

The Wash, on the east coast of England, is the largest embayment in the UK. The extensive intertidal flats here and on the North Norfolk Coast provide ideal conditions for *common seal Phoca vitulina* breeding and hauling-out. This site is the largest colony of common seals in the UK, with some 7% of the total UK population.

### **(4) Annex II Species - present as a qualifying feature but not the primary reason for selection of this site**

### 1355 Otter *Lutra lutra*

The otter *Lutra lutra* is a semi-aquatic mammal, which occurs in a wide range of ecological conditions, including inland freshwater and coastal areas (particularly in Scotland). Populations in coastal areas utilise shallow, inshore marine areas for feeding but also require fresh water for bathing and terrestrial areas for resting and breeding holts.

#### (5) Summary of Quality and Importance

- a) Sandbanks which are slightly covered by sea water all the time for which this is considered to be one of the best areas in the United Kingdom.
- b) Mudflats and sandflats not covered by seawater at low tide for which this is considered to be one of the best areas in the United Kingdom.
- c) Coastal lagoons for which the area is considered to support a significant presence.
- d) Large shallow inlets and bays for which this is considered to be one of the best areas in the United Kingdom.
- e) Reefs for which this is considered to be one of the best areas in the United Kingdom.
- f) Salt tolerant saltmarsh vegetation (*Salicornia*) and other annuals colonising mud and sand for which this is considered to be one of the best areas in the United Kingdom.
- g) Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) for which this is considered to be one of the best areas in the United Kingdom.
- h) Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) for which this is one of only four known outstanding localities in the United Kingdom which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares.
- i) Otter (*Lutra lutra*) for which the area is considered to support a significant presence.
- j) Common Seal (*Phoca vitulina*) for which this is considered to be one of the best areas in the United Kingdom.

#### (6) Interest Features of Site - General Summary (to illustrate sensitivities of the international site)

The Wash and North Norfolk SAC:

Habitats:-

- Sandbanks which are slightly covered by sea water all the time
- Mudflats and sandflats not covered by seawater at low tide
- Large shallow inlets and bays
- Reefs
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows
- Mediterranean and thermo-Atlantic halophilous scrubs
- Coastal lagoons

Species:-

- Common Seal
- Otter



### 3. Conservation Objectives (SAC)

The Conservation Objectives for this site are, subject to natural change, to maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

#### **Wash -**

- Coastal Saltmarsh
- Saline Lagoon
- Vegetated shingle
- Littoral sediment
- Sub-littoral sands and gravels
- Sabellaria reefs

#### **North Norfolk Coast -**

- Coastal Lagoons
- Littoral Sediment
- Supralittoral Sediment
- Fen, Marsh and Swamp
- Lowland Neutral Grasslands

Habitat Extent and Species Population Objectives – Summary:

#### **Wash -**

- Coastal Saltmarsh - To maintain no decrease in extent from the established baseline, subject to natural change.
- Saline Lagoon- To maintain no reduction in extent of saline lagoon area.
- Littoral sediment -To maintain no decrease in extent of littoral sediment (inter tidal area).
- Sub-littoral sands and gravels -To maintain no change in extent of inshore sub littoral sediment habitat
- Sabellaria reefs - To maintain no change in extent of *Sabellaria spinulosa* reef allowing for natural succession / known cyclical change
- On Coastal Vegetated shingle -To maintain no decrease in extent from the established baseline subject to natural change.
- On Coastal Vegetated shingle -To maintain internationally important populations and Aggregations of Non Breeding Birds,- internationally important populations of individual species: Pink-footed Goose, Dark-bellied Brent Goose, Shelduck, Pintail, Oystercatcher, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Sanderling.
- On Coastal Vegetated shingle - To maintain internationally important Aggregations of non-breeding birds – greater than 20,000 waterfowl
- On Coastal Vegetated shingle -To maintain nationally important populations and Aggregations of non-breeding birds listed in Annex 1 of the Birds Directive:- of Bewick's Swan, Whooper Swan, Bar-tailed Godwit
- On Coastal Vegetated shingle -To maintain nationally important populations and Aggregations of breeding birds listed in Annex 1 of the Birds Directive:- of Common Tern, Little Tern

- On Coastal Vegetated shingle -To maintain exceptionally high breeding densities and Aggregation of non-Annex 1 breeding birds: of Redshank

#### **North Norfolk -**

- Coastal Lagoons - To maintain: coastal lagoons and their submerged aquatic community within pans and creeks; and also common seal populations.
- Littoral sediment -To maintain saltmarsh plants, Wintering waterfowl assemblage, and Aggregation of non-breeding birds: Bar-tailed godwit, Brent goose, Dunlin, Grey plover, Knot, Oystercatcher, Redshank, Sanderling, Shelduck.
- Supralittoral Sediment - To maintain: shifting dunes, Fixed dune grassland, humid dune slacks, Vascular Plant Assemblage (Jersey cudweed, Grey hair-grass) common seal, natterjack toad, aggregation of breeding birds (Common tern Little tern, Sandwich tern ), aggregation of non breeding birds (Shelduck, Ringed plover).
- Fen, Marsh and Swamp - To maintain: swamp and reed bed, and tall herb fen, aggregation of breeding birds (Bittern, Marsh harrier ), aggregation of non breeding birds (Avocet, Brent goose, Oystercatcher, Redshank, Shelduck, White-fronted goose, Wigeon), mixed birds assemblage, wintering waterfowl assemblage.
- Lowland Neutral Grasslands - To maintain: Wet grassland, Aggregations of non-breeding birds (Avocet, Brent goose, Oystercatcher, Redshank, Shelduck, White-fronted goose, Wigeon).
- Various habitats - To maintain a Variety of breeding bird species (70)

#### **4. Site Condition Assessment - Favourable Condition Table**

The Component SSSI underpinning the Wash and North Norfolk Coast international SAC site include: the Wash, North Norfolk Coast, Gibraltar Point SSSI:

##### **SSSI Condition Summary for the Wash (compiled 11 April 2016)**

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
99.59%	67.98%	31.61%	0.00%	0.41%	0.00%

**Source: Natural England**

##### **SSSI Condition Summary for North Norfolk Coast (compiled 11 April 2016)**

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
100.00%	99.4%	0.6%	0.00%	0.00%	0.00%

**Source: Natural England**

#### **5. Site Vulnerability (including existing pressures and trends)**

Ecological vulnerability of habitats is closely linked to the physical environment. The intertidal zone is vulnerable and being threatened by coastal squeeze, as a result of land-claim and coastal defence works as well as sea-level rise and storm surges. Intertidal habitats are also potentially

affected by changes in sediment budget caused by dredging and coastal protection works. The estuary is fed by 4 large rivers. The volume and quality of water entering the Wash is dependent on the use made of these rivers.

The area supports internationally important seal populations that are vulnerable to disturbance and disruption of the marine ecosystem upon which they depend. Such issues should be addressed through the Marine Scheme of Management.

## **6. Other Relevant plans or projects**

- Development Plan Documents for Boston, East Lindsey, South Holland, Kings Lynn and West Norfolk and North Norfolk Authorities.
- Norfolk Local Transport Plan 2011 - 2026
- Broadland Rivers Catchment Flood Management Plan (Environment Agency, 2009)
- Adopted Shoreline Management Plans; The Kelling to Lowestoft Shoreline Management Plan (SMP) (August 2012) and North Norfolk SMP (2010)

### 3. The Humber Estuary, Flats, Marshes and Coast

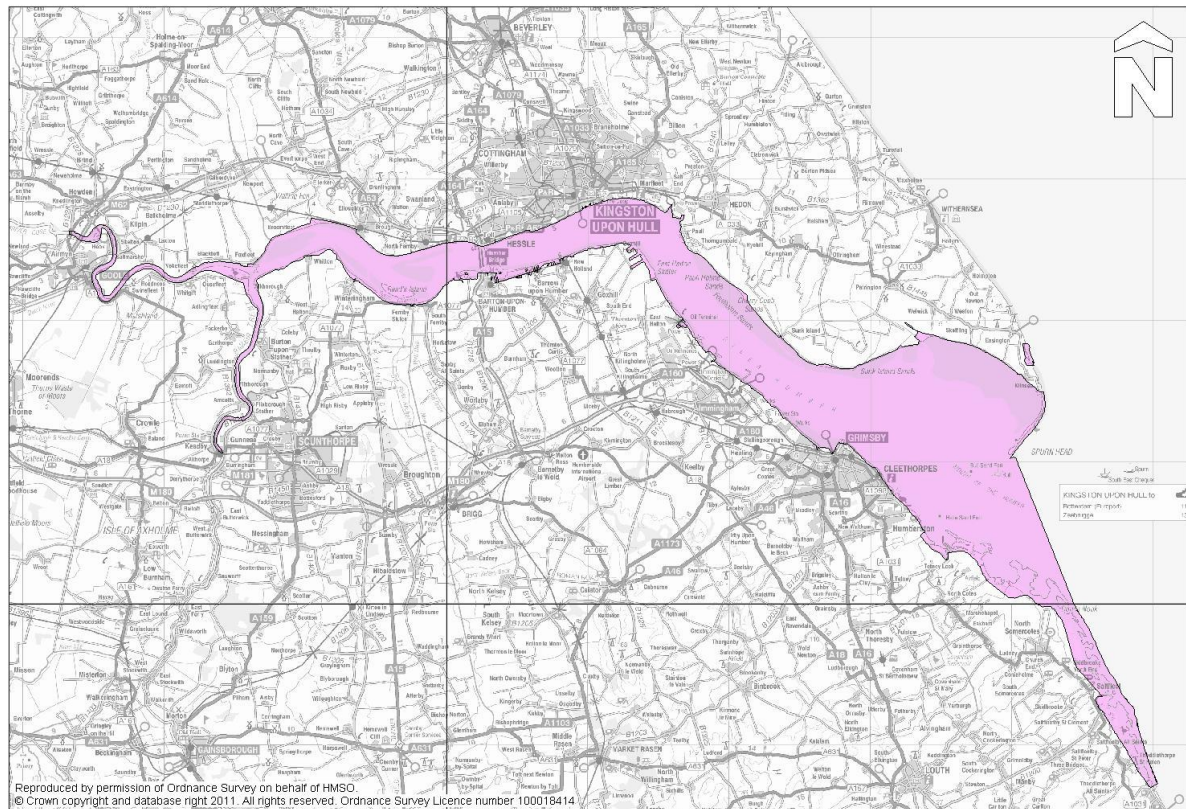
**Designation:** Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar

**Location:** The Humber Estuary is located on the boundary between the East Midlands Region and the Yorkshire and the Humber Region, on the east coast of England bordering the North Sea.

**Longitude:** 00 03 25 E

**Latitude:** 53 32 59 N

**Area:** 36657.15 ha



#### 1. The Characteristics of the European site

##### (a) Brief description

The Humber Estuary is the second-largest coastal plain estuary in the UK and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macro-tidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney. The designations (SPA/SAC/Ramsar) incorporate sections of the Rivers Ouse and Trent and the entire Humber Estuary, extending south from the mouth of the Humber to near Saltfleet on the east coast.

The Humber Estuary comprises extensive wetland and coastal habitats. The inner estuary supports extensive areas of reedbed, with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools.

## **(b) General site character**

Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (94.89%)  
Salt marshes. Salt pastures. Salt steppes (4.38%)  
Coastal sand dunes. Sand beaches. Machair (0.38%)  
Bogs. Marshes. Water fringed vegetation. Fens (0.35%)

## **(c) Primary Reasons for Designation**

### **SAC**

The Humber Estuary SAC has both habitats and species of European importance, namely:

- Annex I Habitats: Estuaries; Mudflats and sandflats not covered by sea water at low tide; Sandbanks which are slightly covered by sea water all the time; Coastal lagoons; Salicornia (salt tolerant plants) and other annuals colonising mud and sand; Atlantic salt meadows (*Glaucopuccinellietalia maritima*); Embryonic shifting dunes; Shifting dunes along the shoreline with marram grass (*Ammophila arenaria*) ('white dunes'); Fixed dunes with herbaceous vegetation ('grey dunes'); Dunes with sea buckthorn plant (*Hippophae rhamnoides*).
- Annex II Species: Sea lamprey fish (*Petromyzon marinus*); River lamprey fish (*Lampetra fluviatilis*); Grey Seal *Halichoerus grypus*.

### **SPA**

- Breeding populations of birds: Bittern (*Botaurus stellaris*); Little Tern (*Sternula albifrons*); Marsh Harrier (*Circus aeruginosus*) Avocet (*Recurvirostra avosetta*).
- Wintering populations of birds: Bittern (*Botaurus stellaris*); Bar-tailed Godwit (*Limosa lapponica*); Golden Plover (*Pluvialis apricaria*); Avocet (*Recurvirostra avosetta*); Hen Harrier (*Circus cyaneus*); Dunlin *Calidris alpina alpina*; Knot (*Calidris canutus*); Black-tailed Godwit (*Limosa limosa islandica*); Redshank (*Tringa tetanus*); Shelduck (*Tadorna tadorna*).
- Passage populations of birds: Redshank; Knot; Dunlin; Black-tailed Godwit; and Ruff (*Philomachus pugnax*)
- Internationally important assemblages of birds, regularly supporting 153,934 individuals, including: Dark-bellied Brent Goose; Shelduck; Teal; Wigeon; Mallard; Pochard; Scaup; Goldeneye; Bittern; Lapwing; Ringed Plover; Oystercatcher; Avocet; Golden Plover; Grey Plover; Turnstone; Sanderling; Dunlin; Knot Bar-tailed Godwit; Black-tailed Godwit; Curlew; Whimbrel; Ruff; Greenshank; Redshank.

### **Ramsar**

- Criterion 1: Representative of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sandflats, saltmarshes, and coastal brackish/saline lagoons
- Criterion 3: The second-largest colony of grey seals (*Halichoerus grypus*) in England, and the most north-easterly breeding site for Natterjack Toad (*Bufo calamita*)
- Criterion 5: An internationally important assemblage of wintering birds, regularly supporting 153,934 individuals
- Criterion 6: Internationally important populations of the following species: Golden Plover, Knot, Dunlin, Black-tailed Godwit, Redshank, Shelduck, and Bar-tailed Godwit

- Criterion 8: An important route for river lamprey fish (*Lapetra fluviatilis*) and sea lamprey fish (*Petromyzon marinus*) between the sea and their spawning areas.

## 2. Qualifying Features

### SAC

#### (1) Annex I Habitats - primary reason for selection of this site (as SAC):

##### 1130 Estuaries

The Humber is the second-largest coastal plain estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macro-tidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney. Suspended sediment concentrations are high, and are derived from a variety of sources, including marine sediments and eroding boulder clay along the Holderness coast. This is the northernmost of the English east coast estuaries whose structure and function is intimately linked with soft eroding shorelines. Habitats within the Humber Estuary include 1330 Atlantic salt meadows and a range of sand dune types in the outer estuary, together with subtidal sandbanks (H1110 Sandbanks which are slightly covered by sea water all the time), extensive intertidal mudflats (H1140 Mudflats and sandflats not covered by seawater at low tide), glasswort beds (H1310 *Salicornia* (salt tolerant plants) and other annuals colonising mud and sand), and 1150 coastal lagoons. As salinity declines upstream, reedbeds and brackish saltmarsh communities fringe the estuary. These are best-represented at the confluence of the Rivers Ouse and Trent at Blacktoft Sands. Upstream from the Humber Bridge, the navigation channel undergoes major shifts from north to south banks, for reasons that have yet to be fully explained. This section of the estuary is also noteworthy for extensive mud and sand bars, which in places form semi-permanent islands. Significant fish species include 1099 river lamprey *Lampetra fluviatilis* and 1095 sea lamprey *Petromyzon marinus* which breed in the River Derwent, a tributary of the River Ouse.

##### 1140 – Mudflats and Sandflats not covered by seawater at low tide

The Humber Estuary includes extensive intertidal **mudflats and sandflats not covered by seawater at low tide**. Upstream from the Humber Bridge, extensive mud and sand bars in places form semi-permanent islands.

#### (2) Annex I Habitats -present as a qualifying feature but not the primary reason for selection of this site (as SAC)

1110 - Sandbanks which are slightly covered by sea water all the time

1150 - Coastal lagoons

1310 – Salt tolerant plants (*Salicornia*) and other annuals colonising mud and sand

1330 - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

2110 - Embryonic shifting dunes

2120 - Shifting dunes along the shoreline with marram grass (*Ammophila arenaria*) (`white dunes`)

2130 - Fixed dunes with herbaceous vegetation (`grey dunes`)

2160 - Dunes with sea buckthorn (*Hippophae rhamnoides*)

**(3)Annex II Species - present as a qualifying feature but not the primary reason for selection of this site(as SAC**

1095 - Sea lamprey - *Petromyzon marinus*

1099 - River lamprey - *Lampetra fluviatilis*

1364 - Grey seal - *Halichoerus grypus*

**SPA**

**(4)SPA - Bird Species Supported:**

**(a) Bird Species present:**

The Humber Estuary SPA qualifies under Article 4.1 of the Directive (79/409/EEC) by the area supporting populations of European importance of the following Bird species listed on Annex I of the Directive:

*During the breeding season:*

- Bittern (*Botaurus stellaris*): 10.5% of the population in Great Britain 2000-2002;
- Marsh harrier (*Circus aeruginosus*): 6.3% of the breeding population in Great Britain 1998-2002;
- Avocet (*Recurvirostra avosetta*): 8.6% of the population in Great Britain 1998-2002;
- Little tern (*Sterna albifrons*): 63 pairs representing at least 2.6% of the breeding population in Great Britain.

*Over winter:*

- Bittern (*Botaurus stellaris*): 4% of the wintering population in Great Britain 1998/9-2002/3;
- Hen harrier (*Circus cyaneus*): 1.1% of the wintering population in Great Britain 1997/8-2001/2;
- Bar-tailed godwit (*Limosa lapponica*): 4.4% of the wintering population in Great Britain 1996/7 – 2000/1;
- Golden plover (*Pluvialis apricaria*): 12.3% of the wintering population in Great Britain 1996/7 – 2000/1;
- Avocet (*Recurvirostra avosetta*): 1.7% of the population in Great Britain 1996/7 to 2000/1.

*On passage:*

- Ruff (*Philomachus pugnax*): 28 individuals representing 1.4% of the population in Great Britain 1996-2000.

**(b) Migratory Bird Species:**

This Humber Estuary SPA site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of the following migratory bird species:

***Over winter:***

- Dunlin (*Calidris alpina alpina*): 23,605 individuals representing at least 1.7% of the wintering Northern Siberia/Europe/Western Africa population 1996/7 to 2000/1;
- Knot (*Calidris canutus*): 6.3% of the wintering North-eastern Canada/Greenland/Iceland/North-western Europe population 1996/7 to 2000/1;
- Black-tailed godwit (*Limosa limosa islandica*): 3.2% of the population 1996/7 to 2000/1;
- Shelduck (*Tadorna tadorna*): 1.5% of the wintering North-western Europe population 1996/7 to 2000/1;

- Redshank (*Tringa totanus*): 3.6% of the wintering Eastern Atlantic -wintering population 1996/7 to 2000/1.

On passage:

- Dunlin (*Calidris alpina alpina*): 1.5% of the population 1996-2000;
- Knot (*Calidris canutus*): 4.1% of the population 1996-2000;
- Black-tailed godwit (*Limosa limosa islandica*): 2.6% of the population 1996-2000;
- Redshank (*Tringa totanus*): 5.7% of the Eastern Atlantic - wintering population 1996-2000;
- Sanderling (*Calidris alba*): 1,767 individuals representing at least 1.8% of the Eastern Atlantic/Western & Southern Africa - wintering population

### (c) Bird Assemblage Qualification:

The Humber Estuary SPA site also qualifies under the Assemblage qualification of 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:

*Assemblage qualification:*

In the non-breeding season, the area regularly supports 153,934 individual waterbirds (five year peak mean 1996/97 – 2000/01), including: dark-bellied brent goose (*Branta bernicla bernicla*), shelduck (*Tadorna tadorna*), wigeon (*Anas penelope*), teal (*Anas crecca*), mallard (*Anas platyrhynchos*), pochard (*Aythya ferina*), scaup (*Aythya marila*), goldeneye (*Bucephala clangula*), bittern (*Botaurus stellaris*), oystercatcher (*Haematopus ostralegus*), avocet (*Recurvirostra avosetta*), ringed plover (*Charadrius hiaticula*), golden plover (*Pluvialis apricaria*), grey plover (*P. squatarola*), lapwing (*Vanellus vanellus*), knot (*Calidris canutus*), sanderling (*C. alba*), dunlin (*C. alpina*), ruff (*Philomachus pugnax*), black-tailed godwit (*Limosa limosa*), bar-tailed godwit (*L. lapponica*), whimbrel (*Numenius phaeopus*), curlew (*N. arquata*), redshank (*Tringatotanus*), greenshank (*T. nebularia*) and turnstone (*Arenaria interpres*).

Non-qualifying species of interest: The SPA is used by non-breeding merlin (*Falco columbarius*), peregrine (*F. peregrinus*) and shorteared owl (*Asio flammeus*) and breeding common tern (*Sterna hirundo*) and kingfisher (*Alcedo atthis*) (all species listed in Annex I to the EC Birds Directive) in numbers of less than European importance (less than 1% of the GB population).

### Ramsar

#### (5) Ramsar Criterion

- a) The site is designated as a Ramsar site (internationally important wetland) as over winter, the area regularly supports 187,617 individual waterfowl birds (5 year peak mean 1991/2 - 1995/6) including:-

Mallard (*Anas platyrhynchos*); Golden plover (*Pluvialis apricaria*); Bar-tailed godwit (*Limosa lapponica*); Shelduck (*Tadorna tadorna*); Knot (*Calidris canutus*); Dunlin (*Calidris alpina alpina*); Redshank (*Tringa tetanus*); Cormorant (*Phalacrocorax carbo*); Dark-bellied brent goose (*Branta bernicla bernicla*); Bittern (*Botaurus stellaris*); Teal (*Anas crecca*); Curlew (*Numenius arquata*); Pochard (*Aythya farina*); Ruddy turnstone (*Arenaria interpres*); Goldeneye (*Bucephala clangula*); Little tern (*Sterna albifrons*); Greater scaup (*Aythya marila*); Oystercatcher (*Haematopus ostralegus*); Ringed plover (*Charadrius hiaticula*); Grey plover (*Pluvialis squatarola*); Lapwing (*Vanellus vanellus*); Sanderling (*Calidris alba*); Black-tailed godwit (*Limosa limosa islandica*); Greenshank (*Tringa nebularia*); Marsh harrier (*Circus aeruginosus*); Hen harrier (*Circus cyaneus*); Avocet (*Recurvirostra avosetta*); Ruff (*Philomachus pugnax*); Wigeon (*Anas penelope*); and Whimbrel (*Numenius phaeopus*).



b) The Ramsar Wetlands site is designated for conservation for meeting criteria:

*Criterion 1: Habitats* -The site is a representative example of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons.

*Criterion 3: Species* -The Humber Estuary Ramsar site supports a breeding colony of grey seals *Halichoerus grypus* at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. The dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site are the most north-easterly breeding site in Great Britain of the natterjack toad *Bufo calamita*.

*Criterion 5: Assemblages of international importance* (as noted above). 153,934 individual waterfowl, non-breeding season(as stated above)

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

*Criterion 8: The Humber Estuary acts as an important migration route for both river lamprey (*Lampetra fluviatilis*) and sea lamprey fish (*Petromyzon marinus*).*

(Source: JNCC Information Sheet on Ramsar Wetlands)

## **(6) Interest Features of Site - General Summary** (to illustrate sensitivities of the international site)

### **(a) Humber Estuary SPA**

The SPA qualifies for European protection by supporting bird populations of European importance including breeding, wintering and migratory species of birds.

Wintering birds include:- bittern, hen harrier, bar tailed godwit, avocet, golden plover, knot, dunlin, shelduck and redshank.

Breeding birds: bittern, marsh harrier, avocet and little tern.

Migratory birds include: ruff, dunlin, knot, bar tailed godwit and redshank.

In the non-breeding season the area regularly supports 153,934 waterfowl.

### **(b) The Humber SAC**

The SAC qualifies for European protection due to the Annex I habitats and Annex II species it hosts and supports

Habitats:

- Sandbanks which are slightly covered by seawater all the time
- Coastal lagoons
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows
- Embryonic shifting dunes
- Shifting dunes across the shoreline with *Ammophila arenaria*
- Fixed dunes with herbaceous vegetation ("grey dunes")

- Dunes with *Hippophae rhamnoides*

Species:

- Sea lamprey
- River lamprey
- Grey Seal

(c) Humber Estuary Ramsar Site

Ramsar criterion 1 – The estuary and its full range of habitats and processes.

Ramsar criterion 3 – Breeding colony of grey seals at Donna Nook and breeding site of natterjack toad at the dune slacks at Saltfleetby-Theddlethorpe

Ramsar criterion 5 – Waterfowl assemblage of international importance

Ramsar criterion 6 – Various named bird species occurring at levels of international importance

Ramsar criterion 8 –

- Migratory route for river lamprey and sea lamprey
- Breeding birds
- Wintering birds
- Migratory birds

### **3.Conservation Objectives - For the Humber Estuary SPA, SAC, and Ramsar site**

The Conservation Objectives for this site are, subject to natural change, to maintain the following habitats and geological features in favourable condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SAC, SPA, Ramsar).

Features are:-

#### **Habitat Types represented (Biodiversity Action Plan categories):**

- Estuary;
- Inshore sublittoral sediment;
- Littoral rock (intertidal zone);
- Inshore littoral rock;
- Littoral sediment (mudflat, sandflat and saltmarsh)
- Saline lagoons;
- Sand dunes;
- Standing open water and canals.

#### **Geological features (Geological site types)**

- EC – Coastal Cliffs and foreshore
- IA – Active processes geomorphology

#### **Species features**

- Breeding bird assemblage;
- Passage and wintering waterfowl species;

- Grey seal;
- River lamprey;
- Sea lamprey;
- Vascular plants assemblages; and,
- Invertebrate assemblages.

(Note: The Humber Estuary SSSI is a component SSSI of the wider SPA/Ramsar designation of the Humber Estuary. The other component SSSI's of the Humber Estuary SPA/Ramsar site are North Killingholme Haven Pits SSSI, The Lagoons SSSI and Saltfleetby-Theddlethorpe Dunes SSSI.)

(Source: Derived from full Natural England Conservation Objectives citation for site)

#### 4. Site Condition Assessment – Favourable Condition Table

The Component SSSI underpinning the international site is: the Humber Estuary:

##### SSSI Condition Summary for Humber Estuary (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
98.75%	7.54%	91.21%	0.17%	1.09%	0.00%

Source: Natural England

#### 4. Site Vulnerability (including existing pressures and trends)

The Humber Estuary SAC and SPA is vulnerable to key issues such as coastal squeeze, impacts on the sediment budget, and geomorphological structure and function of the estuary (due to sea level rise, flood defence works, dredging and the construction, operation and maintenance of ports, pipelines and other infrastructure), changes in water quality and flows, pressure from additional built development, and damage and disturbance arising from access, recreation and other activities. Management intervention is necessary to secure ecological resilience required to respond to both natural and anthropogenic (human induced) change.

##### How Change is Being addressed:

Coastal squeeze is being addressed through the development and implementation of the Humber Flood Risk Management Strategy. All proposals for flood defence, development, dredging, abstractions and discharges which require consent from any statutory body, and land use plans which may have impacts upon the site are subject to assessment under the "Habitats Regulations". Diffuse pollution will be addressed through a range of measures including implementation of the Waste Water Framework Directive and Catchment Sensitive Farming initiatives. Other issues are addressed via a range of measures including regulation of on-site land management activities and implementation of the Humber Management Scheme, developed by all relevant statutory bodies to assist in the delivery of their duties under the Habitats Regulations.

(Derived from UK SAC & SPA data forms)

##### Summary of Vulnerabilities – of SAC and SPA Site Designation

The Humber Estuary SAC and SPA is vulnerable to impacts on the geomorphological structure and function of the estuary (including impacts on the sediment budget) from the following:

- Coastal squeeze (e.g. sea level rise and climate change);
- Flood defence works;
- Dredging;
- Construction, operation and maintenance of ports, pipelines and other infrastructure; and,
- In addition the site is sensitive from damage and disturbance arising from access, recreation and other activities.

#### Vulnerabilities of Ramsar Site Designation

The Humber Estuary Ramsar site is sensitive to the following:

- Disturbance through vegetation cutting (e.g. anglers clearing reedbeds);
- Loss of high tide roosting and foraging areas for the Ramsar birds;
- Vegetation succession;
- Water diversion for irrigation/domestic/industrial use;
- Overfishing;
- Pollution (e.g. domestic sewage and agricultural fertilisers);
- Disturbance from recreation and,
- Coastal squeeze.

#### **6. Other Relevant plans or projects**

- Development Plan Documents for North Lincolnshire, North East Lincolnshire, East Lindsey, City of Kingston Upon Hull and East Riding of Yorkshire.
- Humber Flood Risk Management Strategy.
- River Basin Management Plan for the Humber River Basin District.
- Grimsby and Ancholme Catchment Flood Management Plan (Dec 2009).

## 5. Baston Fen

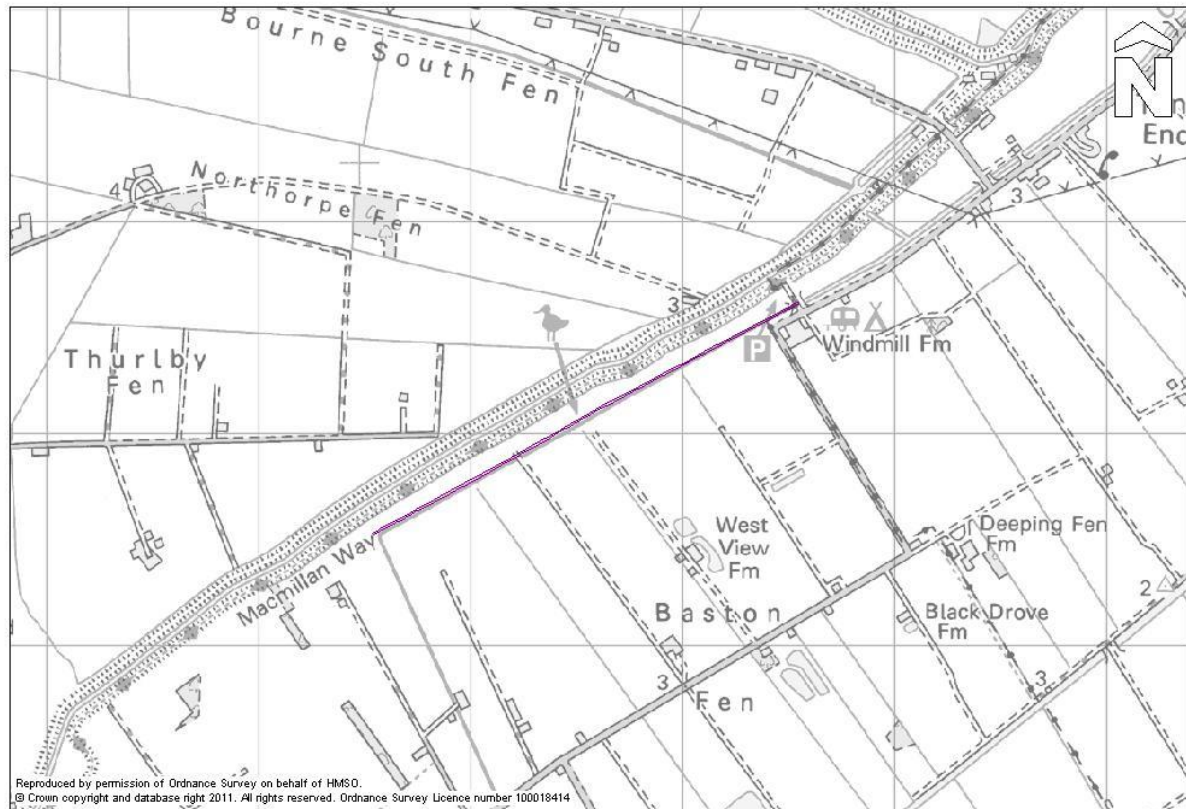
**Designation:** Special Area Conservation (SAC)

**Location:** Lincolnshire

**Longitude:** 00 19 01 W

**Latitude:** 52 44 21 N

**Area:** 2.2 ha



### 1.The characteristics of the European site

#### (a) Brief description

The Baston Fen SAC is a 2km long main drainage channel, the Counterdrain, adjacent and running alongside Baston Fen, South Kesteven, Lincolnshire. It lays east of Thurlby and south-east of Bourne villages. The SAC is part of the inland water body in the eastern, fenland area of South Kesteven, known as Baston Fen.

#### (b) General site character

Inland water bodies (standing water, running water) (100%)

Soli and geology: Alluvium, Clay Neutral

Geomorphology and Landscape: Floodplain, lowland

### **(c) Primary Reasons for Designation**

The Baston Fen SAC has a species of European importance, namely the presence of the Spined loach fish (*Cobitis taenia*) – an Annex II species.

(On Annex II of the Council Directive (92/43/EEC) on the Conservation of Natural Habitats and of Wild Flora and Fauna).

The Counter Drain contains an exceptionally rich aquatic flora and represents an important stronghold of the spined loach within the Welland catchment.

## **2. Qualifying Features**

### **(1) Annex II species that are a primary reason for selection of this site**

#### **1149 Spined loach *Cobitis taenia*.**

The Counterdrain, a large drainage channel running alongside Baston Fen, contains high densities of spined loach *Cobitis taenia*. It is an example of spined loach populations in the Welland catchment. The patchy cover from submerged plants provides excellent habitat for the species.

### **(2) Species**

The Spined loach *Cobitis taenia* is a small bottom-living fish that has a restricted microhabitat associated with a specialised feeding mechanism. They use a complex branchial apparatus to filter-feed in fine but well-oxygenated sediments. Optimal habitat is patchy cover of submerged (and possibly emergent) macrophytes, which are important for spawning, and a sandy (also silty) substrate, into which juvenile fish tend to bury themselves.

The Spined loach *Cobitis taenia* has an extremely wide distribution across Europe and Asia. Even with such a broad range and ecological niche it is generally regarded as threatened, if not rare, in Europe.

In the UK, Spined loach *Cobitis taenia* appears to be restricted to just five east-flowing river systems in eastern England: the rivers Trent, Welland, Witham, Nene and Great Ouse, with their associated waterways (Perrow & Jowitt 2000). Within these catchments it appears to occur patchily in a variety of waterbodies, including small streams, large rivers and both large and small drainage ditches. Little is known about its occurrence in open water, although it is known from a number of small lakes and gravel-pits. With limited means of dispersal, the UK populations are largely genetically isolated from each other.

## **3. Conservation Objectives**

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Standing open water and canals-ditches
- Fens, marsh and swamp

## Habitat Extent and Species Population Objectives – Summary

- For standing open water and ditches: to maintain ditch system, and no reduction in channel length
- For standing open water and ditches: to maintain adult populations densities and a variety of age structures of Spined loach fish
- For standing open water and ditches: to maintain outstanding assemblage of Dragonfly (Odonata)
- For standing open water and ditches: to maintain assemblage of nationally scarce vascular plants (hairlike pondweed, grass wack pondweed).
- For Fens, marsh and swamp: to maintain extent of wetland habitat and a mosaic of swamp habitat types
- For Fens, marsh and swamp: to maintain assemblage of nationally scarce vascular plants
- (fen pondweed, greater water parsnip)
- For Fens, marsh and swamp: to maintain outstanding assemblage of Dragonfly (Odonata)

### 4. Site Condition Assessment - Favourable Condition Table

The relevant Component SSSI underpinning the international site is: Baston and Thurlby Fens

Note - Only the Counter Drain section of the SSSI is an internationally designated site - the SAC. (Baston Fen is owned and managed as a Wildlife Trust reserve.)

#### SSSI Condition Summary for Baston and Thurlby Fens (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
100.00%	65.06%	34.94%	0.00%	0.00%	0.00%

Source: Natural England

### 5. Site Vulnerability (including existing pressures and trends)

Baston Fen SAC consists of a 2km long main drain, intensively managed by Welland and Deeping Internal Drainage Board. The drain retains a high population of spined loach and a rich aquatic flora but the effects of drain management on the European interest are presently unknown and require further investigation (JNCC).

#### Analysis

The Lincolnshire Biodiversity Action Plan (BAP) reports that the spined loach population in Lincolnshire appears to be healthy, and does not appear to be in serious danger, data having been collected for the past 20 years from routine fish surveys. The fish are found in only a few locations. While it does not appear to be in serious danger, however, "its apparently fragmented distribution in highly regulated rivers and drains means that it is potentially vulnerable to changes in river/land use". (Lincolnshire BAP2005-2007)

Baston Fen SAC falls within the habitat type described as Rivers, Canals and Drains with the Lincs BAP (2006). The Lincolnshire BAP lists the following problems which are inherent with such high maintenance drainage systems, such as the Baston Fen SAC:

- Water abstraction
- Chemical enrichment and pollution.

- Navigational and flood defence structures and impoundments.
- Climate change
- Land drainage and the management of waterways,
- Fishing and fish farming.
- Development within the floodplain.
- Loss of native fauna through swamping of introduced exotic species.

Suitable Management :-The BAP shows that the Environment Agency, together with partners including the Internal Drainage Boards, British Waterways, Lincolnshire Wildlife Trust and landowners, have ongoing programmes to ensure the safeguarding and management of the SAC as well as management and protection of the species

## **6. Other Relevant plans or projects**

- Development Plan Documents for South Kesteven.
- Environment Agency- River Welland and River Glen Waterway Plan 2006 (includes EA commitments (as navigation authority) to ensuring waterways are in favourable condition and to protect/Enhance biodiversity on the waterway)



## 5. Thorne and Hatfield Moors

**Designation:** Special Protection Area (SPA), Special Area Conservation (SAC)

**Location:** Doncaster, South Yorkshire

**Longitude:** 00 53 53 W

**Latitude:** 53 38 16 N

**Area:** 1363.55 ha

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Consisting of:

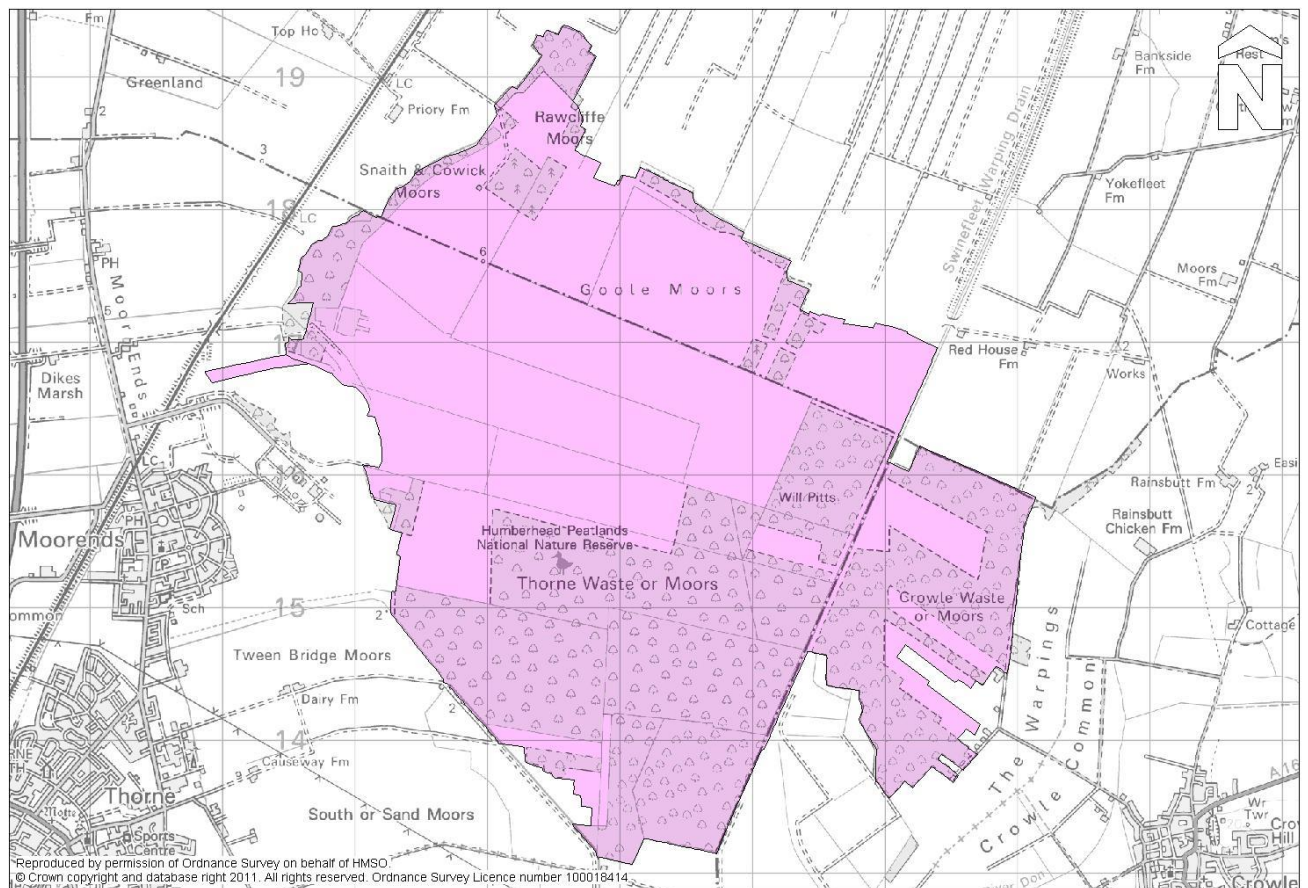
5(A) -Thorne Moor SAC,

5(B) - Hatfield Moor SAC, &

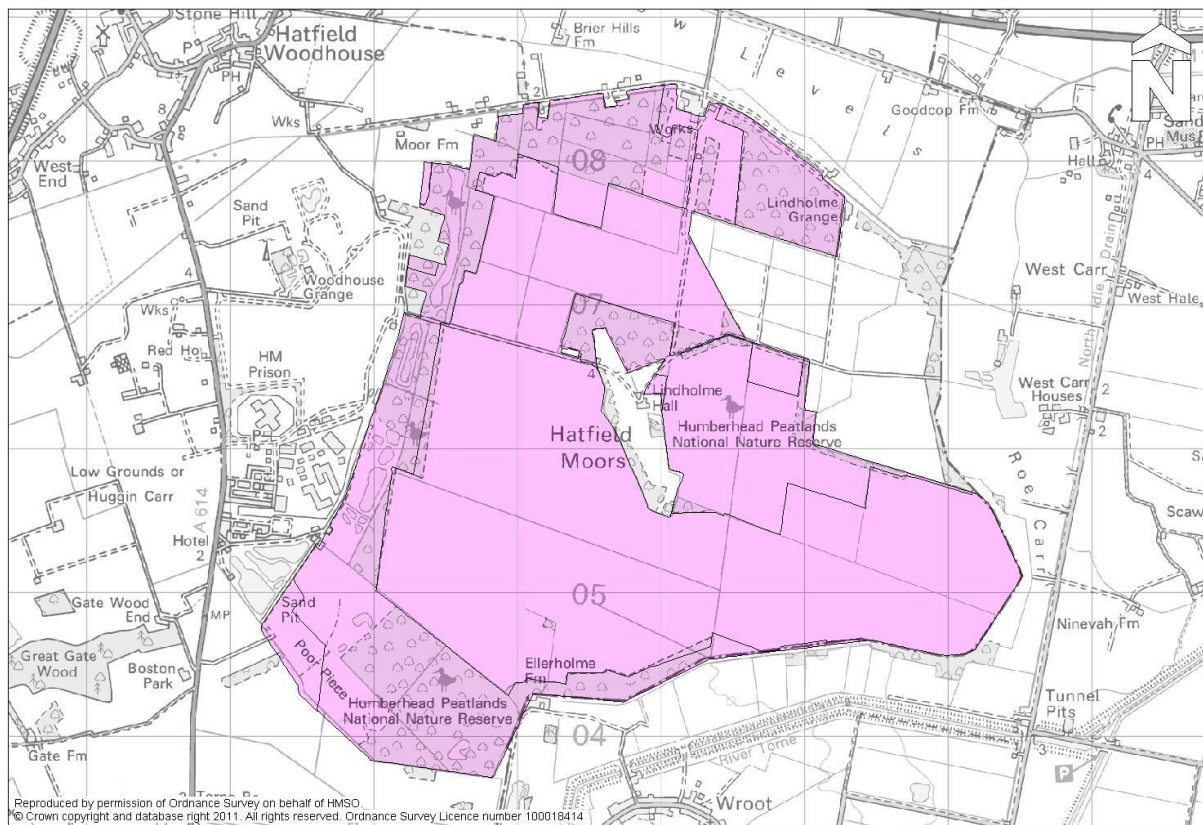
5(C) - Thorne and Hatfield Moors SPA

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### Thorne Moor



## Hatfield Moor



## 5(A) Thorne Moor SAC

### 1. The Characteristics of the European site

#### (a) Brief description

Thorne Moor is England's largest area of raised bog, lying a few kilometres from the smaller Hatfield Moors, both within the former floodplain of the rivers feeding the Humber estuary (Humberhead Levels), and includes the sub-components Goole Moors and Crowle Moors.

#### (b) General site character

Inland water bodies (standing water, running water) (8%)  
Bogs. Marshes. Water fringed vegetation. Fens (28%)  
Heath. Scrub. Maquis and garrigue. Phygrana (19%)  
Broad-leaved deciduous woodland (13%)  
Other land (including towns, villages, roads, waste places, mines, industrial sites) (32%)

Soil and geology: Acidic, Clay, Nutrient-poor, Peat

Geomorphology & landscape: Floodplain, Lowland

#### (c) Primary Reasons for Designation

An Annex I Habitat – Degraded raised bog still capable of natural regeneration.

Thorne Moor SAC is designated due to the presence of degraded raised bog considered capable of regeneration. It is the largest area of this habitat type in the country. Due to restoration work, a

small proportion of the site contains active raised bog, a second reason for the site designation. A variety of species are present including sphagnum mosses, cotton grasses, heather, cranberry and bog rosemary.

### **Relationship Between Site Designations**

- a) Thorne Moor qualifies as a SAC under the EC habitats Directive for the following Annex 1 habitats (see below): degraded raised bogs still capable of natural regeneration
- b) Thorne Moor SAC form part of the Thorne and Hatfield Moors SPA, qualifying for the following Annex 1 bird Species: Nightjar (*Caprimulgus europaeus*)
- c) Thorne Moor SAC covers whole of the Thorne, Crowle and Goole Moors SSSI excluding a small area of grassland on the west boundary.
- d) The SPA (of which this site is only part) covers a similar area excluding a slightly larger part of the grassland/fen

## **2. Qualifying Features (Thorne Moor SAC)**

### **(1) Annex I Habitats - primary reason for selection of this site:**

#### **7120 - Degraded raised bogs still capable of natural regeneration**

Thorne Moor is England's largest area of raised bog, lying a few kilometres from the smaller Hatfield Moors, both within the former floodplain of the rivers feeding the Humber estuary (Humberhead Levels), and includes the sub-components Goole Moors and Crowle Moors. Although recent management has increased the proportion of 7110 active raised bog at Thorne Moors, the inclusion of Goole Moors, where peat-extraction has now ceased, means that the site is still predominantly degraded raised bog. The restored secondary surface is rich in species of 7110 Active raised bogs with bog-mosses *Sphagnum* spp., cottongrasses *Eriophorum angustifolium* and *E. vaginatum*, heather *Calluna vulgaris*, cross-leaved heath *Erica tetralix*, round-leaved sundew *Drosera rotundifolia*, cranberry *Vaccinium oxycoccos* and bog-rosemary *Andromeda polifolia*.

## **3. Conservation Objectives (Thorne Moor SAC)**

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Bogs

Habitat Extent and Species Population Objectives – Summary:

- For Bogs: To maintain Lowland raised bog. To have no reduction in area of peat soils. The Thorne Moor site also includes 97 ha of lagg fen and warp land (grassland and woodland) which are hydrologically contiguous and contain supporting habitats.
- For Bogs: To maintain and monitor high quality inveterbrate assemblage, including scarce species
- For Bogs: To maintain the Breeding Bird Assemblage, number and diversity of breeding species, and British Trust for Ornithology score for birds characteristic of lowland heath, scrub, woodland and lowland grassland.

- For Bogs: To maintain the aggregations of Nightjar breeding bird - This habitat supports greater than 1% UK breeding population. To monitor breeding Nightjar pairs, calling males. Monitor nightjar habitat -no overall loss of more than 5%. To maintain a mosaic of habitat types for Nightjar.
- For Lowland Grassland: To maintain population of plant Greater Yellow Rattle (*Rhinanthus angustifolius*)- a schedule 8 plant

#### Conservation Objectives Summary - Thorne Moor SAC

- To have no loss in area of lagg fen and bog
  - To have no obvious modification in habitat structure.
  - To maintain vegetation composition.
  - To maintain species indicating local distinctiveness.
- (Source: Derived from full Natural England Conservation Objectives citation for site)

#### **4. Site Condition Assessment - Favourable Condition Table**

The relevant component SSSI is Thorne Crowle & Goole Moors:

##### **SSSI Condition Summary for Thorne Crowle & Goole Moors (compiled 11 April 2016)**

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
95.82%	0.00%	95.82%	2.94%	1.24%	0.00%

**Source: Natural England**

#### **5. Vulnerability (including existing pressures and trends)**

Thorne Moors is approximately 1900 ha of raised peat bog, much of which has been successfully restored to active bog through maintenance of water levels, though a large area is classed as degraded because restoration to its previous habitat is still in early stages.

*Peat-cutting* (now very limited (approx. 15 ha), and which will be addressed via the review of planning consents), *water abstraction* from the underlying aquifer (consented by the EA), and surrounding agricultural drainage (addressable and managed through Water Level Management Plans) affect the ability to successfully restore the degraded bog.

*Scrub invasion/encroachment* following drainage and peat-cutting is addressed via the Site Management Statements, NNR management and WES agreements.

#### **6. Other Relevant plans or projects**

- Development Plan Documents for Doncaster, East Riding and North Lincolnshire.

## 5(B) Hatfield Moor SAC

### 1. The Characteristics of the European site

#### (a) Brief description

Hatfield Moors is a remnant of the original extensive bog and wetland once found in the Humberhead levels and is the second largest area of extant lowland bog in England.

#### (b) General site character

Inland water bodies (standing water, running water) (7%)

Bogs. Marshes. Water fringed vegetation. Fens (12%)

Heath. Scrub. Maquis and garrigue. Phygrana (9%)

Other arable land (5%)

Broad-leaved deciduous woodland (6%)

Coniferous woodland (2%)

Other land (including towns, villages, roads, waste places, mines, industrial sites) (59%)

#### (c) Primary Reasons for Designation

An Annex I Habitat – Degraded raised bog still capable of natural regeneration.

Hatfield Moor SAC is designated due to the presence of degraded raised bog that is considered capable of natural regeneration. It is the second largest site of this type in the UK (after Thorne Moors). The site is relic of a once extensive area of bog and fen peatlands in the Humberhead Levels.

Historical peat extraction on the site means little of the original habitat remains however, since mineral working ceased the bog is being restored. The site includes birch woodland, dwarf shrubs such as heathers, bog species and sphagnum mosses. It is also notable for its invertebrate species including the mire pill beetle.

#### Relationship Between Site Designations

- a) Hatfield Moor qualifies as a SAC under the EC habitats Directive for the following Annex 1 habitats (see below): degraded raised bogs still capable of natural regeneration
- b) Hatfield Moor forms part of the Thorne and Hatfield Moors SPA, qualifying for the following Annex 1 bird Species: Nightjar (*Caprimulgus europaeus*)
- c) Hatfield Moor SAC covers whole of the Hatfield Moors SSSI excluding the ditch interest in the south.
- d) The SPA (of which this site is only part) covers only the former vegetated areas of the SSSI and excludes the former worked areas.

### 2. Qualifying Features (Hatfield Moor SAC)

#### (1) Annex I Habitats - primary reason for selection of this site

##### 7120 - Degraded raised bogs still capable of natural regeneration

Hatfield Moors is a remnant of the once-extensive bog and fen peatlands within the Humberhead Levels, and is still the second-largest area of extant lowland raised bog peat in England. Moraines of sand occur beneath the peat, the largest of which forms Lindholme Island, in the centre of the bog. Little, if any, original bog surface has survived the massive extraction of peat over the last few

decades. Peat-cutting has now ceased, and the bog is being restored over its remaining minimum average depth of 0.5 m of peat.

### **3. Conservation Objectives (Hatfield Moor SAC)**

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Bogs
- Lowland Ditch Systems

Habitat Extent and Species Population Objectives – Summary:

For Bogs: To maintain Lowland raised bog. To have no reduction in area of peat soils. The Hatfield Moor site also includes a further 148ha of former peatland and lagg worked for gravel, with potential for restoration as bog or lagg habitat 97 ha of lagg fen and warp land (grassland and woodland) which are hydrologically contiguous and contain supporting habitats.

For Bogs: To maintain and monitor high quality Invertebrate assemblage, including scarce species

For Bogs: To maintain the Breeding Bird Assemblage, number and diversity of breeding species, and British Trust for Ornithology score for birds characteristic of lowland damp grassland and scrub, lowland heath and scrub mosaic.

For Bogs: To maintain the aggregations of Nightjar breeding bird. This habitat supports greater than 1% UK breeding population. To monitor breeding Nightjar pairs, calling males. Monitor nightjar habitat -no overall loss of more than 5%. To maintain a mosaic of habitat types for Nightjar

For Lowland Ditch System: To maintain ditch system (no reduction in length) containing nationally scarce aquatic plant species.

#### Conservation Objectives Summary - Hatfield Moor SAC

- To have no loss in area of lagg fen and bog
- To have no obvious modification in habitat structure.
- To maintain vegetation composition.
- To maintain species indicating local distinctiveness.

(Source: Derived from full Natural England Conservation Objectives citation for site)

### **4. Site Condition Assessment - Favourable Condition Table**

The relevant component SSSI is Hatfield Moors:

### SSSI Condition Summary for Hatfield Moors (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
93.50%	1.27%	92.23%	6.50%	0.00%	0.00%

Source: Natural England

### 5. Site Vulnerability (including existing pressures and trends)

This includes current management regimes that address vulnerabilities.

Hatfield Moor SAC is approximately 1425 ha of raised peat bog, though a large area is classed as degraded because peat-cutting still takes place. In addition to peat-cutting (which will cease in 2004), water abstraction from the underlying aquifer (*consented by the EA*) and surrounding agricultural drainage (*addressable through Water Level Management Plans*) affect the ability to successfully restore the degraded bog.

Scrub invasion following drainage and peat-cutting is *addressed via Site Management Statements, NNR management and WES agreements*. Extraction of sand and gravel aggregates almost adjacent to the site also affects groundwater levels and will be addressed via the review of planning consents. (Source: UK SAC Data form)

### 6. Other Relevant plans or projects

- Development Plan Documents for Doncaster, East Riding and North Lincolnshire.



## 5(C) Thorne and Hatfield Moors SPA

### 1. The Characteristics of the European site

#### (a) Brief description

Thorne and Hatfield Moors SPA is an extensive lowland raised mire system adjacent to the Humber estuary on the north-east coast of England and is the largest remaining lowland peatland in England

#### (b) General site character

Inland water bodies (standing water, running water) (10%)

Bogs. Marshes. Water fringed vegetation. Fens (28%)

Heath. Scrub. Maquis and garrigue. Phygrana (21%)

Broad-leaved deciduous woodland (14%)

Coniferous woodland (1%)

Other land (including towns, villages, roads, waste places, mines, industrial sites) (26%)

Soil and geology: Acidic, Clay, Nutrient-poor, Peat, Sand

Geomorphology & landscape: Floodplain, Lowland

#### (c) Primary Reasons for Designation

Breeding populations of Nightjar birds.

Thorne and Hatfield Moors SPA - Parts of Thorne and Hatfield Moors are designated as an SPA as the area regularly supports a population of Nightjar during the breeding season.

Thorne and Hatfield Moors is the most northerly site designated an SPA because of the presence of breeding nightjar. The site supports approximately 1.8% of the national population of this species.

### 2. Qualifying Features (Thorne and Hatfield Moors SPA)

(Including EC Wild Birds Directive Annex species)

#### (1) Annex I Birds and regularly occurring migratory birds not listed on Annex I

A224 - Nightjar (*Caprimulgus europaeus*) (During breeding season supports 1.9% of the GB breeding population).

### 3. Conservation Objectives (Thorne and Hatfield Moors SPA)

*[Note - these Objectives are drawn from Thorne and Hatfield Moors SACs regarding Bird Species, as no separate Natural England Cons Objectives citation for SPA]*

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Bogs



Habitat Extent and Species Population Objectives – Summary:

- For Bogs: To maintain the Breeding Bird Assemblage, number and diversity of breeding species,
- For Bogs: To maintain the aggregations of Nightjar breeding bird. This habitat supports greater than 1% UK breeding population. To monitor breeding Nightjar pairs, calling males. Monitor nightjar habitat -no overall loss of more than 5%. To maintain a mosaic of habitat types for Nightjar.

Conservation Objectives Summary - Thorne and Hatfield Moors SPA (BDC)

- To monitor the number of calling male birds each year and maintain a stable or increasing population.
- To not lose any more than 5% of the current nightjar habitat.
- To maintain a mosaic of habitat types

(Source: Derived from full Natural England Conservation Objectives citation for SAC sites)

#### **4. Site Condition Assessment - Favourable Condition Table**

For condition of relevant component SSSI, see Tables for constituent SSSI above, ie:

5(A) - Thorne Crowle & Goole Moors SSSI

5(B) - Hatfield Moors SSSI

#### **5. Vulnerability (including existing pressures and trends)**

Thorne and Hatfield Moors SPA form an extensive lowland raised mire system. Outside of the areas that are currently being worked for peat, the main threats to the nightjar's habitat come from lack of management and re-wetting operations. The former is being addressed by a programme of scrub clearance work to create a mosaic with open areas of various sizes; the latter by incorporating information on nightjars' requirements and previous patterns of usage of the site into National Nature Reserve management plans, to ensure that future management takes account of both the raised mire and nightjar interests. On the parts of the site that are still worked for peat, any impacts on the nightjar's habitat or behaviour will be addressed as part of the review of extant permissions under the relevant provisions of the Habitats Regulations.

#### **6. Other Relevant plans or projects**

- Development Plan Documents for Doncaster, East Riding and North Lincolnshire.

## 6. Grimsthorpe

**Designation:** Special Area Conservation (SAC)

**Location:** Bourne

**Longitude:** 00 28 09 W

**Latitude:** 52 46 19 N

**Area:** 0.35 ha



### 1. The Characteristics of the European site

#### (a) Brief description

Grimsthorpe SAC is a small site (ca.0.35ha) that consists of Elsea Pit, a small former limestone quarry within the grounds of Grimsthorpe Park SSSI. The site supports a semi-natural dry grassland habitat with scrubland facies, and the small annual plant Early Gentian (*Gentianella anglica*).

#### (b) General site character

Dry grassland. Steppes (85.7%)

Inland rocks. Screes. Sands. Permanent snow and ice (14.3%)

### (c) Primary Reason for Designation

The presence of Early Gentian (*Gentianella anglica*) plant, a species appearing in Annex II of EC Habitats Directive. It is a small annual flowering plant, found on this dry calcareous (chalk) grassland habitat site, the most northerly outpost of this species in UK.

## 2. Qualifying Objectives

### (1) Annex I Habitats - present as a qualifying feature but not the primary reason for selection of this site

#### **6210 - Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)**

*Festuco-Brometalia* grasslands are found on thin, well-drained, lime-rich soils associated with chalk and limestone.

Most of these calcareous grasslands are maintained by grazing. A large number of rare plants are associated with this habitat, including purple milk-vetch *Astragalus danicus*, dwarf sedge *Carex humilis*, spotted cat's-ear *Hypochaeris maculata*, spring cinquefoil *Potentilla tabernaemontani*, pasqueflower *Pulsatilla vulgaris*, bastard-toadflax *Thesium humifusum* and the Annex II species 1654 early gentian *Gentianella anglica*, as well as various bryophytes and lichens. The invertebrate fauna is also noteworthy, and includes rarities such as the adonis blue *Lysandra bellargus* and silver-spotted skipper *Hesperia comma*.

### (2) Annex II Species - primary reason for selection of this site

#### **1654 - Early entian (*Gentianella anglica*).**

Early entian *Gentianella anglica* is an annual plant, occurring in calcareous grassland, mainly on steep, south-facing slopes. It is a small purple petals flowering plant, for which this is considered to be one of the best areas in the United Kingdom. It grows on bare ground or in thin turf that is kept open by a combination of rabbit or sheep-grazing and trampling by livestock on thin droughted soils. It is nationally scarce, is found on grazed chalk grassland and favours close-cropped, chalk downland.

Grimsthorpe is the most northerly outpost for early gentian *Gentianella anglica*, with 2–3 colonies totalling several hundred plants in old oolitic limestone quarries.

## 3. Conservation Objectives

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE, Table 1).

Interest Features identified are:

- Lowland calcareous grassland (SAC designated interest feature)
- Lowland neutral grassland (SAC designated interest feature)
- Broadleaved, mixed and yew woodland

## Habitat Extent and Species Population Objectives - Summary Notes:

### (1) Habitat:

- (a) On this site favourable condition requires the maintenance of the extent of each habitat type (either designated habitat or habitat supporting designated species). Maintenance implies restoration if evidence from condition assessment suggests a reduction in extent

(NE Table 2 – Habitat extent objectives)

- (b) Here, this includes no reduction in lowland calcareous or neutral grassland or any fragmentation without prior consent

### (2) Species:

- (a) On this site favourable condition also requires the maintenance of population of each designated species or assemblage. Maintenance implies restoration if evidence from condition assessment suggests a reduction in size of population or assemblage. (NE Table 2a – Species population objectives)

- (b) Here, this includes a Species Specific Target that Early Gentian plant should be present

Source: Derived from full Natural England (NE) Conservation Objectives citation for Site

## 4. Site Condition Assessment - Favourable Condition Table

The relevant component SSSI is the larger Grimsthorpe Park SSSI, within which the smaller Grimsthorpe SAC area sits.

### SSSI Condition Summary for Grimsthorpe Park (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/part destroyed
100.00%	94.97%	5.03%	0.00%	0.00%	0.00%

Source: Natural England

## 5. Site Vulnerability (including existing pressures and trends)

The site is vulnerable to sheep/cattle grazing and there is little scope for increasing the area of this habitat.

The site is on the northern limit for Early Gentain (*Gentianella anglica*) in the UK, but not all of the site provides suitable conditions and there is little scope for increasing the area of suitable habitat here. As with other biennials, numbers of *G. anglica* vary dramatically from year to year, the highest recorded number being 400 individuals. Arrangements are in hand to enable the erection of electric fencing around the site so that it will be possible for light grazing with sheep or cattle to take place.

Current Management: - The entire parkland, including Elsea Pit, is managed under the terms of a management Agreement with English Nature.

## 6. Other Relevant plans or projects

- Development Plan Documents for South Kesteven

## 7. Birklands and Bilhaugh

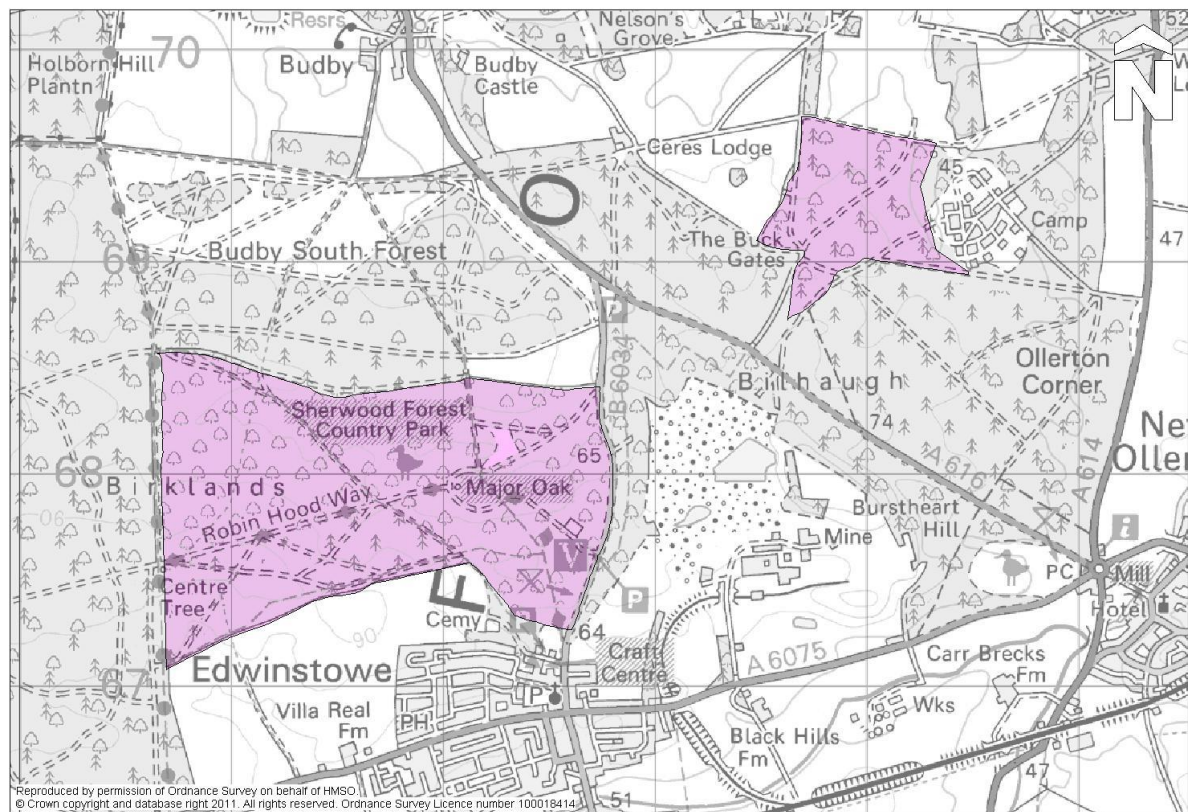
**Designation:** Special Area Conservation (SAC)

**Location:** Sherwood Forest, Nottinghamshire

**Longitude:** 01 04 31 W

**Latitude:** 53 12 17 N

**Area:** 271.84 ha



### 1. The Characteristics of the European site

#### (a) Brief description

Birklands and Bilhaugh SAC is a small area of oak-birch woodland (271.84ha) that lies within Sherwood Forest.

#### (b) General site character

Heath. Scrub. Maquis and garrigue. Phygrana (1%)

Dry grassland. Steppes (3%)

Broad-leaved deciduous woodland (89%)

Coniferous woodland (5%)

Other land (including towns, villages, roads, waste places, mines, industrial sites) (2%)

#### (c) Primary Reasons for Designation

Birklands and Bilhaugh SAC is an area of Sherwood Forest designated due to the presence of old acidophilous oak woodland on sandy plains. It is one of only four locations in the UK where this habitat is found and considered to be of outstanding quality. While not a designating feature, the site is notable for its rich invertebrate fauna, particularly spiders, and for having a diverse range of fungal species. The woodland also has a mixed age structure and is important for its dead wood communities.

## 2. Qualifying Features

### (1) Annex I Habitats - that are a primary reason for selection of this site

#### 9190 - Old acidophilous oak woods with common oak (*Quercus robur*) on sandy plains.

This habitat type comprises ancient lowland oak woodland on acidic, sandy or gravelly substrates. Veteran trees are relatively abundant in UK stands compared to examples in continental Europe, and are often associated with assemblages of notable lichens, fungi and invertebrates.

Birklands and Bilhaugh is the most northerly site selected for old acidophilous oak woods and is notable for its rich invertebrate fauna, particularly spiders, and for a diverse fungal assemblage, including *Grifoa sulphurea* and *Fistulina hepatica*. Both native oak species, *Quercus petraea* and *Quercus robur*, are present, with a mixture of age-classes, so there is good potential for maintaining the structure and function of the woodland system and a continuity of dead-wood habitats.

## 3. Conservation Objectives

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Lowland Parkland and Wood Pasture
- Broadleaved, Mixed and Yew Woodland
- Dwarf Shrub Heath

Habitat Extent and Species Population Objectives - Summary (BDC)

- To maintain the wood decay invertebrate assemblage.
- To maintain the extent of the area covered by ancient semi natural wood pasture.
- To maintain the age and size class distribution.
- To not have any reduction in the number of veteran trees.
- To maintain areas of open habitat.
- To ensure dead wood habitat is maintained.
- To ensure regeneration of young trees.
- To ensure species composition is desirable.
- Ensure that less than 5% of native oaks above a set size show signs of stress.
- To maintain local distinctiveness.
- To ensure associate fungi and invertebrates show no sign of significant decline.

- To ensure that vegetation heterogeneity is maintained so a range of vegetation surfaces are available.
  - For Dwarf shrub heath – monitor and maintain grass heath assemblage - no unconsented loss of the total area of dry heathland (including grass-heath) communities
- (Source: Derived from full Natural England (NE) Conservation Objectives citation for Site)

#### 4. Site Condition Assessment - Favourable Condition Table

The relevant component SSSI is Birklands and Billhaugh

##### SSSI Condition Summary for Birklands and Bilhaugh (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/part destroyed
96.87%	0.00%	96.87%	3.13%	0.00%	0.00%

Source: Natural England

(Note: The Birklands and Bilhaugh SAC is composed of component SSSI Units 5, 6, 7, 8 and 10 only.)

#### 5. Site Vulnerability (including existing pressures and trends)

The site is susceptible to damage from visitor pressure as it is popular with recreational users. The site's designated interest features are also vulnerable to the impacts from air pollution, particularly aerial deposition of nitrogen.

#### 6. Other Relevant plans or projects

- Development Plan Documents for Newark and Sherwood
- Nottinghamshire Local Transport Plan



## 8. Rutland Water

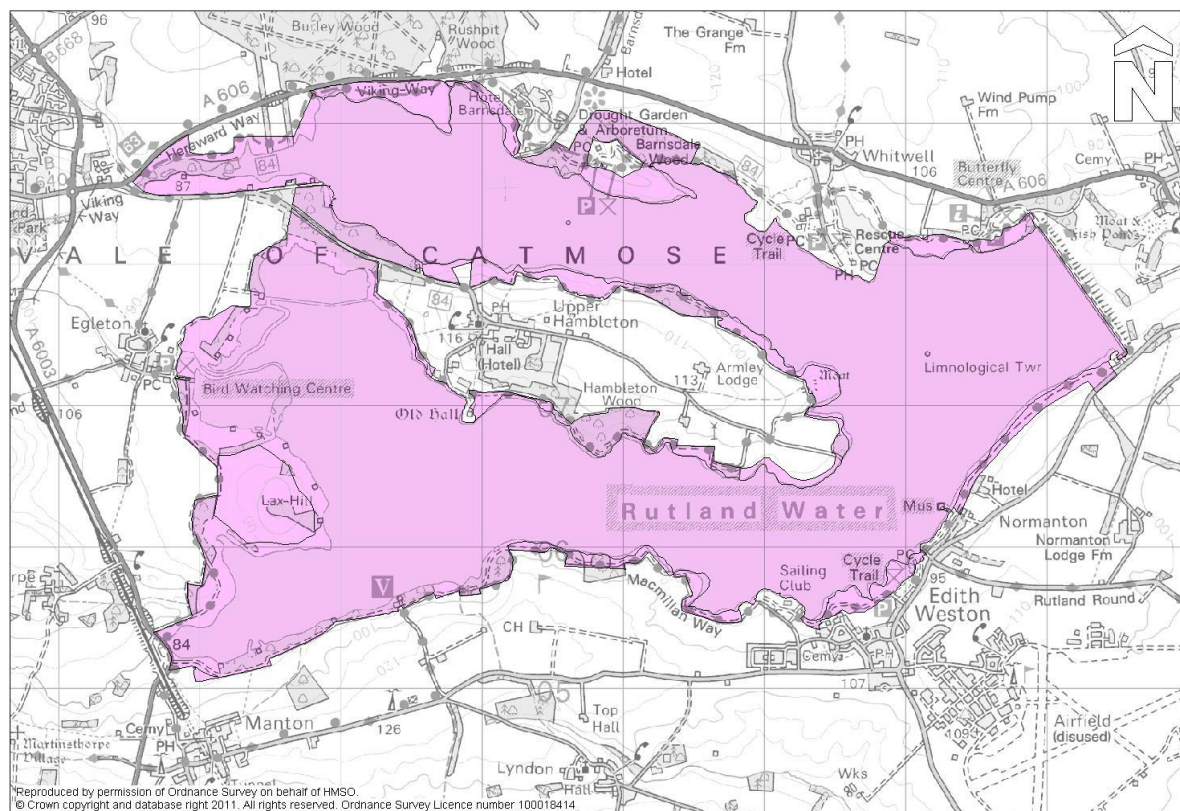
**Designation:** Special Protection Area (SPA), Ramsar

**Location:** Rutland

**Longitude:** 00 39 54 W

**Latitude:** 52 38 52 N

**Area:** 1556.87 ha



### 1. The Characteristics of the European site

#### (a) Brief description

Rutland Water is a large eutrophic\* man-made pump storage Reservoir created by the damming of the Gwash Valley in 1975. Located between Stamford and Oakham. The reservoir is in a lowland setting receiving its water from the Nene (90%) and Welland (10%). In general the reservoir is drawn down in the summer and filled during the autumn and winter months when river levels are high. A Nature Reserve occupies a narrow strip of land of some 600 acres and running for 8 miles round the western end of the Water. The reserve is owned by Anglian Water and managed by the Leicestershire and Rutland Wildlife Trust

The lagoons are one of the most important areas for wintering and breeding wildfowl.

\*(eutrophic = water body rich in nutrients and minerals which causes dense growth of algae and plant life, which decays and diminishes oxygen content to the detriment of other organisms)



### **(b) General site character**

Inland water bodies (standing water, running water) (80%)  
Bogs. Marshes. Water fringed vegetation. Fens (0.1%)  
Dry grassland. Steppes (9.9%)

### **(c) Primary Reasons for Designation**

Wintering populations of wildfowl, and the lowland open water that support them.

The reservoir regularly supports internationally important numbers of gadwall and shoveler birds and nationally important numbers of eight other species of wildfowl.

## **2. Qualifying Features**

(Including EC Wild Birds Directive Annex species)

### **(1) Annex I Birds and regularly occurring migratory birds not listed on Annex I (SPA)**

Qualifies under Article 4.2 of Birds Directive (79/409/EEC) by the open water lagoon habitat supporting the following migratory and over Winter populations of the following bird species:-

A056 Northern shoveler – *Anas clypeata*  
A052 Common Teal - *Anas crecca*  
A050 Eurasian Wigeon - *Anas penelope*  
A051 Gadwall - *Anas strepera*  
A061 Tufted Duck - *Aythya fuligula*  
A067 Common Goldeneye - *Bucephala clangula*  
A036 Mute swan - *Cygnus olor*  
A125 Eurasian Coot - *Fulica atra*  
A070 Goosander - *Mergus merganser*  
A005 Great Crested Grebe - *Podiceps cristatus*

### **(2) Article 4.2 Qualification – An Internationally Important Assemblage of Birds (SPA)**

The site also qualifies by regularly supporting at least 20,000 waterfowl. It has supported an Over Winter population assemblage of 25,037 waterfowl (5 year peak mean 01/04/1998)

### **(3) Ramsar Criterion**

The Ramsar Wetlands site is designated for conservation for meeting criteria:

*Criterion 5:* Assemblages of international importance: species with peak counts in winter- 19,274 waterfowl (5 year peak mean 1998/ 1999 - 2002/ 2003).

*Criterion 6:* Species/populations occurring at levels of international importance: qualifying Species (populations with peak counts in spring/autumn) are:

Gadwall - *Anas strepera*, Northern shoveler – *Anas clypeata*, Mute swan - *Cygnus olor*.

### 3. Conservation Objectives

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI,SAC,SPA,Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Standing Open Water and Canals (and surrounding marginal habitats)

Habitat Extent and Species Population Objectives – Summary:

- To maintain the assemblages of important breeding populations of birds characteristic of lowland standing open water and marginal vegetation habitats (including black necked grebe)
- To maintain a variety of passage of all bird and waterfowl species within site (maintain assemblage variety – 109 species)
- To maintain aggregations of internationally important non-breeding birds (greater than 20,000 waterfowl)
- To maintain aggregations of wintering waterfowl populations (including gadwall, goldeneye, mallard, pochard, shoveler, teal, tufted duck, wigeon)
- To maintain the extent of the habitat area covered by open water and marginal vegetation, grassland feeding and other grassland areas, woodland and plants

### 4. Site Condition Assessment - Favourable Condition Table

The relevant component SSSI is Rutland Water:

#### SSSI Condition Summary for Rutland Water (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
100.00%	100%	0%	0.00%	0.00%	0.00%

Source: Natural England

### 5. Site Vulnerability (including existing pressures and trends)

There are currently no hazards reported as affecting the site's ecological character.

However, the SPA may be vulnerable to pressures from recreation, nutrient inputs and changes in water level.

Recreation and Management: The site is one of the most popular tourist attractions in the East Midlands. Fishing, walking water sports and cycling currently take place and the reservoir has been zoned to allow this to take place. *Management* of the site for its SPA interests is currently compatible with these recreation uses except in periods of drawdown. A revised strategy with Anglian Water Supplies (AWS) is *intended to address this problem*.

Nutrient Inputs: The reservoir is filled from the River Nene and the River Welland. In the past phosphate levels have led to algal blooms. Although these have currently had little visible effects on the wildfowl, continued eutrophication could lead to an algal dominated system that may reduce the value of the area for both plant feeding and invertebrate feeding wildfowl. Phosphate inputs *are being tackled* through implementation of the Urban Waste Water Treatment Directive in the Nene catchment which contributes the major phosphate load to the reservoir. If necessary, monitoring will be introduced to show if the reduction in phosphate level is adequate and to investigate the contribution of agricultural sources to this problem.

Changes in Water Level: Rutland water is a major source of urban water supply. Increased abstraction in the summer up to the current licensed limit may cause further and more extensive periods of drawdown which can effect populations of invertebrates on which some species depend, whilst rapid filling can render other food sources unavailable for dabbling ducks. Drawdown may also increase disturbance through recreation uses. These issues *will be tackled* through discussions with AWS and the Environment Agency.

(Source: JNCC UK SPA Data Form)

## **6. Other Relevant plans or projects**

- Development Plan Documents for Rutland, South Kesteven, Peterborough, Melton Corby and North Northamptonshire.

## 9. Saltfleetby – Theddlethorpe Dunes and Gibraltar Point

**Designation:** Special Area of Conservation (SAC)

**Location:** East Lindsey, Skegness and Mablethorpe, Lincolnshire

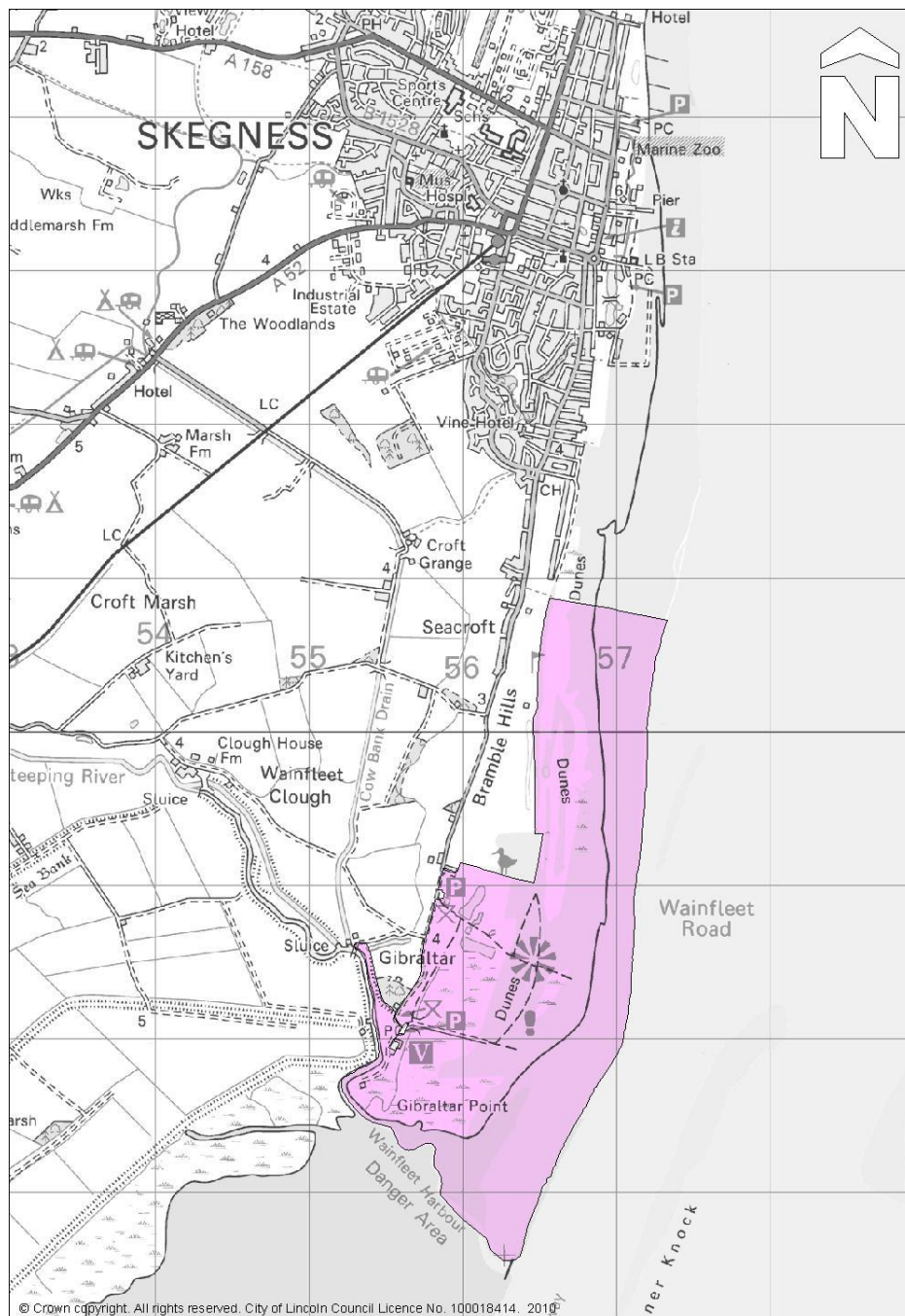
**Easting:** 00 13 33 E

**Northing:** 53 23 28 N

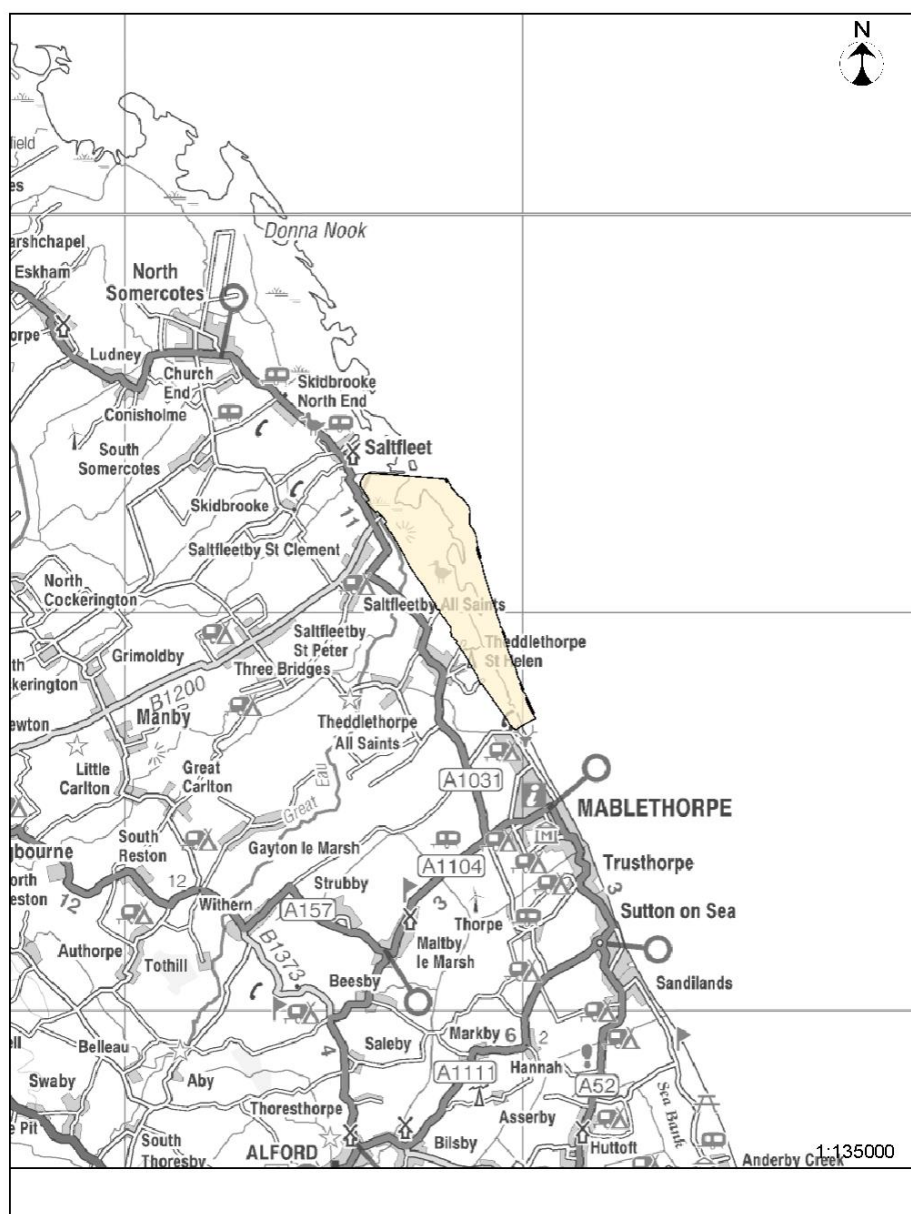
**Area:** 960.2 ha

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Gibraltar Point SSSI:



### Saltfleetby-Theddlethorpe SSSI:



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## 1. The Characteristics of the European site

### (a) Brief description

Salfleetby-Theddlethorpe Dunes and Gibraltar Point consists of an actively accreting coastal sand dune system, saltmarsh and extensive intertidal flats. All stages of dune development are represented, with the older dunes extensively colonised by scrub.

**(b) General site character**

Salt marshes. Salt pastures. Salt steppes (35%)  
Coastal sand dunes. Sand beaches. Machair (63%)  
Bogs. Marshes. Water fringed vegetation. Fens (2%)

### **(c) Primary Reasons for Designation**

The Saltfleetby – Theddlethorpe Dunes and Gibraltar Point SAC has habitats of European importance, namely:

Annex I Habitats: Shifting dunes along the shoreline with marram grass (*Ammophila arenaria*) ('white dunes'); Fixed dunes with herbaceous vegetation ('grey dunes'); Dunes with sea buckthorn (*Hippophae rhamnoides*); Humid dune slacks; Embryonic shifting dunes

## **2. Qualifying Features**

### **(1) Annex I Habitats - that are the primary reason for selection of this site (as SAC)**

#### **2120 - Shifting dunes along the shoreline with marram grass (*Ammophila arenaria*).**

The dune system on the composite site Saltfleetby–Theddlethorpe Dunes and Gibraltar Point contains good examples of Shifting dunes within a complex site that exhibits a range of dune types. At this site the *Ammophila*-dominated dunes are associated with lyme-grass *Leymus arenarius* and sand sedge *Carex arenaria*. These shifting dunes are part of a successional transition with 2130 Fixed dunes with herbaceous vegetation and 2160 Dunes with *Hippophae rhamnoides*.

#### **2130 - Fixed dunes with herbaceous vegetation.**

Within this dune complex on the east coast of England there are extensive areas of fixed dune vegetation within largely intact geomorphologically-active systems, with representation of early successional stages on the seaward side, and more stable areas. The lime-rich dunes support a rich and diverse flora, dominated in places by red fescue *Festuca rubra* and with unusual species including pyramidal orchid *Anacamptis pyramidalis*, bee orchid *Orchis apifera*, sea-holly *Eryngium maritimum*, lesser meadow-rue *Thalictrum minus* and sea campion *Silene maritima*. The fixed dunes are part of a successional transition, and the rapidly-accreting dunes on the seaward sand bars and shingle banks make this an important site for research into the processes of coastal development.

#### **2160 - Dunes with sea buckthorn (*Hippophae rhamnoides*).**

This site supports a good example of Dunes with *Hippophae rhamnoides* in the main part of its natural range in the UK. This habitat develops on dune areas and is present in a range of successional stages from early colonisation to mature scrub associated with other species such as elder *Sambucus nigra*, hawthorn *Crataegus monogyna* and ivy *Hedera helix*, typically associated with an understorey of ruderal species. These stands of scrub are important for both migratory and breeding birds.

#### **2190 - Humid dune slacks.**

The Humid dune slacks at this site are part of a successional transition between a range of dune features, and some have developed from saltmarsh to freshwater habitats after becoming isolated from tidal inundation by sand deposition. There is a range of different communities present, many of which are species-rich. The species present depend on the wetness of the slack, its location within the system and the management history. Some of the drier slacks support a very wide range of species; this has been encouraged by management. The wetter slacks often have more permanent standing water and are composed of stands of sedges and rushes.

**(2) Annex I Habitats – that are present as a qualifying feature but not the primary reason for selection of this site (as SAC):**

**2110 - Embryonic shifting dunes**

Embryonic shifting dune vegetation exists in a highly dynamic state and is dependent on the continued operation of physical processes at the dune/beach interface. It is the first type of vegetation to colonise areas of incipient dune formation at the top of a beach.

The habitat type is of exceptional importance as an indicator of the general structural and functional 'health' of a dune system. Creation of new dune habitat, and indeed the long-term survival of the dune system at which it occurs, is often dependent upon the survival of this habitat type.

**(3) Interest Features of Site - General Summary** (to illustrate sensitivities of the international site)

Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC:

- Shifting dunes across the shoreline with marram grass - *Ammophila arenaria*
- Fixed dunes with herbaceous vegetation ("grey dunes")
- Dunes with sea buckthorn - *Hippophae rhamnoides*
- Humid dune slacks
- Embryonic shifting dunes

**3. Conservation Objectives**

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1)

Interest Features identified are:

- Sub-littoral sands & gravels
- Littoral sediment
- Coastal saltmarsh
- Coastal sand dune

(Note: Littoral = inter-tidal zone & part of sea close to shore)

Habitat Extent and Species Population Objectives – Summary:

- To maintain sandbanks which are slightly covered by sea water at all times (Sub-littoral sands & gravels)
- To maintain mudflats and sandflats not covered by sea water at all times (Littoral sediment)
- To maintain coastal saltmarsh habitats (including atlantic salt meadows), and plants and shrubs colonising saltmarsh, mud and sand

- To maintain coastal sand dunes: – including shifting dunes along shore (white dunes) with marram grass (*Ammophila arenaria*); fixed dunes with herbaceous vegetation (“grey dunes”); humid dune slacks; dunes with sea buckthorn (*Hippophae rhamnoides*).
- Bird Species: To maintain Assemblage of non-breeding birds (of over 20,000 wintering waterbirds)
- Bird Species: To maintain Aggregations of non-breeding birds (eg Dunlin, Redshank, Knot, Sanderling, Dark bellied Brent goose, Wigeon) and breeding birds (eg Little tern)
- Plant Species: To maintain outstanding Assemblage of vascular plants
- Invertebrate Species: To maintain outstanding Assemblage of invertebrates
- Amphibian Species: To maintain amphibians (eg Natterjack Toad)

#### 4. Site Condition Assessment - Favourable Condition Table

The relevant component SSSI are: Gibraltar Point and Saltfleetby-Theddlethorpe Dunes.

Saltfleetby-Gibraltar terrestrial SAC covers all the non-tidal parts of Gibraltar Point SSSI but also includes the non-tidal parts of another SSSI at Saltfleetby-Theddlethorpe Dunes.

The SAC therefore covers 2 separate and distinct SSSI sites - the Saltfleetby-Theddlethorpe Dunes SSSI element laying north of Mablethorpe and east of Manby; and Gibraltar Point SSSI laying south of Skegness, 2 separate sites which are approximately 28km apart.

##### SSSI Condition Summary for Gibraltar Point (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
91.53%	60.33%	31.21%	0.00%	8.47%	0.00%

Source: Natural England

##### SSSI Condition Summary for Saltfleetby-Theddlethorpe Dunes (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
100.00%	78.78%	21.22%	0.00%	0.00%	0.00%

Source: Natural England

#### 5. Site Vulnerability (including existing pressures and trends)

Saltfleetby-Theddlethorpe Dunes and Gibraltar Point are two separate coastal complexes. They both contain a complex of habitats ranging from dry 'grey' dunes down to saltmarsh. The sites are both vulnerable to changes in sedimentation rates along the coast caused by coastal protection schemes further north.

The sites are both visited by large numbers of tourists and disturbance and damage from inappropriate access is a problem.



Management: The majority of these sites are declared as National Nature Reserves, overseen by Natural England.

## **6. Other Relevant plans or projects**

- Development Plan Documents for East Lindsey, North East Lincolnshire and Boston.

## 10. Gibraltar Point

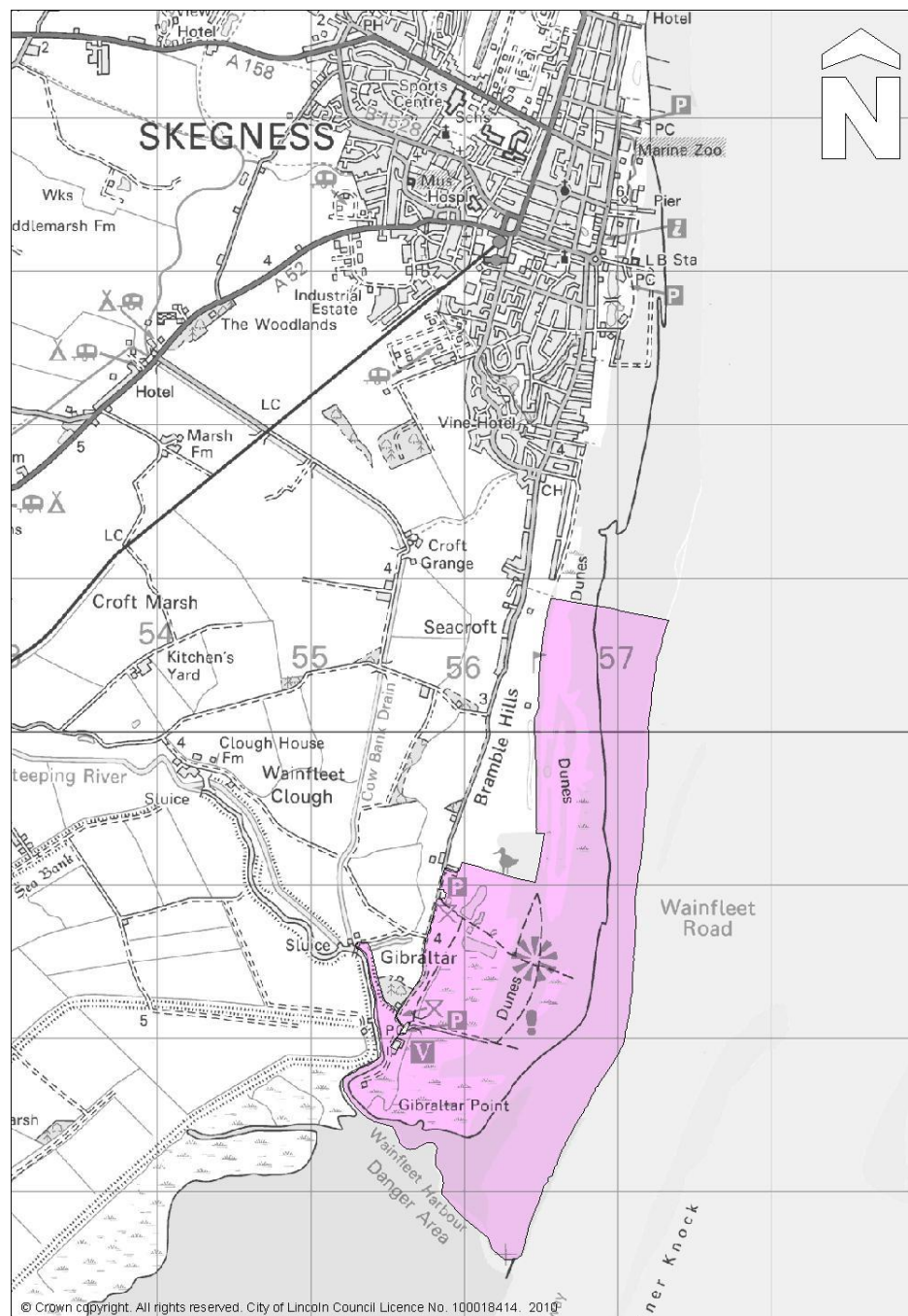
**Designation:** Special Protection Area (SPA), Ramsar

**Location:** Skegness, Lincolnshire

**Easting:** 00 20 16 E

**Northing:** 53 06 00 N

**Area:** 414.09 ha



## **1. The Characteristics of the European site**

### **(a) Brief description**

Gibraltar Point consists of an actively accreting sand dune system, saltmarsh and extensive intertidal flats, laying south of Skegness and north of the Wash. All stages of dune development are represented, with the older dunes extensively colonised by scrub. There are also small areas of freshwater marsh and open water. The site accommodates large numbers of over-wintering birds.

### **(b) General site character**

Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (48%)  
Salt marshes. Salt pastures. Salt steppes (20%)  
Coastal sand dunes. Sand beaches. Machair (28%)  
Inland water bodies (standing water, running water) (1%)  
Bogs. Marshes. Water fringed vegetation. Fens (1%)  
Humid grassland. Mesophile grassland (2%)

### **(c) Primary Reasons for Designation**

SPA:

The SPA regularly supports Breeding Bird populations of Little Tern, and Overwintering Populations of Bar-tailed Godwit, Grey Plover and Sanderling.

Ramsar:

The site meet various Ramsar wetlands site Criteria:

Criterion 1: The dune and saltmarsh habitats on site;

Criterion 2: An assemblage of wetland invertebrate species, including 8 rare and 4 vulnerable;

Criterion 5: An internationally important assemblage of waterfowl (53,072 over winter);

Criterion 6: International important bird species: Grey Plover, Sanderling, Bar-tailed Godwit, and Dark-bellied Brent Goose.

## **2. Qualifying Features (Including EC Wild Birds Directive Annex species)**

### **(1) Annex I Birds and regularly occurring migratory birds not listed on Annex I**

A144 Sandpiper (*Calidris alba*)

A157 Bar-tailed godwit (*Limosa lapponica*)

A141 Grey plover (*Pluvialis squatarola*)

A195 Little tern (*Sterna albifrons*)

### **(2) Ramsar Criterion**

The Ramsar Wetlands site is designated for conservation for meeting criteria:

*Criterion 1*- The dune and saltmarsh habitats present on the site are representative of all the stages of colonisation and stabilisation.

*Criterion 2*- Supports an assemblage of wetland invertebrate species of which eight species are listed as rare in the British Red Data Book and a further four species listed as vulnerable.

*Criterion 5-* Assemblages of international importance: 53,072 waterfowl over winter.

*Criterion 6-* Species/bird populations occurring at levels of international importance: Grey Plover (*Pluvialis squatarola*), Sanderling (*Calidris alba*), Bar-tailed Godwit (*Limosa lapponica*), Dark-bellied Brent Goose (*Branta bernicula bernicula*).

### **(3) Interest Features of Site - General Summary**

(to illustrate sensitivities of the international site)

Gibraltar Point SPA

Wintering birds: The area supports are sanderling, grey plover, and bar tailed godwit.

Breeding birds: little tern.

## **3. Conservation Objectives**

The Conservation Objectives for this site are, subject to natural change, to Maintain the following specific Designated Features of Interest (habitats & geological) in Favourable Condition (or restored to favourable condition if features are judged to be unfavourable), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, SAC, SPA, Ramsar), as individually listed by Natural England (NE Table 1).

Interest Features identified are:

- Sub-littoral sands & gravels
- Littoral sediment
- Coastal saltmarsh
- Saline Lagoon
- Coastal sand dune
- Coastal geomorphology

(Note: Littoral = inter-tidal zone and part of sea close to shore)

Habitat Extent and Species Population Objectives – Summary:

- To maintain sandbanks which are slightly covered by sea water at all times (Sub-littoral sands & gravels).
- To maintain mudflats and sandflats not covered by sea water at all times (Littoral sediment).
- To maintain coastal saltmarsh habitats (including atlantic salt meadows), and plants and shrubs colonising saltmarsh, mud and sand.
- To maintain coastal lagoon habitats (ie *saline lagoon*).
- To maintain coastal sand dunes: including shifting dunes along shore (white dunes) with marram grass (*Ammophila arenaria*); fixed dunes with herbaceous vegetation (“grey dunes”); humid dune slacks; dunes with sea buckthorn (*Hippophae rhamnoides*).
- Bird Species: to maintain Assemblage of non-breeding birds (of over 20,000 wintering waterbirds).
- Bird Species: to maintain Aggregations of non-breeding birds (eg Bar-tailed godwit, Grey Plover, Knot, Oystercatcher, Sanderling, Dark bellied Brent goose, Dunlin, Ringed plover, Wigeon) and breeding birds (eg Little tern)
- Plant Species: to maintain outstanding Assemblage of vascular plants
- Invertebrate Species: to maintain outstanding Assemblage of invertebrates (in dunes and saltmarsh)
- To maintain active coastal geomorphological process

#### 4. Site Condition Assessment - Favourable Condition Table

The relevant component SSSI is Gibraltar Point:

##### SSSI Condition Summary for Gibraltar Point (compiled 11 April 2016)

% meeting area of favourable or unfavourable recovering	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed/ part destroyed
91.53%	60.33%	31.21%	0.00%	8.47%	0.00%

Source: Natural England

#### 5. Site Vulnerability (including existing pressures and trends)

The site is subject to a high number of visitors which require close management.

##### Recreation & Site Management:

The Ramsar Site and SPA broadly coincide with the area declared as a National Nature Reserve and managed for nature conservation by the local Wildlife Trust. The site is well protected by law and by appropriate land management.

Land adjacent to the site has been acquired for management as an extension to the nature reserve or as permanent pasture under the Countryside Stewardship Scheme.

Gibraltar Point is managed as a nature reserve and supports a field station for education and research, and there; is an interpretative centre, guided tours and education.

##### Natural Processes Management:

The natural geomorphological forces which have built the sand dunes and shaped the coastline will continue to operate and re-model the coast. Sea defences up-drift may have modified the natural evolution of the site, but recent beach restoration with imported material, some 8 to 18 km to the north of the site is expected to restore longshore drift patterns to a more natural state.

##### Potential pollution:

Seaborne pollution, particularly accidental discharge from shipping or from inshore oil and gas drilling operations could pose problems for the site but contingency plans exist for dealing with oil spills.

#### 6. Other Relevant plans or projects

- Development Plan Documents for East Lindsey, North East Lincolnshire and Boston.

## 11. Sherwood Forest Region

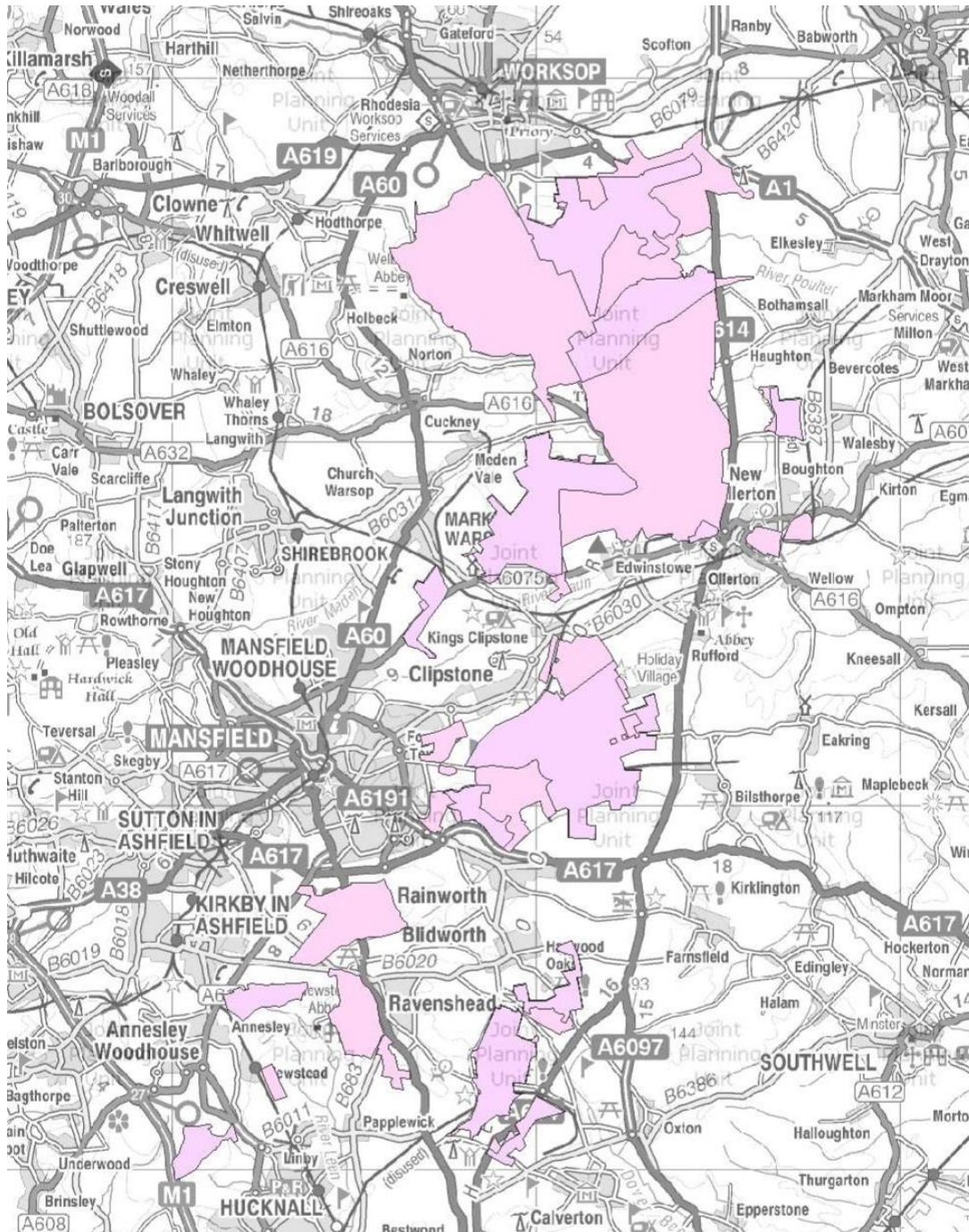
**Designation:** Prospective future Special Protection Area (prospective SPA)

**Location:** Sherwood Forest, Nottinghamshire

**Easting:** [prospective]

**Northing:** [prospective]

**Area:** [prospective]





## **1. The Characteristics of the European site**

### **(a) Brief description**

This prospective possible future European site (pSPA) consists of a series of land parcels that could qualify as a SPA for birds due to the presence of breeding populations of nightjar and woodlark birds.

It is an area within Sherwood Forest under DEFRA review and consideration for possible future classification as a SPA.

As yet, no assessment has been made as the boundary of any future SPA, although Natural England have provided an indicative boundary around the core areas for nightjar and woodlark breeding populations in the Sherwood Forest area. This is a prospective SPA that may become a Potential SPA (pSPA,) before becoming an SPA. The site is made up of a number of smaller areas which appear to provide optimal breeding habitat but it is important to stress that the boundary is not yet fixed. The site would only be protected under the Birds Directive once it became a Potential SPA (pSPA).

No boundaries have been set, but Natural England have identified a single indicative boundary around what it would consider to represent the core breeding nightjar and woodlark populations in the Sherwood Forest region. Natural England have emphasised this does not constitute a proposed SPA boundary for a number of reasons. This boundary is purely indicative and there is ongoing consideration underway.

### **(b) Primary Reason for potential selection of the site**

The presence of breeding populations of nightjar and woodlark birds.

## **2. Qualifying Features**

The population of nightjar in the Sherwood Forest Region represent 1.88% of the total UK breeding nightjar population and 2.51% of the total UK breeding woodlark population.

## **3. Conservation Objectives - Draft**

Sherwood Forest prospective Special Protection Area (prospective SPA) general principle conservation objective:

*“To maintain and, where not in favourable condition, to restore, the habitats supporting the breeding populations, and to avoid significant disturbance, of the Annex 1 bird species of European importance (nightjar and woodlark) with particular reference to lowland heathland, acid grassland and rotational coniferous plantation”*

Source: Natural England, Lincolnshire, December 2011

## **4. Site Vulnerability (including existing pressures and trends)**

In their 28 June 2010 note, as updated on 11 July 2011 (see below) on this prospective SPA Natural England suggest an assessment be made of the likely impacts on breeding nightjar and woodlark in the Sherwood Forest area.

*“This should ideally cover the potential direct, indirect and cumulative impacts which may include, but may not be limited to, the following:*

- disturbance to breeding birds from people, their pets, noise, traffic and/or artificial lighting*
- loss, fragmentation and/or damage to breeding and/or feeding habitat*
- bird mortality arising from domestic pets and/or predatory mammals and birds*
- bird mortality arising from road traffic and/or wind turbines*
- pollution and/or nutrient enrichment of breeding habitats ”*

## **5. Other Relevant plans or projects**

- Development Plan Documents for Newark and Sherwood, Bassetlaw, Mansfield, Ashfield and Gedling.
- Nottinghamshire Local Transport Plan.

## **6. Natural England Advice**

Natural England’s “Advice Note to Local Planning Authorities Regarding the Consideration of Effects on the Breeding Population of Nightjar and Woodlark in the Sherwood Forest Region” (Natural England, 28 June 2010, replaced by 11 July 2011 Note) included the following statements:

- It is presently Natural England’s view that based on Governments previous practice, the Sherwood Forest region is not a pSPA and therefore the provisions of the 2010 Regulations do not presently apply.
- However it is also our view that there currently remains a possibility of an area of Sherwood Forest being recommended for future classification as a SPA on the basis of the evidence from recent national nightjar and woodlark surveys and the interpretation of that data.
- Natural England would advise local planning authorities that they may wish to adopt a "risk based approach" or similar to provide decision-making with a degree of future-proofing until such a time that there is more certainty on whether the Sherwood Forest area is to be afforded pSPA or SPA status and whether the provisions of the 2010 Regulations are to take effect.
- Natural England suggest that as part of a risk-based approach to forward planning and decision-making, development plans and proposals are accompanied by an additional and robust assessment of the likely impacts arising from the proposals on breeding nightjar and woodlark in the Sherwood Forest area.
- Natural England state that their role relating to development plans or projects that may affect any future European site can only be advisory at this stage. As Sherwood has not yet been formally proposed as an SPA, Natural England will therefore not formally object to proposals that have the potential to affect a future European site that is not yet proposed.
- Natural England therefore consider there is merit in following this risk-based approach in considering the effects of proposed developments on the breeding populations of nightjar and woodlark.



## Appendix D: Natural England's response to HRA Screening of Further Draft Central Lincolnshire Local Plan

**Emma Naylor**

**From:** Emma Naylor  
**Sent:** 09 November 2015 11:10  
**To:** 'enquiries@naturalengland.org.uk'  
**Cc:** 'roslyn.deeming@naturalengland.org.uk'; 'james.marshall@naturalengland.org.uk'  
**Subject:** Central Lincolnshire Further Draft Local Plan: Habitats Regulations Assessment Methodology and Screening Report  
**Attachments:** E050\_CLincs Further Draft Local Plan\_HRA Methodology and Screening\_Nov 2015.pdf

Dear Sir/ Madam,

### Consultation on Central Lincolnshire Further Draft Local Plan

The Central Lincolnshire Local Plan Team, on behalf of the Central Lincolnshire Joint Strategic Planning Committee, is currently consulting on the Further Draft of the Central Lincolnshire Local Plan as well as various other documents, including the Local Plan Integrated Impact Assessment, Housing Growth Delivery Plan, Economic Growth Delivery Plan and Developer Contributions Supplementary Planning Document.

The consultation on the Further Draft Local Plan and other documents commenced on 15 October and will close at **23:59 on Wednesday 25 November 2015**.

Full details of the consultation and details of how to make comments can be found on our [website](#).

### Consultation on Habitats Regulations Assessment Methodology and Screening Report

We have prepared a 'Habitats Regulations Assessment Methodology and Screening Report' for the Further Draft version of the Local Plan.

I attach a copy of this report, and it is also available in the [Planning Policy Library](#) (see document E050).

In accordance with the Conservation of Habitats and Species Regulations 2010, we are seeking Natural England's views, as the statutory nature conservation body, on the Habitats Regulations Assessment Methodology and Screening Report for the Central Lincolnshire Further Draft Local Plan.

Please return your comments on the HRA Report to [talkolanning@central-lincs.org.uk](mailto:talkolanning@central-lincs.org.uk) by 23:59 hours on Monday 21 December 2015.

Please note that the deadline for comments on the Local Plan (and the other documents that we are consulting on) remains 23:59 on 25 November 2015.

If you have any queries regarding the Local Plan or HRA Report please do not hesitate to contact me (contact details below).

Yours faithfully,

**Emma Naylor**  
Planning Policy Officer

Central Lincolnshire Local Plan Team,  
C/O North Kesteven District Council,  
District Council Offices,  
Kesteven Street,

Date: 07 December 2015  
Our ref: 171435  
Your ref: None

NATURAL  
ENGLAND

Emma Naylor  
Planning Policy Officer  
Central Lincolnshire Local Plan Team,  
c/o North Kesteven District Council

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**BY EMAIL ONLY**

Dear Emma

**Planning consultation:** Central Lincolnshire Further Draft Local Plan: Habitats Regulations Assessment Methodology and Screening Report

Thank you for your consultation which was received by Natural England on 13 November 2015.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

**CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010, AS AMENDED (THE 'HABITATS REGULATIONS')**

Natural England welcomes the opportunity to provide comments on the Habitats Regulations Assessment of the Central Lincolnshire Further Draft Local Plan, as a statutory consultee and specialist adviser on the application of the Conservation of Habitats and Species Regulations 2010, the 'Habitats Regulations.'

We are satisfied that the Screening Report fully covers our concerns and consider that the emerging draft policies of the Central Lincolnshire Local Plan have undergone a full Habitats Regulations Assessment screening, in line with appropriate legislation and guidance. We can therefore confirm that we agree with the Report's conclusions that the Local Plan would not be likely to have a significant effect on a European Site either alone or in combination with other plans or projects, and no further assessment work is required at this stage.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact Roslyn Deeming on 0300 060 1524. For any new consultations, or to provide further information on this consultation please send your correspondences to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

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Roslyn Deeming  
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