

North East Lincolnshire Pre-submission Local Plan, incorporating Main Modifications

Habitats Regulations Assessment Report

Prepared by LUC July 2017 **Project Title**: Habitats Regulations Assessment of the North East Lincolnshire Local Plan: Pre-Submission Local Plan, incorporating Main Modifications

Client: North East Lincolnshire Council

Version	Date	Version Details	Prepared by	Checked by	Approved by
1	17/12/15	Draft HRA Report for the North East Lincolnshire Local Plan: Pre- submission Draft	Rebecca Turner David Green Kate Nicholls Kieran Moroney	Jeremy Owen	Jeremy Owen
2	21/01/16	Final HRA Report for the North East LincoInshire Local Plan: Pre- submission Draft	As above	Jeremy Owen	Jeremy Owen
3	02/09/16	Updated HRA Report for the North East Lincolnshire Local Plan: Pre-submission Draft taking into account proposed modifications	As above	Kate Nicholls Jeremy Owen	Jeremy Owen
4	05/09/16	Final updated HRA Report for the North East Lincolnshire Local Plan: Pre-Submission Draft taking into account proposed modifications	As above	Kate Nicholls Jeremy Owen	Jeremy Owen
5	05/12/16	Updated assessment following comments from Natural England and RSPB and receipt of additional data	David Green Sarah Smith	Jeremy Owen	Jeremy Owen
6	12/12/16	Updated assessment following teleconference with Natural England	David Green Sarah Smith	Jeremy Owen	Jeremy Owen
7	17/07/16	HRA of the Pre- Submission Local Plan, incorporating Main Modifications	David Green	Jeremy Owen Sarah Smith	Jeremy Owen

HRA Report



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Habitats Regulations Assessment Report

Prepared by LUC July 2017

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FS 566056 EMS 566057

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1 Introduction

- 1.1 North East Lincolnshire Council is producing a new Local Plan in order to provide the policy framework for development in the Borough up to 2032. The Local Plan will deliver the Council's spatial vision for the Borough, setting out planning policies to guide development. Once adopted, the Local Plan will shape what gets built and where, what gets safeguarded and how development will be delivered.
- 1.2 LUC was appointed by North East Lincolnshire Council in September 2015 to prepare a Habitats Regulations Assessment (HRA) of the Local Plan on its behalf. This HRA Report relates to the Pre-Submission Draft Local Plan, taking into account the Main Modifications following the Examination hearings. It should be read in conjunction with:
 - The Pre-Submission Draft Local Plan (January 2016).
 - The 2017 Schedule of Main Modifications.
- 1.3 A draft version of the HRA Report for the Pre-Submission Draft Local Plan was provided to North East Lincolnshire Council in December 2015, prior to the consultation, and the Council then made a small number of changes to the Pre-Submission Draft Local Plan in order to address recommendations made in the HRA Report. The changes made to the Local Plan at that stage were as a result of recommendations made in the draft HRA Report are described further ahead in this report. The HRA conclusions were then updated based on the final version of the Local Plan document.
- 1.4 The HRA Report was then published for consultation alongside the Pre-Submission Draft Local Plan between February and April 2016. In response to comments received from Natural England during the consultation, additional HRA work was carried out. **Appendix 4** presents the comments received from Natural England during the consultation on, and examination of, the Pre-Submission Draft Local Plan and explains how they have been addressed in this updated HRA Report, which included some additional work on aspects of the HRA. Consultation comments from the RSPB were also taken into account in this additional work.
- 1.5 The updated HRA work presented in this report takes into account the Main Modifications to the Pre-Submission Draft Local Plan, arising as a result of the Examination hearings. The nature of the Main Modifications is described in more detail in **Chapter 2**.

Background to the preparation of the new Local Plan

- 1.6 In June 2012 North East Lincolnshire Council ceased work on its Local Development Framework (LDF) Core Strategy and started preparing a new Local Plan. Some of the work on the LDF Core Strategy, which had progressed as far as Draft Submission stage, was taken forward and used to inform the preparation of the new Local Plan. However, the emerging Local Plan reflects the significant changes to the national planning system that have occurred since the Core Strategy was prepared.
- 1.7 North East Lincolnshire Council published a New Local Plan Initial Issues and Options paper for consultation in October 2012. After that consultation further work was undertaken by the Council on the development of options, taking into account consultation responses and seeking to reflect the latest situation in the Borough and the most up-to-date evidence. This resulted in the identification of an updated set of reasonable policy and site options for consultation, as set out in the January 2015 Draft Local Plan. That document was subject to consultation between February and March 2015. The outcomes of the consultation fed into the development of the Pre-Submission Draft Local Plan, which together with the previous version of this HRA report (December 2016), were subjected to Examination.

The requirement to undertake Habitats Regulations Assessment of Development Plans

- 1.8 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010¹ and again in 2012². Therefore when preparing its Local Plan, North East Lincolnshire Council is required by law to carry out a Habitats Regulations Assessment although consultants can undertake the HRA on its behalf. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is explained in the online National Planning Practice Guidance (NPPG).
- 1.9 HRA refers to the assessment of the potential effects of a development plan on one or more Natura 2000 sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs):
 - SPAs are classified under the European Council Directive 'on the conservation of wild birds' (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).
 - SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance.
- 1.10 Potential SPAs (pSPAs)³, candidate SACs (cSACs)⁴, Sites of Community Importance (SCIs)⁵ and Ramsar sites should also be included in the assessment.
 - Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 1.11 For ease of reference during HRA, these designations can be collectively referred to as European sites, despite Ramsar designations being at the international level. The term 'European site' is interchangeable with the term 'Natura 2000 site' in the context of HRA. The latter is used throughout this report.
- 1.12 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or whole development plan, would adversely affect the integrity of the site in question either alone or in combination with other plans. This is judged in terms of the implications of the plan for a site's 'qualifying features' (i.e. those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle meaning that where uncertainty or doubt remains, an adverse impact should be assumed.

Stages of the Habitats Regulations Assessment

1.13 **Table 1.1** below summarises the stages involved in carrying out a full HRA, based on various guidance documents^{6,7,8}.

¹ The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007. HMSO Statutory Instrument 2007 No. 1843. From 1 April 2010, these were consolidated and replaced by the Conservation of Habitats and Species Regulations 2010 (SI No. 2010/490). Note that no substantive changes to existing policies or procedures have been made in the new version.

² The Conservation of Habitats and Species (Amendment) Regulations 2012. Statutory Instrument 2012 No. 1927.

³ Potential SPAs are sites that have been approved by Government and are currently in the process of being classified as SPAs.

⁴ Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted.

⁵ SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the Government.

⁶ Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

⁷ Planning for the Protection of Natura 2000 sites. Guidance for Regional Spatial Strategies and Local Development Documents. Department for Communities and Local Government (DCLG), August 2006.

⁸ *The Appropriate Assessment of Spatial Plans in England. A guide to why, when and how to do it.* RSPB. August 2007.

Table 1.1: Stages in HRA

Stage	Task	Outcome
Stage 1: Screening (the 'Significance Test') Stage 2: Appropriate	Description of the plan. Identification of potential effects on Natura 2000 sites. Assessing the effects on Natura 2000 sites (taking into account potential mitigation provided by other policies in the plan). Gather information (plan and	Where effects are unlikely, prepare a 'finding of no significant effect report'. Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.
Assessment (the 'Integrity Test')	Natura 2000 sites). Impact prediction. Evaluation of impacts in view of conservation objectives. Where impacts considered to affect qualifying features, identify alternative options. Assess alternative options. If no alternatives exist, define and evaluate mitigation measures where necessary.	describing the plan, Natura 2000 site baseline conditions, the adverse effects of the plan on the Natura 2000 site, how these effects will be avoided through, firstly, avoidance, and secondly, mitigation including the mechanisms and timescale for these mitigation measures. If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	Identify and demonstrate 'imperative reasons of overriding public interest' (IROPI). Demonstrate no alternatives exist. Identify potential compensatory measures.	This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

- 1.14 In assessing the effects of the North East Lincolnshire Local Plan in accordance with Regulation 102 of the Conservation of Habitats and Species Regulations 2012, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which will inform the 'Integrity Test'. The relevant sequence of questions is as follows:
 - Step 1: Under Reg. 102(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not –
 - Step 2: Under Reg. 102(1)(a) consider whether the plan is likely to have a significant effect on the site, either alone or in combination with other plans or projects (the 'Significance Test'). [These two steps are undertaken as part of Stage 1: Screening shown in Table 1.1 above.] If Yes –
 - Step 3: Under Reg. 102(1), make an Appropriate Assessment of the implications for the site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 102(2) to consult Natural England, and optional under Reg. 102(3) to take the opinion of the general public. [*This step is undertaken during Stage 2: Appropriate Assessment shown in Table 1.1 above.*]
 - Step 4: In accordance with Reg.102(4), but subject to Reg.103, give effect to the land use plan only after having ascertained that the plan will not adversely affect the integrity of the Natura 2000 site.
- 1.15 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified

only very occasionally and would involve engagement with both the Government and European Commission.

1.16 The HRA should be undertaken by the 'competent authority' - in this case North East Lincolnshire Council, and LUC has been commissioned to do this on its behalf. The HRA also requires consultation with Natural England as the statutory nature conservation body⁹ in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences. The consultation responses of other stakeholders, such as the RSPB, are also taken into account.

HRA work carried out for the North East Lincolnshire Local Plan

- 1.17 North East Lincolnshire Council is part of the South Humber Ecology Group along with Natural England, the RSPB and landowners in the South Humber employment area. The group has been integral in the co-ordinated preparation of the South Humber Gateway Mitigation Strategy. The purpose of the strategy is to mitigate the potential for employment-related allocations to adversely affect the Humber Estuary SPA and Ramsar site through the loss of offsite foraging and loafing habitat for key bird species. The strategy is based upon extensive and targeted bird survey findings which have allowed key habitat parcels to be identified, safeguarded and managed to ensure potential impacts on the qualifying bird species of the SPA and Ramsar site associated with employment development in this area can be successfully mitigated. This work has fed into the HRA of the North East Lincolnshire Local Plan and has influenced the preparation of the Local Plan itself, in particular the development of Policy 6: Habitat Mitigation-South Humber Bank.
- 1.18 As well as considering the likely impacts on Natura 2000 sites of the employment-related proposals in the Local Plan, this HRA report presents an assessment of all of the policies in the Local Plan (taking into account the Main Modifications) in order to identify where there could be likely significant effects on the integrity of Natura 2000 sites, either alone or in combination with other plans.

Structure of this report

- 1.19 This chapter (**Chapter 1**) has described the background to the preparation of the North East Lincolnshire Local Plan and the requirement to undertake HRA. The remainder of the report is structured into the following sections:
 - **Chapter 2: The Local Plan** summarises the content of the Local Plan, which is the subject of this HRA report and describes the Main Modifications that the Council is now proposing to the document.
 - **Chapter 3: HRA Screening Methodology** sets out the approach taken and the tasks carried out during the screening stage of the HRA.
 - **Chapter 4: HRA Screening Assessment of the Local Plan** summarises the findings of the screening stage of the HRA and describes whether significant effects on Natura 2000 sites are likely to result from the implementation of the Local Plan, taking into account the Main Modifications.
 - **Chapter 5: Appropriate Assessment** describes the approach taken to the Appropriate Assessment and assesses whether the Local Plan policies which could not be screened out will adversely affect the integrity of Natura 2000 sites.
 - **Chapter 6: Conclusions** summarises the HRA conclusions for the Local Plan.

⁹ Regulation 5 of *The Conservation of Habitats and Species Regulations 2010*. HMSO Statutory Instrument 2010 No. 490.

2 The Local Plan

2.1 The North East Lincolnshire Local Plan sets out an overall Vision for North East Lincolnshire as follows:

By 2032 North East Lincolnshire will be nationally and internationally recognised as a centre for off-shore renewables, focusing on operations and maintenance and contributing significantly to the Humber's 'Energy Estuary' status. Growth in key sectors - food, energy, chemicals, ports and logistics - will be matched by a strong tourism and leisure offer. Evident through increased jobs and diversity of skills, the barriers to accessing jobs will have been broken down. This will be facilitated through the establishment of facilities to improve education and skills, and measures implemented to address housing need and affordability, and health and service needs, including countering deprivation issues in specific wards. A platform for sustainable economic growth will have been created, with conditions to capture and sustain more and better jobs in the area well established.

Good progress will have been made to make North East Lincolnshire a forward looking Borough where aspirations have been raised, and gaps narrowed in terms of social inequality; whether caused by health, education, age, disability, ethnicity, location or other aspects. Housing initiatives will have successfully revitalised areas of low housing demand, and steps taken to lift housing delivery to support economic growth, recognising the need to provide housing to address demographic change, and improve prospects for economic growth, whilst providing choice within the housing market, and being sensitive to the scale and character of settlements. Town centres will be successful, having developed their offer to support growth.

Environmental quality will be a source of pride, aspiration and confidence. The special character, biodiversity and distinctiveness of the Borough will continue to be protected and enhanced. The Borough's ecological and green infrastructure networks will have been improved, providing improved habitats and access to nature for local communities. A commitment will have been demonstrated, to address the causes and consequences of climate change, including bringing about an overall reduction in the proportion of properties at risk from flooding.

- 2.2 The Local Plan then presents 10 Strategic Objectives which set out the measures needed to achieve the overall vision. The strategic objectives address the following headline topics:
 - Population.
 - Climate change.
 - Economy.
 - Housing.
 - Social and health inequality.
 - Built, historic and natural environment.
 - Transport.
 - Town centres and local facilities.
 - Design.
 - Minerals and waste.
- 2.3 The Local Plan then sets out proposed policies within the following sections:
 - Future development requirements.
 - Spatial development strategy.
 - General policies.

- Building the economy we need.
- Building the homes we need.
- Building the places we need.
- Minerals and waste policies.
- 2.4 The final section of the document sets out proposals for testing the viability and deliverability of the Local Plan.

Changes to the Local Plan since the Pre-Submission Consultation

- 2.5 As described in **Chapter 1**, the Pre-Submission Draft Local Plan was subject to public consultation between February and April 2016. As a result of consultation responses received during that period, as well as additional information that became available since then, North East Lincolnshire Council prepared a 'Schedule of Modifications to the Pre-Submission Draft Local Plan' (2016) which detailed the Council's proposed minor modifications to the Local Plan.
- 2.6 These modifications largely sought to update the new Local Plan, avoid duplication and improve clarity and presentation. The Council did not consider that they altered the overall impact of the Local Plan or change its direction, or affect the substance or soundness of the document. Most of the proposed modifications related to changes to policy wording or the wording of supporting text, although some changes were also proposed to the proposed housing site allocations two previously allocated sites were to be removed, and seven new housing allocations were proposed for inclusion.

Main Modifications to the Local Plan of relevance to the HRA following Examination

- 2.7 Following examination, North East Lincolnshire Council intends to make a number of Main Modifications to the Pre-Submission Local Plan. These have been taken into account in this updated HRA. The Main Modifications of relevance to the HRA are outlined below:
 - Policies 1, 9 and 24 have been deleted.
 - New Policy 1 Employment land supply
 - Support to generate 8,800 jobs has been moved from Statement 3 to this New Policy. This policy also provides for a minimum of 123.6ha B-class employment space and 33,600m² for non B-class uses within town centre opportunity sites.
 - New Policy 2 Housing land supply
 - Provision for delivery of at least 13,340 new homes has been moved from Statement 4 to this policy.
 - New Policy 3 Settlement hierarchy and New Policy 4 Distribution of housing growth
 - These policies include text setting out the settlement hierarchy and the proportion of homes to be delivered in each area, which was previously included in non-policy text of the Local Plan. They have been considered together as New Policy 3 simply sets out the hierarchy, whereas New Policy 4 distributes development among the hierarchy.

• Policy 4 Employment Allocations

- Three sites (ELR 021, ELR25 (a-e) and ELR039a) are listed in this policy as 'land reserved for long term business expansion'. These sites are part of the South Humber Mitigation Zone.
- Additional mitigation wording in relation to the Humber Estuary SPA/Ramsar site as follows: "Sites ELR016a and ELR016b have been identified as having high potential to support SPA/Ramsar birds and proposals will need to be supported by an assessment for these species".
- Text relating to 'Impacts on Natura 2000 sites' has also been included with reference to the need for HRA if likely significant effects on the Humber Estuary SAC, SPA and Ramsar are predicted alone or in-combination with other existing or potential sources

of air pollution. The supporting text also states that "*sites that are located within the South Humber Bank Mitigation Zone will need to be progressed in accordance with the provisions set out in Policy 6 'Habitat Mitigation – South Humber Bank"*.

• Policy 6 Habitat Mitigation – South Humber Bank

- Text has been added as to require that "within the Mitigation Zone identified on the Policies Map, proposals which adversely affect the Humber Estuary SPA/Ramsar site due to the loss of functionally linked land will normally be required to provide their own mitigation". Mitigation sites are to be safeguarded against development and appropriate development is to be provided in line with The North East Lincolnshire South Humber Gateway Ecological Mitigation Delivery Plan.
- The Mitigation Contribution set out in this policy has been set at £11,508/ha.

• Policy 10 Tourism and Visitor Economy

• Further text added to criteria G, which seeks to maintain the integrity of the designated Humber Estuary Natura 2000 sites and features of interest associated with the Humber Estuary SSSI. Supported development should promote "Securing appropriate, effective and timely mitigation when necessary; including a commitment to further development of the Cleethorpes Habitat Management Plan to manage increasing recreational pressures and access to sensitive areas. Any mitigation or management measures will be implemented prior to impacts occurring".

• Policy 11 Housing Allocations

- Table 13.5 Housing allocations has been amended to include a new column identifying Medium/High SPA Bird Potential.
- The following additional text added in relation to SPA birds: "Sites identified as having medium or high potential to support SPA/Ramsar birds will be required to provide an assessment for these species. This assessment should incorporate a suitable level of data collection and/or bird surveying to determine the individual and cumulative importance of the site for SPA/Ramsar species. Where the assessment identifies the potential for adverse effects resulting from the offsite habitat loss and/or disturbance, appropriate and timely measures must be taken to mitigate such impacts. Such mitigation is likely to be in the form of alternative habitat managed specifically for the affected bird species and/or contributions towards the provision of strategic mitigation sites. Any strategic mitigation provision must be additional to that provided through the South Humber Bank Strategic Mitigation which only mitigates for sites within the South Humber Bank Mitigation Zone. All such measures must be in place and operational prior to the relevant impact(s), and must be maintained for the duration of the impact(s)".
- The following additional text has been added in relation to recreational impacts: "The Council will track planning permission granted on all housing sites and will identify and secure appropriate, effective and timely mitigation to manage increasing recreational pressures on the Humber Natura 2000 sites when necessary; this includes a commitment to further development of the Cleethorpes Habitat Management Plan. Any mitigation or management measures identified will be implemented prior to impacts occurring".
- The following additional text has been added in the justification text: "A desk-based assessment undertaken as part of the Habitats Regulation Assessment of the Local Plan identifies a small number of sites as having moderate potential to support SPA/Ramsar qualifying bird species. Some of these sites already benefit from planning permission and in such cases the issue has been appropriately explored and considered through the planning application process. Development proposals on all other sites will need to be supported by further assessment that confirms the individual and cumulative importance of the site for SPA/Ramsar species".
- One housing site, HOU143, is no longer allocated because it is no longer considered to be available and is therefore no longer a reasonable alternative. An additional 13 housing sites have been allocated, six of which were included in the 2016 proposed

modifications. These allocations include Development Company sites, which are sites owned by the Council that are to be released for development.

• The Main Modifications include an updated table of sites that are now under construction. These sites have been included in this HRA as an audit trail of development sites listed in the Local Plan document and in line with the precautionary principle. Some sites identified as being under construction in the Pre-Submission Local Plan have now been completed and these are not included in this HRA. Note that the maps included in this report only show those sites allocated in the Local Plan.

Policy 30 Renewable Energy and Low Carbon Infrastructure

- Text added as follows: "Developments and their associated infrastructure will be assessed on their merits and subject to the following impact considerations, taking into account of individual and cumulative effects; biodiversity, geodiversity and nature conservation, with regard given to the findings of the HRA and potential impacts on SPA birds, where appropriate".
- This policy now includes identified broad areas in which onshore wind energy development may be acceptable.

Policy 39 Developing a Green Infrastructure Network

• Text added as follows: "Recognition should also be made to the role such green infrastructure plays in mitigating the effects of recreational pressure on the Humber Estuary SAC/SPA/Ramsar, specially designing natural green space which is attractive to walkers and dog walkers, particularly in areas where development is most likely to result in increasing visitors to the Humber Estuary SCA/SPA/Ramsar".

• Policy 42 Green Space and Recreation

• Additional text as follows: "In making this provision, recognition should be made to the role such green space plays in mitigating the effects of recreational pressure on the Humber Estuary SCA/SPA/Ramsar, specially designing natural green space which is attractive to walkers and dog walkers, particularly in areas where development is most likely to result in increasing visitors to the Humber Estuary SAC/SPA/Ramsar".

Potential impacts of the Local Plan on Natura 2000 sites

2.8 **Table 2.1** below sets out the range of potential impacts that development in general and related activities may have on Natura 2000 sites.

Table 2.1: Potential impacts and activities adversely affecting Natura 2000 sites	

Broad categories and examples of potential impacts on Natura 2000 sites	Examples of activities responsible for impacts
 Physical loss Removal (including offsite effects, e.g. foraging habitat) Mine collapse Smothering Habitat degradation 	Development (e.g. housing, employment, infrastructure, tourism) Infilling (e.g. of mines, water bodies) Alterations or works to disused quarries Structural alterations to buildings (bat roosts) Afforestation Tipping Cessation of or inappropriate management for
	nature conservation

Broad categories and examples of potential impacts on Natura 2000	Examples of activities responsible for impacts
sites	
 Physical damage Sedimentation / silting Prevention of natural processes Habitat degradation Erosion Trampling Fragmentation Severance / barrier effect Edge effects 	Flood defences Dredging Mineral extraction Recreation (e.g. motor cycling, cycling, walking, horse riding, water sports, caving) Development (e.g. infrastructure, tourism, adjacent housing etc.) Vandalism Arson Cessation of or inappropriate management for
Fire	nature conservation
Non-physical disturbance Noise Vibration Visual presence Human presence Light pollution 	Development (e.g. housing, industrial) Recreation (e.g. dog walking, water sports) Industrial activity Mineral extraction Navigation Vehicular traffic Artificial lighting (e.g. street lighting)
Water table/availability	Water abstraction
 Drying Flooding / stormwater Water level and stability Water flow (e.g. reduction in velocity of surface water Barrier effect (on migratory species) 	Drainage interception (e.g. reservoir, dam, infrastructure and other development) Increased discharge (e.g. drainage, runoff)
Toxic contamination	Agrochemical application and runoff
Water pollutionSoil contaminationAir pollution	Navigation Oil / chemical spills Tipping Landfill Vehicular traffic Industrial waste / emissions
Non-toxic contamination	Agricultural runoff
 Nutrient enrichment (e.g. of soils and water) Algal blooms Changes in salinity Changes in thermal regime Changes in turbidity Air pollution (dust) 	Sewage discharge Water abstraction Industrial activity Flood defences Navigation Construction
Biological disturbance	Development (e.g. housing areas with domestic and
 Direct mortality Out-competition by non- native species Selective extraction of species Introduction of disease Rapid population fluctuations Natural succession 	public gardens) Predation by domestic pets Introduction of non-native species (e.g. from gardens) Fishing Hunting Agriculture Changes in management practices (e.g. grazing regimes, access controls, cutting/clearing)

3 HRA Screening Methodology

3.1 HRA screening of the North East Lincolnshire Local Plan, incorporating Main Modifications, has been undertaken in line with current guidance and seeks to meet the requirements of the Habitats Regulations. The tasks that have been undertaken during the screening stage of the HRA are described in detail below.

Identification of Natura 2000 sites which may be affected by the Local Plan and the factors contributing to and defining the integrity of these sites

- 3.2 Natura 2000 sites within 20km of North East Lincolnshire that could potentially be affected by the policies in the emerging Local Plan were identified in the August 2013 Sustainability Appraisal (SA) Scoping Report. Although that document related to the SA process which is separate to the HRA, it set out introductory information about the requirement for HRA and the approach that would be taken to the assessment.
- 3.3 All Natura 2000 sites lying partially or wholly within 20km of the North East Lincolnshire Borough boundary have been included in the HRA of the Local Plan, in order to address the fact that impacts from development may affect Natura 2000 sites which are located outside the administrative boundary of the Plan. A distance of at least 15km has generally been considered reasonable in other local authority HRAs to ensure that all designated sites that could potentially be affected by development are identified and included in the assessment. However, in order to be consistent with the HRA work that was carried out previously during the preparation of the North East Lincolnshire Core Strategy, the same even more precautionary distance of 20km has been applied in the HRA of the Local Plan. For some local authorities, there is the possibility that sites beyond even the 20km distance could be affected by development within a district, for example where the water resources used to supply the district come from a source that lies further afield and which is subject to European designation. This issue will be considered further during the HRA process and it may become apparent that other Natura 2000 sites, located more than 20km away from North East Lincolnshire, should also be included in the assessment.
- 3.4 Four Natura 2000 sites are located within 20km of North East Lincolnshire. The Humber Estuary represents three of these four sites given its separate but overlapping SAC, SPA and Ramsar designations. The SAC, SPA and Ramsar site mainly cover the estuary and so are mostly located outside of the Borough boundary, but they buffer the coastal boundary of North East Lincolnshire and extend up to approximately 1.5km into the Borough in places. Outside of the Borough boundary, Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC lies approximately 17km down the coast to the south. These Natura 2000 sites are mapped in **Figure 3.1** at the end of this section.
- 3.5 The qualifying features for which these sites are designated and the factors which contribute to and define their integrity have been described in detail in **Appendix 1**. In doing so, reference was made to the Conservation Objectives for each site, as well as the Standard Data forms for SACs and SPAs¹⁰ and Site Improvement Plans prepared by Natural England. This analysis has enabled Natura 2000 site interest features to be identified, along with the features of each site which determine site integrity and the specific sensitivities of the site. This information allows an analysis of how the potential impacts of the emerging North East Lincolnshire Local Plan may affect the integrity of each site.

¹⁰ These were obtained from the Joint Nature conservation Committee and Natural England websites (www.jncc.gov.uk and www.naturalengland.org.uk)

Assessment of 'likely significant effects' of the Local Plan

- 3.6 As required under Regulation 102 of the Conservation of Habitats and Species Regulations 2010 an assessment was undertaken of the 'likely significant effects' of the Local Plan and this has now been updated to take account of the Main Modifications described in **Chapter 2**. Screening matrices were prepared in order to assess which components of the Local Plan would be likely to have a significant effect on Natura 2000 sites. The findings of the updated screening assessment are summarised in **Chapter 4** and the full screening matrices can be found in **Appendix 2**. Separate screening matrices were prepared for each Natura 2000 site, although a single matrix was prepared for the Humber SPA and Ramsar site due to the significant amount of crossover in the qualifying features of those sites.
- 3.7 A risk-based approach involving the application of the precautionary principle was adopted in the assessment, such that a conclusion of 'no significant effect' was only reached where it was considered very unlikely, based on current knowledge and the information available, that a proposal in the Local Plan (taking into account Main Modifications) would have a significant effect on the integrity of a Natura 2000 site.
- 3.8 Previously, according to EC Guidance¹¹, mitigation measures were not generally considered as part of the screening stage. However, the High Court judgement from 2008 case law¹² implied that this should not be the case. Therefore, during the screening stage of this HRA the potential for the implementation of mitigation measures such as good practice and other statutory safeguards (e.g. Environmental Permitting regime etc.) to make significant effects unlikely to occur has been taken into account. This information is recorded in detail in **Appendix 2** and in some cases enabled likely significant effects from a policy or proposal to be ruled out. In other cases, even in light of the identified mitigation, likely significant effects could not be ruled out at the screening stage and it was therefore necessary for the issue to be considered in more detail during the later Appropriate Assessment (see **Chapter 5**).
- 3.9 A 'traffic light' approach has been used to record the likely impacts of the Local Plan policies on Natura 2000 sites and their qualifying habitats and species, using the colour categories shown below.

Red	There are likely to be significant effects (Appropriate Assessment required).
Amber	There may be likely significant effects, but this is currently uncertain (Appropriate Assessment required).
Green	There are unlikely to be significant effects (Appropriate Assessment not required).

3.10 It is important to note that the colour coded matrix in **Appendix 2** shows the findings of the initial screening stage of the HRA only and where likely significant effects could not be ruled out, the conclusions of the Appropriate Assessment (described in **Chapter 5**) supersede the earlier screening conclusions.

Assumptions applied during the screening assessment

3.11 The following high level assumptions were applied during the screening assessment and were taken into account prior to preparation of the screening matrices.

Physical loss of or damage to habitat

3.12 Any development resulting from the North East Lincolnshire Local Plan will be located within the Borough boundary; therefore loss of habitat from within the boundaries of a Natura 2000 site can be ruled out in relation to any sites that lie entirely outside of North East Lincolnshire i.e. Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC.

¹¹ Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provision of Articles 6 (3) and (4) of the Habitats Directive 92/43/EEC. European Commission, November 2001.

¹² Judgment of Sullivan J in Dilly Lane litigation (CO/7623/2007) handed down 1 May 2008 and issued 2 June 2008.

- 3.13 However, the potential for loss of habitat from within the boundaries of the Natura 2000 sites that lie partially within the Borough (i.e. the Humber Estuary SAC, SPA and Ramsar site) needs to be considered if proposals in the Local Plan could result in development coming forward in those areas.
- 3.14 In addition, habitat loss from development in areas outside of the Natura 2000 site boundaries may result in likely significant effects on site integrity where that habitat contributes towards maintaining the interest feature for which the Natura 2000 site is designated. This includes both greenfield and brownfield land which may provide offsite foraging, loafing and roosting habitat for birds associated with the Humber Estuary SPA and Ramsar site. The Humber Estuary SAC and Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC do not include birds amongst their qualifying features and so likely significant effects relating to offsite habitat loss can be screened out for those sites.
- 3.15 Therefore, likely significant effects from the North East Lincolnshire Local Plan as a result of onsite physical loss of or damage to habitat need to be considered in relation to the Humber Estuary SAC, SPA and Ramsar site and can be screened out in relation to Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC. Offsite physical loss of or damage to habitat needs to be considered in relation to the Humber Estuary SPA and Ramsar site but can be screened out in relation to the Humber Estuary SAC and Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC.

Non-physical disturbance (noise, vibration and light pollution)

- 3.16 Noise and vibration effects, e.g. during the construction of new housing or other development, are most likely to disturb bird species and are therefore a key consideration for the qualifying bird species associated with the Humber Estuary SPA and Ramsar site. These effects may also impact upon grey seals which are a qualifying species of both the Humber Estuary SAC and Ramsar site.
- 3.17 The effects of disturbance from noise, vibration and light are most likely to be significant if development takes place adjacent to the Humber Estuary or offsite habitats which are functionally linked (e.g. areas used by the qualifying birds for foraging, loafing and roosting).
- 3.18 Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC is located 17km to the south of the Borough and is designated for its dune habitat which is not vulnerable to non-physical disturbance. Therefore, impacts associated with noise, vibration and light pollution can be screened out for that site.
- 3.19 Likely significant effects associated with non-physical disturbance therefore need to be considered in relation to the Humber Estuary SPA, SAC and Ramsar site but can be screened out in relation to Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC.

Air pollution

- 3.20 Local Plan policies that are likely to result in increased traffic (such as housing and employment allocations) have the potential to contribute to increased air pollution. Employment allocations and waste management proposals also have the potential to result in an increase in emissions of pollutants. Where employment or waste management development is proposed, consideration has therefore been given to whether activities within the site could potentially result in effects on Natura 2000 sites as a result of increased air pollution from industrial and waste management processes.
- 3.21 Air pollution is most likely to affect Natura 2000 sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by any deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen availability that can then affect plant health, productivity and species composition.
- 3.22 In terms of vehicle traffic, nitrogen oxides (Nox, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and Nox can cause eutrophication of soils and water.

- 3.23 Based on the Highways Agency Design for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 1¹³ (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.
- 3.24 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the screening stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:
 - Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more.
 - Heavy duty vehicle (HDV) flows will change by 200 AADT or more.
 - Daily average speed will change by 10 km/hr or more.
 - Peak hour speed will change by 20 km/hr or more.
 - Road alignment will change by 5 m or more.
- 3.25 An assessment has been undertaken to identify which Natura 2000 sites lie within 200m of the strategic road network. The Humber Estuary, SAC, SPA and Ramsar were found to be located within 200m of a number of 'A' roads including the A1077, A1098, A15, A18 and A180. Therefore, if there is a significant increase in AADT along those routes as a result of the development proposed through the Local Plan, there could be significant effects on site integrity as a result of increased air pollution. There may also be significant effects relating to air pollution if employment or waste-related development were to take place in close proximity of the sites, resulting in an increase in emissions. The qualifying habitats and species of the Humber Estuary SAC, SPA and Ramsar are potentially sensitive to air pollution the Site Improvement Plans for these sites identify the impact of atmospheric nitrogen deposition as a priority issue.
- 3.26 Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC has been screened out in relation to increased air pollution as it is located approximately 17km away from North East Lincolnshire at the nearest point, at which distance diffuse pollution associated with proposals in the Local Plan would not be expected to result in likely significant effects. Although the site is within 200m of the A1031, that route is not expected to experience a significant increase in traffic generation as a result of development in North East Lincolnshire as it does not provide a key link to or from the larger towns where development in North East Lincolnshire will be focussed. The A1031 runs part of the way from Grimsby south towards Skegness but does not follow a direct route and does not go as far as Skegness. Traffic moving between those towns would therefore be more likely to use the faster and more direct A16 which travels directly from Grimsby right to Skegness.
- 3.27 Therefore, likely significant effects from the North East Lincolnshire Local Plan as a result of increased air pollution need to be considered in relation to the Humber Estuary SAC, SPA and Ramsar site but can be screened out in relation to Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC.

Recreation and urban impacts

3.28 Recreation activities and general human presence can result in likely significant effects as a result of physical disturbance, e.g. through erosion, arson and trampling as well as disturbance to qualifying species including breeding birds and seals. Where policies or site allocations in the Local Plan are likely to result in an increase in the local population, or where an increase in tourism is considered likely, the potential for an increase in visitor numbers and the associated recreation and urban impacts at Natura 2000 sites has been identified. The nature of development proposed needs to be taken into account, for example employment sites are less likely to result in increased recreation pressure than residential sites as employees will be at work within the development site for the majority of the time.

¹³ Design Manual for Road and Bridges. Highways Agency. http://dft.gov.uk/ha/standards/dmrb/index.htm

- 3.29 The qualifying bird species of the Humber Estuary SPA and Ramsar site are likely to be particularly susceptible to recreational disturbance from dogs, anglers, illegal use of off-road vehicles and motorbikes, and illegal wildfowling. The potential for these types of activities to have significant effects is likely to be more pronounced in the vicinity of important roosting locations such as the Pywipe mudflats to the west of Grimsby port. The effect of increased recreational activities could also result in increased collection of *Salicornia* plants from the saltmarsh habitat. This plant is a qualifying feature of the Humber Estuary SAC and therefore its collection has potential to adversely affect the site.
- 3.30 Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC has been screened out in relation to increased recreation pressure, due to its distance from North East Lincolnshire which is approximately 17km away at the closest point. There is no information in the Site Improvement Plan for the SAC to indicate that recreation pressure or human disturbance is a priority issue at the site.
- 3.31 Therefore, likely significant effects on the Humber Estuary SAC, SPA and Ramsar site as a result of recreation and urban impacts arising from the Local Plan need to be considered, but these types of effects can be screened out in relation to Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC.

Water quantity and quality

- 3.32 The increased demand for water and its impacts on water quality is considered a priority issue in the Site Improvement Plan for the Humber Estuary. The qualifying habitats of the SAC are highly sensitive to changes in water levels, quality, and salinity. Changes in these factors have the potential to result in degradation of the SAC habitat through pollution, or changes in the vegetation associated with altered conditions. New development has the potential to result in increased demand for water treatment, abstraction, disposal and urban runoff. The qualifying bird species of the Humber Estuary SPA and bird species and grey seal of the Ramsar site, are dependent upon the maintenance of marine and coastal habitat, and could therefore be vulnerable to changes in water quality or water levels where such changes would affect the quality and type of habitat and/or distribution and abundance of food.
- 3.33 Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC is located 17km to the south of the Borough boundary. Given this distance and the lack of direct hydrological connectivity between North East Lincolnshire Borough and the SAC, likely significant effects on the site as a result of changes in water quality and quantity due to Local Plan proposals have been screened out.
- 3.34 Therefore, likely significant effects on the Humber Estuary SAC, Ramsar and SPA sites as a result of changes in water quantity and quality from the North East Lincolnshire Local Plan need to be considered but this type of effect can be ruled out in relation to the Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC.
- 3.35 Based on the screening assumptions set out above, likely significant effects of any nature on Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC were able to be ruled out and a screening matrix did not need to be prepared in **Appendix 2** for that site.

Interpretation of 'likely significant effect'

- 3.36 Relevant case law helps to interpret when effects should be considered as a likely significant effect, when carrying out HRA of a land use plan.
- 3.37 In the Waddenzee case, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:
 - An effect should be considered 'likely', "*if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site"* (para 44).
 - An effect should be considered 'significant', "*if it undermines the conservation objectives*" (para 48).

- Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).
- 3.38 In the 'Sweetman' case, the Court of Justice of the European Union commented that:

"The requirement that an effect in question be 'significant' exists in order to lay down a de minimus threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."

3.39 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or de minimus; referring to such cases as those "*that have no appreciable effect on the site"*. In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

Mitigation provided by the Local Plan

- 3.40 Some of the potential effects of the North East Lincolnshire Local Plan could be mitigated through the implementation of other policies in the plan itself, such as those relating to the provision of habitat mitigation along the Humber South Bank (which could help mitigate the impacts of loss of offsite habitat), improved sustainable transport links (which could help to mitigate potential increases in air pollution associated with increased vehicle traffic) and the provision of green infrastructure (which could help mitigate an increase in recreation activities at Natura 2000 sites).
- 3.41 In addition, the use of good practice construction techniques may help to mitigate potential noise and light pollution effects associated with new development during the construction phase. The extent to which mitigation may be achieved through the Local Plan itself has been considered during the screening process and has influenced the screening conclusions (see **Appendix 2** and **Chapter 4**).
- 3.42 As described in **Chapter 1**, a significant amount of work has been undertaken by the South Humber Ecology Group, which includes North East Lincolnshire Council and Natural England as well as other parties, to develop the South Humber Gateway Mitigation Strategy. The mitigation provided by that strategy (as well as the information gathered to inform its preparation) has been taken into account throughout this HRA and has informed the conclusions reached.

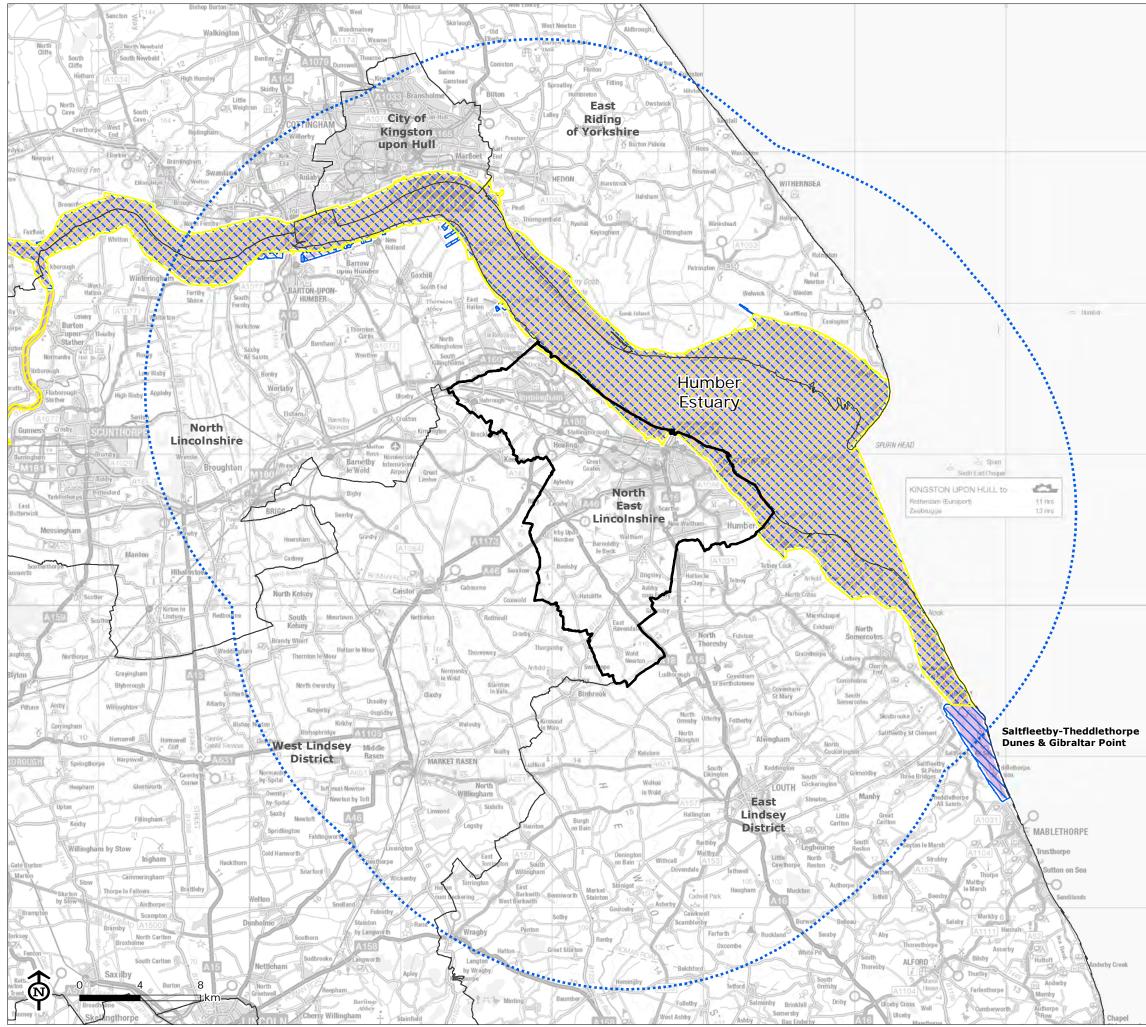
Identification of other plans and projects which may have 'incombination' effects

- 3.43 Regulation 102 of the Amended Habitats Regulations 2010 requires an Appropriate Assessment where "a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, where likely significant effects are identified from the North East Lincolnshire Local Plan, it is necessary to consider whether there may also be significant effects in combination with other plans or projects.
- 3.44 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the North East Lincolnshire Local Plan may also affect the Natura 2000 sites that are the focus of this assessment.
- 3.45 There are a large number of potentially relevant plans; therefore the review has focussed on planned spatial growth within the authorities that are adjacent to North East Lincolnshire and the Natura 2000 sites included in this HRA. The findings of any associated HRA work for those plans have been reviewed where available to inform conclusions about the likelihood of in-combination effects.
- 3.46 **Appendix 3** presents the review of potential in-combination effects, outlining the components of each plan that could have an impact on nearby Natura 2000 sites and considering the findings of

the accompanying HRA work (where available). This information is also summarised in **Chapter 4** along with a summary of the potential in-combination effects of relevant projects.

- 3.47 The Local Plans of the following authorities have been considered in assessing the potential for incombination effects on Natura 2000 sites with North East Lincolnshire's Local Plan:
 - North Lincolnshire.
 - West Lindsey.
 - East Lindsey.
 - East Riding of Yorkshire this District is not adjacent to North East Lincolnshire but borders the Humber Estuary Natura 2000 sites on the other side of the estuary.
- 3.48 Projects with potential to have in-combination effects with the North East Lincolnshire Local Plan were identified through consultation with North East Lincolnshire Council and identification of projects through the National Infrastructure Planning website¹⁴. The following projects were taken into account when considering in-combination effects with the Local Plan:
 - The Able Marine Energy Park.
 - Improvements to the A160 and A180 near the Port of Immingham.
 - The North Killingholme Power Project.
 - The replacement of a natural gas transmission pipeline that runs beneath the Humber Estuary.

¹⁴ The Planning Inspectorate (2012) National Infrastructure Planning website. Available at: https://infrastructure.planninginspectorate.gov.uk/projects/, accessed: 18/11/16



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NE Lincolnshire Local Plan – HRA

Figure 3.1

European sites within 20km of North East Lincolnshire



20km buffer

NE Lincolnshire district boundary



Surrounding districts

Humber Estuary Special Area of Conservation



Humber Estuary Special Protection Area

Humber Estuary Ramsar site





4 HRA Screening Assessment of the Local Plan

- 4.1 As described in **Chapter 3**, a screening assessment has been carried out in order to identify the likely significant effects of the North East Lincolnshire Local Plan on the Natura 2000 sites in and around the Borough. The detailed screening matrices used for this assessment can be found in **Appendix 2**. The screening work described in this chapter has been updated since it was presented in the HRA Report for the Pre-Submission Draft Local Plan in order to take account of the Main Modifications following the Examination hearings.
- 4.2 This HRA report has taken the approach of screening each policy individually, which is consistent with current guidance. In reality, however, the policies and site allocations in the Local Plan will combine to deliver the overall scale of development within the Borough and the in-combination effects of the policies together have therefore been taken into consideration.
- 4.3 A summary of the findings of the updated screening assessment is provided below.

Significant effects likely

- 4.4 Two policies in the Local Plan were considered **likely** to result in significant effects on the Humber Estuary SPA and Ramsar site as a result of **offsite habitat loss**:
 - Policy 4: Employment allocations.
 - Policy 11: Housing allocations.
- 4.5 These policies allocate sites for housing and employment development within close proximity of the SPA and Ramsar site (although none are within the boundaries of a Natura 2000 site) and so are likely to result in the loss of offsite habitat which is used by the qualifying bird species of the SPA and Ramsar site, potentially resulting in significant effects on the integrity of those sites.
- 4.6 The potential for site allocations to result in offsite habitat loss impacting upon the integrity of the Humber Estuary SPA and Ramsar site therefore needs to be considered in more detail during the Appropriate Assessment stage of the HRA.
- 4.7 None of the policies in the Local Plan are **likely** to have significant effects on the integrity of the Humber Estuary SAC or Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC as a result of offsite habitat loss because the qualifying features are not dependent upon the habitats or areas affected.

Significant effects uncertain

- 4.8 For a number of the Local Plan proposals the likelihood of a significant effect on a Natura 2000 site was uncertain. Therefore, in line with the precautionary approach being applied in the HRA, until significant effects can be ruled out they are identified as likely significant effects.
- 4.9 The following proposals would all result in development, which could combine to increase air pollution from vehicle traffic and/or pressure for recreation space. There may also be effects relating to changes in water quality either as a result of increased demand for water treatment or as a result of deposition from air pollution. In addition, depending on the location of development resulting from the proposals there is a chance that physical damage/loss of habitat or non-physical disturbance could affect the Humber Estuary SAC, SPA and Ramsar site, if development were to take place in that part of the Borough.
- 4.10 On this basis, the following proposals were highlighted as having potential but uncertain significant effects on Natura 2000 sites:
 - New Policy 1: Employment Land supply.
 - New Policy 2: Housing land supply.
 - New Policy 3: Settlement hierarchy and New Policy 4: Distribution of housing growth.

- Policy 4: Employment Allocations (note that this policy is considered to have <u>likely</u> significant effects on the Humber Estuary SPA and Ramsar site as described above, but effects on the Humber Estuary SAC are classed as uncertain).
- Policy 10: Tourism and Visitor Economy.
- Policy 11: Housing Allocations (note that this policy is considered to have <u>likely</u> significant effects on the Humber Estuary SPA and Ramsar site as described above, but effects on the Humber Estuary SAC are classed as uncertain).
- Policy 22: Grimsby Town Centre Opportunities.
- Policy 23: Cleethorpes Town Centre Opportunity Sites.
- Policy 29: Grimsby Town Football Club Community Stadium.
- Policy 30: Renewable and Low Carbon Infrastructure.
- Policy 36: Safeguarding Transport Infrastructure.
- Policy 46: Future Requirements for Waste Facilities.
- 4.11 Therefore, in line with the precautionary principle applied in the HRA, the potential for these policies to have significant effects on the integrity of one or more of the Humber Estuary Natura 2000 sites needed to be considered in more detail through the Appropriate Assessment (see **Chapter 5**).

Significant effects unlikely

- 4.12 Significant effects on the integrity of a Natura 2000 site are considered **unlikely** in relation to most of the Local Plan policies. The following 29 policies are screened out because they will not result directly in development (i.e. they set out criteria for development that will be delivered through other policies, which have been screened separately for their impacts on Natura 2000 sites):
 - Policy 2: Development Boundaries.
 - Policy 3: Providing Infrastructure.
 - Policy 5: Existing Employment Areas.
 - Policy 7: Office Development.
 - Policy 8: Skills and Training.
 - Policy 12: Development of Strategic Housing Sites.
 - Policy 13: Housing Mix.
 - Policy 14: Provision for Elderly Person's Housing Needs.
 - Policy 15: Housing Density.
 - Policy 16: Affordable Housing.
 - Policy 17: Rural Exceptions.
 - Policy 18: Self Build and Custom Build Homes.
 - Policy 19: Provision for Gypsies and Travellers.
 - Policy 20: Good Design in New Developments.
 - Policy 21: Retail Hierarchy and Town Centre Development.
 - Policy 25: Primary Shopping Frontages.
 - Policy 26: Freeman Street District Centre.
 - Policy 27: Local Centres.
 - Policy 28: Social and Cultural Places.
 - Policy 31: Energy and Low Carbon Living.

- Policy 32: Flood Risk.
- Policy 34: Telecommunications.
- Policy 37: Parking.
- Policy 38: Conserving and Enhancing the Historic Environment.
- Policy 41: Landscape.
- Policy 43: Safeguarding Minerals and Related Infrastructure.
- Policy 44: Mineral Extraction and Secondary Aggregates.
- Policy 47: Safeguarding Waste Facilities and Related Infrastructure.
- 4.13 Another eight policies are **unlikely** to have significant effects on Natura 2000 sites because, as well as not directly resulting in new development, they could provide mitigation for the potential effects of development proposed elsewhere in the Local Plan:
 - Policy 6: Habitat mitigation-South Humber Bank.
 - Policy 33: Water Management.
 - Policy 35: Promoting Sustainable Transport.
 - Policy 39: Developing a Green Infrastructure Network.
 - Policy 40: Biodiversity and Geodiversity.
 - Policy 42: Green Space and Recreation.
 - Policy 45: Restoration and Aftercare (Minerals).
 - Policy 48: Restoration and Aftercare (Waste).
- 4.14 Where likely significant effects were not able to be ruled out through the screening exercise, these were examined in more detail during the Appropriate Assessment stage of the HRA, as reported in **Chapter 5**.

In-combination effects

4.15 As described in **Chapter 3**, a review was undertaken of other plans and projects which could lead to likely significant effects on Natura 2000 sits when considered in combination with the North east Lincolnshire Local Plan. The detailed review of neighbouring plans can be found in **Appendix 3** and the findings are summarised below.

Plans that could have in-combination effects

- 4.16 Of the neighbouring plans reviewed, likely significant effects in combination with the North East Lincolnshire Local Plan are not considered likely with regards to Central Lincolnshire, East Riding and East Lindsey's Local Plans. HRA work undertaken for those plans has concluded that they are not expected to lead to significant effects on Natura 2000 sites (including the Humber Estuary SAC, SPA and Ramsar site) either alone or in combination with other plans and projects.
- 4.17 HRA work for the North Lincolnshire Local Plan identified likely significant effects with regards to North Lincolnshire Core Strategy policy CS12 (South Humber Bank Strategic Employment Site) and North Lincolnshire Housing and Employment Land Allocations (H&ELA) DPD policy SHBE-1 (South Humber Bank), which gives more detail to Core Strategy policy CS12. There is potential for likely significant effects from North East Lincolnshire's employment site allocations incombination with the North Lincolnshire Local Plan. These effects relate to disturbance to and permanent loss of terrestrial habitat supporting SPA/Ramsar waterbirds (offsite habitat loss or damage). The HRAs carried out for the Core Strategy and H&ELA DPD concluded that, with the South Humber Gateway Mitigation Strategy in place, there would be no residual effects on the integrity of the Humber Gateway Mitigation Strategy would also apply to any employment sites in the South Humber Bank area proposed through the North East Lincolnshire Local Plan. The

implementation of the South Humber Gateway Mitigation Strategy provides adequate mitigation to ensure the integrity of the site is maintained.

- 4.18 The HRA of the North Lincolnshire H&ELA DPD suggests that increases in recreational pressure at the Humber Estuary SAC/SPA/Ramsar are primarily expected to arise from additional housing in Barton, although employment allocations could also add to this to a lesser extent. This is not expected to lead to significant effects as visitor surveys suggest that this is restricted to the floodbanks around Barton (an area which tends to attract local people only). The Footprint Ecology recreational study (2010)¹⁵ found areas around Grimsby and Cleethorpes to be some of the most popular in terms of recreation. The number of new visitors to Grimsby and Cleethorpes generated by the North Lincolnshire Local Plan is expected to be limited, as the Core Strategy allocates the majority of development to Scunthorpe, Barton and Brigg, all of which are a considerable distance from Grimsby and Cleethorpes. As the average distance travelled to visit the Humber Estuary is 4.42km¹⁶, new residents in North Lincolnshire are expected to visit areas closer to home. In-combination effects on the integrity of the SAC, SPA and Ramsar site can be ruled out with regards to recreational pressures.
- 4.19 The HRA carried out for the H&ELA DPD considered site-specific studies for housing and employment allocations where qualifying features of the SPA and Ramsar site may utilise supporting habitat. With the exception of site SHBE-1 (see **paragraph 4.17**) studies concluded that none of the allocations were likely to be important for such features, therefore likely significant effects in-combination with the North East Lincolnshire Local Plan with regards to loss of functionally linked land can be ruled out.
- 4.20 The HRAs for the North Lincolnshire Core Strategy and H&ELA DPD did not identify any potential significant effects of non-physical disturbance and air pollution on the Humber Estuary SAC, SPA and Ramsar site. As such, in-combination effects on the integrity of the SAC, SPA and Ramsar site can be ruled out with regards to non-physical disturbance and air pollution.
- 4.21 The Appropriate Assessment of the North Lincolnshire H&ELA DPD considers possible impacts of changes of surface water discharges on the integrity of the SPA and Ramsar site. This recognises that developments will need to meet existing standards for foul water and surface water treatment. It recognises that in the South Humber Bank Area, surface water may discharge rapidly into waterbird mitigation areas and/or the estuary itself. Policies BARE-1, NEWE-1 and SHBE-1 of the H&ELA DPD highlight the need for HRA at the project level and requires mitigation to be secured by planning obligations, where necessary. The need for project level HRA, along with Policy 33: Water Management of the North East Leicestershire Local Plan, led to the conclusion that in-combination effects on the integrity of the SAC, SPA and Ramsar site can be ruled out with regards to water quantity and quality.
- 4.22 This assessment has identified that the North East Lincolnshire Local Plan has potential for likely significant effects in-combination with the North Lincolnshire Core Strategy and H&ELA. However, provided that the mitigation strategy is implemented in line with Policy 6 in the Local Plan (taking into account Main Modifications), adverse effects on the integrity of the SAC, SPA and Ramsar site are not expected in-combination with other plans.

Projects which could have in-combination effects

- 4.23 Projects with potential to have in-combination effects with the North East Lincolnshire Local Plan were identified through consultation with North East Lincolnshire Council and identification of projects through the National Infrastructure Planning website¹⁷.
- 4.24 In North Lincolnshire, the Able Marine Energy Park is located on land near North Killingholme and the site is partly located within the Humber Estuary SAC, SPA and Ramsar site. Planning permission was granted in June 2013 for a business park, offices, transport depot, warehousing, external storage, distribution, chilled and frozen logistics, vehicle storage, motel and HGV park.

¹⁵ Footprint Ecology (July 2012) Desk based study of recreational disturbance to birds on the Humber Estuary

¹⁶ Footprint Ecology (July 2012) Results of the Recreational Visitor Surveys Across the Humber Estuary.

¹⁷ The Planning Inspectorate (2012) National Infrastructure Planning website. Available at:

https://infrastructure.planninginspectorate.gov.uk/projects/, accessed: 18/11/16

The site is connected directly to the adjacent port of Immingham, which lies within North East Lincolnshire Borough.

- 4.25 The HRA Report for the development concluded during the Appropriate Assessment that the scheme would have likely significant effects on the integrity of the Humber Estuary SAC as a result of loss of intertidal mudflats. The proposal would also result in the loss of important supporting habitat for the qualifying bird species of the Humber Estuary SPA and Ramsar site. As part of the HRA process, consideration was therefore given to potential alternative solutions and Imperative Reasons of Overriding Public Importance (IROPI) and mitigation was agreed with Natural England. More than one third of the site will be extensively landscaped with major wildlife and nature reserves to provide alternative habitat and therefore meet the provisions of the Habitat Regulations. On this basis, **likely significant effects in-combination with North East Lincolnshire's Local Plan are not considered likely.**
- 4.26 The A160 and A180 near the Port of Immingham are currently being improved. The project involves upgrading the existing single-carriageway section of the A160 to dual carriageway, with associated junction improvements, including works at Brocklesby Interchange on the A180. An HRA was undertaken for this project, which concluded that the project would not have a likely significant effect of the Humber Estuary SAC, SPA or Ramsar site. On this basis, **likely significant effects in-combination with North East LincoInshire's Local Plan are not considered likely.**
- 4.27 The North Killingholme Power Project has been consented by the Secretary of State. This is to be located north of North Killingholme, adjacent to and partially within, the Humber Estuary SAC, SPA and Ramsar site. This project involves the development of a new thermal generating station that will operate either as a Combined Cycle Gas Turbine (CCGT) plant or as an Integrated Gasification Combined Cycle (IGCC) plant, with a total electrical output of up to 470Mwe. The HRA for this project identified likely significant effects with regards to habitat loss, fragmentation, air quality, hydrological changes, mortality and disturbance. However, the Development Consent Order contains a series of measures that must be implemented to mitigate such effects. With this mitigation in place, there are expected to be no adverse effects on the integrity of the European sites. On this basis, likely significant effects in-combination with North East Lincolnshire's Local Plan are not considered likely.
- 4.28 The Secretary of State has granted development consent for the replacement of a natural gas transmission pipeline that runs beneath the Humber Estuary. The pipeline commences approximately 2 miles north east of Goxhill, North Lincolnshire, terminating approximately 1 mile south east of Paull, East Riding of Yorkshire. Whilst the HRA identified likely significant effects arising from the project, the Development Consent Order contains a series of measures that must be implemented to mitigate such effects. With this mitigation in place, there are expected to be no adverse effects on the integrity of the European sites. On this basis, **likely significant effects in-combination with North East Lincolnshire's Local Plan are not considered likely.**

5 Appropriate Assessment

- 5.1 Following the screening stage, if likely significant effects on Natura 2000 sites are unable to be ruled out, the plan-making authority is required under Regulation 102 of the Habitats Regulations 2010 to make an 'Appropriate Assessment' of the implications of the plan for Natura 2000 sites, in view of their conservation objectives. EC Guidance¹⁸ states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of Natura 2000 sites with respect to their conservation objectives and to their structure and function.
- 5.2 A site's integrity depends on it being able to sustain its 'qualifying features' (i.e. those Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management support.
- 5.3 An Appropriate Assessment has therefore been undertaken for all of the Natura 2000 sites in North East Lincolnshire Borough (+20km) where likely significant effects from the Local Plan were identified (or were not able to be ruled out) during the screening stage, i.e. the Humber Estuary SAC, SPA and Ramsar site. Potential likely significant effects on those sites, either alone or in combination with other policies and proposals, were identified for a number of the Local Plan policies. It was concluded during the screening stage that the North East Lincolnshire Local Plan will not result in likely significant effects on Saltfleetby-Theddlethorpe and Gibraltar Point SAC and an Appropriate Assessment did not therefore need to be undertaken for that site.
- 5.4 The Appropriate Assessment work presented in this chapter was updated since it was originally presented in the January 2016 HRA Report for the Pre-Submission Draft Local Plan, in order to take into account consultation comments from Natural England and additional work undertaken as a result, and to reflect the Main Modifications arising from the Examination.
- 5.5 During the Appropriate Assessment stage, a conclusion needs to be reached as to whether or not the policies or site allocations in the Local Plan would adversely affect the integrity of a Natura 2000 site. As stated in the EC Guidance, assessing effects on site integrity involves considering whether the predicted impacts of the Local Plan policies (either alone or in combination) have the potential to:
 - Cause delays to the achievement of conservation objectives for the site.
 - Interrupt progress towards the achievement of conservation objectives for the site.
 - Disrupt those factors that help to maintain the favourable conditions of the site.
 - Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.
 - Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem.
 - Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants).
 - Interfere with anticipated natural changes to the site.
 - Reduce the extent of key habitats or the population of key species.
 - Reduce the diversity of the site.
 - Result in disturbance that could affect the population, density or balance between key species.

¹⁸ Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

- Result in fragmentation.
- Result in the loss of key features.
- 5.6 The conservation objectives for each Natura 2000 site (listed in **Appendix 1**) are generally to maintain the site's qualifying features in favourable condition. The Site Improvement Plans for each Natura 2000 site provide a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features at the site(s) and outline the priority measures required to improve the condition of the features. This information has been drawn on to help to understand what is needed to maintain the integrity of the Natura 2000 sites.
- 5.7 Where likely significant effects were identified or considered uncertain at the screening stage in relation to a policy in the Local Plan (i.e. those policies listed in paragraphs 4.4 and 4.10 and shaded red or orange in the screening matrices in **Appendix 2**), the potential impacts have been set out below and judgements made (based on the information available) regarding whether the impact will have an adverse effect on the integrity of each Natura 2000 site. Consideration has been given to the potential for mitigation measures to be implemented that could reduce the likelihood or severity of the potential impacts, such that there would not be an adverse effect on the integrity of the site.

Humber Estuary SAC

- 5.8 The Humber Estuary SAC is located to the north east of North East Lincolnshire Borough. A small area of the SAC extends inland within the Borough boundary although it mainly covers the Humber Estuary. The qualifying features of the SAC are mostly habitats (estuary, sandbanks, coastal lagoons, Atlantic salt meadows and dunes) although it is also designated for 24alicornia, sea lamprey, river lamprey and grey seal. More information about the Conservation Objectives, qualifying features and key vulnerabilities of the SAC can be found in **Appendix 1**.
- 5.9 As described in **Chapter 4**, Local Plan policies could potentially affect the SAC as a result of physical damage/loss of onsite habitat, non-physical disturbance such as noise and light pollution, air pollution, recreational disturbances and hydrological changes.

Physical damage/loss of habitat (onsite)

- 5.10 As described in **Chapter 3**, offsite habitat loss or damage was able to be screened out for the SAC because of the nature of its qualifying features, but the potential for onsite habitat loss or damage needed to be considered. The SAC extends into North East Lincolnshire and therefore has the potential to be affected by habitat loss or damage where Local Plan policies could result in development in that part of the Borough.
- 5.11 The Local Plan does not allocate any development within the boundaries of the SAC. However Policy 30: Renewable and low carbon infrastructure could potentially result in renewable energy development in a range of broad locations across the Borough, as identified in part 4A of the policy. Potential for habitat loss or damage within the boundaries of the SAC was identified in the screening matrix if development resulting from the policy was to come forward in the 'industrial landscape' broad area, although this is unlikely given that this policy supports onshore wind development, not offshore. Policy 30 intends to deliver at least 75MW of installed grid-connected renewable energy, which could affect the SAC directly. The supporting text for this Policy 30 explains that 60MW of this is already consented as large-scale solar farm projects at Laceby and Bradley and states that there is capacity for at least 16MW additional electricity from renewable sources (excluding onshore wind). The 2017 Schedule of Main Modifications (MM 78) states that opportunities for onshore wind are considered to be limited and renewable energy capacity is most likely to be increased through further solar farm development. It is not clear from either the Local Plan or the Renewable Energy Capacity report¹⁹ where or in what form future renewable energy is likely to be delivered.

¹⁹ AECOM and Local Government Yorkshire and Humber (2011) Low Carbon and Renewable Energy Capacity in Yorkshire and Humber, Final Report

Mitigation

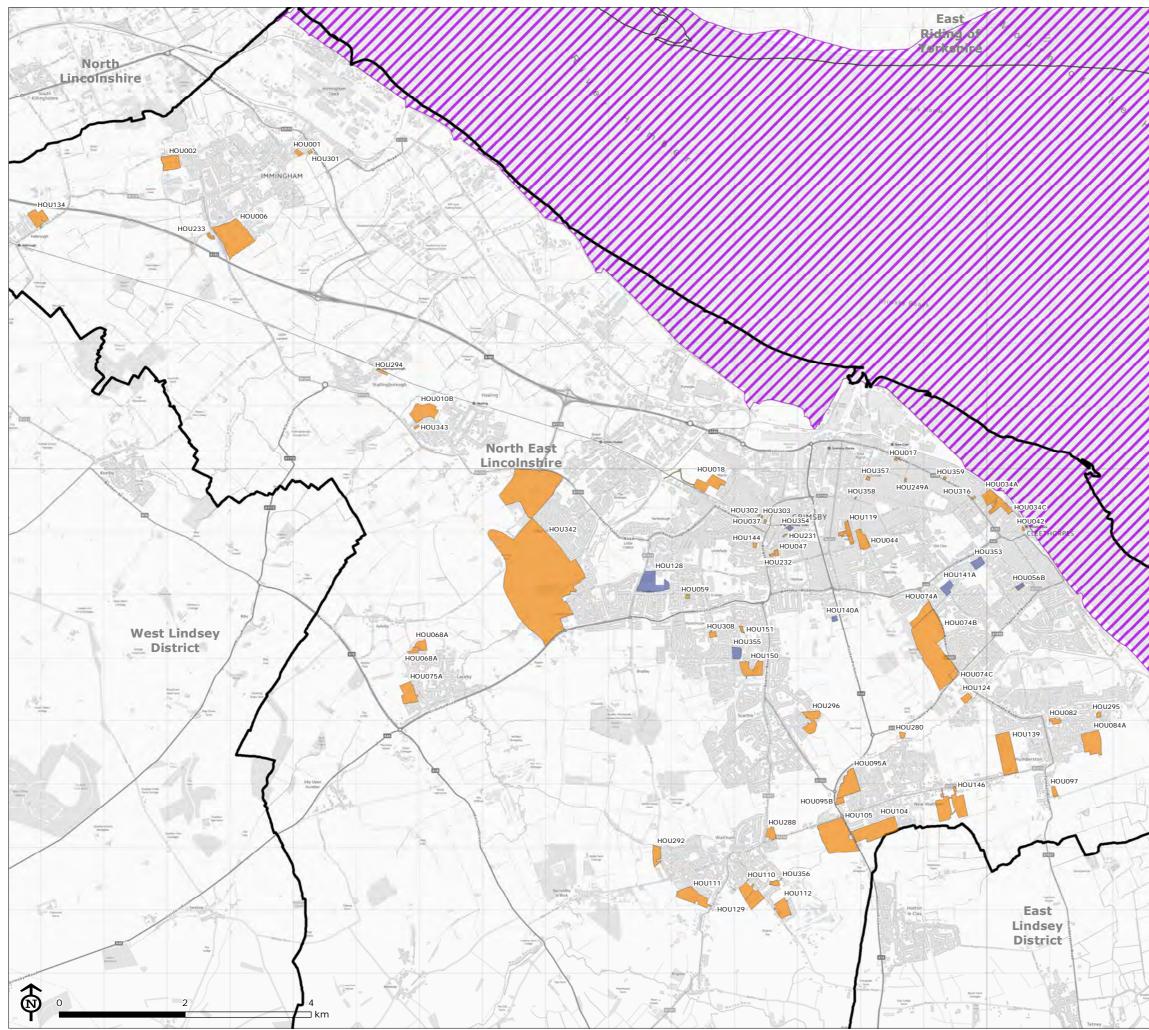
- 5.12 Policy 40: Biodiversity and Geodiversity will provide a level of protection to the SAC because it sets out the Council's commitment to have regard to biodiversity and geodiversity when considering development proposals (which will include proposals for renewable energy). Specifically, it seeks to protect, manage and enhance international, national and local sites of biological and geological conservation importance, having regard to the hierarchy of designated sites and the need for appropriate buffer zones. In addition, the supporting text to Policy 30 (see paragraph 14.148 in the Local Plan) recognises that renewable energy development can impact upon biodiversity during the construction, operation and decommissioning stages and states that proposals will therefore be considered against Policy 40: Biodiversity and Geodiversity and that, where possible, mitigation measures should be used to compensate and improve biodiversity.
- 5.13 Policy 30 states that developments and their associated infrastructure will be subject to biodiversity impact consideration, particularly in relation to designations. If a proposal came forward for a renewable energy installation within the boundaries of the SAC, it would be subject to the requirements of the Habitats Regulations and a project-level HRA would be required. This would ensure that the impacts of the particular scheme in question on the SAC would be assessed and mitigation incorporated if required, and that the proposal would only be able to be implemented if there would be no adverse effects on the integrity of the SAC in relation to habitat loss (or any other type of impact).
- 5.14 In an earlier draft version of the HRA Report for the Pre-Submission Local Plan it was recommended that the wording of the supporting text at paragraph 14.148 be strengthened. The supporting text previously stated that the Council will give particular consideration to the potential for any renewable energy proposal to disturb or displace SPA birds caused by the loss of suitable feeding, roosting and loafing sites. It was therefore recommended that this text be expanded to also refer to the potential for damage or disturbance to the SAC. This recommendation has since been addressed in the Local Plan.
- 5.15 Natural England advised that the HRA should be updated with estimates of how much of the 75MW target can be met though existing permissions and that it should assess whether the remaining target can be met without developing in areas which may threaten the Humber SAC, SPA and Ramsar or other significant constraints, and that if it is determined that the remaining target can be met through development in areas that will not affect the Humber Estuary designated sites or any other significant effects then this should be clearly stated in the conclusions.
- 5.16 It has not been possible to carry out a separate detailed study of all potential options and opportunities to meet the remainder of the 75MW target, taking into account the variety of renewable technologies available and the pace of development in the range and efficiency of renewable technologies. In our view, it is not necessary to carry out a detailed study as Policy 30 provides an aspirational target rather than a firm commitment, through insertion of the qualifying term "seek". Policy 30 states that "The Council will support opportunities to maximise renewable energy capacity within the Borough and seeks to deliver at least 75MW of installed grid-connected renewable energy by 2032".
- 5.17 The Council is confident from its work undertaken to date that the additional 75MW is deliverable without adverse effects on the integrity of Natura 2000 sites. The Local Plan does not allocate specific sites for renewable energy, and therefore proposals will be assessed as and when they come forward. Safeguards are built into both the policy and the supporting text, and together with Policy 40: Biodiversity and Geodiversity, the NPPF, and the requirement for HRA at the project level in accordance with the Habitats Regulations, these provide sufficient assurance that the integrity of Natura 2000 sites will be safeguarded when implementing this policy.
- 5.18 Furthermore, as part of the Examination process, Policy 30 was modified to include the following additional wording: "Developments and their associated infrastructure will be assessed on their merits and subject to the following impact considerations, taking into account of individual and cumulative effects; biodiversity, geodiversity and nature conservation, with regard given to the findings of the HRA and potential impacts on SPA birds, where appropriate". This gives a sufficient level of certainty to enable a conclusion that the integrity of the Humber Estuary will be protected from onsite physical damage and loss.

5.19 Therefore, it is concluded that the Local Plan (taking into account Main Modifications and mitigation and safeguards included in the Plan) will not have an adverse effect on the integrity of the Humber Estuary SAC as a result of loss of or damage to onsite habitat.

Non-physical disturbance

- 5.20 As described in **Chapter 3**, non-physical disturbance such as noise, vibration and light pollution could affect the qualifying grey seal of the SAC although the qualifying habitats and plants would not be affected in this way. No development is allocated within the boundaries of the SAC through the Local Plan, although as described above, Policy 30: Renewable and Low Carbon Infrastructure could in theory result in renewable energy development proposals in any part of the broad areas identified on the Policies Map. Therefore, the potential for non-physical disturbance to affect the SAC was identified in the screening matrix if development resulting from the policy was to come forward in that area. Policy 30 intends to deliver 75MW of installed grid-connected renewable, which could affect the SAC through noise, vibration or light pollution particularly during the construction phase but also throughout the life of the development. The supporting text for this Policy 30 explains that 60MW of this is already consented as large-scale solar farm projects at Laceby and Bradley and states that there is capacity for at least 16MW additional electricity from renewable sources (excluding onshore wind). The 2017 Schedule of Main Modifications (MM 78) states that opportunities for onshore wind are considered to be limited and renewable energy capacity is most likely to be increased through further solar farm development. It is not clear from either the Local Plan or the Renewable Energy Capacity report²⁰ where or in what form future renewable energy is likely to be delivered.
- 5.21 In addition, if any type of development were to occur outside of the SAC but within very close proximity there could be impacts on the qualifying grey seal as a result of non-physical disturbance. There are a number of housing and employment site allocations within very close proximity of the SAC, in particular ELR005, which is a large employment allocation immediately adjacent to the SAC, and ELR025 a-e, although this is land reserved for long term business use and is not allocated for development in the plan. Housing allocations HOU034, HOU042, HOU057 and HOU316 are alos within close proximity (50m) of the SAC. The locations of the allocated residential and employment sites are shown in **Figures 5.1 and 5.2** overleaf. However, these sites are mainly surrounded by existing development, which will minimise the potential for non-physical disturbance at the SAC, as described in **Table 5.1**.

²⁰ AECOM and Local Government Yorkshire and Humber (2011) Low Carbon and Renewable Energy Capacity in Yorkshire and Humber, Final Report



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NE Lincolnshire Local Plan – HRA

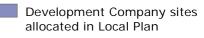
Figure 5.1: Residential sites allocated in the Local Plan



NE Lincolnshire district boundary



Surrounding districts

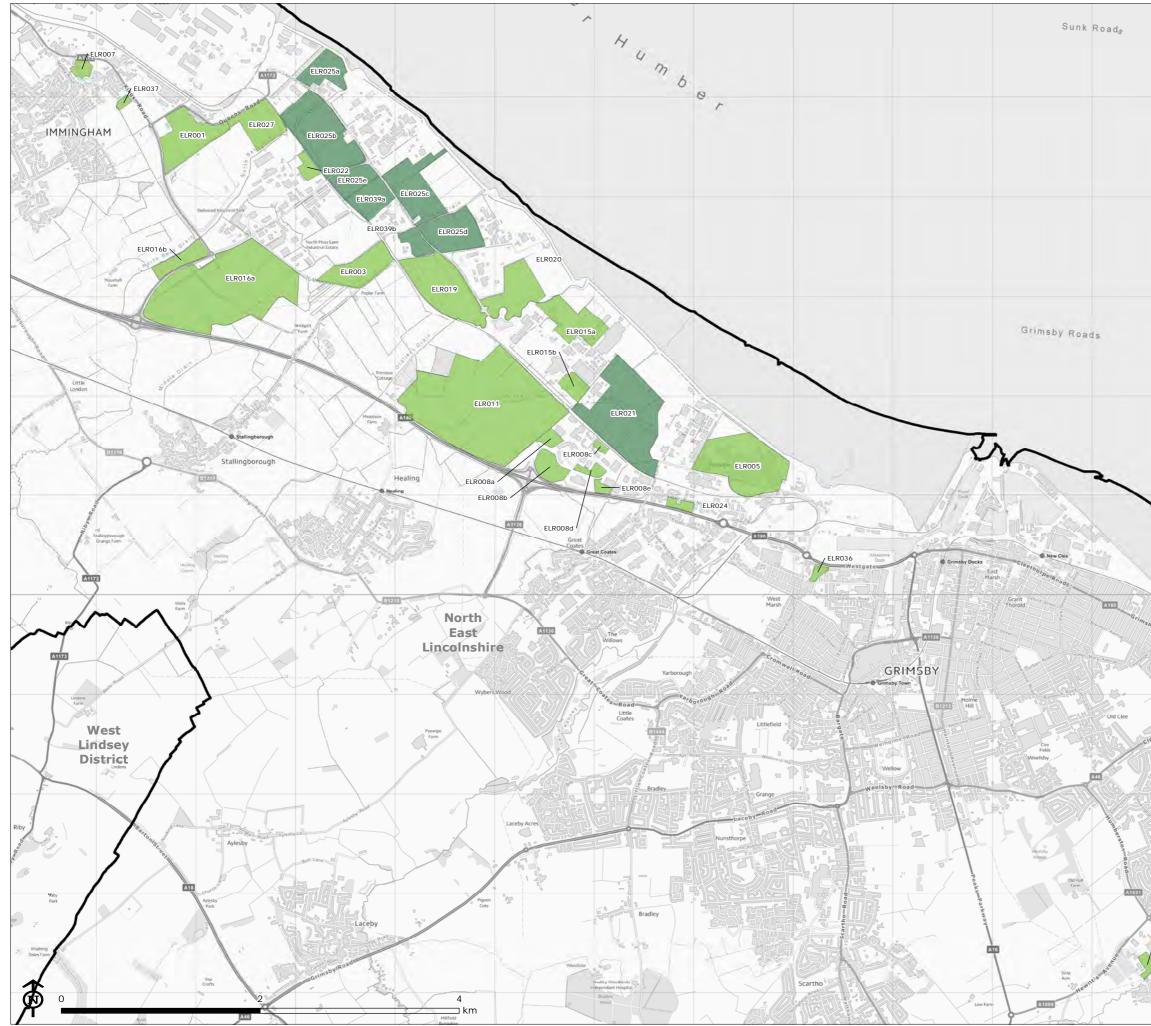




Humber Estuary SAC, SPA & Ramsar site







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CB: Goosen_V EB: Goosen_V LUCLON 5784-01_007_HRAFig5_2_EmploymentSites 17/07/2017 Source: ENGIE

NE Lincolnshire Local Plan – HRA

Figure 5.2: Employment Sites Allocated in the Local Plan



NE Lincolnshire borough boundary



Surrounding districts



Land reserved for long term business expansion



Employment sites allocated in Local Plan





Table 5.1: Site allocations close to the Humber Estuary SAC and existing development
nearby

Site Allocation	Existing development nearby
ELR005	Surrounded by built development on three sides and is a mainly brownfield site.
ELR025 a-e (a and c)	Existing industrial development to southeast, south and west.
HOU034	Railway line between the site and the SAC. Site surrounded on three sides by existing built development and is partially brownfield land.
HOU042	Existing built development and a road (North Promenade) between the site and the SAC. Existing buildings also located between the site and the SAC.
HOU057	Existing road (A1098 Kingsway) between the site and the SAC. Site surrounded by existing development.
HOU316	Site is over 280m from the SAC, with significant existing development in between.

5.22 On the basis of the significant amount of existing development around these allocated sites, including in most cases between the site and the SAC, their development for housing and employment uses is not considered likely to have an adverse effect on the integrity of the Humber Estuary SAC in relation to non-physical disturbance. In addition, site ELR025 a-e is land reserved for long term business expansion and is not allocated for development in the plan.

Mitigation

- 5.23 As described above in relation to loss of habitat, Policy 40: Biodiversity and Geodiversity will also provide a level of protection to the SAC in relation to non-physical disturbance because it sets out the Council's commitment to have regard to biodiversity and geodiversity when considering development proposals. It seeks to protect, manage and enhance international, national and local sites of biological and geological conservation importance, having regard to the hierarchy of designated sites and the need for appropriate buffer zones. In addition, the supporting text to Policy 30 (see paragraph 14.148 in the Local Plan document) recognises that development can impact upon biodiversity during the construction, operation and decommissioning stages and states that proposals will be considered against Policy 40: Biodiversity and Geodiversity with mitigation measures being used where possible to compensate and improve biodiversity.
- 5.24 Use of good practice construction techniques would be expected which would help to mitigate the potential impacts of noise, vibration and light pollution during the construction phase. This might involve placing restrictions on the times of day or seasons in which construction activities can take place and would be informed as appropriate at the project level.
- 5.25 Furthermore, Policy 30 was modified as part of the Examination process to include the following additional wording: "Developments and their associated infrastructure will be assessed on their merits and subject to the following impact considerations, taking into account of individual and cumulative effects; biodiversity, geodiversity and nature conservation, with regard given to the findings of the HRA and potential impacts on SPA birds, where appropriate". As described above, any proposal for a renewable energy installation within close proximity of the SAC would be subject to the requirements of the Habitats Regulations, which provides further protection to the SAC in relation to the potential impacts of non-physical disturbance from construction and operation. This gives a sufficient level of certainty to enable a conclusion that the integrity of the Humber Estuary SAC will be protected from non-physical disturbance.
- 5.26 The employment sites ELR005 and ELR025 a-e are within the South Humber Bank Mitigation Zone and the supporting text clarifies that development would need to be progressed in accordance with the provisions set out in Policy 6 'Habitat Mitigation South Humber Bank'.
- 5.27 Therefore, it is concluded that the Local Plan (taking into account Main Modifications, mitigation and safeguards included in the Local Plan) will not have an adverse effect on the integrity of the Humber Estuary SAC as a result of loss of non-physical disturbance.

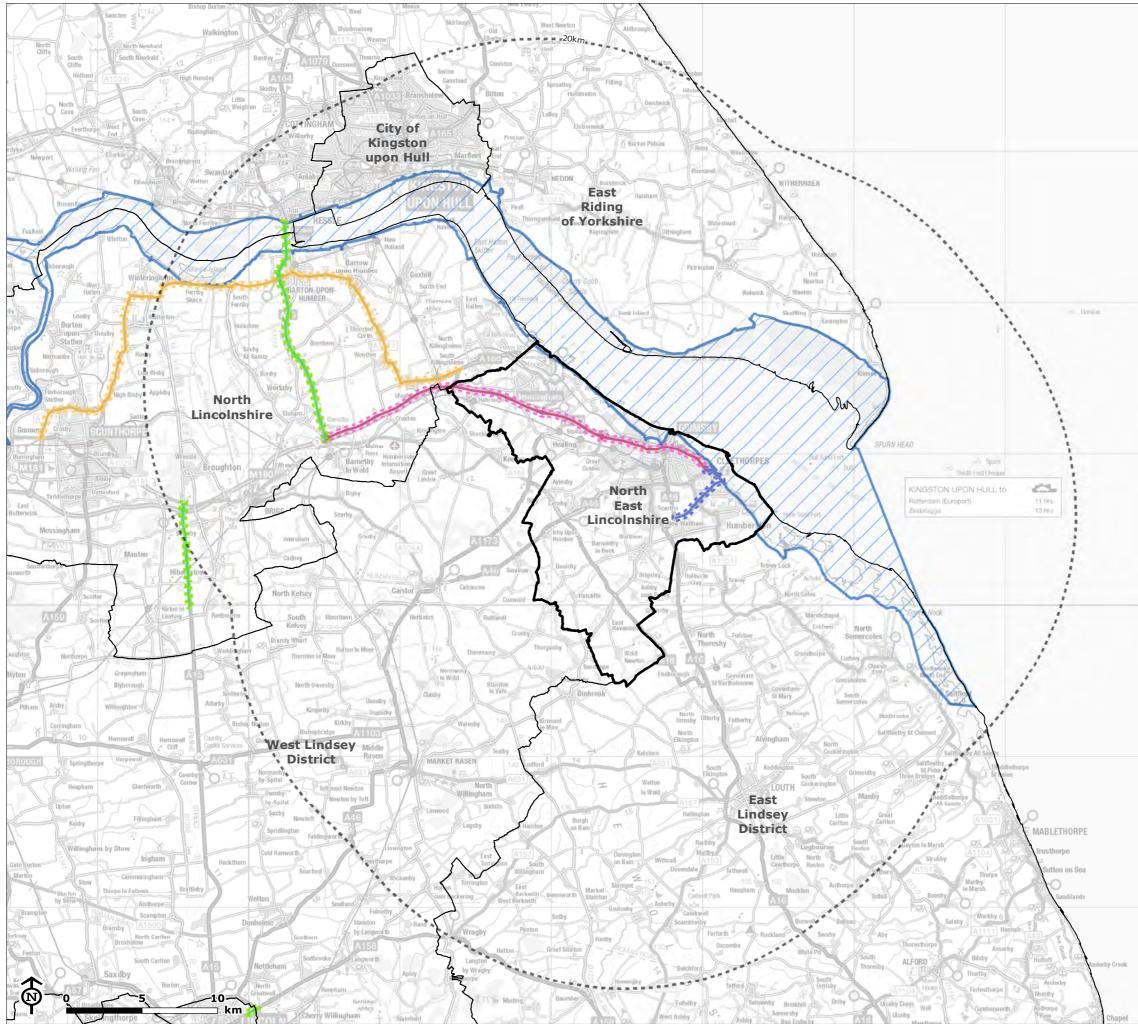
Air Pollution

5.28 Air pollution, in particular nitrogen deposition, has been highlighted as a priority issue in Natural England's Site Improvement Plan for the Humber Estuary. In addition, APIS data²¹ show that levels of nitrogen deposition at the site are already exceeding critical loads in relation to certain habitat types. Nitrogen deposition has the potential to result in eutrophication of habitats, (particularly estuaries and salt marshes), which can result in a change in water quality and lead to successional changes to plant communities. Therefore, as noted in **Chapter 3**, any development proposal which could result in a significant increase in traffic along a road situated within 200m of the SAC, or that will result in increased levels of air pollution from commercial or waste management activities, has the potential to adversely affect the integrity of the SAC.

Emissions from traffic

- 5.29 The following policies are identified as potentially contributing to an increase in air pollution within and around North East Lincolnshire as a result of increased vehicle traffic:
 - New Policy 1: Employment land supply.
 - New Policy 2: housing land supply.
 - New Policy 3: Settlement hierarchy and New Policy 4: Distribution of housing growth.
 - Policy 4: Employment Allocations.
 - Policy 10: Tourism and Visitor Economy.
 - Policy 11: Housing Allocations.
 - Policy 22: Grimsby Town Centre Opportunities.
 - Policy 23: Cleethorpes Town Centre Opportunity Sites.
 - Policy 29: Grimsby Town Football Club Community Stadium.
 - Policy 30: Renewable and Low Carbon Infrastructure.
- 5.30 As well as the potential for increased traffic along existing roads, the Local Plan refers to proposals to develop two link roads: the South Humber Bank Link Road and Grimsby West Link Road. The routes for these roads are to be safeguarded through Policy 36: Safeguarding Transport Infrastructure and the Grimsby West Link Road is an integral part of the delivery of one of the Local Plan site allocations, the Grimsby West strategic housing site (HOU342). However, the Grimsby West Relief Road would be located more than 3km from the Humber Estuary SAC and therefore traffic along that route would not affect the SAC in relation to increased air pollution. The South Humber Bank Link Road is also outside of the 200m buffer area within which significant effects in relation to air pollution could occur.
- 5.31 As described in **Chapter 3** and shown in **Figure 5.3** overleaf, there are a number of 'A' roads within 200m of the SAC including the A1077, A1098, A15 and A180. Therefore, if there is a significant increase in AADT along any of those routes as a result of the development proposed through the Local Plan, there could be significant effects on the SAC as a result of increased air pollution. Information about these routes and a commentary about the likelihood of each one seeing a significant increase in AADT is recorded in **Table 5.2**. The table also describes which housing and employment site allocations are most likely to contribute additional traffic to each route, although this is based on the location of the site allocations alone and so provides an indication only.

²¹ http://www.apis.ac.uk/srcl/select-a-feature?site=UK0030170&SiteType=SAC&submit=Next



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CB:Tzampoura_V EB:Goosen_V LUCEDI 5784-01_004_HRAFig5_3_StrategicRoads_A3L 12/07/2017 Source: Natural England, OS

NE Lincolnshire Local Plan – HRA

Figure 5.3: Strategic Roads within 200m of the SAC

- NE Lincolnshire district boundary
- Surrounding Districts
- 20km buffer from district boundary
- Humber Estuary SAC

Road

- A1077
 - A1098
 - **—** A15
- A180

Road buffer (200m)

- A1077 A1098 2222 A15
- 222 A180





Strategic road	Route and likely significance in relation to Local Plan proposals	Site allocations that are most likely to contribute additional traffic to the strategic road
A1077	The part of the road within 200m of the SAC is approximately 14km outside of North East Lincolnshire, near Barton upon Humber. The road does not provide a direct connection into North East Lincolnshire Borough or to any of the key locations proposed for growth in the Local Plan.	Site allocations in the north of North East Lincolnshire, such as the employment site allocations between Immingham and Grimsby and housing site allocations HOU002, HOU004, HOU006 and HOU134 are most likely to contribute traffic to this route. However, the part of the road that is within 200m of the SAC is a considerable distance from North East Lincolnshire and does not provide a direct connection to/from key locations within the Plan. As such, there are no site allocations that are likely to result in significant levels of additional traffic on this part of the road.
A1098	A main route into Cleethorpes from the A16, which runs north- south through North East Lincolnshire Borough.	The site allocations within closest proximity of the A1098 are HOU074A, HOU074B, HOU074C, HOU124 HOU056B and HOU057. Other site allocations within reasonably close proximity of the route in Cleethorpes include HOU141A, HOU353 and HOU139.
A15	Crosses the Humber Estuary SAC (the Humber Bridge) approximately 13km to the north of North East Lincolnshire Borough. The A15 links with the A180, a key route through North East Lincolnshire.	Previous iterations of the HRA considered potential impacts of traffic on this route, due to its links with the A180. Further work has shown that the majority of residents in North East Lincolnshire work within the local authority area. ONS data shows that 'significant' commuting flows with North East Lincolnshire are with East Lindsey, West Lindsey and North Lincolnshire. Only 0.64% of the population of North East Lincolnshire commute to either East Riding of Yorkshire or the City of Kingston upon Hull ²² . Some of those commuting across the Humber, can be expected to favour alternative routes, due to the toll charge on the Humber Bridge. The increase in residents travelling across the Humber Bridge on a frequent basis is likely to be insignificant.
A180	The main route into Grimsby from the west.	There are a number of allocated sites within close proximity of the A180 through North East Lincolnshire including housing site allocations HOU134 and HOU006, as well as employment site allocations ELR016A, ELR016B, ELR011, ELR008A, ELR008B, ELR008C, ELR008D, ELR008E, ELR024 and ELR036.

Table 5.2: Strategic roads within 200m of the Humber Estuary SAC

5.32 On the basis of this information it is reasonable to assume that the A1098 and A180 could experience an increase in vehicle traffic as a result of development in North East Lincolnshire, although this is not expected in the case of the A1077 due to its lack of direct links with North East Lincolnshire, nor is it expected for the A15. The A15 crosses the Humber Estuary at the Humber Bridge, which lies between North Lincolnshire and East Riding of Yorkshire. Neither the

²² ONS (date not available) Where do we commute to?, Available at: <u>http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc193/#sty=true&flow=flow0&period=0&fix=E06000012&view=475.6308344</u> 3,237.818380735,78.73833114,79.36323853&tr=-75.42303466796875,-71.27883911132812&sc=1, accessed: 11/11/16

HRAs of adopted North Lincolnshire local plan documents²³ nor the HRAs of the adopted East Riding of Yorkshire local plan documents²⁴ identified likely effects on the integrity of the Humber Estuary SAC, SPA or Ramsar site as a result of air pollution.

- 5.33 Overall, the areas of the SAC within 200m of a strategic road were found to be small fragments within the Natura 2000 site. Due to the small size and distribution of the areas likely to be affected by increased traffic levels, it is considered that any effects are likely to result in localised impacts.
- 5.34 The second column of **Table 5.3** shows that only a small percentage of the SAC is within 200m of each of the roads considered in this assessment.

Road	Area of SAC within 200m of a strategic road (sqm /ha)	Priority habitat types within 200m	Approx. distance from road to habitat at nearest point (m)	Proportion of habitat type within SAC within 200m of road (%)	Area of habitat type within SAC within 200m of road (sqm)
A1098	165360 sqm/ 16.54 ha	Coastal sand dunes	23	1.4	24133 (2.4 ha)
A180	452 sqm	Mudflats	184	0.0006	329 (0.033 ha)
	/0.045 ha	Coastal saltmarsh	210	0	0

Table 5.3: The area of the Humber Estuary SAC within 200m of a strategic road

- 5.35 Further analysis was undertaken to identify broad habitat types for which the SAC is designated that are located within 200m of the A180 and A1098, as Natural England advised that it is the proportion of the habitat type rather than the SAC as a whole that should be assessed in relation to impacts from air pollution. **Table 5.3** demonstrates that the only habitat within 200m of the A1098 is coastal sand dunes. However, a review of aerial photography and the Cleethorpes Habitat Management Plan²⁵ indicates that the area of habitat within 200m of the road comprises a well-used tourist beach bordered by a wall and subject to regular disturbance. Photographs from the Management Plan and Street view photographs from Google Maps (**Figure 5.4**) suggest that no sand dune habitat occurs on the beach west of Cleethorpes Leisure Centre, which includes the entirety of the area within 200m of the A1098.
- 5.36 The Cleethorpes Management Plan also states that the main activity at this location is a holiday beach, with donkey rides in summer and mechanical rake cleaning to maintain the beach's Blue Flag status. It is highly unlikely that sand dunes and associated vegetation could establish under these conditions. Indeed, the Management Plan specifies that, because this is the main tourist beach at Cleethorpes colonising areas of cord grass, which is an early coloniser of dune habitat, it has been agreed with Natural England that such habitat can be removed at this location.
- 5.37 It is therefore unlikely that any designated features will be affected by air pollution from the A1098.

²³ Atkins (2010) North Lincolnshire Council Local Development Framework, Core Strategy Development Plan Document Submission Draft Habitats Regulations Assessment: Stage 1 – Screening; Stage 2 – Appropriate Assessment; Updated Appropriate Assessment Review; North Lincolnshire Council Local Development Framework, Habitats Regulations Assessment, Stage 1 Significance Test and Stage 2 Appropriate Assessment, December 2014

²⁴ Atkins (2014) East Riding Local Plan Strategy Document, Habitat Regulations Assessment Stage 1: Screening; Stage 2 – Appropriate Assessment; Atkins (2013) East Riding of Yorkshire Local Plan Allocations Document, Habitat Regulations Assessment Stage 1 (Screening); Stage 2 – Appropriate Assessment (2014)

²⁵ North East Lincolnshire Council (2016) Cleethorpes Habitat Management Plan 2016-2021

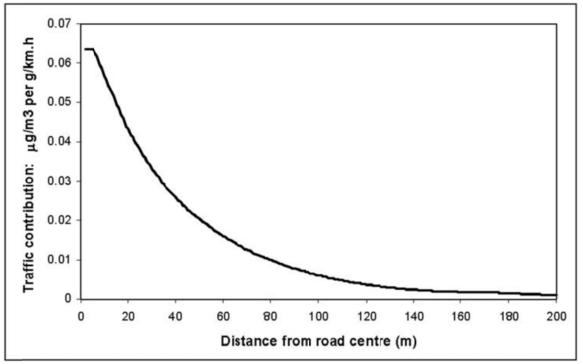
Figure 5.4: View north north west from outside Cleethorpes Leisure Centre²⁶



5.38 The only habitat type present within 200m of the A180 is mudflats. There is an area of coastal saltmarsh just over 200m from the road. **Table 5.3** demonstrates that mudflats are only present towards the further part of the 200m zone. The 200m mark is generally considered to be the point at which concentrations of pollutants from vehicle traffic become so diluted, they cease to be significant (see **Figure 5.5**). As such, nitrogen deposits at this point will already be at low concentrations. The estuary and mudflats are flushed twice a day by tides and are not considered to be sensitive to increases in air pollution at this location. In addition, this table demonstrates that only an extremely small proportion of the total mudflat habitat in the SAC lies within 200m of the A180. As such, any effect of air pollution from the A180 is unlikely to adversely affect the integrity of the SAC.

²⁶ Google (2016) Google Maps Street View, Cleethorpes, England (Image capture: Sep 2012), available at: <u>https://www.google.co.uk/maps/@53.5522019.-</u> 0.0172904,3a,75y,355.69h,72.92t/data=!3m6!1e1!3m4!1sEdk6Z7BVrmQa4KP7RFnVOg!2e0!7i13312!8i6656</u>, accessed: 14/11/16





- 5.39 The distance from the road to habitats, the small proportion of each habitat type that will be lost and the unlikely presence of sand dunes at Cleethorpes beach will greatly minimise any possible effects of increased air pollution from traffic.
- 5.40 Overall, it is therefore unlikely that increased vehicle traffic from the Local Plan (taking into account Main Modifications and safeguards provided in the Local Plan) would not have an adverse effect on the integrity of the Humber Estuary SAC.

Emissions from industrial and commercial activities

- 5.41 As well as emissions from road traffic, the Local Plan is likely to result in an increase in emissions from employment and waste management sites, particularly because the Local Plan allocates sites within fairly close proximity of the SAC. Policy 46: Future Requirements for Waste Facilities could result in an increase in emissions from waste management activities and Policy 4: Employment Allocations could result in emissions from commercial activities at the allocated employment sites. The majority of the proposed sites are large-scale developments, including two that are within 200m of the SAC (ELR015a and ELR005) and the land reserved for long term business expansion at site ELR025 a-e. Sites ELR015a and ELR005 are allocated for use by the Chemicals and Processing sector and are identified in Policy 46 as potential sites for waste management. Because of the proposed use of those sites, existing regulatory processes and requirements would apply to the operation of those sites, such as The Environmental Permitting (England and Wales) Regulations 2010, which would require potential likely significant effects on the SAC to be taken into consideration. Site ELR025 a-e is not allocated for development in the local plan, rather it is safeguarded for long-term development if the companies who own the land wish to expand. However, permitting constraints operate on a site-by-site basis and do not take into account the cumulative effects of all of the site allocations in the Local Plan; therefore in theory the first site to come forward could result in emissions at a level that prevent development being permitted at the other allocated employment sites, at which point the Plan would be undeliverable.
- 5.42 In most cases the Local Plan is not specific about the expected nature of commercial activities at the allocated employment sites, and this information cannot be assumed until specific applications come forward for those sites. Therefore, it is not possible to make assumptions about the likely

²⁷ Figure C1 from Design Manual for Roads and Bridges (May 2007) Volume 11 Environmental Assessment, Section 3 Environmental Assessment Techniques. Part 1 HA207/7 Air Quality

level of emissions from each of the allocated sites in order to inform a conclusion about their likely cumulative impacts. It was therefore recommended during the process of updating this HRA report that the Local Plan be amended to include a qualification regarding employment sites, stating that:

"employment uses that give rise to emissions to air that could prejudice the delivery of other employment sites through in-combination likely significant effects with other existing or potential sources of air pollution on the integrity of the Humber Estuary SAC, SPA and Ramsar site, will be required to undertake a Habitats Regulations Assessment. Planning consent will not be granted until such an assessment concludes that there will be no adverse effects on the integrity of the SAC, SPA and Ramsar site, either alone or in combination with other plans or projects".

5.43 This additional text was added to the Main Modifications to the Local Plan. In addition, as part of the examination process, the wording of Policy 4 was updated to include the text relating to 'Impacts on Natura 2000 sites' and refers to the need for HRA if likely significant effects on the Humber Estuary SAC, SPA and Ramsar are predicted alone or in-combination with other existing or potential sources of air pollution. The supporting text also states that "*sites that are located within the South Humber Bank Mitigation Zone will need to be progressed in accordance with the provisions set out in Policy 6 'Habitat Mitigation - South Humber Bank'"*.

Mitigation

- 5.44 In addition to the safeguards provided in Policy 4 as outlined above, Policy 35: Promoting Sustainable Transport may help to mitigate the potential impacts of development in relation to increased emissions from vehicle traffic, as it requires development proposals to promote the use of sustainable modes of transport. Specifically, developments should prioritise pedestrian and cycle access to and within the site; protect and improve public transport provision and/or facilities, adopting a 400m walk to bus stop standard; make suitable provision to accommodate the efficient delivery of goods and supplies; and make suitable provision for electric vehicle charging, car clubs and car sharing when considering car park provision. These measures should help to reduce traffic generation resulting from residential, employment and other types of development.
- 5.45 Policy 40: Biodiversity and Geodiversity will provide some mitigation for the potential impacts of air pollution on the SAC because it sets out the Council's commitment to have regard to biodiversity and geodiversity when considering development proposals. It seeks to protect, manage and enhance international, national and local sites of biological and geological conservation importance, having regard to the hierarchy of designated sites and the need for appropriate buffer zones.
- 5.46 The additional text that has been added to the supporting text of Policy 4 also provides mitigation in relation to the potential impacts of emissions from industrial sources.
- 5.47 Taking into account the identified mitigation, it is concluded that the Local Plan (taking into account Main Modifications) will not have adverse effects on the integrity of the Humber Estuary SAC as a result of air pollution, either from increased traffic or commercial sources.

Recreational Pressure

- 5.48 Public access and disturbance, in particular to the estuary and Atlantic salt marshes, has been identified as a priority issue in Natural England's Site Improvement Plan for the Humber Estuary. Recreational activities undertaken within the Humber Estuary range from onshore activities such as walking, cycling, beach recreation, bird and seal watching, to offshore activities, such as kite surfing, kite flying and motor cruising.
- 5.49 There is public access to most of the Humber Estuary via footpaths and bridleways along the sea wall, access to beaches and saltmarsh. The North Shore has mostly continuous access along the estuary with the only exception being the Saltend industrial area. There is public access to most of the South Bank but access is restricted at several areas of foreshore at industrial sites at

Grimsby and Immingham Docks and also due to private landownership from Read's Island to Alkborough²⁸.

- 5.50 The SAC habitats, including sand dunes, may be vulnerable to the impacts of walking and beach recreation which can lead to nutrient enrichment, trampling and erosion of habitat, plus the potential for damage to dune vegetation as a result of fire. Visitor survey work undertaken by Footprint Ecology²⁹ identified particular hotspots for terrestrial recreational pressure in the vicinity of Cleethorpes where walking and dog walking were the primary activities.
- 5.51 Policies in the Local Plan that were identified as potentially resulting in likely significant effects on the SAC as a result of increased recreation pressure were:
 - New Policy 2: housing land supply.
 - New Policy 3: Settlement hierarchy and New Policy 4: Distribution of housing growth.
 - Policy 10: Tourism and Visitor Economy.
 - Policy 11: Housing Allocations.
 - Policy 22: Grimsby Town Centre Opportunities.
 - Policy 23: Cleethorpes Town Centre Opportunity Sites.
- 5.52 The Humber Estuary is a key attraction for recreation and is likely to experience increased visitor numbers as a result of the housing development proposed through the Local Plan, as well as any growth in the tourism sector. Visitor survey work carried out by Footprint Ecology at the Humber Estuary³⁰ identified that 88% of the visitors to the Humber Estuary SPA were local residents with the majority living within 4.42 km of the site with dog walking the primary reason for visiting. Most of the housing sites allocated in the North East Lincolnshire Local Plan are located within 4.42km of the SAC.
- 5.53 Sites located further than 4.42km from the SAC are unlikely to result in significant effects on the SAC in relation to recreational pressures. Therefore, housing allocations HOU134, HOU068a, HOU75A, HOU131, HOU292, HOU296, HOU111, HOU110, HOU129, HOU112, and HOU113, HOU104, HOU105, HOU356, HOU288 and HOU95a and b are unlikely to affect the SAC.
- 5.54 The remaining site allocations comprise both small urban infill sites and larger sites on the edges of existing settlements. Given the locations of proposed allocations a site by site assessment of the potential to result in recreational effects on the SAC is of limited use in assessing the likelihood of adverse effects on the integrity of the SAC because it would fail to fully recognise the cumulative and in-combination nature of this type of impact within North East Lincolnshire as a result of population growth. As a result, a more strategic approach to assessing the likelihood of adverse effects, which considers broad development locations, and specific areas where increases in recreational pressure are likely to occur is considered more appropriate.
- 5.55 Housing allocations within the urban centres of Grimsby and Cleethorpes are located close to the coastline and would therefore be expected to contribute to increases in recreational pressures along the corresponding seafronts as a result of people walking.
- 5.56 Away from these urban centres, housing allocations would not be expected to result in notable increases in recreational visits to the SAC from walkers due to distance, a lack of connectivity and the presence of suitable alternative sites such as Cleethorpes Country Park. As a result, the primary method of accessing the SAC for recreational purposes is considered to be via car. In light of this, increases in visitor recreation are likely to be focused in areas where existing infrastructure such as car parks and footpaths already facilitate recreational activity. Housing allocations associated with Policies 11, 22, 23, and 24 are therefore considered likely to contribute to increases in the numbers of visitors to the SAC but are not expected to result in any notable changes in visitor patterns or distribution. This is likely to limit the potential for impacts to areas where recreational pressure is already focused.

²⁸ Footprint Ecology (2010) *Desk Based Study on Recreation Disturbance to Birds on the Humber Estuary*.

²⁹ Footprint Ecology (2011) *Results of the recreational visitor surveys across the Humber Estuary*.

³⁰ Footprint Ecology (July 2012) Results of the Recreational Visitor Surveys Across the Humber Estuary.

- 5.57 A review of the Footprint Ecology study and the SAC site information indicates that areas of key concern, and the primary sources of recreational pressure in and around North East Lincolnshire, include:
 - Donna Nook Walkers and dog walkers.
 - Horsehoe Point Dog walkers.
 - Cleethorpes Dog walkers and horse riders.
 - Pyewipe Fishermen and dog walkers.
 - Halton Marshes dog walking and fishing.
- 5.58 Of the above, recreational pressures at Pyewipe and Halton Marshes relate primarily to disturbance of roosting sites for SPA/Ramsar birds and would not be expected to adversely affect the SAC at these locations where the dominant habitats include intertidal mudflats not susceptible to recreational disturbance or areas of saltmarsh which are not easily accessed at these locations. Donna Nook and Horseshoe Point are located further than 4.42km from the housing allocations and therefore the contribution of visitors resulting from the Local Plan is unlikely to be significant. The key area susceptible to recreational disturbance as a result of proposed housing is Cleethorpes, particularly in locations where sand dune habitat, which is attractive to visitors, and vulnerable to the effects of recreational disturbance.
- 5.59 The Footprint Ecology report supports this view. Relatively large numbers of visitors access the Humber Estuary SAC at Cleethorpes, where walking and dog walking represent the main activities pursued at the site. In winter, the majority of visitors arrived by car, but a relatively large proportion arrived by foot, which reflects the large population centred close to the SAC in this location. A review of postcodes undertaken as part of the study revealed that the majority of visits to the SAC from within North East Lincolnshire headed to the area around Cleethorpes.
- 5.60 Housing allocations within 4.42km of the SAC have the potential to result in adverse effects on the integrity of the Humber Estuary SAC as a result of increases in recreational pressures focused on sand dune habitats to the southeast of Cleethorpes. Mitigation and avoidance measures, which will need to be included and committed to within the Local Plan to provide certainty that the allocations will not adversely affect site integrity, are outlined below. They comprise a multifaceted approach including the provision of alternative open space, site management and monitoring at sensitive parts of the SAC, and education to increase awareness of key issues and responsibilities of visitors.

Mitigation

- 5.61 Key recommendations reported in the Footprint Ecology Study, which have been considered in the development of the Local Plan and measures described below to mitigate the effect of proposed housing increases in North East Lincolnshire, include:
 - Site development away from sensitive sites.
 - Planning conditions on adjacent development (planting, screening, careful routing, provision of access infrastructure incorporated into new developments) to influence visitor flows and minimise disturbance.
 - Provide alternative recreational facilities provision may need to be combined with other measures such as education and management on the designated site. Likely to need to be carefully designed and target to provide viable alternative. Targeting for dog walkers would need to ensure dog friendliness.
 - Provision of designated access points for water sports.
 - Attract visitors to less sensitive areas and discourage visitors to sensitive areas.
 - Restrict access to parts of site.
 - Provide dedicated fenced dog exercise areas.
 - Zoning designated areas for particular activities (code of conduct and use of byelaws).
 - Management of car parking e.g. redistribution of spaces, closures, permit use, review of charges.

- Path design and management.
- Signs and interpretation and leaflets educating visitors.
- Codes of conduct guidance on how to behave at certain locations.
- Wardening valuable educational and enforcement role.
- Provision of information off-site via local media, newspapers etc.
- Establishment of voluntary marine reserves.
- Off-site education initiatives such as school visits to raise awareness of issues.
- Dog control orders e.g. keep dogs on leads and restricting access at certain times.
- Covenants regarding keeping of pets in new developments.
- Legal enforcement.
- Limiting visitor numbers e.g. through tickets, permits or similar.

Mitigation – On-site Management

- 5.62 Cleethorpes in particular has been identified as a key area where increases in housing may lead to adverse effects as a result of increased recreational pressures. The Cleethorpes Habitat Management Plan³¹ which has recently been produced by North East Lincolnshire Council proposes some of the mitigation measures identified in the Footprint Ecology Study and is likely to help mitigate the potential effects of the Local Plan. The Habitat Management Plan aims to enhance the designated area by improving the biodiversity. The plan will set out actions to deliver and maintain favourable condition for nature conservation and comply with the Higher Level Stewardship agreement, also enabling successful recreation, public enjoyment, and education. The plan states that all permissible activities and actions will be clearly laid out as agreed and consented by Natural England.
- 5.63 Therefore, the Cleethorpes Habitat Management Plan is considered to provide an appropriate means of mitigating recreational impacts from the Local Plan. Currently, the management plan includes the following aims which align closely with the recommendations of the Footprint Ecology Report:
 - Allow natural processes as far as possible.
 - Maintain and enhance sand dunes by annual cutting of dune slacks and other key areas, and control of scrub.
 - Repairs and general maintenance.
 - Enhance the designated area by improving the biodiversity.
 - To list plans and projects with all permissible activities clearly laid out.
 - Improve education in the area.
 - Explore the enhancement of Green Tourism.
- 5.64 The Management Plan also recognises the requirements for favourable condition of the SACs component SSSI such as minimal vehicle and trampling impacts and also highlights the Council's role in conserving the SAC, including as part of a 10 year HLS agreement with Natural England.
- 5.65 Importantly, the Management Plan provides an existing platform which demonstrates that the Council is already taking measures to address impacts in the Cleethorpes area. Nevertheless, at present the Management Plan lacks the specific measures, aims and commitments required to mitigate recreational effects on the SAC/SPA/Ramsar, and therefore the Council has committed in the Local Plan to further develop the Management Plan, so that it is able to secure and deliver the mitigation required. Key areas for development will include specific reference to managing visitor movements, provision of infrastructure such as boardwalks and fencing, interpretation and educational resources, and screening and protecting sensitive areas. It will also be important for monitoring and feedback to be linked to development and refinement of the Management Plan in

³¹ North East Lincolnshire Council (2016) Cleethorpes Habitat Management Plan 2016-2022

the future, and through agreement with Natural England, to ensure that it continues to mitigate for recreational impacts on the Humber Estuary SAC/SPA/Ramsar in perpetuity. This has been addressed in the Local Plan through modifications proposed during the Examination, including the additional text now incorporated in the Main Modifications to Policy 10: Tourism and Visitor Economy, which seeks to maintain the integrity of the designated Humber Estuary Natura 2000 sites and features of interest associated with the Humber Estuary SSSI. Supported development should promote "Securing appropriate, effective and timely mitigation when necessary; including a commitment to further development of the Cleethorpes Habitat Management Plan to manage increasing recreational pressures and access to sensitive areas. Any mitigation or management measures will be implemented prior to impacts occurring".

5.66 In addition, as a result of the Examination, Main Modifications have also been made to Policy 11: Housing Allocations, in relation to recreational impacts, whereby "*The Council will track planning permission granted on all housing sites and will identify and secure appropriate, effective and timely mitigation to manage increasing recreational pressures on the Humber Natura 2000 sites when necessary; this includes a commitment to further development of the Cleethorpes Habitat Management Plan. Any mitigation or management measures identified will be implemented prior to impacts occurring*".

Mitigation – Provision of Natural Green Space

- 5.67 Local Plan Policy 39: Green Infrastructure and Policy 42: Green Space and Recreation provide opportunities to mitigate increases in recreational pressure, in particular from residential development, by providing alternative locations for recreational activities and adopting a strategic approach to delivery of high quality open space.
- 5.68 The Local Plan commits to minimum standards with regards to provision of natural green space. Developments of 10 or more units will have to provide, or contribute towards providing, a minimum of 1ha of natural green space per 1,000 of population which is in accordance with current National standards and is in keeping with the approach used by other comparable Local Plans. In addition, such developments will need to meet accessibility standards including a local recreational area within 400m, District Park within 1km, and Major Park within 3km. The Local Plan assumes that a development site of 22ha (equivalent to 1,000 population/455 units) would need to provide 1ha of natural green space; 0.8 ha of children's play space; 1.6ha outdoor sports; and 0.2ha of allotment provision. Based on the number of houses proposed, the Local Plan equates to a commitment to provide almost 30ha of natural green space during the lifetime of the plan.
- 5.69 Taking into account areas with current deprivation with regards to access to green space will be important in focusing the design of strategic provision of green space. It is recommended that the location, design, and accessibility of open space is focused to areas where current and proposed housing is most likely to contribute to increasing visitors to the Humber Estuary SAC (i.e. typically housing developments within 4.42km of the SAC with a lack of existing open space provision). Within the Local Plan, strategic Green Infrastructure corridors have been identified linking between New Waltham, Humberston, Grimsby and Cleethorpes and the seafront. These are the areas where housing growth is most likely to contribute to increased recreational pressures on the SAC and therefore provides a sensible platform upon which specific provision of strategic open space should focused. It will be important to develop this network further to ensure that the green infrastructure network maximises its function to relieve visitor pressure on the SAC/SPA/Ramsar.
- 5.70 Housing allocations of particular note with regards to their likely contribution to increasing recreation at the SAC, and potential opportunities to link to areas of strategic open space are summarised below:
 - HOU074a, b and c (Land West of Humberston Road) there is an opportunity to link to Cleethorpes Country Park, and Weelsby Woods. The Local Plan includes a commitment to expand Weelsby Woods to the south, creating a strong and extensive area of green infrastructure between Weelsby Woods and Hewitts Avenue; forming green links that will connect to the wider countryside and through the development.
 - HOU342 (Grimsby West Urban Extension) there is an opportunity to create and maintain extensive open space on this site due to its large size and the large number of houses

proposed. Also considerable opportunity to provide linkages to and extension of the existing high quality accessible open space along the River Freshney corridor. The Local Plan includes a commitment to providing green infrastructure, specifically including the expansion of the Freshney Parkway to the west and creation of a Freshney Valley Country Park.

- HOU018, HOU118, and HOU128 (Grimsby West) there is an opportunity to provide a link and contribute to the existing River Freshney corridor.
- HOU002 (Immingham) this site should seek to maximise connectivity to Homestead Park and Public Rights of Way and associated open space to north.
- HOU006 (Immingham) poorly connected to existing green space provision. Given its large size there will be a requirement to provide high quality green space on site.
- HOU146 (New Waltham) HOU092, HOU147. HOU139, HOU084a (Humberston) Sites in relatively close proximity to accessible parts of the SAC. There is an opportunity to incorporate high quality open space within these sites due to their large size, potentially incorporating strategic links between them via Public Rights of Way to maximise attractiveness to walkers and dog walkers. There is also an opportunity to promote and direct recreational opportunities towards Cleethorpes Country Park which lies in close proximity.
- 5.71 The above list provides an example of the key strategic opportunities and priorities which could help to maximise the provision and accessibility of high quality natural green space. Crucially, the opportunities identified above demonstrate that the housing allocations with greatest potential to contribute to increases in recreational pressure on the SAC also have the potential to provide and contribute to linkages to existing areas of high quality natural green space within the Borough. This demonstrates that the policies specified within the Local Plan provide an opportunity to mitigate recreation pressures on the SAC. However, it is recommended that the green infrastructure strategy is further developed with a specific priority to maximise its role in mitigating recreational impacts on the Humber Estuary SAC/SPA/Ramsar.
- 5.72 Whilst a number of mitigatory policies and commitments are included in the Local Plan, the effectiveness of providing open space as mitigation will depend on the nature, location and design of open space and green infrastructure and whether it provides an attractive alternative to walkers and dog walkers in particular, which represent the key source of recreational disturbance to the SAC (and SPA/Ramsar). Studies from within the UK indicate that the three most important amenities dog owners seek are:
 - Off lead access.
 - Close to home.
 - Away from traffic.
- 5.73 Taking into consideration Natural England's guidelines for provision of Suitable Alternative Natural Greenspace, together with Hampshire County Council's Planning for dog ownership in new developments, the following aims are recommended with respect to the provision or enhancement of green space at sites within 4.42km of the SAC:
 - Sites should be semi-natural in appearance.
 - They should be a minimum of 3ha (per 1,000 population), and include sufficient sized areas to enable users to walk their dogs off the lead safely. Smaller sites may also be suitable if they are close to and have good links to other smaller sites, to form a larger total area/network.
 - Sites should aim to allow a minimum dog walking penetration of 784 m from starting point and a circular dog walk of 2.7km.
 - The design of the site, if near to a designated site, should not inadvertently increase access to the designated site, but rather should be self-contained.
 - Sites should be within 400-500m of the target audience/new housing, unless a larger fit for purpose site is created which has a larger catchment area, with sufficient capacity for additional users.
 - They should have adequate car parking if they are larger than 10 ha.

- Existing green spaces should be assessed to ensure that the proposed use of the site is compatible with its existing use.
- The carrying capacity of the site should be measured to ensure it has not already been reached.
- 5.74 Suitable Green Space provision will need to be funded by developer contributions and secured via Section 106 agreements. The calculation of costs will take into account acquisition costs, upgrading costs, and maintenance and management costs in perpetuity. Alternatively natural green space provision / may be provided on site by developers for individual developments. Where developers are providing their own natural green space, account should be taken of the guidance detailed herein.
- 5.75 As part of the Examination process, Policies 39 and 42 have been modified to provide additional certainty that they will maximise their function in alleviating recreational pressures on the Humber Estuary. Policy 39 has been modified to include the following additional text: "Recognition should also be made to the role such green infrastructure plays in mitigating the effects of recreational pressure on the Humber Estuary SAC/SPA/Ramsar, specially designing natural green space which is attractive to walkers and dog walkers, particularly in areas where development is most likely to result in increasing visitors to the Humber Estuary SCA/SPA/Ramsar".
- 5.76 The provision of open space described above will help to reduce the numbers of people visiting the SAC by providing suitable and more readily accessible alternatives. However, the provision of open space will not replicate the unique experience of visiting the coastline, and therefore site based management and education, in line with the recommendations of the Footprint Ecology recreational study will also be required.
- 5.77 Policy 10: Tourism and Visitor Economy, states that the Council will support developments that maintain the integrity of the designated Humber Estuary Natura 2000 sites, and one of the Main Modifications includes an additional requirement within the policy that developments of this nature protect and enhance sites of biodiversity and geodiversity importance. A Main Modification to paragraph 12.91 of the Local Plan explains that the Council is an active member of the Humber Nature Partnership, an organisation made up of statutory regulators, public sector, business sector and voluntary sector members and other Humber Stakeholders, which works collectively to deliver sustainable management of the Humber Natura 2000 site. It specifically works on the delivery of the Humber Management Scheme, providing ecological services to members of the partnership and developing and implementing projects to meet the Humber Conservation Objectives.
- 5.78 The supporting text to the policy also refers to the management suggestions for the Humber Estuary as set out in the Footprint Ecology study on recreational disturbance to birds at the Humber Estuary³² which include on and offsite education highlighting the conservation importance of sites, details of access points and parking; zoning; changing local bylaws controlling access particularly related to dogs, and zoning of particular activities. In light of the findings of the study, it is recommended that such measures be focused on accessible parts of the coastline to the southeast of Cleethorpes where local recreational pressures are concentrated, and to a lesser extent, the coastline at Immingham and the Halton marshes, albeit these areas relate primarily to bird disturbance.
- 5.79 It was recommended in an earlier draft of the HRA Report for the Pre-Submission Draft Local Plan that the Local Plan should make reference to the need to incorporate improvements to visitor management at the Humber Estuary, to avoid the SAC being adversely affected by an increase in visitor numbers. This recommendation was incorporated into the Pre-Submission Draft Local Plan by the Council the introductory text to Policy 10: Tourism and Visitor Economy recognises the potential impacts of recreation on the Humber Estuary sites and noted that appropriate visitor management will be required. The Pre-Submission Draft Local Plan also stated that the Council will need to consider potential impacts of development and incorporate improvements to visitor management as the visitor numbers increase, in particular considering the management suggestions set out in the Footprint Ecology study.

³² Footprint Ecology (2010) Desk Based Study on Recreation Disturbance to Birds on the Humber Estuary

5.80 As part of the Examination process, Policy 10 was modified to include further text which seeks to maintain the integrity of the designated Humber Estuary Natura 2000 sites and features of interest associated with the Humber Estuary SSSI. Supported development should promote "Securing appropriate, effective and timely mitigation when necessary; including a commitment to further development of the Cleethorpes Habitat Management Plan to manage increasing recreational pressures and access to sensitive areas. Any mitigation or management measures will be implemented prior to impacts occurring"

5.81 In light of the mitigation measures and safeguards committed to in the Local Plan, (taking into account Main Modifications) the Plan will not have an adverse effect on the integrity of the Humber Estuary SAC as a result of recreation.

Water quality and quantity

- 5.82 Water pollution is a key issue in Natural England's Site Improvement Plan for the Humber Estuary with regards to the estuary, mudflat and sand-flat habitats. Particular issues that could affect water quality include dissolved oxygen, which may act as a barrier to migrating sea lamprey, and leaching from industries which is likely to affect nutrient levels. Water quantity is also likely to be affected by water abstraction and disposal, as well as from urban water runoff.
- 5.83 Policies that could have a significant effect on the SAC in relation to changes to water quality and quantity are:
 - New Policy 1: Employment land supply.
 - New Policy 2: housing land supply.
 - New Policy 3: Settlement hierarchy and New Policy 4: Distribution of housing growth.
 - Policy 4: Employment Allocations.
 - Policy 10: Tourism and Visitor Economy.
 - Policy 11: Housing Allocations.
 - Policy 22: Grimsby Town Centre Opportunities.
 - Policy 23: Cleethorpes Town Centre Opportunity Sites.
- 5.84 However, taking into account the water flows and capacity of the Humber Estuary SAC, any changes in water quality would have to be of considerable magnitude in order to have a significant effect on the integrity of the site. Any effects on water quality resulting from the North East Lincolnshire Local Plan would be localised and should be regulated and managed by Environment Agency consents and water company Asset Management Programmes.

Mitigation

- 5.85 Mitigation for potential impacts on water quality and quantity is provided through Policy 33: Water Management. This policy states that development proposals must demonstrate that adequate and sustainable water supplies are available to support the development proposed; that provisions are made for the efficient use of water, including its re-use and recycling; and that appropriate and sustainable sewerage systems are provided for the disposal of foul and surface water.
- 5.86 In light of the mitigation incorporated into the Local Plan it is concluded that the Local Plan (taking into account Main Modifications) will not have an adverse effect on the integrity of the Humber Estuary SAC as a result of changes to water quality and quantity.

Humber Estuary SPA and Ramsar site

- 5.87 The Humber Estuary SPA and Ramsar site is located to the north east of the North East Lincolnshire boundary. The qualifying features of the SPA are all bird species while the Ramsar site is designated for its bird species and also the grey seal (also a qualifying feature of the SAC). More information about the Conservation Objectives, qualifying features and key vulnerabilities of the SPA and Ramsar site can be found in **Appendix 1**.
- 5.88 The SPA and Ramsar site are considered together in this section as they share many of their sensitive qualifying features. Where different conclusions are reached in relation to the SPA and the Ramsar site this is made clear in the sections below.
- 5.89 The SPA and Ramsar cover almost exactly the same area as the Humber Estuary SAC; therefore much of the information set out above in relation to the SAC is also relevant to the SPA and Ramsar site. Instead of repeating the same information here, reference is made to the sections above where relevant.
- 5.90 As described in **Chapter 3**, the Local Plan has the potential to significantly affect the Humber Estuary SPA and Ramsar site as result of physical damage/loss (both onsite and offsite), non-physical disturbance, air pollution, water quality and quantity and recreational disturbance.
- 5.91 As described in **Chapter 3**, because the qualifying bird species of the SPA and Ramsar site make use of offsite habitat, consideration needs to be given to the potential for the Local Plan to have significant effects on the integrity of the SPA and Ramsar site as a result of habitat loss or damage both offsite and onsite.

Non-physical disturbance

5.92 The Appropriate Assessment findings for the SPA and Ramsar site in relation to non-physical disturbance are as described above in relation to the Humber Estuary SAC. Because of the extent of existing built development around the allocated employment and residential sites within 500m of the SPA and Ramsar site, and the mitigation included in the Local Plan, **it is concluded that the Local Plan (taking into account Main Modifications) will not have adverse effects on the integrity of the SPA and Ramsar site in relation to non-physical disturbance.**

Air pollution

5.93 The Appropriate Assessment findings for the SPA and Ramsar site in relation to air pollution are as described above in relation to the Humber Estuary SAC. The mitigation described in relation to emissions from commercial sources will also mitigate any potential impacts on the SPA/Ramsar site. The same roads lie within 200m of the SPA and Ramsar site as described above for the SAC and for the reasons described in that section, **it is concluded that the Local Plan (taking into account Main Modifications) will not result in adverse effects on the integrity of the SPA and Ramsar site in relation to air pollution.**

Recreation pressure

- 5.94 The assessment of recreational pressures provided above for the Humber Estuary SAC are also relevant for the SPA/Ramsar, albeit the potential for adverse effects on the integrity of the SPA/Ramsar relates principally to the disturbance of birds. The conclusions and recommendations of the Footprint Ecology visitor and recreational studies are predominantly in relation to bird features and therefore the mitigation measures and required policy modifications provided above for the SAC, and the Cleethorpes Management Plan would also serve to provide suitable mitigation for the SPA/Ramsar.
- 5.95 During the Examination of the Submission Draft Local Plan, the Inspector sought further reassurance relating to the robustness of the assessment of recreational pressures on the Humber Estuary SPA/Ramsar provided in the previous version of this HRA Report. In summary, the Inspector asked North East Lincolnshire Council to consider and provide additional evidence on the recreational disturbance impacts on the Humber Estuary SPA/Ramsar, with a particular emphasis on identifying the impacts. In light of this, additional evidence is presented below.

- 5.96 The negative effect of recreational disturbance on wetland birds is well documented. Disturbance to birds can reduce the time spent feeding and can lower bird survival rates and/or cause displacement to areas of lower suitability. Regular disturbance as a result of recreational activities has the potential to lower the populations of qualifying bird species for which the SPA/Ramsar is designated, which would represent an adverse effect on the site's integrity.
- 5.97 There is public access to most of the Humber Estuary shoreline within North East Lincolnshire via footpaths and bridleways along the sea wall, and access to beaches. There is no public access to several areas of foreshore at industrial sites at Grimsby and Immingham Docks³³.
- 5.98 The Humber Estuary is a key attraction for recreation and is likely to experience increased visitor numbers as a result of housing development proposed through the Local Plan.
- 5.99 The approach to assessment of recreational impacts on the Humber Estuary SPA/Ramsar provided in this HRA report followed the approach used for the HRA of the Hull Local Plan³⁴, as the Inspector highlighted that a similar issue was raised, and since resolved, at the Hull Local Plan Examination. Firstly, the predicted quantified increase in visitors to the SPA /Ramsar as a result of housing allocations proposed within the Local Plan was calculated. Secondly, key information relating to bird distribution and patterns of recreational disturbance at the site was extrapolated from the comprehensive reports published by Footprint Ecology for the Humber Estuary^{1 & 35}. The predicted increases were considered in light of the recreational and bird studies to determine the effect of recreational disturbance on the Humber Estuary SPA/Ramsar site.

Calculation of additional visits to the Humber Estuary arising from residential allocations within the North East Lincolnshire Local Plan

Assumptions

- 5.100 The calculation of additional visits to the Humber Estuary as a result of the North East Lincolnshire Local Plan is in line with the method used for calculation of additional visitors arising from the Hull Local Plan, as presented in Appendix O of the HRA of the Hull Local Plan.
- 5.101 The calculations below refer to the number of additional visits. A 'visit' consists of an individual travelling to the Humber Estuary as a destination and who will spend time there for recreational purposes, e.g. walking along the coast.
- 5.102 It was assumed that increases in visits will only increase as a result of residential development, as people tend to partake in recreational activities close to home. With regards to employment development, people tend to spend most of their time at work in the workplace, therefore it was assumed they do not contribute to recreational impacts at the Humber Estuary.
- 5.103 Footprint Ecology state that for every three people visiting the Humber Estuary, there is generally one dog visiting³⁶. The Hull HRA states that this is similar to the RSPCA's estimated figure that 24% households own a dog. This 24% is in line with the Pet Population report 2017³⁷, therefore this figure was used to inform our calculations. In line with the precautionary principle, we assumed that every time a household with a dog visits the Humber Estuary, the household will take their dog.
- 5.104 The Footprint Ecology report identified that 88% of the visitors to the Humber Estuary SPA were local residents with the majority living within 4.4km of the site and with dog walking being the primary reason for visiting. As per the Hull HRA, we further considered the likely frequency of visits for different areas within this 4.4km distance. We assumed that visitors from within North East Lincolnshire walk 1km to visit the Estuary on a daily basis, such as dog walking, walk up to 1.6km³⁸ to access the Estuary for recreation on a weekly basis and drive up to 4.4km to access the Estuary on a monthly basis. Visitors from beyond the 4.4km were assumed to visit the site on a yearly basis or less. These assumptions are extremely precautionary, as it is highly unlikely

³³ Footprint Ecology (2010) *Desk Based Study on Recreation Disturbance to Birds on the Humber Estuary.*

³⁴ Ch2m for Hull City Council (2017) Habitats Regulations Assessment (HRA) Report, Hull Local Plan

³⁵ Footprint Ecology (July 2012) Results of the Recreational Visitor Surveys Across the Humber Estuary.

³⁶ Footprint Ecology (July 2012) Results of the Recreational Visitor Surveys Across the Humber Estuary

³⁷ PFMA (2017) Pet Population report

³⁸ Based on travel distances to survey point 5 in the Footprint Ecology report

that every single resident within 1km of the Humber Estuary will visit the site on a daily basis and so on.

Baseline visit numbers

5.105 North East Lincolnshire Council provided information on the number of dwellings within 1km, 1.6km, 4.4km and over 4.4km zones from the Humber Estuary as of 5th April 2017. These figures were used to calculate baseline numbers of annual visits to the Humber Estuary arising from North East Lincolnshire (Table 5.4). Of 15,251 dwellings within 1km of the Estuary, 320 of these are chalets that can only be occupied for 10 months of the year. The figures in Table 5.4 have been adjusted to reflect this. In line with a precautionary approach, it was assumed that these dwellings will be occupied for the entirety of these 10 months, despite the fact that this is likely to contribute to an over-estimation of visits.

Distance from Estuary	≤ 1km	>1km ≤ 1.6km	>1.6km ≤ 4.4km	>4.4km
Visits to estuary	Daily	Weekly	Monthly	Yearly
No. households	15,251 (320 of which are only occupied for 10 months of the year ³⁹)	11,460	37,245	10,483
Population (2.3 per household ⁴⁰)	35,077 (736 of which are only present for 10 months of the year)	26,358	85,664	24,111
Population x frequency of visits	34,341 x 365 + 736 x 304	26,358 x 52	85,664 x 12	24,111 x 1
Annual visits	12,758,209	1,370,616	1,027,962	24,111

Table 5.4: Baseline number of visits to the Humber Estuary each year generated from within North East Lincolnshire

5.106 The estimated number of total baseline annual visits to the Humber Estuary in North East Lincolnshire is **15,180,898**.

Table 5.5: Baseline number of properties with dogs using the Humber Estuary (i.e. within 1km of the Estuary)

Number of properties	Population (2.3 per household ⁴¹)	Dogs (24% households)
15,251	35,077	3,660

5.107 The current number of households within 1km of the Estuary that own dogs has been estimated at 3,660, as shown in **Table 5.5**. These are considered to be high risk visits, as such households

³⁹ March to December

⁴⁰ Taken from ONS 2011 census data

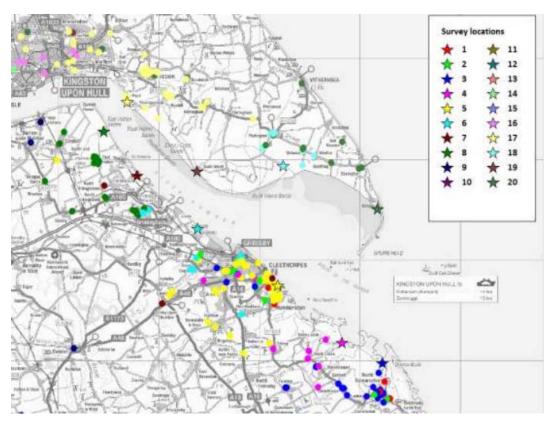
⁴¹ Taken from ONS 2011 census data

are more likely to visit the estuary more than once a day, and dogs have been recognised as a key source of disturbance to SPA/Ramsar birds.

Forecast additional visits

5.108 Part of Map 2.8 of the Footprint Ecology report has been reproduced in Figure 5.5. This demonstrates that the majority of visitors to the Humber Estuary that live in North East Lincolnshire visit Cleethorpes (i.e. survey location 5, Cleethorpes (Discovery Centre)), rather than any other part of the Estuary. Other areas of the Humber Estuary that are visited by residents of North East Lincolnshire are Horseshoe Point (survey location 4), Donna Nook (survey location 3), Oldfleet Drain, North of Grimsby (survey location 6), Rimac (survey location 1), Sea Lane, Salfleet (survey location 2) and Killingsholme (survey location 7). Survey locations 5 and 6 lie within North East Lincolnshire. As visits from residents of future development are likely to follow existing patterns of visits, it is likely that Cleethorpes will be the primary location within North East Lincolnshire where visits to the Humber Estuary will increase.

Figure 5.5: Homes postcodes of visitors to survey locations (survey locations are shown as stars, with postcodes as dots of the corresponding colour)⁴²



- 5.109 We determined which allocated housing sites lie within which zone⁴³ in terms of distance to the Humber Estuary. Where a site lies across more than one zone, the zone in which the majority of the site lies was used. Where a fairly equal part of the site was located in multiple zones, the closer distance was used, in keeping with the precautionary principle. The various housing sites, their estimated dwelling capacity and distance from the Humber Estuary are shown in **Table 5.6**.
- 5.110 Table 5.6 is based on the site information contained in the Pre-submisison Local Plan, taking into account the 2017 Schedule of Main Modifications prepared by North East Lincolnshire Council. Both site allocations and Development Company sites have been included in the table, in order to calculate the increase in all visitors to the Estuary arising from development in North East Lincolnshire over the plan period. Table 5.6 also includes sites that are committed and being implemented. The dwelling numbers for these sites represent the number of units remaining as

⁴² Footprint Ecology (July 2012) Results of the Recreational Visitor Surveys Across the Humber Estuary

⁴³ i.e. within 1km, between 1km and 1.6km, between 1.6km and 4.4km and further than 4.4km

of September 2016, as those units already completed are accounted for in the baseline figures outlined above. Due to differences in timing of data gathering, a few units included for committed sites in the table below may have been completed and included in the baseline figures above. This may lead to a slight overestimation in the increase in number of visitors to the Humber Estuary and represents a precautionary approach.

- 5.111 In addition, the Local Plan makes allowance for delivery of 1,073 dwellings through small windfall sites over the plan period, which have also been included in **Table 5.6.** Due to the nature of windfall sites, it cannot be known where these may come forward and therefore which distance zone from the estuary such sites would fall into. For the purposes of this addendum it has been assumed that the proportion of windfall sites in each distance zone will be equal to the proportion of existing housing in each distance zone.
- 5.112 Taking into account dwellings that have already been constructed, committed sites, site allocations, Development Company sites and the small sites windfall allowance, the total number of dwellings to be delivered in the plan period exceeds the minimum requirement of 13,340 in the Local Plan, in order to allow flexibility in meeting this requirement. The totals in **Table 5.6** do not include dwellings for which construction has been completed. As of September 2016, 1,177 dwellings had already been completed, resulting in estimated delivery of a total of 14,242 dwellings in the plan period.

Table 5.6: The distance between housing allocations in the North East Lincolnshire Local Plan and the Humber Estuary and number of dwellings at each site (committed sites in grey)

≤ 1km	>1km ≤ 1.6km	>1.6km ≤ 4.4km	>4.4km
Site: HOU017	Site: HOU018	Site: HOU001	Site: HOU068A
dw: 30	dw: 250	dw: 32	dw: 100
Site: HOU034A,	Site: HOU084A	Site: HOU002	Site: HOU095A,
HOU034B, HOU034C	dw: 198	dw: 178	HOU095B
dw: 242			dw: 216
Site: HOU042	Site: HOU295	Site: HOU006	Site: HOU104
dw: 80	dw: 10	dw: 540	dw: 300
Site: HOU56B	Site: HOU301	Site: HOU010B	Site: HOU105
dw: 30	dw: 18	dw: 250	dw: 400
Site: HOU249A	Site: HOU353	Site: HOU037	Site: HOU110,
dw: 14	dw: 80	dw: 14	HOU129
			dw: 230
Site: HOU359	Site: HOU357	Site: HOU044	Site: HOU111
dw: 16	dw: 19	dw: 260	dw: 199
Site: HOU057	Site: HOU358	Site: HOU047	Site: HOU112
dw: 24	dw: 16	dw: 28	dw: 95
Site: HOU316		Site: HOU059	Site: HOU134
dw: 21		dw: 32	dw: 118
C'h - 110114.05		Site: HOU74A,	Site: HOU292
Site: HOU125 dw: 26		HOU074B, HOU074C	dw: 66
dw: 26		dw: 748	
		Site: HOU082	Site: HOU288
		dw: 17	dw: 51
		Site: HOU097	Site: HOU296
		dw: 31	dw: 160
		Site: HOU118	Site: HOU356
		dw: 165	dw: 10
		Site: HOU119	Site: HOU131
		dw: 113	dw: 12
		Site: HOU124	Site: HOU076
		dw: 50	dw: 973
		Site: HOU128	Site: HOU066
		dw: 390	dw: 68

≤ 1km	>1km ≤ 1.6km	>1.6km ≤ 4.4km	>4.4km
		Site: HOU139	Site: HOU113
		dw: 311	dw: 1
		Site: HOU140A	
		dw: 23	
		Site: HOU141A	
		dw: 100	
		Site: HOU144	
		dw: 13	
		Site: HOU146	
		dw: 385	
		Site: HOU150	
		dw: 490	
		Site: HOU151	
		dw: 19	
		Site: HOU231	
		dw: 12	
		Site: HOU232	
		dw: 14	
		Site: HOU233	
		dw: 8	
		Site: HOU294	
		dw: 14	
		Site: HOU302	
		dw: 10	
		Site: HOU303	
		dw: 11	
		Site: HOU308	
		dw: 60	
		Site: HOU342 dw: 2,713	
		Site: HOU354	
		dw: 80	
		Site: HOU355	
		dw: 100	
		Site: HOU280	
		dw: 13	
		Site: HOU343	
		dw: 10	
		Site: HOU092 and	
		HOU147	
		dw: 430	
		Site: HOU062	
		dw: 99	
		Site: HOU004	
		dw: 56	
		Site: HOU101B	
		dw: 100	
Windfall: 220	Windfall: 165	Windfall: 537	Windfall: 151
Total numbers of a	dditional dwellings		
703	756	8,456	3,150

5.113 The figures in **Table 5.6** have been used to calculate likely increases in visitors at the site, in line with the assumptions presented in above. These are presented in **Table 5.7** below.

Table 5.7: Forecast additional visits from housing allocations

Distance from Estuary	≤ 1km	>1km ≤ 1.6km	>1.6km ≤ 4.4km	>4.4km
Visits to estuary	Daily	Weekly	Monthly	Yearly
Population (2.3 per household ⁴⁴)	1,617	1,739	19,449	7,245
Population x frequency of visits	1617 x 365	1,739 x 52	19,449x 12	7,245x 1
Annual increase in visits	590,205	90,428	233,388	7,245

5.114 The estimated number of total additional annual visits to the Humber Estuary in North East Lincolnshire as a result of the Local Plan is **921,266**. This is a **6.1%** increase, compared to estimated current visits, based on a 2016 baseline number of dwellings in the local authority area. This provides a precautionary 'worst-case' prediction because, in reality, the provision of dwellings will be phased over the lifetime of the Plan and some of the dwellings will be occupied by people who already reside in North East Lincolnshire but who don't currently have their own home.

Table 5.8: Forecast additional number of properties with dogs using the HumberEstuary (i.e. within 1km of the Estuary)

Number of properties	Population (2.3 per household ⁴⁵)	Dogs (24% households)
703	1,617	169

5.115 The forecast additional number of households within 1km of the Estuary that own dogs has been estimated at 169, as demonstrated in **Table 5.8**. These are considered to be high risk visits, as such households are more likely to visit the estuary more than once a day. This is an increase in high risk visits of **4.6%**, compared to current high risk visits.

Calculation of additional visits to the Humber Estuary arising from tourist visitors as a result of the North East Lincolnshire Local Plan

- 5.116 Local Plan Policy 10 confirms that the Council will support development that safeguards, supports and enhances the growth of existing and new visitor, cultural and leisure attractions that are appropriate to their location, including the resort area and town centres. The policy also supports the provision of a wide range of attractions within the town centres of Grimsby and Cleethorpes; the development of a year round all weather visitor economy; and proposals to enhance the provision of support facilities for visitors, e.g. car parking. The policy confirms that it will support development that maintains the integrity of the designated Humber Estuary Natura 2000 sites. However, an increase in external visitors to North East Lincolnshire as a result of Policy 10 has the potential to contribute to increasing recreational pressures on the Humber Estuary SPA and Ramsar sites, resulting in impacts associated with disturbance to qualifying bird species.
- 5.117 Estimating the change in visitor numbers to enable a quantification of the additional recreational impact on the SPA/Ramsar as a result of the Local Plan is difficult to predict because it is affected by a multitude of unforeseeable variables, most notably including weather, changes in British and overseas economies, currency exchange rates, and changes in recreational preferences in the UK. Visitor numbers may increase or decrease over time in response to prevailing factors. For the purposes of this assessment, and in accordance with a precautionary approach, it has been assumed that visitor numbers will increase over time.

⁴⁴ Taken from ONS 2011 census data

⁴⁵ Taken from ONS 2011 census data

5.118 A study which looked at the visitor trends to North East Lincolnshire between 2009 and 2013⁴⁶ was used to provide a baseline upon which growth in visitor numbers during the Plan could be predicted. This shows that day visitors outnumber staying visitors by a factor of 15 in terms of visitor numbers and by a factor of 3 in terms of visitor days. Growth rates of all types of visitor during the study period remained fairly consistent with an overall average annual increase in total visitors of 0.4%⁴⁷. Predictions are shown in **Table 5.9** below and include growth rates of 0.4%, based on recent trends.

Annual increase	2013 baseline	2032 projection	Total increase in annual visits during plan period (no.)	Total increase in annual visits during plan period (%)
0.4%	9,287,000	10,018,807	731,807	8%

Table 5.9: Growth predictions for visits to North East Lincs by non-residents

- 5.119 Growth of 0.4% per year every year would result in an additional 731,807 annual visits to North East Lincolnshire by year 2032. This increase does not equate directly to additional visits which would have the potential to result in recreational disturbance to SPA/Ramsar birds, because many visits will be for purposes not associated with such activities and/or sensitive locations. Nevertheless, the increase of **8%** can be used to predict a similar increase in the level of recreational disturbance associated with visitors to North East Lincolnshire. Such an increase has the potential to contribute towards disturbance which would result in adverse effects on the integrity of the Humber Estuary SPA/Ramsar.
- 5.120 According to the Footprint Ecology studies, 88% of the visits to the Humber Estuary are from residents. This suggests that 12% of the visits are from non-resident visitors. The calculations above show that the baseline for residents is 15,180,898, representing 88% of all visits. Extrapolating upwards, the total number of visits is therefore 17,251,020 (i.e. 15,180,898/0.88). The difference between the two figures can be assumed to be visits to the Humber Estuary by non-residents, equating to 2,070,122 visits (i.e. 17,251,020 minus 15,180, 898).
- 5.121 Assuming an 8% increase in visits from non-residents by 2032, this equates to an additional **165,610** visits per annum to the Humber Estuary (i.e. 8% of 2,070,122).

Cumulative increases in visitors to the Humber Estuary

5.122 On the basis of the above calculations, the predicted increase in the number of visits to the Humber Estuary as a result of the residential allocations is 921,266 visits per annum, and from non-residents 165,610 visits per annum, giving a total increase of **1,086,876** visits per annum. In percentage terms, this represents an increase in visits per annum to the Humber Estuary by 2032 of **6.3%** (i.e. 1,086,876/17,251,020).

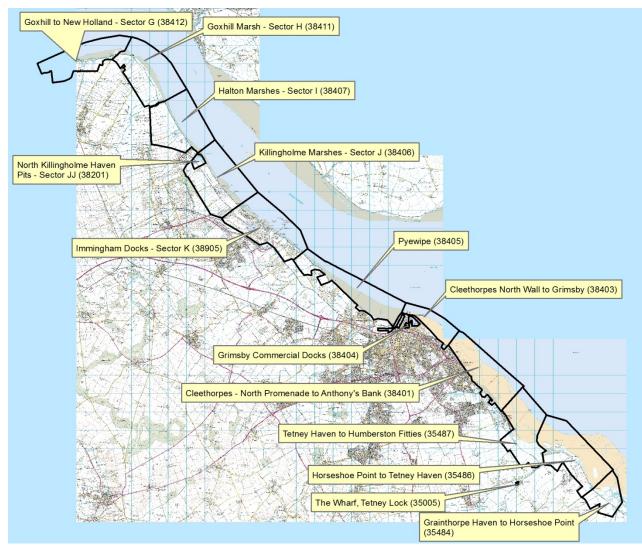
Interpretation of the Footprint Ecology Studies

5.123 Footprint Ecology have undertaken two comprehensive studies of the Humber Estuary, including a review of visitor patterns, behaviours and recreational pressures, and also, the effect of recreational disturbance on estuary birds. The latter study analysed BTO WeBS Core Count data for the Humber Estuary to identify Key WeBS Sectors for SPA species. BTO WeBS Sectors are illustrated in **Figure 5.6** below.

⁴⁶ Global Tourism Solutions (UK) Ltd (2013), STEAM Final Trend Report for 2009-2013 North East Lincolnshire

⁴⁷ Ibid - ('Average Annual Change' in table presented in page 24)

Figure 5.6: BTO WeBS Sectors



- 5.124 Of the 10 Sectors present within North East Lincolnshire, only North Killingholme Haven Pits Sector JJ (38201), Pyewipe (38405), and Cleethorpes – North Promenade to Anthony's Bank (38401) were identified as being key sectors for SPA bird species.
- 5.125 The North Killingholme Haven Pits Sector was identified as a key sector for black-tailed godwit and redshank. The study indicates that for black-tailed godwit, there is limited evidence for any impacts of disturbance on populations, but some evidence that this species avoids areas close to footpaths. With regards to redshank, the study recognises that there is evidence of avoidance and nocturnal behaviour in areas close to sources of recreation.
- 5.126 The Cleethorpes North Promenade to Anthony's Bank sector was identified as being a key sector for feeding knot and sanderling. The study explains that knot tend to concentrate in large roosts and avoids sites with high levels of boat activity nearby and areas close to footpaths. The study also presents evidence that sanderling foraging times are reduced as a result of disturbance, with dogs off leads representing a particular issue.
- 5.127 The Pyewipe sector was identified as a key sector for both black-tailed godwit and shelduck. As described above, for black-tailed godwit there is limited evidence for any impacts of disturbance on populations, but some evidence that this species avoids areas close to footpaths. The study suggests that shelduck densities are lower closer to footpaths during the winter.
- 5.128 The Footprint Ecology Study also used a questionnaire of local bird experts and WeBS surveyors to identify locations where disturbance events to birds had been witnessed. The questionnaire identified that of the 10 sectors located within North East Lincolnshire, disturbance to birds was reported by the respondents at five of the sectors. Sectors where bird disturbance had been witnessed and reported by the respondents in the questionnaire were:

- 38406 Killingholme Marshes Sector J.
- 38905 Immingham Docks Sector K.
- 38405 Pyewipe.
- 35487 Tetney Haven to Humberston Fitties.
- 35486 Horseshoe Point to Tetney Haven.
- 5.129 Activities reported as causing disturbance at the above sites included walking with or without dogs along the shore and the flood bank, dogs off leads in intertidal areas, and motorised vehicles on the seawalls and to a lesser extent on the intertidal and sandy shore habitat. Other issues reported as resulting in disturbance, albeit to a lesser extent, included angling, bird watching, wildfowling, horse riding and cycling.
- 5.130 Disturbance by RIBS, powerboats and jet skis was only reported at the Tetney Haven to Humberston Fitties Sector and the Footprint Ecology Study indicates that this activity is mainly focused in parts of the Humber Estuary outside of North East Lincolnshire and is more prevalent in the summer months when SPA and Ramsar birds, with the exception of nesting little tern, are less susceptible to disturbance.
- 5.131 The studies presented patterns of recreational disturbance through the year, totalled across the whole estuary and derived from the questionnaire of local experts to show the frequency of occurrence of disturbance arising from different activity types. The results indicate that people walking along the flood bank was the primary activity resulting in disturbance throughout the year with the highest frequency of occurrence and highest frequency of an activity perceived to be disturbing birds. Other activities with high frequencies of occurrence and which were perceived to be disturbing birds included birdwatching, dogs off leads in intertidal areas, and people walking along the shore either with or without dogs.
- 5.132 Airborne activities including commercial aircraft, microlights and pleasure aircraft were also reported as regularly resulting in bird disturbance, but these activities are unlikely to be closely linked to increases in residential population as a result of the plan and were not notable contributors to disturbance events within North East Lincolnshire.
- 5.133 The questionnaire survey results indicated that disturbance to SPA birds was less prevalent in the vicinity of inaccessible industrial areas and areas directly adjacent to the urban conurbations of Grimsby and Cleethorpes where consistently high levels of existing recreational activity and an absence of important high tide roosts lower the susceptibility of impacts occurring. In contrast, bird disturbance events were associated with the north and south of the Borough in areas where public access occurs in close proximity to the foreshore and habitats of increased importance for SPA birds close to accessible paths, such as saltmarsh and mudflats.
- 5.134 The only sector identified as a key sector for SPA birds in the Footprint Ecology Study, and where the questionnaire respondents reported known disturbance events was the Pyewipe Sector which is important for shelduck and black tailed godwit. This area is therefore likely to be of increased susceptibility to increases in recreational pressure as a result of the Local Plan housing allocations and visitor activity. In addition, housing allocations in the south of the Borough, such as in the south of Cleethorpes are located in close proximity to the Tetney Haven to Humberston Fitties sector and the Horseshoe Point to Tetney Haven sector where the existing infrastructure and accessibility is likely to result in increased recreational pressures on SPA/Ramsar birds at these sectors.
- 5.135 The Footprint Ecology studies identified that 88% of the visitors to the Humber Estuary SPA were local residents with the majority living within 4.4 km of the site with dog walking the primary reason for visiting. Most of the housing sites allocated in the North East Lincolnshire Local Plan are located within 4.4km of the SPA/Ramsar.
- 5.136 Sites located further than 4.4km from the SPA are unlikely to result in significant effects on the SAC in relation to recreational pressures. Therefore, housing allocations HOU134, HOU068a, HOU75A, HOU131, HOU292, HOU296, HOU111, HOU110, HOU129, HOU112, HOU113, HOU105, HOU288, HOU104, HOU296, HOU356 and HOU95a/b are considered unlikely to significantly affect the SPA/Ramsar.

- 5.137 The remaining site allocations comprise both small urban infill sites and larger sites on the edges of existing settlements. Given the locations of proposed allocations a site by site assessment of the potential to result in recreational effects on the SPA is of limited use in assessing the likelihood of adverse effects on the integrity of the SPA because it would fail to fully recognise the cumulative and in-combination nature of this type of impact within North East Lincolnshire as a result of population growth. As a result, a more strategic approach to assessing the likelihood of adverse effects, which considers broad development locations based on distance from the SPA/Ramsar, and specific areas where increases in recreational pressure are likely to occur is considered more appropriate.
- 5.138 Housing allocations within the urban centres of Grimsby and Cleethorpes are located close to the coastline and would therefore be expected to contribute to increases in recreational pressures along the corresponding seafronts as a result of people walking.
- 5.139 Away from these urban centres, housing allocations would not be expected to result in notable increases in recreational visits to the SPA from walkers due to distance, a lack of connectivity and the presence of suitable alternative sites such as Cleethorpes Country Park. As a result, the primary method of accessing the SPA for recreational purposes for the majority of housing allocations is considered to be via car. In light of this, increases in visitor recreation are likely to be focused in areas where existing infrastructure such as car parks and footpaths already facilitate recreational activity. Housing allocations associated with Policies 11, 22 and 23 are therefore considered likely to contribute to increases in the numbers of visitors to the SPA but are not expected to result in any notable changes in visitor patterns or distribution. This is likely to limit the potential for impacts to areas where recreational pressure is already focused.
- 5.140 The Footprint Ecology Visitor Study and the SPA site information indicates that areas of key concern, and the primary sources of recreational pressure in and around North East Lincolnshire, include:
 - Donna Nook Walkers and dog walkers.
 - Horseshoe Point Dog walkers.
 - Cleethorpes Dog walkers and horse riders.
 - Pyewipe Fishermen and dog walkers.
 - Halton Marshes dog walking and fishing.
- 5.141 Donna Nook and Horseshoe Point are located further than 4.42km from the housing allocations and therefore the contribution of visitors resulting from the Local Plan is unlikely to be significant.
- 5.142 Cleethorpes, which is attractive to visitors and vulnerable to the effects of recreational disturbance, is in close proximity to many of the housing allocations and therefore likely to be of increased susceptibility to recreational disturbance of birds. Recreational pressures at Pyewipe and Halton Marshes were identified in the report as relating primarily to disturbance of roosting sites for birds.
- 5.143 The Footprint Ecology report confirms that large numbers of visitors access the Humber Estuary SPA/Ramsar at Cleethorpes, where walking and dog walking represent the main activities pursued at the site. In winter, the majority of visitors arrived by car, but a relatively large proportion arrived by foot, which reflects the large population centred close to the SPA in this location. A review of postcodes undertaken as part of the study revealed that the majority of visits to the SPA from within North East Lincolnshire headed to the area around Cleethorpes.
- 5.144 The analysis of visitor numbers shows that, on the basis of recent trends, the total number of non-resident visits to North East Lincolnshire would increase by 8% between 2013 and 2032. However, only 12% of visits to the Humber Estuary are from non-residents. When combined with resident visits, it is predicted that the total increase in visits to the Humber Estuary will be in the order of 6.3% compared to the baseline.
- 5.145 In summary, the predicted 6.3% increase in visitors to the Humber Estuary SPA/Ramsar, arising from the housing allocations within the Local Plan and visits from non-residents, have the potential to result in adverse effects on the integrity of the SPA/Ramsar site as a result of increases in recreational disturbance to birds at the key locations described above.

5.146 In light of the above assessment, the mitigation measures detailed below will be required to provide sufficient certainty that the Local Plan will not result in adverse effects on integrity.

Mitigation

- 5.147 In light of the above information which quantifies the predicted impact of increases in recreational pressure on the Humber Estuary SPA/Ramsar, mitigation will be required to avoid or minimise impacts to ensure that the Plan will not result in adverse effects on site integrity.
- 5.148 Mitigation will require a multi-faceted approach including the provision of alternative open space and green infrastructure, site management and monitoring at the sensitive parts of the SPA outlined in this report, and education of local residents and visitors to increase awareness of key issues and responsibilities. These measures will be delivered as part of the development of the Cleethorpes Habitat Management Plan, and/or an equivalent mitigation strategy which is adaptive and able to respond to updated monitoring results, thereby ensuring that the measures provided continue to successfully mitigate any impacts identified or predicted, before they are able to result in adverse effects on the integrity of the Humber Estuary SPA/Ramsar site.
- 5.149 The Main Modifications include a commitment to further develop the Cleethorpes Habitat Management Plan, as part of Policy 10. Main Modifications to Policy 11 state that the Council will identify and secure appropriate, effective and timely mitigation to manage increasing recreation pressure on Natura 2000 sites. Policies 39: Developing a Green Infrastructure Network and 42: Green Space and Recreation now refer to the role these may play in diverting potential recreational visits to the Humber Estuary.

Conclusion

5.150 Providing the mitigation measures described above are successfully delivered and the strategy for delivering mitigation continues to be responsive and adaptive to new information during the lifetime of the Local Plan, an increase in recreational pressures associated with the Local Plan, incorporating Main Modifications, will not lead to adverse effects on the integrity of the Humber Estuary European sites.

Water quality and quantity

- 5.151 During the Examination, the Inspector sought further reassurance relating to the robustness of the assessment of water quality and quantity on the Humber Estuary SPA/Ramsar provided in the previous version of this HRA Report. In summary, the Inspector asked North East Lincolnshire Council to remove ambiguity regarding the assessment of water quality and quantity on the SPA/Ramsar, arising as a result of an apparent lack of clarity in the previous version of this HRA regarding recognition of the susceptibility of SPA/Ramsar qualifying features to changes in hydrology. As a result, additional assessment and clarifications were provided to support the examination in the form of an addendum. The updated assessment, which addresses the Inspector's comments, is provided below.
- 5.152 Water pollution is identified as a priority issue in the Natural England Site Improvement Plan for the Humber Estuary. Changes in water quality have the potential to adversely affect the habitats upon which qualifying bird species and lamprey depend, and therefore reductions in water quality as a result of the Local Plan, have the potential to result in 'Likely Significant Effects' and 'Adverse Effects on Integrity' in the absence of suitable mitigation and avoidance measures.
- 5.153 Whilst the qualifying features of the Humber Estuary SPA and Ramsar sites are theoretically vulnerable to changes in water quantity, the water levels in areas of primary importance for qualifying features are predominantly controlled by tidal powers at the estuary scale and/or coastal management regimes. Therefore the policies proposed within the Local Plan would not be expected to result in any measurable changes in water levels with potential to result in likely significant effects on the Humber Estuary SPA or Ramsar site.
- 5.154 The species of the SPA and Ramsar are largely dependent on the habitats for which the SAC is designated (e.g. sandflats, mudflats and salt marsh). As with the Humber Estuary Ramsar site, the assessment for the Humber Estuary SAC provided in the main HRA Report also applies to the SPA, i.e. any changes in water quality and quantity arising from the North East Lincolnshire Local Plan is highly unlikely to be of sufficient magnitude to adversely affect the integrity of the SPA,

SAC or Ramsar site. Any effects on water quality resulting from the Local Plan would be localised and should be regulated and managed by Environment Agency consents and Water Company Asset Management Programmes. In addition, Local Plan Policy 33 includes 'built in' mitigation for any potential impacts on water quality and quantity.

- 5.155 A recent judgement⁴⁸ indicates that there is no legal requirement that a Habitats Regulations Assessment under Regulation 48(1) must be carried out in the absence of any mitigation measures that form part of a plan or project. On the contrary, the competent authority is required to consider whether the plan or project as a whole, including such measures if they are part of the project, is likely to have a significant effect on the European site. This judgement makes clear that mitigation should be considered for any proposal, and can include a range of appropriate measures both on and off site that avoid or minimise the adverse impact of a plan or project on a European site.
- 5.156 In light of the above judgements, the avoidance and mitigation safeguards provided in the Local Plan have been fully considered in reaching the conclusion below in respect of the effect of the Local Plan on the Humber Estuary SPA/Ramsar as a result of water quality and quantity.

Conclusion

5.157 The mitigation and avoidance safeguards built into the Local Plan are considered sufficiently robust to ensure that likely significant effects on the Humber Estuary SPA and Ramsar site as a result of changes in water quality and quantity will not occur.

Physical damage/disturbance to species/habitat loss (onsite)

- 5.158 The SPA and Ramsar site extend within the boundaries of North East Lincolnshire and therefore have the potential to be directly affected by onsite habitat loss/damage or disturbance to species where Local Plan policies could result in development in that part of the Borough. As described above in relation to the Humber Estuary SAC, the Local Plan does not allocate any development within the boundaries of the SPA or Ramsar site but Policy 30: Renewable and Low Carbon Infrastructure could result in renewable energy development anywhere within the broad areas identified, including in close proximity to the Humber Estuary; therefore the potential for onsite habitat loss/damage or disturbance to species at the SPA and Ramsar site was identified in the screening matrix if development resulting from the policy were to come forward in that area.
- 5.159 Policy 30 intends to deliver at least 75MW of installed grid-connected renewable energy, which could affect the SAC directly. The supporting text for this Policy 30 explains that 60MW of this is already consented as large-scale solar farm projects at Laceby and Bradley and states that there is capacity for at least 16MW additional electricity from renewable sources (excluding onshore wind). The 2017 Schedule of Main Modifications (MM 78) states that opportunities for onshore wind are considered to be limited and renewable energy capacity is most likely to be increased through further solar farm development. It is not clear from either the Local Plan or the Renewable Energy Capacity report⁴⁹ where or in what form future renewable energy is likely to be delivered.
- 5.160 For the reasons set out in paras 5.15 to 5.18 it is not considered necessary to carry out a separate detailed study to determine how the remainder of the 75MW target can be met that does not already have planning consent in order to inform the conclusions of the HRA.

Mitigation

- 5.161 As described above in relation to the SAC, Policy 40: Biodiversity and Geodiversity will also provide a level of protection to the SPA and Ramsar site because it sets out the Council's commitment to have regard to biodiversity and geodiversity when considering development proposals (which will include proposals for renewable energy).
- 5.162 In addition, Policy 30 is proposed to be modified as a result of the examination process to include the following wording: "*Developments and their associated infrastructure will be assessed on their*

⁴⁸ Dilley Lane Judgement - Hart District Council v The Secretary of State for Communities and Local Government, Luckmore Limited and Barratt Homes Limited (CO/7623/2007) 1st May 2008

⁴⁹ AECOM and Local Government Yorkshire and Humber (2011) Low Carbon and Renewable Energy Capacity in Yorkshire and Humber, Final Report

merits and subject to the following impact considerations, taking into account of individual and cumulative effects; biodiversity, geodiversity and nature conservation, with regard given to the findings of the HRA and potential impacts on SPA birds, where appropriate". The Habitats Regulations would apply to any proposal for a renewable energy installation within the boundaries of the SPA and Ramsar site, or proposals outside the boundaries that could give rise to likely significant effects on the SPA and Ramsar site, and the supporting text to Policy 30 states that the Council will give particular consideration to the potential for any renewable energy proposal to disturb or displace SPA birds caused by the loss of suitable feeding, roosting and loafing sites.

5.163 Therefore, it is concluded that the Local Plan (taking into account Main Modifications) will not result in adverse effects on the integrity of the SPA and Ramsar site as a result of habitat loss or damage (onsite).

Physical damage/disturbance to species/habitat loss (offsite)

- 5.164 The Local Plan (taking into account Main Modifications) allocates a number of sites for employment and housing development, in areas where qualifying SPA and Ramsar bird species may make use of offsite habitat for foraging, roosting and loafing. Therefore, Policies 4: Employment Allocations and 11: Housing Allocations were identified during the screening stage as likely to have significant effects on the SPA and Ramsar site as a result of offsite habitat loss.
- 5.165 In response to comments provided by Natural England during the consultation on the Draft Local Plan and accompanying HRA Reports, a detailed desk-based study was undertaken to identify potential impacts from proposed employment and housing allocations on offsite habitat used by the qualifying bird species of the Humber Estuary SPA and Ramsar site. Much of North East Lincolnshire, particularly areas in proximity to the Humber SPA/Ramsar have been subject to extensive bird surveys, and therefore the desk-based study involved obtaining and mapping the distribution of relevant bird records from the following sources:
 - Greater Lincolnshire Nature Partnership.
 - British Trust for Ornithology (WeBS and Atlas data).
 - North and East Yorkshire Ecological Data Centre.
 - Humber Nature Partnership.
 - Lincolnshire Ecological Record Centre.
- 5.166 In addition to mapping the number and distribution of relevant bird species, the desk study also included the following components to inform the assessment:
 - Consultation with RSPB to understand local habitat preferences of relevant bird species.
 - Identification of the bird species which are susceptible to the loss of the habitat types affected, and ruling out those species unlikely to utilise the habitat types located within the site allocations (e.g. species restricted to marine habitats).
 - Consultation with the Ecology Officer at North East Lincolnshire Council, to discuss locations of known importance for SPA birds.
 - A review of aerial imagery and Magic Map Application to identify main habitat types within each site allocation and establish their potential value for SPA birds.
 - Recognition of factors likely to affect suitability of allocations for bird species, including openness, size, shape, proximity of negative factors such as tall boundary features and urban environs, and potential sources of disturbance.
 - A review of the sites location within flood risk zones, because many of the SPA bird species favour sites which flood.

Bird Habitat Preferences

5.167 Bird records and habitat preferences were cross referenced against the habitat types present within each allocation (taking into account any the factors listed above) to determine the suitability of offsite parcels for SPA and Ramsar. Known habitat preferences are summarised in **Table 5.10** below and were taken from *Birds of the Western Palearctic*, British Trust for Ornithology, and further refined in light of local preferences via consultation with RSPB

Conservation Officer for Yorkshire, Humber & Peak District, Richard Barnard, and through previous consultation responses such as information provided by Lincolnshire Wildlife Trust. **Table 5.10** also assesses whether each bird species is susceptible to the loss of habitats located within the site allocations.

Bird species	Season	Species habitat preferences (relative to season of designation) ⁵⁰	Susceptible to loss of offsite habitat as a result of Local Plan allocations
Avocet	Wintering and Breeding	Highly specialised needs most often met in lowland maritime regions. A taste for extensive highly saline tracts of still shallow water and flat bare sand, clay, or mud forming islands, ridges, spits, or margins. Also favours smaller and less saline pools, lagoons, muddy arms or deltas, and estuaries, and sheltered muddy tidal flats where ample loose sediment is rich in food organisms. Suitable habitat sometimes formed by artefacts such as saltpans, irrigation waters, polders, floodlands, and even purpose-made scrapes and flashes of water on nature reserves.	No – habitat types affected are of low importance for this species.
Bittern	Wintering and Breeding	Closely restricted to lowland swamps and densely vegetated wetlands with extensive shallow standing water, not unduly fluctuating in level. Favours tracts or fringes overgrown with tall emergent vegetation, especially reed, giving dense cover close to sheltered open waters.	No – habitat types affected are of low importance for this species.
Hen Harrier	Wintering	In winter, often on arable farmland or rough pastures, or on heathland, coastal sand-dunes, and marshy areas. Habitat selection largely governed by availability of preferred prey species which can be seized in the open; otherwise, not discriminating but choosing spacious, relatively undisturbed landscapes rather than areas in intensive human use.	Yes – may utilise arable and pasture in areas away from existing human settlements.
Golden Plover	Wintering	On migration and in winter, attracted to mown grass or close-grazed pastures, and to stubbles, fallows, harvest fields, and other farmlands of open character, including floodlands. On coast, tends to neglect tidal flats of mud and sand and to prefer open ground above the foreshore thus sharing more commonly with Lapwings than with other waders.	Yes – may utilise arable and pasture within site allocations.
Bar-tailed godwit	Wintering	Outside breeding season almost entirely coastal showing pronounced preference for sheltered bays or inlets such as estuaries, or shores of islands or islets free from rock, gravel, or shingle and providing plenty of tidal movement over fine sand or mud.	No – habitat types affected are of low importance for this species.
Ruff	Passage	Outside breeding season, the need for proximity between feeding, resting, and roosting places is reduced, with local movements of up to c.20km from one another sometimes being undertaken. Although dry grasslands, harvested cornfields, airfields, and dried beds of seasonal water bodies may still be used, preference is much stronger for muddy margins of lakes, pools, ponds, rivers and other watercourses, irrigated levels, floodlands, and marshes; less frequently seashores and tidal mudflats.	Yes – may utilise arable and pasture within site allocations.

Table 5.10: Typical habitat preferences for SPA and Ramsar birds

⁵⁰ The Birds of the Western Palearctic (Abridged), Concise Edition, (1998), Oxford University Press

Bird species	Season	Species habitat preferences (relative to season of designation) ⁵⁰	Susceptible to loss of offsite habitat as a result of Local Plan allocations
Marsh harrier	Breeding	Strongly prefers shallow, standing, fresh, or brackish waters fringed and extensively invaded by tall standing reeds, reedmace, and other dense emergent aquatic growth, without many or widespread trees. Also favours corresponding habitats along margins or lakes and slow flowing rivers. Or resulting from artificial flooding, or with little or no open water. Normally needs unbroken area of aquatic vegetation exceeding c.100ha where food is plentiful. Also occurs on shallow excavations, irrigated fields, rushy grassland, fens and peat bogs, and especially in non-breeding season, grassy plains or ploughland. Farmland (including fallows, meadows) adjoining regular territories used for hunting, especially where reedbeds limited or occupied at high density.	Yes – may utilise arable and pasture in areas away from existing human settlements.
Little tern	Breeding	Frequently coast dwelling, more along mainland than on islands, but spreads freely up suitable reaches of major rivers and to some lakes where suitable conditions occur. Strongly prefers linear strips of bare shingle, shell beach, or sand, only just above normal tide or flood limits, and often only a few metres from shallow clear water, saline or fresh, where fish of suitable size can be caught by plunging, without necessity for extended foraging flights.	No – habitat types affected are of low importance for this species.
Shelduck	Wintering	Choice of wetland, especially for breeding, governed by attachment to salt of brackish water, either shallow coasts and estuaries or inland seas and lakes. As a coastal species, typically ranges only 1-2km out to sea and little further inland. Wholly freshwater habitats distant from sea used only sporadically and by odd pairs or single birds. Needs foraging areas of fairly high productivity, especially sands and mud flats over which shallow water alternates with drying out through tides or evaporation.	No – habitat types affected are of low importance for this species.
Redshank	Passage, Wintering	Outside breeding season predominately coastal, feeding mainly on unvegetated tracts of mud on estuaries, marine inlets, and sheltered bays, tending to avoid cliffed and rocky or shingly sectors, and beaches of pure sand. When remaining inland, concentrates at points of ample food resources, such as sewage farms and watersides. As much a wading as a ground bird; swims not infrequently.	No – habitat types affected are of low importance for this species.
Knot	Wintering	Marine intertidal habitat used during rest of year, normally where large flat muddy, sandy, and pebbly beaches uncovered. At high water, often resists being driven back to vegetated zone behind foreshore, and so forced to pack densely at certain spots.	No – habitat types affected are of low importance for this species.
Dunlin	Passage, Wintering	Increasingly, towards south of range, favours lowland and grassland coastal habitat, especially in late summer, including salt-marshes, rough grazing land, sand dunes or sandy machair with moist depressions and river flood plains. Presence of surface water, and of unvegetated patches or short grass, moss, or other low herbage essential. Outside breeding season, strongly attracted to broad coastal beaches, especially	Yes – may utilise pasture where regular flooding occurs.

Bird species	Season	Species habitat preferences (relative to season of designation) ⁵⁰	Susceptible to loss of offsite habitat as a result of Local Plan allocations
		mudflats rich in invertebrate food accessible as tide ebbs, but also occurs regularly on lagoons, estuaries, tidal rivers, and margins of lakes and other freshwater bodies as well as sewage farms.	
Black-tailed godwit	Passage	During breeding, typically favours marshy hummocky moorland but changes in land management have created new habitat and poorly drained pastures, damp heaths free of scrub, or border of reedy wetland are of primary importance. But other grasslands managed as meadows, especially when grazed and hay-cut and flooded in winter are also used. Outside the breeding season, favoured habitats include sewage farms, lake margins, tidal marshes, mudflats and sheltered coastal inlets.	Yes – despite a preference for coastal habitat outside the breeding period this species may use flooded pasture and other grasslands for feeding.
Assemblage of	20,000 birds i	n any season in addition to those listed above	
Dark-bellied brent goose	Non- breeding	On leaving breeding quarters, resorts to shallow sea coasts and estuaries, especially with extensive mudflats rich in sea grass. Strongly attached to intertidal feeding zones, but in Britain since 1970's increasing numbers have moved inland to feed on grass and cultivated crops. When not feeding, prefers to rest or sleep on sea surface.	Yes - this species may use pasture and arable fields.
Wigeon	Non- breeding	Winter habitat lowland and largely maritime, especially along coasts where shallow, fairly sheltered waters and extensive tracts of mud, sand, or salt marsh offer sustenance and security for gatherings. Freshwater and brackish lagoons and tracts of flooded grassland also attractive, and may be used in preference to coastal waters.	Yes- may use flooded pasture.
Teal	Non- breeding	On passage or in winter will frequent open habitats such as shallow tidal coasts, large estuaries, salt- marshes, and lagoons, brackish or saline, flooded fields, and artificial waters such as reservoirs devoid of vegetation.	Yes – may use flooded fields.
Mallard	Non- breeding	Adaptability to an extremely wide range of habitat is an outstanding characteristic of species. Essentially still and shallow water bird, requiring water less than 1m in depth for feeding. No duck more tolerant of disturbance, or more ready to exploit artificial supplies of food.	Yes – may use flooded fields.
Pochard	Non- breeding	Predominantly a bottom feeding diver, normally at depths of 1-2.5m, requiring several hectares of open water uncluttered with floating vegetation but prolific in submerged plan and animal food. Although at all seasons strongly preferring fresh water, will shift to coastal and inshore maritime habitats when driven by compelling factors.	No – habitat types affected are of low importance for this species.
Scaup	Non- breeding	Most marine species of Genus. Congregations out of breeding season where large food resources, such as mussel beds or waste grain from sewage outfalls, occur. Such areas may be tidal, and exposed to rough seas, or otherwise inland or partly landlocked seas, including those of low salinity.	No – habitat types affected are of low importance for this species.
Goldeneye	Non- breeding	In winter, more opportunistic than most relatives, resorting indiscriminately to fresh and salt water with,	No – habitat types affected are of low

Bird species	Season	Species habitat preferences (relative to season of designation) ⁵⁰	Susceptible to loss of offsite habitat as a result of Local Plan allocations
		however, some apparent bias towards estuaries and marine bays, sheltered shallow coasts, and sewage outfalls.	importance for this species.
Oystercatcher	Non- breeding	Governed by varying reliance upon successful adaptation to feeding on hard-shelled marine molluscs in intertidal shore zones, and more generalised capacity for feeding on softer-bodied invertebrates, terrestrial as well as marine. Locally, also, need to suitable secure roosts at high tide and acceptable nest sites with easily accessible feeding areas can be limiting factors. Consequently primarily tied to shorelines which can be fed on at low tide, and secondarily to lakesides, riversides, and a wide variety of terrestrial open ground where less specialized feeding techniques can be employed.	No – This species may utilise a range of terrestrial habitats but is primarily reliant on marine habitats and the importance of habitats within the site allocations is low.
Ringed plover	Non- breeding	A bird of sea coasts. Secondarily occupies adjoining hinterlands up to substantial distance inland, where estuaries, rivers, lakes, tundra, gravel beds, sand bars, grasslands of spare and low growth, or other suitable well-drained terrain exists. Whether breeding, migrating or wintering, teds to be most numerous and concentrated on wide sandy or shingle tidal beaches, with access to suitable resting or nesting places above high-water mark.	No – habitat types affected are of low importance for this species.
Grey plover	Non- breeding	After breeding, some use of inland staging points, often by lakes on sand bars, mudflats, pools, and moist places, including short grassy fields and floodlands. Most, however, make straight for the sea coast where in contrast to golden plover, they concentrate mainly in the intertidal zone, on broad mudflats or sandy beaches, and to lesser extent on saltings, islets subject to occasional submergence, and neighbouring freshwater pools.	No – This species may utilise a range of terrestrial habitats but is primarily a marine feeding bird and the importance of habitats within the site allocations is low.
Lapwing	Non- breeding	Requires ready access to soil carrying appreciable biomass of surface or subsurface organisms, not arid and preferably moist or near saturation. Invariably chooses unenclosed terrain affording unbroken all- round views. Throughout historical times, natural habitat has been encroached with suitable substitutes created through farming, with a shift from natural to agricultural land.	Yes - this species is heavily reliant on grasslands, particularly those where flooding occurs, and will also utilise arable fields.
Sanderling	Non- breeding	After breeding season, much attached to tidal sandy beaches on which it can feed. Ocean beaches with firm clean sand and strong breakers hold special attraction. Much less frequently on mudflats and estuaries and usually makes only occasional and bried visits to inland waters.	No – habitat types affected are of low importance for this species.
Whimbrel	Non- breeding	This species will utilise a wide variety of habitats include rocky as well as muddy and sandy beaches; many pass overland, using relatively few staging areas. In winter quarters, mainly frequents sea- shores and coastal inlets, sandy or muddy. Consultation responses from RSPB have highlighted that this species is known to regularly utilise coastal grasslands and arable fields within North East Lincs.	Yes - this species is heavily reliant on grasslands, particularly those where flooding occurs. Will also utilise arable fields.

Bird species	Season	Species habitat preferences (relative to season of designation) ⁵⁰	Susceptible to loss of offsite habitat as a result of Local Plan allocations
Curlew	Non- breeding	After breeding season, shifts mainly to marine coastal habitat, especially mudflats and sands extensively exposed at low tide, resting on adjoin saltmarshes, foreshores, and floodlands. Rocky beaches with many pools, muddy estuaries and comparable habitats beside large inland waters, including riverside and swamp edges are also favoured. This species is known to regularly utilise coastal grasslands and arable fields within North East Lincs in large numbers.	Yes - this species is heavily reliant on grasslands, particularly those where flooding occurs. Will also utilise arable fields.
Greenshank	Non- breeding	On leaving breeding grounds, continental birds, especially, pause at inland flooded meadows, dried up lakes, sandy bars, and marshes on the way to winter resorts. These are varied including seashores which are not too rocky or dominated by cliffs, salt marshes, pools on tidal reefs, estuaries and muddy or sandy tidal inlets, lagoons, inland rivers, lakes, reservoirs, pools, ponds, sewage farms, sand banks, and mudspits.	Yes – this species will utilise a wide range of habitat types outside the breeding season including wet grasslands.
Turnstone	Non- breeding	Outside breeding season almost entirely coastal, preferring shores which are stony, rocky, or covered with seaweed, and similar artefacts such as sea walls and breakwaters, harbours, and jetties.	No – habitat types affected are of low importance for this species.

5.168 The review of habitat types located within the site allocations, in light of individual bird species preferences, identified the following species as being susceptible to the loss of offsite habitat:

- Hen harrier.
- Golden Plover.
- Ruff.
- Marsh harrier.
- Dunlin.
- Black-tailed godwit.
- Dark bellied brent goose.
- Widgeon.
- Teal.
- Mallard.
- Lapwing.
- Whimbrel.
- Curlew.
- Greenshank.
- 5.169 Existing records of the above bird species are shown in **Figure 5.7**.

Assessment of Site Allocations

5.170 Following the establishment of typical habitat preferences for each species, and in light of existing bird records, each allocation site in the Local Plan (taking account of Main Modifications) was assessed for its suitability in supporting SPA birds. The assessment was based on a number of parameters, as described in **Table 5.11** below. Typically, site allocations displayed varying combinations of the parameters outlined below, and were therefore subject to professional judgement and interpretation.

Table 5.11: Habitat suitability rating criteria

Suitability for SPA birds	Typical Description
High	Large sites; area of suitable habitat (e.g. wet grasslands, pasture, arable), present capable of supporting significant numbers of SPA birds; records of significant numbers of SPA birds on site or close by; absence of any notable negative factors; land parcel functionally linked with wider habitat; site prone to flooding; closer to estuary.
Moderate	Sites support large areas of functionally linked suitable habitat capable of attracting significant numbers of SPA birds; no records of significant numbers of SPA birds on site or close by; likely to be further from estuary and/or some limiting factors present.
Low	Smaller or fragmented sites; no significant records of SPA birds within or close to site; habitats present may be suitable but limited by negative factors such as distance from SPA; absence of sight lines and reductions in 'openness' as a result of features such as trees, scrub, and buildings; suitability may be compromised by recreational use; may be isolated within urban areas; not prone to flooding.
Negligible	Habitats present are entirely unsuitable for SPA birds, for example existing developed land or small urban infill sites

Employment site allocations

- 5.171 The majority of employment site allocations within the Local Plan are located within the South Humber Gateway mitigation zone. This area has been demonstrated, through extensive survey, to be of significant importance for populations of SPA/Ramsar bird species for roosting, feeding and loafing. In the absence of suitable mitigation, the loss of habitat in this area would be likely to adversely affect the integrity of the Humber Estuary SPA/Ramsar.
- 5.172 In order to address the potential impacts of development in the South Humber Estuary area on the SPA/Ramsar, in relation to offsite habitat loss, North East Lincolnshire Council has undertaken a significant amount of work along with other organisations in the South Humber Ecology Group (including Natural England, the RSPB and landowners in the South Humber employment area). The group has been integral in the co-ordinated preparation of the South Humber Gateway Mitigation Strategy, which is based upon extensive and targeted bird survey findings which have allowed key habitat parcels to be identified, safeguarded and managed to ensure potential impacts on the qualifying bird species of the SPA and Ramsar site associated with employment development in this area can be successfully mitigated. This work has fed into the preparation of the Local Plan, in particular the development of Policy 6: Habitat Mitigation -South Humber Bank. That policy states that a number of identified mitigation sites will be implemented and managed over the long-term, to provide alternative offsite habitat for the qualifying bird species of the SPA and Ramsar site. Developer contributions from proposals within the identified Mitigation Zone will be required to deliver and manage this land.
- 5.173 In light of this, providing the South Humber Gateway Mitigation Strategy is successfully implemented, it will mitigate the loss of employment allocations specified in the strategy, and will ensure that the loss of such habitat will not adversely affect the Humber Estuary SPA/Ramsar. However, the strategy will not mitigate for the loss of habitat which has not been included within the strategy and/or those located outside the mitigation zone. As a result, those employment allocations not included within the mitigation strategy have been subjected to further assessment on a site-by-site basis in line with the approach specified above (see **Table 5.12** below) to determine their likely importance for SPA birds.

Table 5.12: Assessment of suitability of employment allocations located outside theSouth Humber Mitigation Strategy for SPA birds

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
ELR010	 No significant records of SPA birds within or close to the site. Bird records include maximum counts of 30 teal and 39 mallard within tetrad and maximum count of 9 curlew within tetrad to the east. Allocation is entirely enclosed by housing and industrial land uses, which reduce its openness and restrict the sight lines preferred by SPA bird species The site is relatively small (c.4ha) and 'L-shaped' resulting in a maximum distance of c.60m from the centre of the site to the edge at the furthest point. The allocation is comprised of rough grassland with frequent scattered scrub which is likely to reduce its appeal to waders and wildfowl due to the increased risk of predation and proximity to edge features such as buildings and trees. The site is open to informal public access and aerial imagery indicates the presence of informal access routes within the site, in addition to a footpath running along its southern edge which may increase the likelihood of recreational disturbance events at the site. The site is located outside the flood zone. The site does support suitable foraging habitat for harrier species but given its enclosure within existing developed land and proximity to human disturbance factors, it's suitability for harrier species is low. 	Low
ELR016a	 suitability for harrier species is low. Maximum counts of 17 curlew, 9 widgeon and 1,650 black tailed godwit, 135 lapwing, and 11 dunlin within the wider grid tetrads within which part of the site falls. The site is large (c.97ha) and open. The entire site is located within the extreme flood risk zone. Habitats within the site comprise arable fields The site is relatively close to the Humber SPA (2km) and is well connected to other areas of suitable habitat in the wider landscape. 	High
ELR016b	 Maximum counts of 17 curlew, 1,650 black tailed godwit, 135 lapwing, within the wider grid tetrad within which the site falls. The site is c.7ha but forms a component of a wider extensive network of open fields and is adjacent to allocation ELR016b. The entire site is located within the extreme flood risk zone. Habitats within the site comprise arable fields The site is relatively close to the Humber SPA (2km) and is well connected to other areas of suitable habitat in the wider landscape. 	High
ELR036	- Existing developed site located within an urban area	Negligible
ELR037	 No significant bird records within or adjacent to the site but significant numbers of SPA birds have been recorded within the wider Immingham area to the south and east, particularly golden plover, black tailed godwit and curlew. Bordered by residential development along the northern edge, commercial development and A1173 along eastern edge, and scrub and tree line along western edge. Open arable fields to south. Relatively small (c.1ha). Dominated by rough grassland with scattered scrub which is likely to reduce its appeal to waders and wildfowl due to the 	Low

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
	 increased risk of predation. Proximity to negative edge habitats (e.g. trees and buildings) is c.50m at furthest point. Located outside flood risk zones 	

- 5.174 The assessment of employment allocations has indicated that the following sites have high potential to be of importance for SPA birds:
 - ELR016a.
 - ELR016b.
- 5.175 Employment allocations ELR016a and ELR016b are located immediately to the south of the South Humber Bank Mitigation Zone. The area has been subjected to extensive survey effort and therefore a wealth of data exists regarding the distribution and relative importance of specific locations for SPA birds in this area. A review of the available data concludes that, despite numerous bird records from within and adjacent to these allocations, numbers of SPA birds considered significant at the Humber Estuary population level (i.e. at least 1% of the Humber population) have not been recorded. Relevant species recorded within the site include maximum counts of 39 lapwing, 7 curlew and 38 golden plover. These maximum counts are low compared with other areas of the South Humber with peak counts of >6,000 lapwing, >10,000 golden plover and 477 curlew recorded nearby.
- 5.176 A maximum count of 1,620 black-tailed godwit was recorded within the wider tetrad which incorporates the western part of the site. The resolution of this record does not provide a precise location and no records of this species have been confirmed within the allocations ELR016a and ELR016b. This data suggests that these employment sites are unlikely to represent an important resource for SPA birds at the Humber Estuary SPA/Ramsar population scale. Nevertheless, SPA birds have been recorded utilising these allocations, and given the high suitability of the sites a commitment to providing safeguards and mitigation in respect of these allocations will be required to enable a sufficient level of certainty to conclude that the integrity of the Humber SPA/Ramsar will not be adversely affected. Mitigation requirements are discussed in more detail below.
- 5.177 The remaining employment site allocations included within the South Humber Mitigation Strategy were considered to have low or negligible potential to support the SPA/Ramsar qualifying bird species and associated loss of habitat is not expected to adversely affect the SPA/Ramsar.

Housing Allocations

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
HOU001	 Small infill development in urban setting and presence of scrub and edge effects 	Negligible
HOU002	 Relatively small (c.5ha) with adjacent development to east and south boundary and woodland/scrub to north. Western part of site in flood zone. No relevant bird records in or adjacent to site. 	Low
HOU006	 Large site (c.22ha) comprising predominantly arable with small pasture enclosures along northern edge adjacent to housing. Approximately 40% of the site is located in the flood zone. No records of SPA birds within site but 	Moderate

Table 5.13: Suitability of housing allocations for SPA birds

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
HOU105	 significant numbers of black-tailed godwit within tetrad, and relevant records of curlew, lapwing, teal and widgeon also within tetrad. A large area of arable farmland to the southwest of New Waltham. No significant records of SPA birds in the vicinity and located relatively far from SPA (>5km) and outside flood risk zone, but given openness and connectivity with wider landscape to the west this land parcel may provide suitable habitat. 	Moderate
HOU119	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU074C	 A small corner of a larger arable field adjacent to road junction. The proximity of edge features and small size is likely to significantly reduce the suitability of this site for SPA birds. 	Low
HOU075A	 Arable field adjacent to existing housing development on two sides. Relatively far from SPA (>6.8km) Limited number of mallard recorded in the area, but there no waterbodies within the site and the site is not at high risk of flooding, therefore it is likely that there is much more suitable habitat for mallard in the area than at this site. No other records within proximity of the site. 	Low
HOU124	 No significant records of SPA birds within or close to the site. Allocation is entirely enclosed by housing and industrial land uses, which reduce its openness and restrict the sight lines preferred by SPA bird species The site is relatively small (c.4ha) and 'L-shaped' resulting in a maximum distance of c.60m from the centre of the site to the edge at the furthest point. The allocation is comprised of rough grassland with frequent scattered scrub which is likely to reduce its appeal to waders and wildfowl due to the increased risk of predation and proximity to edge features such as buildings and trees. The site is open to informal public access and aerial imagery indicates the presence of informal access routes within the site, in addition to a footpath running along its southern edge which may increase the likelihood of recreational disturbance events at the site. The site is located outside the flood zone. The site does support suitable foraging habitat for harrier species but given its enclosure within existing developed land and proximity to human disturbance factors, it's suitability for harrier species is low. 	Low
HOU233	- Small site comprising abundant scrub and woodland	Negligible
HOU037	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU134	 Area of grazed pasture c.5ha adjacent to existing housing on two sides (south and west) and the A180 to north. Records of 290 lapwing relatively close to site and given 	Moderate

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
	quality of habitat and relative openness to east, considered of potential moderate importance for SPA species.	
HOU249A	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU301	 Small infill development comprising scrub habitats unsuitable for SPA birds 	Negligible
HOU294	 Small infill development comprising scrub habitats unsuitable for SPA birds 	Negligible
HOU110	 Arable field bordering housing on the south edge of Waltham. The relatively small size and L-shape of the land parcel mean edge features including housing, trees and hedge lines are within c.50m of the centre of the site at the furthest point, which is likely to significantly reduce suitability for SPA species due to edge effects and a lack of openess. 	Low
HOU112	- A series of four small fields. The two northern fields comprise rough grassland with encroaching scrub which is largely unsuitable for SPA bird species accept harriers. The two southern fields support mown grasslands which may provide suitable habitat for certain SPA birds. However, the presence of housing along the eastern, southern and western edge is likely to significantly reduce the suitability of this site for SPA birds, and when the distance of 7km from the SPA, and absence of relevant records is considered, the site is deemed of low suitability for SPA birds.	Low
HOU129	 Arable field bordering allocation HOU110 on the south edge of Waltham. Large in size and square shape result in habitat of increased suitability but distance of c.7km from SPA is likely to reduce suitability for supporting SPA birds. 	Low
HOU111	 A complex of five fields including two arable and three grazing pastures on the southwest edge of Waltham. Despite the suitability of the habitat types for several SPA bird species, the suitability of the site is lowered by the presence of interspersing treelines and woodlands, and housing along the northern edge (80m at furthest point) and a distance of 7.7km from the SPA. 	Low
HOU292	 An arable field on the western edge of Waltham. The arable provides suitable foraging habitat for SPA birds but the suitability of the site is significantly reduced by the adjacent housing along the eastern and southern and its narrow layout which ensures the site is within 60m or less of peripheral edge features, and distance of >7km from SPA. 	Low
HOU131	- Comprises rough grassland, but small site and proximity of	Low

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
	peripheral features including housing along southern edge and tree lines and hedges around remainder of site significantly reduce suitability for SPA birds	
HOU150	 Areas of mown amenity grassland in hospital complex. Surrounded by urban development and subjected to disturbance factors. 	Negligible
HOU059	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU018	 Site supports rough grassland and disturbed ground which provides suitable foraging habitat for harrier species, but small size, and proximity to existing development, construction site and school playing fields is likely to significantly lower suitability for these species. 	Low
HOU302	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU303	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU047	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU144	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU151	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU231	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU232	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU017	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU044	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU034C	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU042	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU295	 Small site comprising scrub and woodland enclosed in urban area, unsuitable for SPA birds. 	Negligible
HOU082	 Small site comprising grassland and scrub with public access enclosed by residential development, unsuitable for SPA birds. 	Negligible
HOU084A	 A relatively large area of pasture located 1.2km to the west of the Humber SPA. Large flocks of golden plover and lapwing have been recorded along this part of the coastline, particularly in the vicinity of the nearby Tetney Marshes and the pasture provides suitable foraging habitat for these species. A maximum of 150 brent geese have also been recorded in fields to the south. The site is 	Moderate

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
	adjacent to housing along the north and west.	
HOU097	 Small site comprising grassland adjacent to residential development. Woodland and tree lines enclosing site and close to centre which is likely to significantly reduce suitability for SPA birds. 	Low
HOU074A	- An area of rough grassland on the southern edge of Grimsby and western outskirts of Cleethorpes. Aerial imagery indicates that the site is open to public access and supports a network of informal paths. Given the urban setting and likely frequency of dog walking at the site, it is unlikely that the site provides suitability for SPA bird species. In addition, the site is narrow in shape and enclosed by nearby trees, woodlands and housing, and appears to support scattered scrub encroachment. Each of which is likely to significantly reduce the openness preferred by SPA bird species and increase predation risk and disturbance events. As a result, the site is considered to be of low suitability for SPA species.	Low
HOU074B	 A series of several large arable fields 2km to the west of the SPA on the western edge of Grimsby, providing an expansive open area of potentially suitable habitat for SPA bird species including waders and wildfowl. No significant bird records have been identified for this site but records of up to 30 teal and 39 mallard have been recorded within the wider tetrad. 	Moderate
HOU139	 Golf course comprising narrow fairways enclosed by scrub and woodland. Whilst the managed grasslands may provide suitable foraging habitat for some SPA bird species, the proximity of edge habitats is likely to significantly reduce suitability 	Low
HOU146	 The site is located 4km to the west of the SPA and comprises large arable fields to the southeast of New Waltham. The site is located outside of a flood risk area and no significant records of SPA birds were identified in the area. The site is located adjacent to housing along its north edge but given its relatively large size it provides sufficient openness to be suitable for SPA birds. As a result, the habitats present may provide suitable opportunities for SPA species. 	Moderate
HOU296	 Comprises two adjoin triangles of arable farmland adjacent to the eastern edge of Scartho. Whilst the arable provides suitable habitat types for foraging SPA birds, its suitability is likely to be significantly lowered by the shape of the allocation which means that adverse edge features in the 	Low

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
	form of housing or woodland enclose the majority of the site. In addition, the shape results in edge features being as close as 60m to the centre of fields. When coupled with the absence of significant records and the distance of 4.5km from the SPA, the site is considered of low suitability.	
HOU095A	 A triangular area of arable land adjoined by housing along two edges. This results in the proximity of adverse edge factors likely to significantly reduce the suitability for SPA birds 	Low
HOU095B	 Small area of grassland adjacent to housing. Enclosed by tree lines and hedgerows and given proximity of edge features is of low suitability for SPA birds/ 	Low
HOU104	 A relatively large arable field along the southern edge of New Waltham. Negative factors include distance from SPA and edge effects associated with housing along north and east edge and road along west edge. Nevertheless, the site is open and well connected to the south and may therefore provide foraging habitat for certain SPA waders and wildfowl, particularly lapwing who display less attachment to the estuary. 	Moderate
HOU308	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU034B	- Developed site in urban setting	Negligible
HOU316	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU010B	 Arable field with section of rough grassland in east. Bordered by residential development to east and west. Good functional connectivity to open farmland to the north and adjacent to old fleet drain along the northern edge. Located c.3.5km from the SPA. Outside the flood risk zone. A single record of hen harrier <1km of site. Single records of lapwing, golden plover, curlew, black tailed godwit and dunlin in fields to the northwest and south of the site. Given size, absence of significant records and proximity of housing along much of border, unlikely to be of high importance but suitable habitat, openness to north and connectivity to wider fields, and presence of target species in close proximity indicate that this field may be used by SPA birds to some extent. 	Moderate
HOU068A	 Mown grasslands (meadow), on north edge of Laceby. Proximity of residential and roads sever this land parcel from suitable habitat in the wider landscape and given its small size and likely edge effects associated with proximity to, and open access from nearby housing, considered of low suitability. 	Low

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Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
HOU034A	- Lake with a fringe of reed bed and/or similar emergent aquatic vegetation. Its relatively small size and isolated location within a heavily urbanised environment is likely to reduce its suitability for supporting typical reedbed species such as bittern, hen harrier and marsh harrier, and the proximity of edges is likely to reduce its appeal to other wetland bird species, but given its proximity to the adjacent SPA and clear flight lines, it may have potential to support SPA species, particularly ducks.	Moderate
HOU342	- Extensive area of arable farmland which includes part of the River Freshney in the southern part of site and associated wet grassland and pools along the riparian corridor. High degree of openness, lack of existing disturbance and functionally connect with wider area of suitable habitat in landscape. The wildlife trust in their consultation response, have indicated the presence of SPA birds at this site and data search identified records of lapwing, greenshank and redshank in low numbers.	Moderate
HOU288	- Site comprises the corner of a much larger arable field on the edge of Waltham. No records of flooding or relevant SPA bird records. Whilst the wider field to the northeast provides suitable habitat for certain SPA bird species, the allocation is located within a corner of the field and is therefore enclosed along 2 of 3 edges by housing and roads which is likely to reduce the openness and lower the suitability of the allocation.	Low
HOU353	 Playing fields which provide short mown grassland suitable for some foraging SPA species, but urban surroundings, regular use and management, and proximity of buildings and trees is likely to significantly reduce suitability. 	Low
HOU141A	 School playing fields which provide short mown grassland suitable for some foraging SPA species, but urban surroundings, regular use and management, and proximity of buildings and trees is likely to significantly reduce suitability. 	Low
HOU355	 Comprises mown amenity grassland entirely surrounded by urban development 	Negligible
HOU056B	- Small urban infill site, unsuitable for SPA birds	Negligible
HOU140A	- Small urban infill site, unsuitable for SPA birds	Negligible
HOU354	- Small urban infill site, unsuitable for SPA birds.	Negligible
HOU128	 School playing fields managed as amenity grassland. Surrounded by urban development and negative 'edge' factors. 	Low

Site Allocation	Review of site parameters	Assessment of suitability for SPA Birds
HOU118	- Existing developed site unsuitable for SPA birds.	Negligible
Development (Company Sites	
HOU128	 School and playing fields. Suitability is greatly reduced by proximity of surrounding urban development. 	Negligible
HOU354	- Small site surrounded by extensive urban development	Negligible
HOU141a	- Small site enclosed by urban environment	Negligible
HOU353	- Small site enclosed by urban environment	Negligible
HOU056b	- Small site enclosed by urban environment	Negligible

- 5.178 The desk-based study, as shown in **Table 5.13** above, identified the following site allocations with moderate potential to support the SPA/Ramsar qualifying bird species:
 - HOU006.
 - HOU010B.
 - HOU034A.
 - HOU074B.
 - HOU084A.
 - HOU104.
 - HOU105.
 - HOU134.
 - HOU146.
 - HOU147.
 - HOU342.
- 5.179 The remaining housing site allocations not listed above were considered to have low or negligible potential to support the SPA/Ramsar qualifying bird species.
- 5.180 The likelihood of adverse effects occurring on each of the relevant SPA qualifying species is considered below in light of their habitat preferences and the suitability of site allocations. Existing bird records for the species discussed below are shown in **Figure 5.7**.

Golden plover

- 5.181 At the Humber Estuary level, golden plover numbers and distribution indicate a preference for the middle and outer estuary along the north shore, although significant numbers of birds are regularly recorded along the coast of North East Lincolnshire with key areas including the shoreline and nearby fields in the South Humber Gateway area. Significant numbers have also been recorded in the southeast of the Borough in the vicinity of Tetney Marshes. With the exception of the employment allocations within the South Humber Gateway Mitigation Zone, no significant numbers of golden plover have been recorded within or close to the site allocations.
- 5.182 The species records, together with assessment of allocation characteristics, including size, shape, quality of habitat, flood risk, location, distance from SPA, and influence of limiting factors such as urban edges, indicates that no single allocation alone is important in maintaining the integrity of the Humber Estuary golden plover population. Whilst many of the sites provide suitable offsite

foraging habitat in the form of arable fields and short grazed pasture, in isolation the importance of such sites for golden plover is likely to be low when compared with the extensive areas of habitat of increased suitability both within North East Lincolnshire and the wider Humber Estuary, particularly given the influence of factors which limit their suitability. As a result, the potential for the loss of offsite habitat to adversely affect this species relates primarily to the cumulative effect of reducing the extent of feeding areas. The likelihood of this occurring is considered low given the small amount of habitat affected as a proportion of that available around the Humber Estuary.

5.183 Nevertheless, despite the above, uncertainty remains under the precautionary principle as to whether the combined loss of sites would adversely affect integrity of the Humber in relation to this species. Given that significant numbers of this species occur along the North East Lincolnshire coastline, and the dependency of the species on offsite arable fields and grasslands, implementation of appropriate safeguards and mitigation is be required for sites assessed as having moderate or high suitability to enable a conclusion of no significant adverse effect on the Humber Estuary SPA/Ramsar. Mitigation requirements are provided below.

Black-tailed godwit

- 5.184 The distribution of this species at the estuary scale shows a preference for both the north and south shorelines of the middle estuary, including the section which extends northwest from Grimsby, with large numbers recorded at Immingham Dock in the north of the Borough. The distribution of high numbers of birds relates closely with the South Humber Bank mitigation zone.
- 5.185 A maximum count of 1,620 black-tailed godwit was recorded within the tetrad which incorporates the western part of the employment sites ELR016a and ELR016b, located outside of the mitigation zone. The precise location of this record within the tetrad was not available but given the amount of bird survey undertaken in this area, which has recorded species such as golden plover within these allocations, the absence of any records of this species indicates that this site is of low importance for this species. In addition to the above employment allocations, housing allocation HOU006 was identified as being of moderate suitability for this species based on the type, extent and location of the habitats present. The suitability of this housing allocation is compromised by its distance from the SPA (>3km), the small component fields which it comprises, and the proximity of urban edges along the north and east boundary.
- 5.186 With the exception of the sites located within the South Humber Bank mitigation zone, the site allocations are considered unlikely to be of importance in maintaining the integrity of the Humber Estuary population for this species due to limiting factors, and/or the absence of records despite being located within or close to areas where extensive survey has been completed. However, **uncertainty remains under the precautionary principle as to whether the combined loss** of sites would adversely affect integrity of the Humber in relation to this species. Given that significant numbers of this species occur along the North East Lincolnshire coastline, and the dependency of the species on offsite arable fields and grasslands, implementation of appropriate safeguards and mitigation will be required for sites assessed as having moderate or high suitability to enable a conclusion of no significant adverse effect on the Humber Estuary SPA/Ramsar. Mitigation requirements are provided below.

Lapwing

- 5.187 The distribution of Lapwing is relatively even across the Humber Estuary with no clear preference for a particular area. Within North East Lincolnshire significant numbers of lapwing have been recorded feeding in fields within the South Humber Gateway area and also within coastal areas to the southeast of Cleethorpes. However, no significant numbers of lapwing have been recorded within allocations outside of the South Humber Gateway, including Employment Sites ELR016a and ELR016b for which non-significant numbers of lapwing were recorded during the extensive bird survey work completed to inform the South Humber Gateway Mitigation strategy.
- 5.188 The species records, together with assessment of allocation characteristics including size, shape, quality of habitat, flood risk, location, distance from SPA, and influence of limiting factors such as urban edges, indicates that no single allocation alone is considered to be of sufficient quality to be important in maintaining the integrity of the Humber Estuary lapwing population. Whilst many of the sites provide suitable offsite foraging habitat in the form of arable fields and short grazed

pasture, in isolation the importance of such sites for lapwing is likely to be low when compared with the extensive areas of habitat of increased suitability both within North East Lincolnshire and the wider Humber Estuary, particularly given the influence of factors which limit their suitability. As a result, the potential for the loss of offsite habitat to adversely affect this species relates primarily to the cumulative effect of reducing the extent of feeding areas. The likelihood of this occurring is considered low given the small amount of habitat affected as a proportion of that available around the Humber Estuary.

5.189 Nevertheless, despite the above, uncertainty remains under the precautionary principle as to whether the combined loss of sites would adversely affect integrity of the Humber in relation to this species. Given that significant numbers of this species occur along the North East Lincolnshire coastline, and the dependency of the species on arable fields and grasslands, implementation of appropriate safeguards and mitigation will be required for sites assessed as having moderate or high suitability, to enable a conclusion of no significant adverse effect on the Humber Estuary SPA/Ramsar. Mitigation requirements are provided below.

Dark-bellied brent goose

- 5.190 At the estuary scale, the highest concentrations of this species occur on the outer estuary with favoured areas including the north shore in the vicinity of Spurn Point, and the coastline to the southeast of Humberston. Within North East Lincolnshire, records for this species are relatively scarce by comparison. Whilst this species is strongly attached to intertidal feeding zones, since the 1970's increasing numbers have moved inland to feed on grass and cultivated crops. Significant numbers of brent geese regularly occur in the vicinity of the salt marsh and intertidal habitat at Tetney Marshes in the southeast of the Borough. Housing site allocations comprising large arable and pastoral fields in the south of the Borough may provide suitable offsite foraging habitat. A maximum count of 150 brent geese has been recorded in fields to the south of HOU084a.
- 5.191 Site allocations identified as being of moderate suitability may provide offsite foraging habitat for brent geese. It is unlikely that this species is reliant upon any of these site allocations alone for maintaining the integrity of the Humber populations due to limiting factors including proximity of edge and urban features, lack of openness, sources of disturbance, distance from the coast, locations outside areas prone to flooding, and in light of an abundance of habitats and areas of greater suitability in the region. As a result, the loss of individual site allocations is considered unlikely to affect the integrity of the Humber SPA/Ramsar. However, it is uncertain as to whether the cumulative effect of offsite habitat loss will result in significant adverse effects.
- 5.192 In summary, the allocations are, on their own, unlikely to be of importance for brent geese, but in line with a precautionary approach, and in the absence of appropriate safeguards and mitigation, it is not possible to rule out the potential for the cumulative loss of these site allocations to result in significant adverse effects on the integrity of the Humber SPA in respect of this species. Mitigation to enable sufficient certainty that the Local Plan will not adversely affect the integrity of the Humber Estuary SPA in relation to this species is recommended below.

Curlew

- 5.193 The distribution of curlew at the Estuary scale shows a preference for the northern middle and outer shoreline, but significant numbers have been recorded within most of the WeBS core count sectors of the SPA. Within North East Lincolnshire significant numbers of curlew have been recorded feeding in fields within the South Humber Gateway area and also within coastal areas in the north of the Borough and to the southeast of Cleethorpes. No significant numbers of curlew have been recorded within allocations outside of the South Humber Gateway, including Employment Sites ELR016a and ELR016b for which non-significant numbers of this species were recorded during extensive bird survey work completed to inform the South Humber Gateway Mitigation strategy. A maximum count of 43 birds, which would be considered significant at the SPA population scale was recorded within the tetrad which includes part of housing allocation HOU342, although the exact location of this record within the tetrad was not available.
- 5.194 The species records, together with assessment of allocation characteristics including size, shape, quality of habitat, flood risk, location, distance from SPA, and influence of limiting factors such as

urban edges, indicates that no single allocation alone is considered to be of sufficient quality to be important in maintaining the integrity of the Humber Estuary curlew population. Whilst many of the sites provide suitable offsite foraging habitat in the form of arable fields and grazed pasture, in isolation the importance of such sites for curlew is likely to be low when compared with the extensive areas of habitat of increased suitability both within North East Lincolnshire and the wider Humber Estuary, particularly given the influence of factors which limit their suitability. As a result, the potential for the loss of offsite habitat to adversely affect this species relates primarily to the cumulative effect of reducing the extent of feeding areas. The likelihood of this occurring is considered low given the small amount of habitat affected as a proportion of that available around the Humber Estuary.

5.195 Nevertheless, despite the above, uncertainty remains under the precautionary principle as to whether the combined loss of sites would adversely affect integrity of the Humber in relation to this species. Given that significant numbers of this species occur along the North East Lincolnshire coastline, and the dependency of the species on arable fields and grasslands, implementation of appropriate safeguards and mitigation will be required for sites assessed as having moderate or high suitability to enable a conclusion of no significant adverse effect on the Humber Estuary SPA/Ramsar. Mitigation requirements are provided below.

Hen harrier

5.196 During winter, hen harrier will utilise arable and pastoral habitats which comprise the majority of the site allocations, but this species is wide roaming and displays a distinct preference for coastal habitats including grasslands and salt marsh. There is a clear scarcity of records for this species in areas where site allocations are proposed. A review of the site-wide distribution of this species undertaken as part of the Humber Estuary Study on Recreational Disturbance describes this species as roaming widely and hunting over farmland, reedbeds and saltmarsh in winter, and using reedbeds as roost sites. The report highlights that this species favours the south bank of the inner estuary, although they are also seen in the dune slacks on the north Lincolnshire coast and at Humberston Fitties. Reedbed within the site allocations is restricted to allocation HOU034a which is located in an urban environment and unsuitable for this species, and HOU342 which includes a riparian corridor along the River Freshney. Given the presence of public footpaths within this site, the proximity of urban areas, and distance from the coast, this reedbed is considered unlikely to be of importance for hen harrier. In addition, this riparian corridor would be protected and retained as part of any development proposals in line with biodiversity safeguards within the Plan. The loss of arable farmland and pasture as a result of the site allocations represents a tiny proportion of this type of land use available at the Humber Estuary scale, and given the distribution and low reliance on specific areas included within the site allocations, the loss of offsite habitat would not be expected to affect the integrity of the Humber Estuary SPA in respect of the wintering hen harrier population.

Marsh harrier

5.197 The habitats present within the housing allocation sites are likely to be unsuitable for breeding marsh harrier, because they lack the extensive areas of undisturbed reedbed, wetland, and marsh habitat typically favoured for nesting. Farmland, including fallows and meadows adjoining regular breeding territories may be used for hunting, especially where reedbeds are limited or occupied at high density. In terms of species distribution, within North East Lincolnshire the records identified within the areas affected relate to non-breeding records only. At an estuary scale, the Footprint Ecology report indicates that surveys in 2005 identified four pairs on the RSPB reserves at Blacktoft Sands and Read's Island and two pairs at the Lincolnshire Wildlife Trust reserve at Far Ings. Of the remaining pairs, nine were on or close to the south shore of the Humber in North Lincolnshire and the remaining 10 were on or close to the north shore in East Yorkshire. As a result of the preferred geographic distribution of this species, the site allocations within North East Lincolnshire are considered likely to be of low importance for this species. Therefore, **no adverse effect on the integrity of the Humber Estuary SPA/Ramsar is predicted due to the loss of offsite habitat in respect of breeding marsh harrier**.

Ruff

5.198 Records of ruff within North East Lincolnshire are few, and largely restricted to coastal areas. Records away from the coast include relatively low numbers recorded in the vicinity of Cleethorpes Country Park. No records of this species were identified within or close to the site allocations. Whilst this species will utilise dry grasslands, and harvested fields, it shows a much stronger preference for muddy margins of lakes, pools, ponds, rivers and other watercourses, irrigated levels, floodlands, and marshes. As a result, the arable and pastoral habitats which comprise the majority of land use within the site allocations is likely to be of low importance for this species, particularly when considered in light of the availability of this habitat resource at an Estuary-wide scale. Notable areas of preferred habitat for this species are largely restricted to housing allocation HOU342 which includes the River Freshney riparian corridor. Given the presence of public footpaths within this site, the proximity of urban areas, and the absence of records, this riparian habitat is considered unlikely to be of importance for ruff. In addition, given its ecological importance, this riparian habitat would be expected to be retained and protected as part of any development proposals in line with biodiversity safeguards within the Plan. In light of the above, **no adverse effect on the integrity of the Humber Estuary SPA and Ramsar is predicted due to the loss of offsite habitat in respect of ruff**.

Whimbrel

- 5.199 At the Humber Estuary scale, records of this species indicate a clear preference for the intertidal habitats to the northwest of Spurn Point on the north shoreline. Within North East Lincolnshire, the data search identified records of up to 50 whimbrel feeding on intertidal habitat at Cleethorpes Nature Reserve in the southeast of the Borough. No notable records were identified within or close to site allocations. Inland records include maximum counts of between 6 and 34 in Cleethorpes and Grimsby but each of these records is centred in heavily urbanised locations and therefore is either likely to relate to birds flying over, or stopping at locations of low importance at the Humber scale.
- 5.200 In winter quarters, this species mainly frequents sea-shores and coastal inlets and whilst consultation responses from RSPB have highlighted that this species is known to regularly utilise coastal grasslands and arable fields within North East Lincolnshire, the habitats affected represent a tiny proportion of those available at the Humber scale and are of lower suitability relative to the abundance of more suitable examples in the region, such as larger fields away from urban edges, which are located within flood zones and which provide more openness and are closer to the coast. As a result, whilst several site allocations provide suitable habitat for whimbrel, existing records, Humber-wide distribution, and the assessment of habitat suitability relative to other areas, indicates that the importance of such habitats in maintaining the Humber Estuary population is low, and therefore the loss of offsite habitat is not considered likely to adversely affect the integrity of the Humber Estuary SPA/Ramsar in respect of this species.

Greenshank

5.201 Outside the breeding season this species relies upon wetland habitats including inland flooded meadows, dried up lakes, sandy bars, and marshes on the way to winter resorts. These are varied including seashores which are not too rocky or dominated by cliffs, salt marshes, pools on tidal reefs, estuaries and muddy or sandy tidal inlets, lagoons, inland rivers, lakes, reservoirs, pools, ponds, sewage farms, sand banks, and mudspits. The site allocations identified as having potential to support SPA birds are predominantly comprised of arable farmland, and to a lesser extent, short-grazed pasture located outside the flood zone. As a result, the habitat types affected are considered of low suitability for this species. Furthermore, no significant records for this species were identified within, or close to, the site allocations. Therefore, **the loss of offsite habitats as a result of the local plan site allocations will not adversely affect the integrity of the Humber Estuary SPA/Ramsar in respect of greenshank**.

Dunlin

5.202 Outside the breeding season this species favours lowland and grassland coastal habitat, including salt-marsh, rough grazing land, sand dunes, or sandy machair with moist depressions, edges of brackish lagoons, sand or gravel shores and river flood plains. The presence of surface water and of unvegetated patches is essential. Therefore the arable and short grazed pastures which comprise the majority of site allocations are of lower preference for this species. Site allocations prone to flooding are predominantly located within small urban plots unsuitable for this species, or within the South Humber Bank Mitigation Zone, where adverse effects will be avoided via the mitigation strategy. Therefore, the arable and short grazed pasture which will be lost as a result

of the site allocations is considered of low suitability for this species. Furthermore, a review of the distribution of records for this species (Figure 5.6) in relation to site allocations reveals that the distribution is predominantly coastal, with no significant records of this species identified within or close to the site allocations. Therefore, **no adverse effect on the integrity of the Humber Estuary SPA/Ramsar is predicted as a result of the loss of offsite habitat for Dunlin**.

Widgeon

5.203 A review of the Humber-wide distribution of this species using the WeBS mean peak count data, as referred to in the Footprint Ecology study, indicates a clear preference by this species for the north shore and inner parts of the estuary with only low numbers being recorded along the North East Lincolnshire coastline. Records within NE Lincolnshire indicate a clear preference for coastal areas around Grimsby with notable inland records restricted to a maximum count of 50 birds at the southern edge of Healing. This species will utilise tracts of flooded grassland in preference to coastal waters but suitably large areas of open grassland occurring within the site allocations are located outside areas prone to flooding. When considered in light of the species distribution records and the extent of similar habitat available for this species at the Humber Estuary scale, the habitats present within the site allocations are considered of low importance for this species. Therefore, **the loss of offsite habitat is not predicted to result in adverse effects on the integrity of the Humber Estuary SPA/Ramsar in respect of widgeon**.

Teal

5.204 A review of bird records indicates that, outside the breeding season, this species favours the inner parts of the Humber Estuary, the north shore between Kingston-upon-Hull and Weeton, and the eastern shoreline of North Lincolnshire in the vicinity of East Halton Skitters. No significant records were identified in proximity to the site allocations. Whilst this species will utilise flooded fields, its use of a wide range of wetland habitats, and geographic distribution within the Humber Estuary is such that reliance on the pastures and arable land uses within the site allocations is low at the Humber Estuary scale. This is particularly so, given that the majority of site allocations with suitable conditions for supporting this species are not located within flood zones, and the habitats lost represents a tiny proportion of the resource available for this species at the estuary scale. As a result, **the loss of offsite habitats as a result of the local plan site allocations will not adversely affect the integrity of the Humber Estuary SPA/Ramsar in respect of teal.**

Mallard

5.205 A review of bird records indicates that this species favours the north shore of the Humber Estuary to the southeast of Paull. No significant records were identified in proximity to the site allocations. Whilst this species will utilise flooded fields, its adaptability is such that its reliance on the pastures and arable land uses within the site allocations is low at the Humber Estuary scale. In addition, the arable and pastoral habitats lost represent a tiny proportion of this resource available for this species at the estuary scale. As a result, the loss of offsite habitats as a result of the local plan site allocations will not adversely affect the integrity of the Humber Estuary SPA/Ramsar in respect of mallard.

Summary

- 5.206 In light of the above assessment, the potential for loss of offsite habitat to adversely affect qualifying bird species is restricted to golden plover, curlew, lapwing, black-tailed godwit and brent geese. This is consistent with a precautionary approach and is largely because these species will regularly utilise and rely upon inland arable fields and/or grazed pasture for feeding.
- 5.207 With the exception of lapwing, the distribution of these species is predominantly coastal or focused within the South Humber Bank area which is well connected to the estuary and subject to regular flooding. Records away from these areas are scattered with no clear preference for a specific area. The majority of records occur in and around the South Humber Bank area and the loss of functionally linked habitat within this zone will be effectively mitigated for by the strategy. Employment sites located outside this zone with potential to support SPA birds include ELR016a and ELR016b. However, despite the extensive bird survey work undertaken in this area, no significant records of SPA birds were recorded within these site allocations, indicating that these employment allocations are of low importance in supporting the function of the Humber Estuary SPA/Ramsar bird populations. Nevertheless, in line with a precautionary approach and to enable

sufficient certainty to conclude no adverse effect on integrity, further project level survey and HRA assessment will be required for any development coming forward at ELR016a and ELR016b to identify any mitigation measures which may be required, including for example, provision of on-site mitigatory habitat, albeit unlikely to be required.

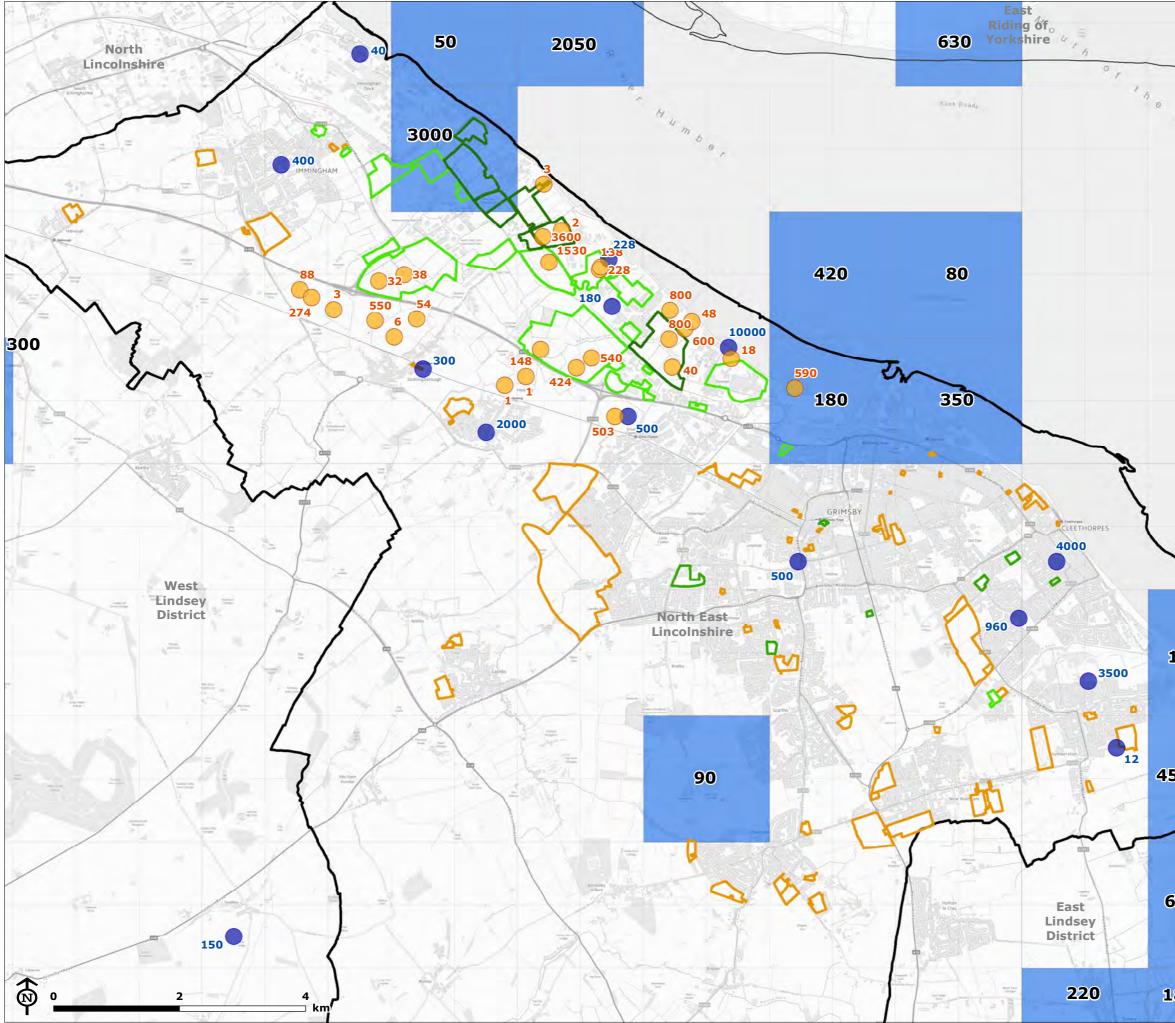
5.208 A handful of housing sites were identified with moderate suitability for SPA birds. No notable records of SPA birds were identified within these housing allocations, but it is recognised that the extent of survey coverage away from the South Humber Gateway area is less comprehensive. As a result, the absence of records was not used in isolation to determine the potential importance of a site for SPA birds. Site allocations identified as having moderate potential to support SPA birds are not, when considered in isolation, likely to have an adverse effect on the integrity of the Humber Estuary SPA due to a number of factors which reduce their suitability, such as being located outside of flood zones, distance from the estuary, proximity of negative factors such as trees, woodlands and urban edges, existing disturbance, and their small size, particularly relative to other comparable habitats which are both abundant within North East Lincolnshire and within the wider Humber region. In the absence of mitigation, there is uncertainty as to whether the cumulative effect of habitat loss would result in significant adverse effects on the Humber SPA/Ramsar populations of golden plover, black-tailed godwit, lapwing, curlew and brent goose as a result of loss of offsite habitat. Mitigation measures which would provide sufficient certainty to enable a conclusion of no adverse effect in relation to loss of offsite habitat are detailed below.

Mitigation

- 5.209 In order to address the potential impacts of development in the Humber Estuary area in relation to offsite habitat loss, North East Lincolnshire Council has undertaken a significant amount of work along with other organisations in the South Humber Ecology Group (including Natural England, the RSPB and landowners in the South Humber employment area). The group has been integral in the co-ordinated preparation of the South Humber Gateway Mitigation Strategy, which is based upon extensive and targeted bird survey findings which have allowed key habitat parcels to be identified, safeguarded and managed to ensure potential impacts on the qualifying bird species of the SPA and Ramsar site associated with employment development in this area can be successfully mitigated. The focus of this work is with respect to employment land and it has fed into the preparation of the Local Plan, in particular the development of Policy 6: Habitat Mitigation-South Humber Bank. That policy states that a number of identified mitigation sites will be implemented and managed over the long-term, to provide alternative offsite habitat for the qualifying bird species of the SPA and Ramsar site. Developer contributions from proposals within the identified Mitigation Zone will be required to deliver and manage this land.
- 5.210 Policy 6 is to be modified following the examination to include the following additional safeguards: "within the Mitigation Zone identified on the Policies Map, proposals which adversely affect the Humber Estuary SPA/Ramsar site due to the loss of functionally linked land will normally be required to provide their own mitigation". Mitigation sites are to be safeguarded against development and appropriate development is to be provided in line with The North East Lincolnshire South Humber Gateway Ecological Mitigation Delivery Plan.
- 5.211 The South Humber Gateway Mitigation Strategy is therefore crucial to the mitigation of the potential impacts of offsite habitat loss at the SPA and Ramsar site relating to employment development. Should any changes be made to the Strategy, these should be reflected in Policy 6 of the Local Plan and agreed with key stakeholders including Natural England, RSPB and the Humber Nature Partnership.
- 5.212 Employment allocations within the South Humber Bank Mitigation zone (shown on the Local Plan Policies Map); will be successfully mitigated by the South Humber Bank Mitigation Strategy. However, the South Humber Gateway Mitigation Strategy does not provide mitigation for the potential impacts of site allocations identified as having high or moderate suitability for SPA birds located outside the Mitigation Zone, and in particular housing allocations.
- 5.213 It was recognised in this HRA, which was examined alongside the Pre-Submission Draft Local Plan, that in order to provide certainty that the loss of offsite functional habitat would not adversely affect the Humber Estuary SPA/Ramsar, safeguards would be required in the Local Plan including bird surveys of sites with moderate to high potential (as identified above) to determine their individual and cumulative importance for golden plover, lapwing, curlew, black-tailed godwit, brent goose and potentially other qualifying SPA birds. In addition, it was recommended that a

commitment to mitigation and phasing of development is required within the Local Plan dependent on the findings of bird surveys.

- 5.214 As part of the Examination progress, the Inspector suggested further refinements to these recommendations. As a result, the Local Plan is to be modified to include the following safeguards:
 - "Sites identified as having medium or high potential to support SPA/Ramsar birds will be required to provide an assessment for these species. This assessment should incorporate a suitable level of data collection and/or bird surveying to determine the individual and cumulative importance of the site for SPA/Ramsar species. Where the assessment identifies the potential for adverse effects resulting from the offsite habitat loss and/or disturbance, appropriate and timely measures must be taken to mitigate such impacts. Such mitigation is likely to be in the form of alternative habitat managed specifically for the affected bird species and/or contributions towards the provision of strategic mitigation sites. Any strategic mitigation provision must be additional to that provided through the South Humber Bank Strategic Mitigation which only mitigates for sites within the South Humber Bank Mitigation Zone. All such measures must be in place and operational prior to the relevant impact(s), and must be maintained for the duration of the impact(s)".
 - "A desk-based assessment undertaken as part of the Habitats Regulation Assessment of the Local Plan identifies a small number of sites as having moderate potential to support SPA/Ramsar qualifying bird species. Some of these sites already benefit from planning permission and in such cases the issue has been appropriately explored and considered through the planning application process. Development proposals on all other sites will need to be supported by further assessment that confirms the individual and cumulative importance of the site for SPA/Ramsar species".
- 5.215 The detailed desk study and review of site information presented above indicated that whilst some of the site allocations support habitats which may be used be SPA birds, they are unlikely to support significant numbers due to various limiting factors described above, or in the case of ELR016a and ELR016b, due to extensive survey work undertaken in the vicinity which would be expected to have recorded any significant numbers of birds at the sites. Therefore, the mitigation measures provided above have been recommended to provide certainty that the cumulative effect of habitat loss would not result in significant adverse effects on the integrity of the Humber Estuary SPA/Ramsar.
- 5.216 In comments received from the RSPB, they specify that, "based on our understanding of SPA bird usage of North East Lincolnshire, that it is most likely that individual allocations will be able to mitigate for their own impacts, if required". This is supported by the findings of the detailed desk study which concluded that because the numbers of SPA birds at any given site are likely to be low and not significant on their own, the mitigation measures provided above are considered precautionary, appropriate and effective.
- 5.217 In light of the desk study findings presented above and the mitigation safeguards provided in the Local Plan (incorporating Main Modifications), adverse effects on the integrity of the Humber Estuary SPA and Ramsar site as a result of loss of offsite functionally linked habitat will be avoided.



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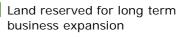
Figure 5.7.1: Golden Plover
Records in Relation to Housing
and Employment Allocations

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NE Lincolnshire district boundary

Surrounding districts





Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan



BTO data (with max count value in the centre of the grid square)



Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records



Point data record (with max count value)

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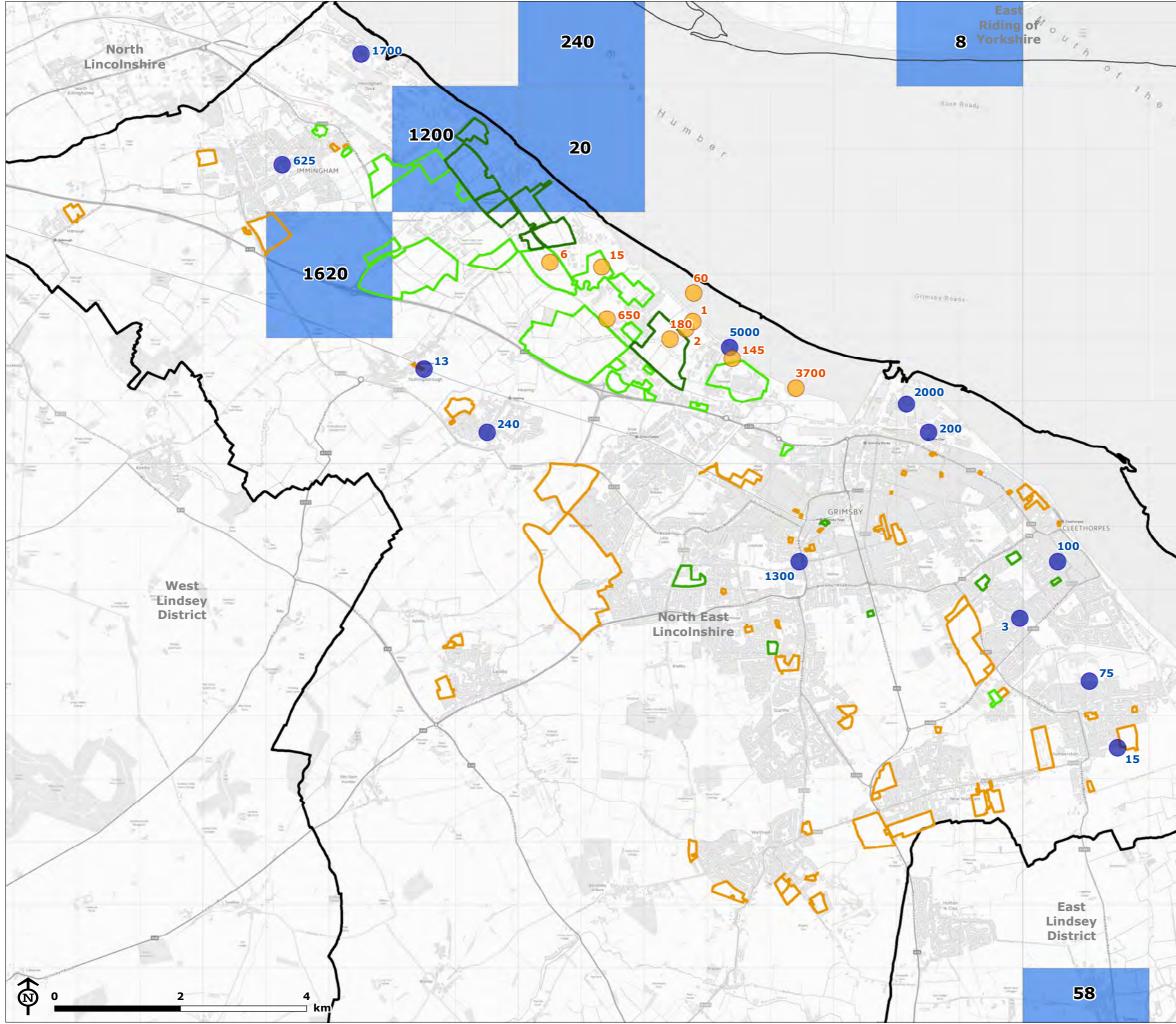
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Map Scale @ A3: 1:60,000



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CB:VG EB:Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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Figure 5.7.2: Black-tailed Godwit Records in Relation to Housing and Employment Allocations

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NE Lincolnshire district boundary

Surrounding districts

Land reserved for long term business expansion



Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)



Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records

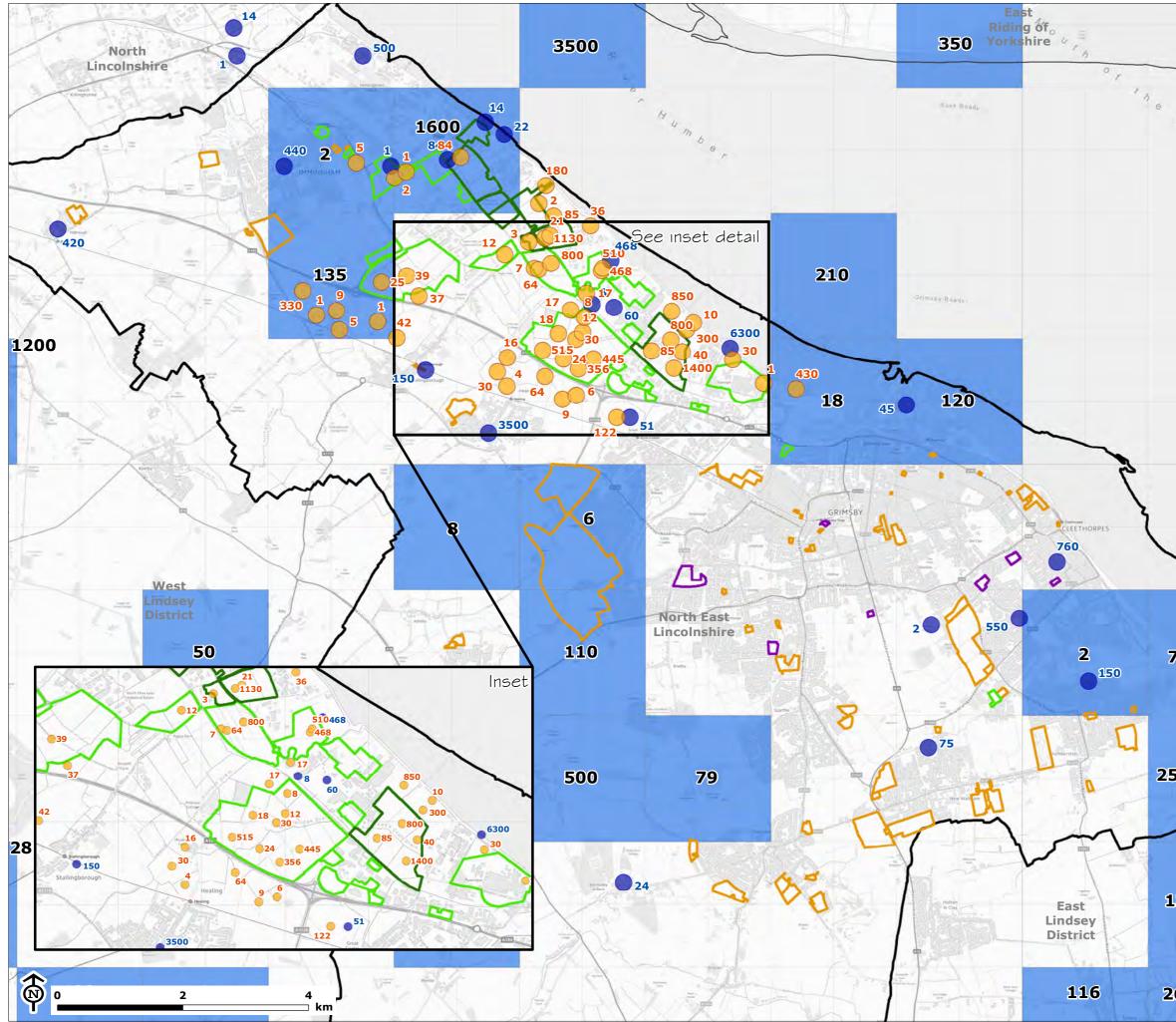


Point data record (with max count value)





CB:VG EB:Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE Lincolnshire County Council



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Figure 5.7.3: Lapwing Records in Relation to Housing and Employment Allocations
NE Lincolnshire district boundary
Surrounding districts
Land reserved for long term business expansion
Employment sites allocated in Local Plan
Development Company sites allocated in Local Plan
Housing sites allocated in Local Plan
BTO data (with max count value in the centre of the grid square)

Lapwing

Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



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Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records



Point data record (with max count value)



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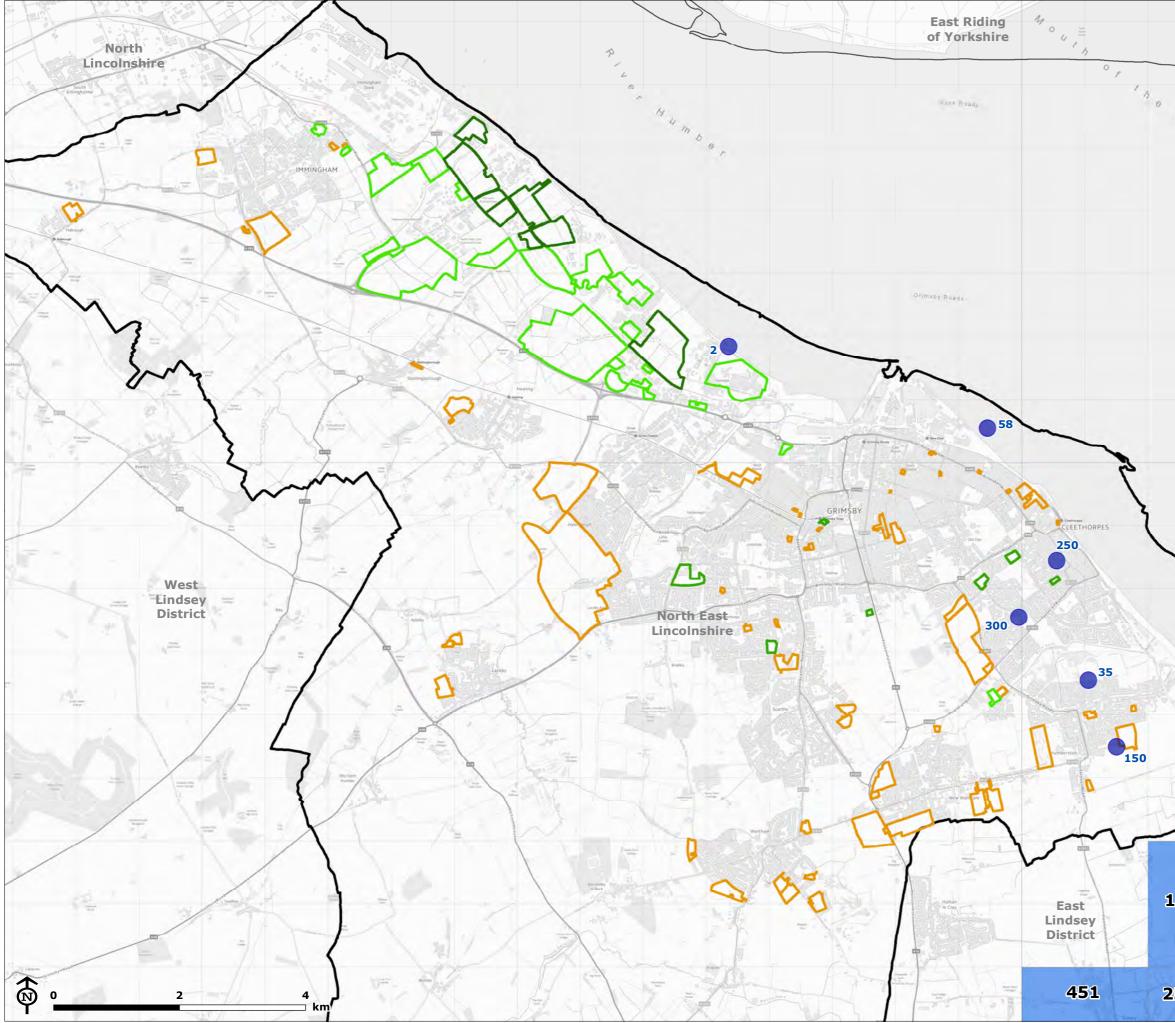
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Map Scale @ A3: 1:60,000 Inset Map Scale @ A3: 1:45,000



CB:VG EB:Goosen_V LUCEDI 5784-01_019_Lapwing_Detail_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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Figure 5.7.4: Brent Goose (Dark-bellied) Records in **Relation to Housing and Employment Allocations**

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NE Lincolnshire district boundary

Surrounding districts	5
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Land reserved for long term business expansion

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Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)

Brent Goose (Dark-bellied)

Lincolnshire Environmental Records **Centre (Part of Greater Lincolnshire** Nature Partnership)



Point data record (with max count value)

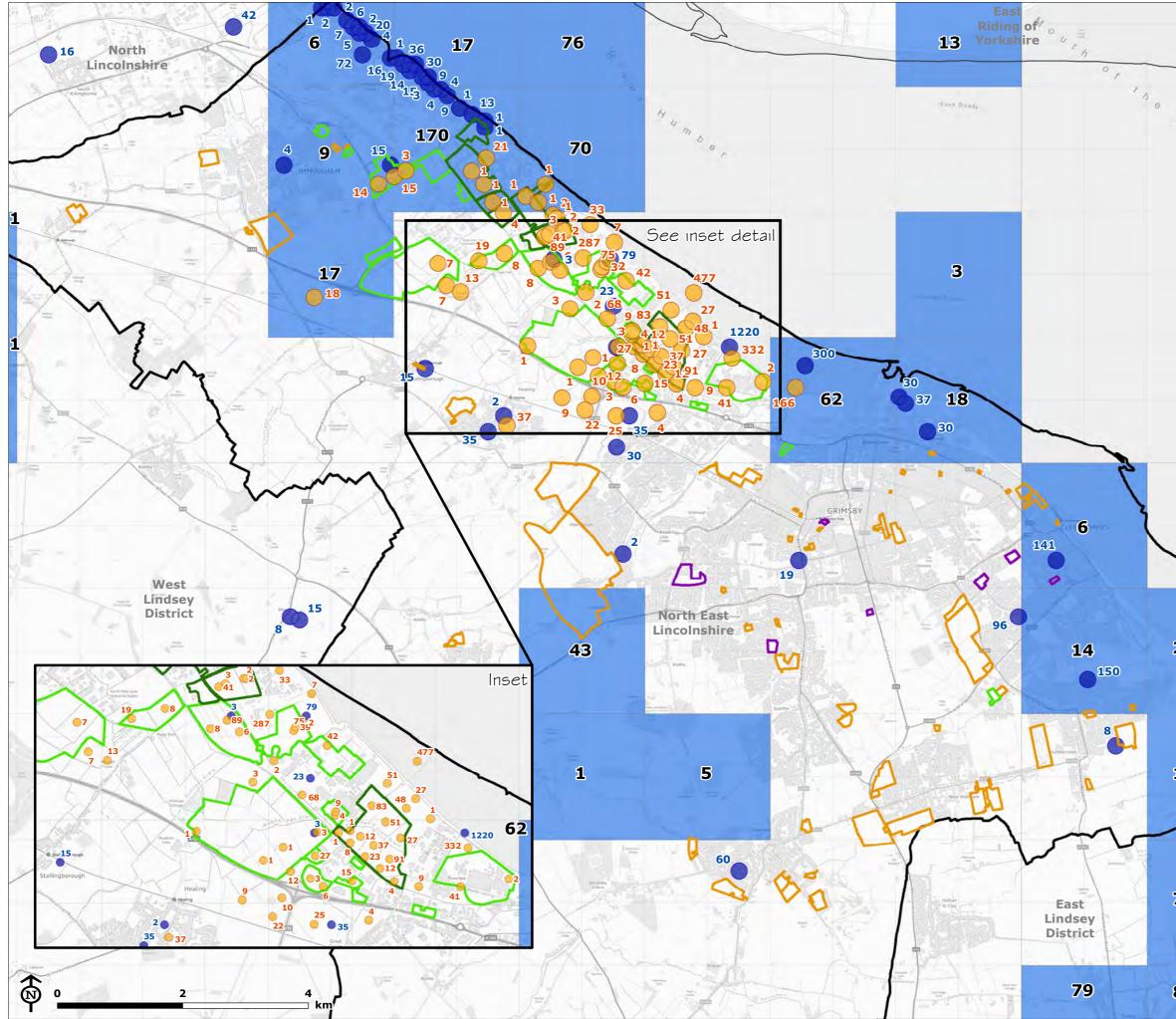


Map Scale @ A3: 1:60,000



250

CB:VG EB:Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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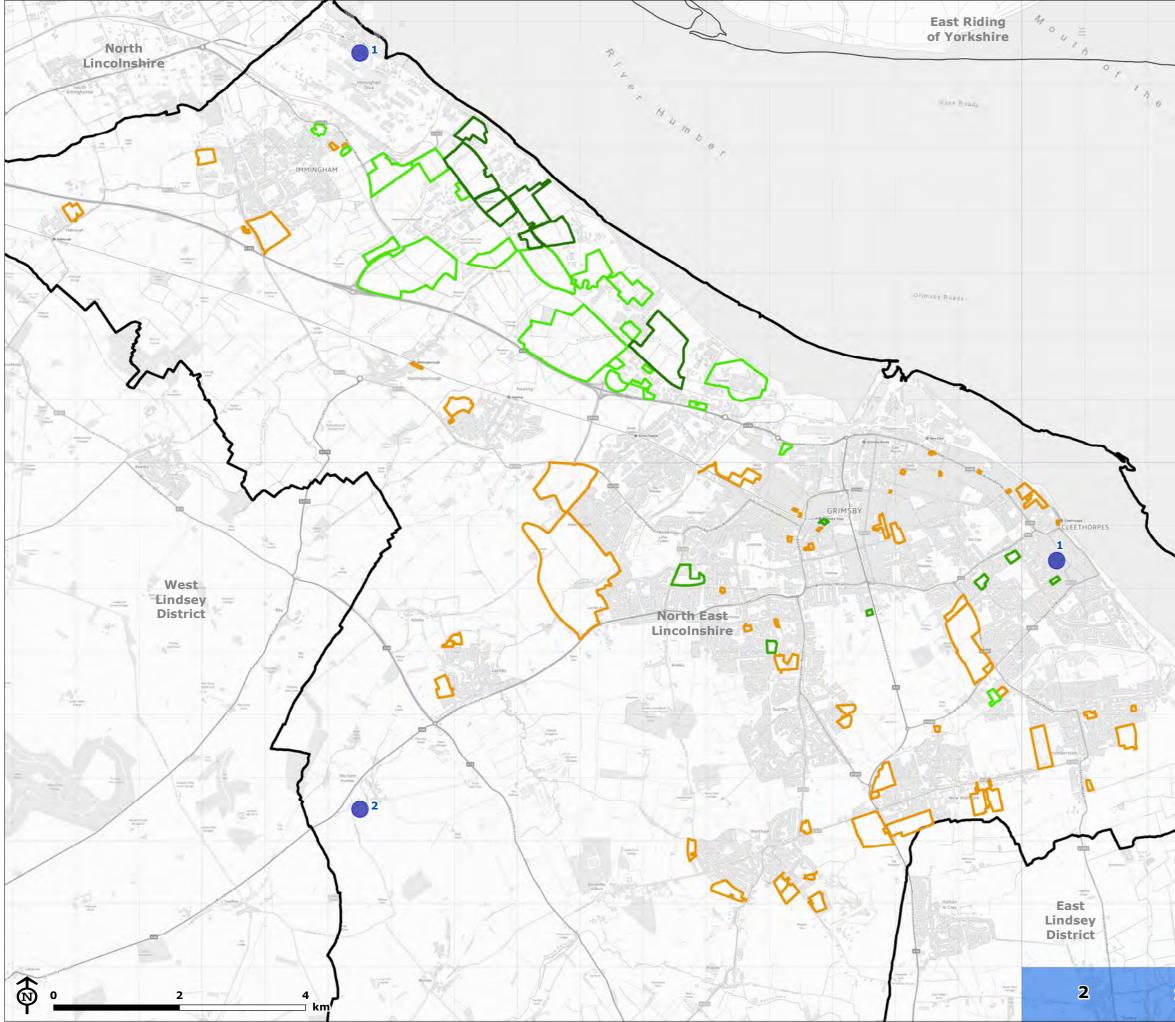
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 NE Lincolnshire district boundary Surrounding districts Land reserved for long term business expansion Employment sites allocated in Local Plan Development Company sites allocated in Local Plan Housing sites allocated in Local Plan
 Land reserved for long term business expansion Employment sites allocated in Local Plan Development Company sites allocated in Local Plan Housing sites allocated in
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allocated in Local Plan Development Company sites allocated in Local Plan Housing sites allocated in
allocated in Local Plan Housing sites allocated in
1
BTO data (with max count value in the centre of the grid square)
Curlew
Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)
Point data record (with max count value)
North & East Yorkshire Ecological Data Centre records
Point data record (with max count value)



CB:VG EB:Goosen_V LUCEDI 5784-01_018_Curlew_Detail_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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Figure 5.7.6: Hen Harrier Records in Relation to Housing and Employment Allocations

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NE Lincolnshire district boundary

Surrounding districts

Land reserved for long term business expansion

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Employment sites allocated in Local Plan

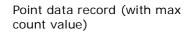
Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)

Hen Harrier

Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)

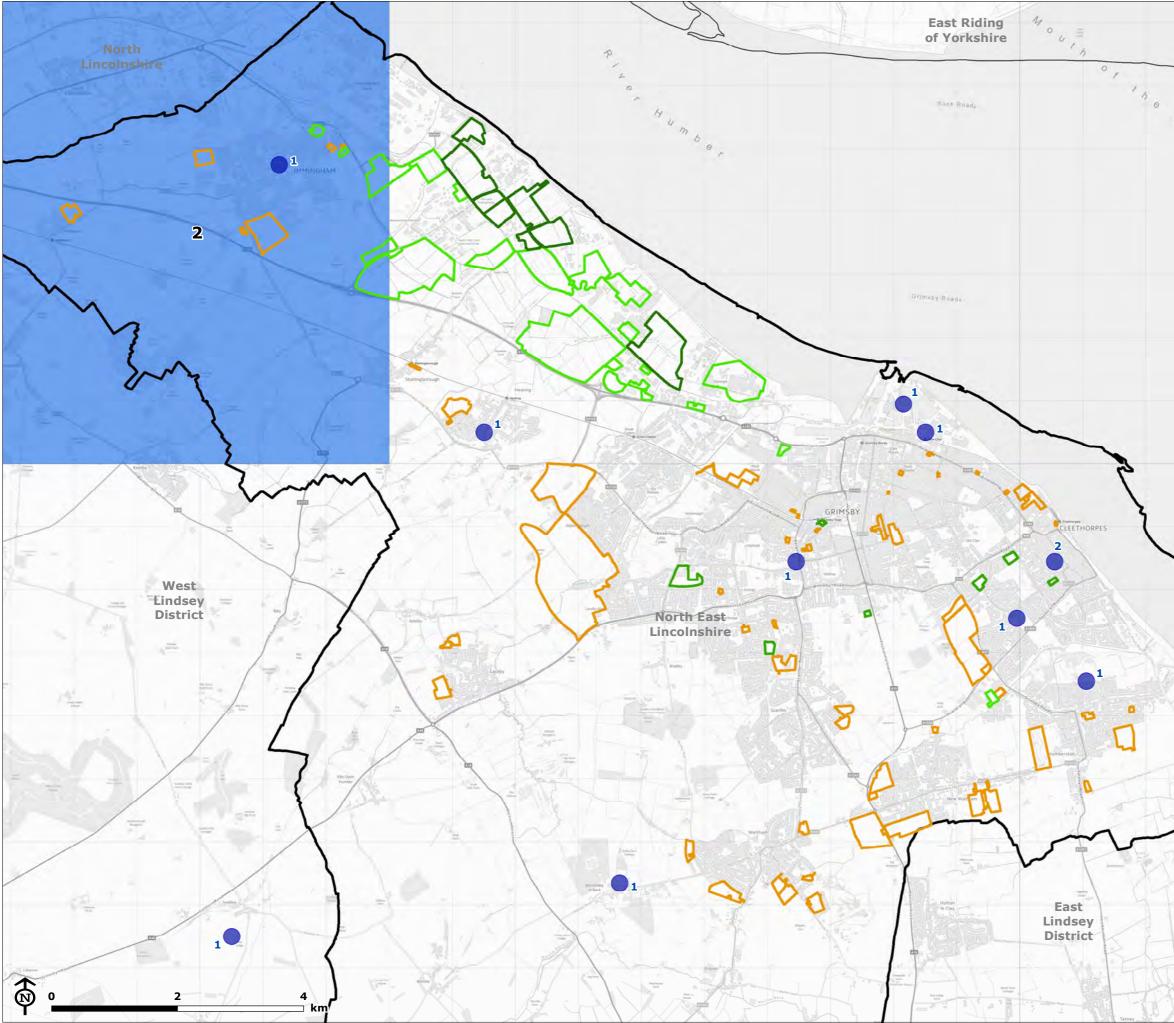


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CB:VG EB:Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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NE Lincolnshire Local Plan – HRA

Figure 5.7.7: Marsh Harrier Records in Relation to Housing and Employment Allocations

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NE Lincolnshire district boundary

Surrounding districts

Land reserved for long term business expansion

Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)

Marsh Harrier

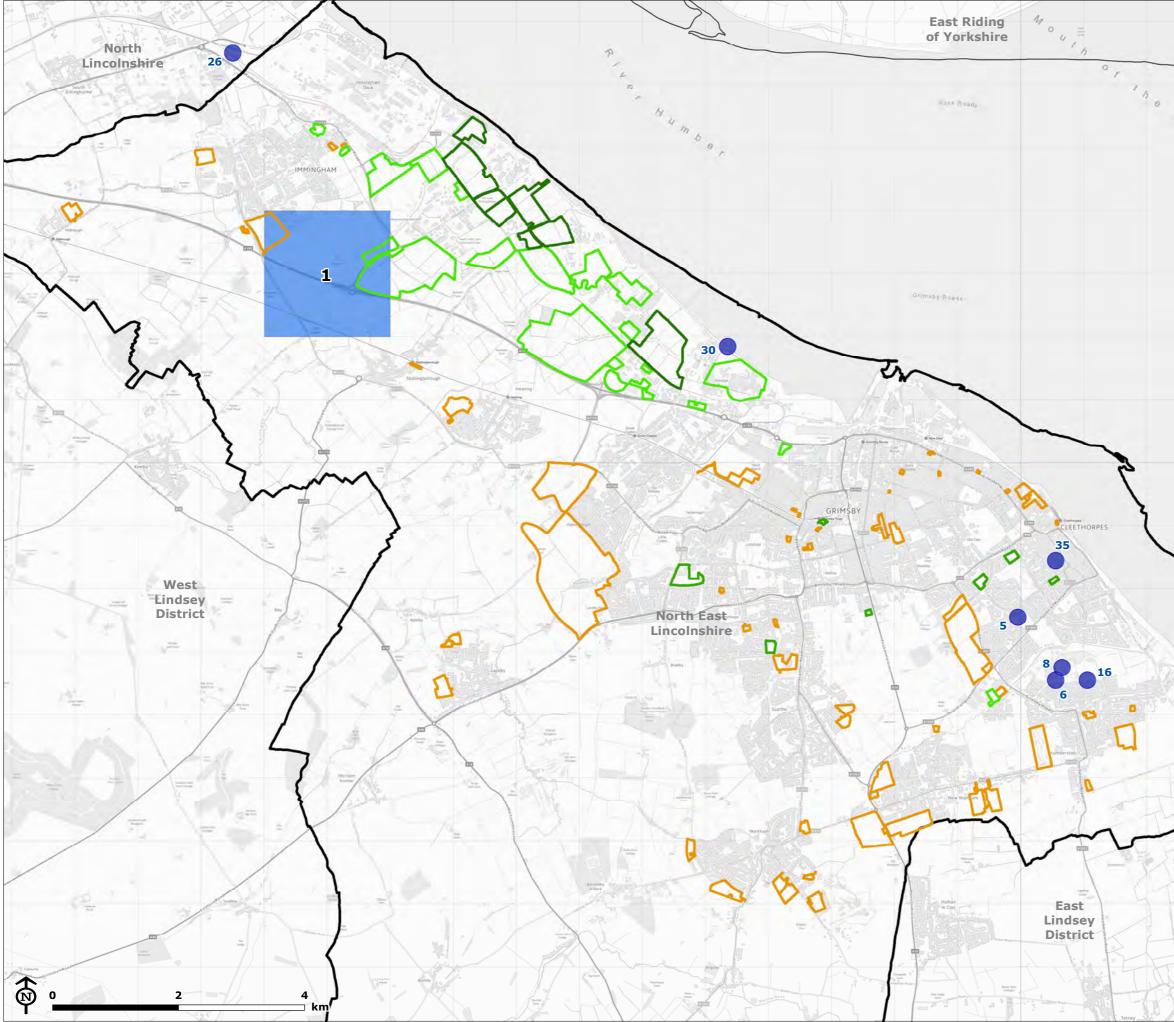
Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



Point data record (with max count value)







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NE Lincolnshire Local Plan – HRA

Figure 5.7.8: Ruff Records in Relation to Housing and **Employment Allocations**

NE Lincolnshire	district	boundary

Surrounding districts

Land reserved for long term business expansion

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Employment sites allocated in Local Plan

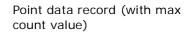
Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)

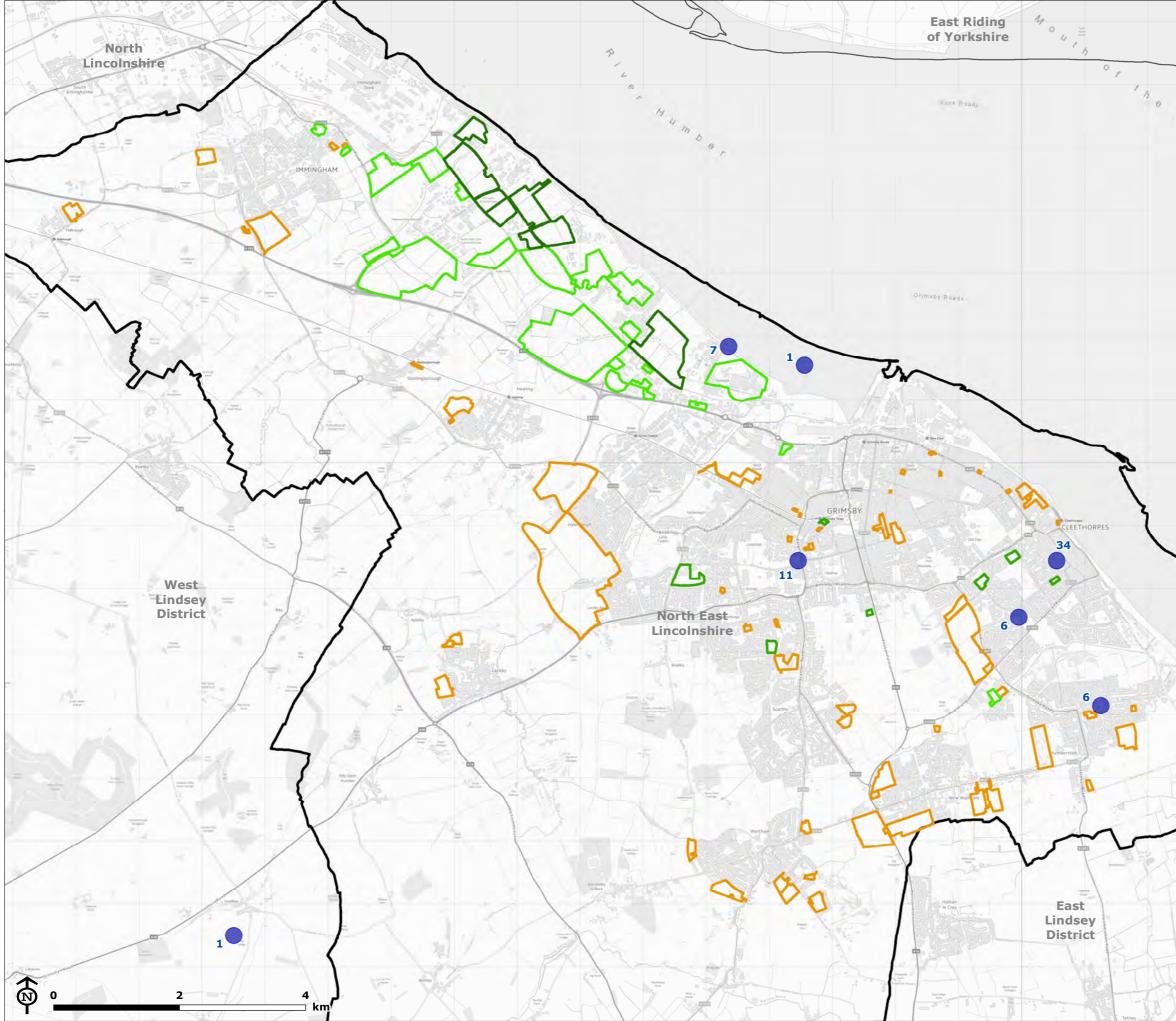
Ruff

Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



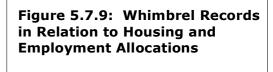
Map Scale @ A3: 1:60,000





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NE Lincolnshire Local Plan – HRA



- Surrounding districts
- Land reserved for long term business expansion



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- Employment sites allocated in Local Plan
- Development Company sites allocated in Local Plan
- Housing sites allocated in Local Plan

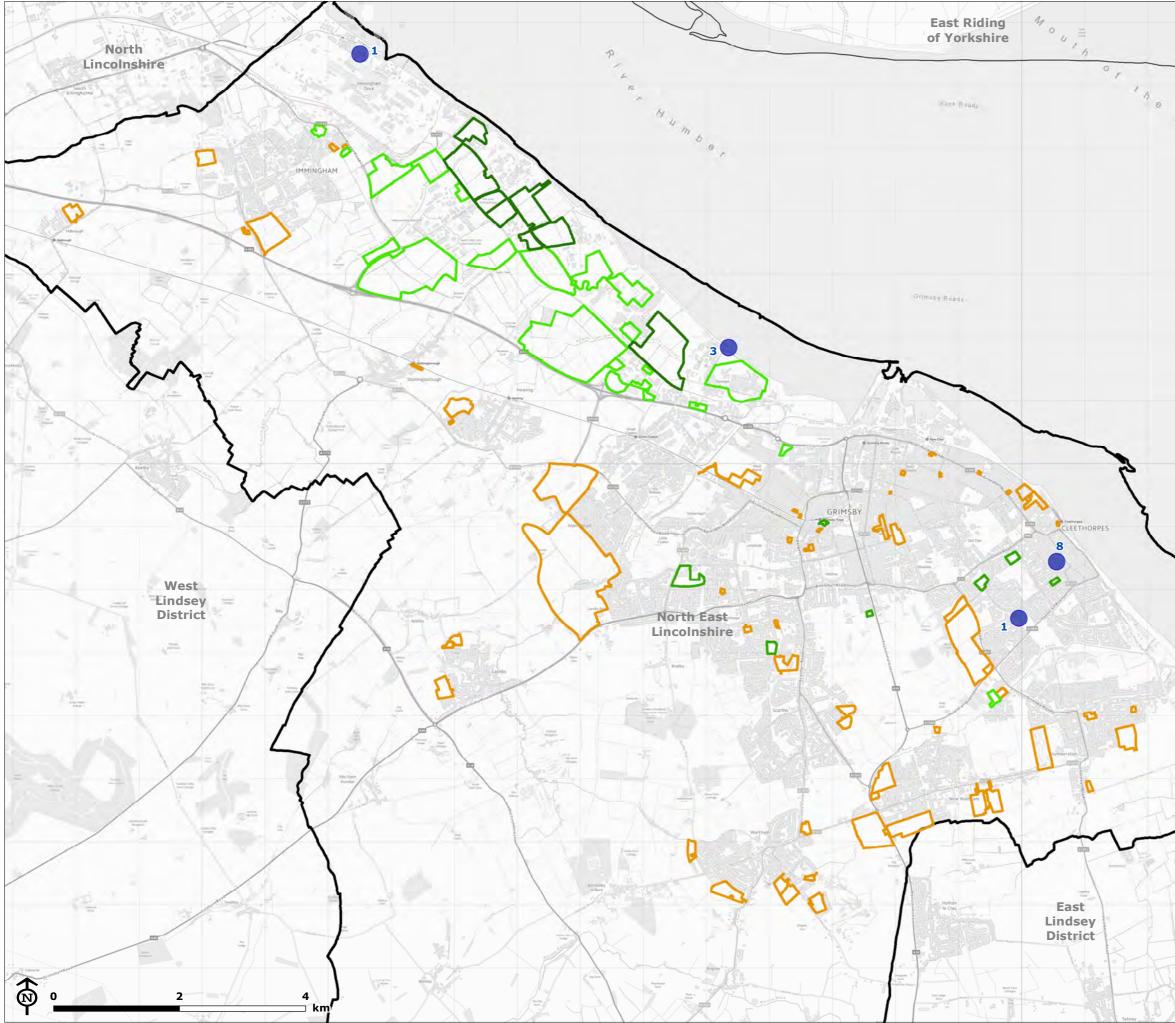
Lincolnshire Environmental Records **Centre (Part of Greater Lincolnshire** Nature Partnership)



Point data record (with max count value)







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NE Lincolnshire Local Plan – HRA

Figure 5.7.10: Greenshank Records in Relation to Housing and Employment Allocations

NE Lincolnshire district boundary

- Surrounding districts
- Land reserved for long term business expansion



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- Employment sites allocated in Local Plan
- Development Company sites allocated in Local Plan
- Housing sites allocated in Local Plan

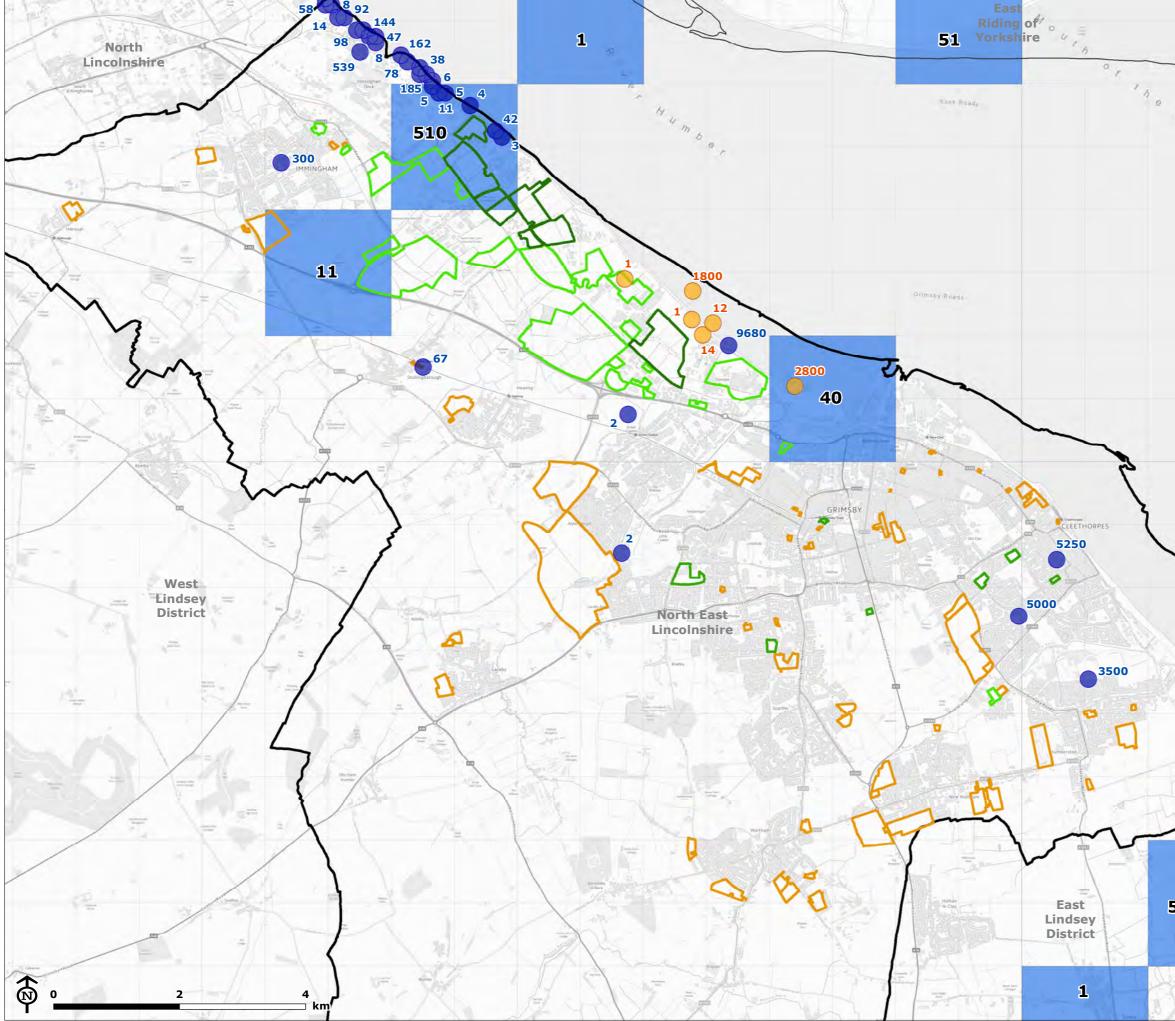
Lincolnshire Environmental Records **Centre (Part of Greater Lincolnshire** Nature Partnership)



Point data record (with max count value)







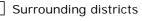
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Figure 5.7.11: Dunlin Records
in Relation to Housing and
Employment Allocations

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NE Lincolnshire district boundary



Land reserved for long term business expansion

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Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)

Dunlin

Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records



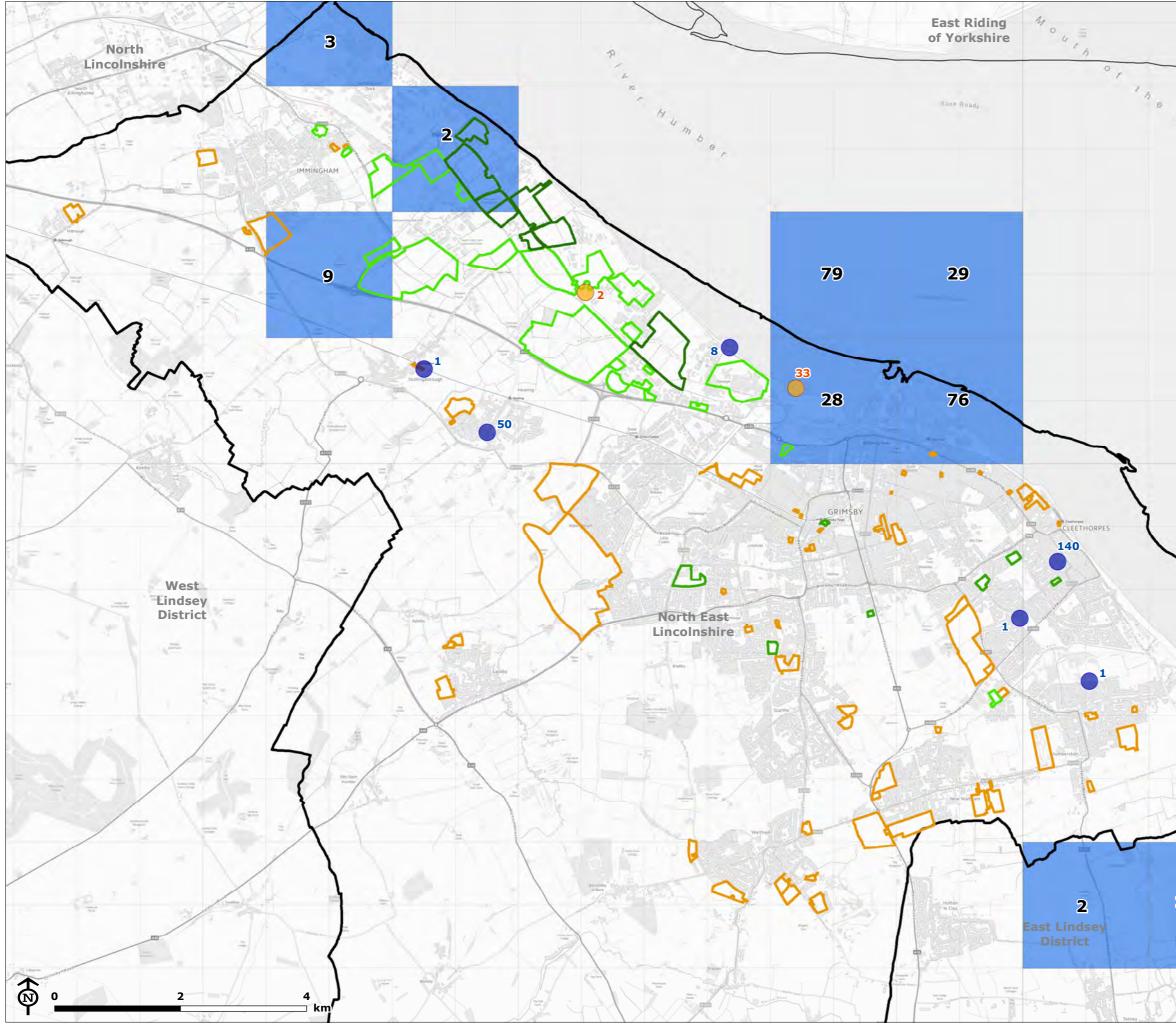
Point data record (with max count value)



Map Scale @ A3: 1:60,000



CB:VG EB:Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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NE Lincolnshire Local Plan – HRA

Figure 5.7.12: Wigeon Records
in Relation to Housing and
Employment Allocations

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NE Lincolnshire district boundary



Surrounding districts

Land reserved for long term business expansion

Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)



Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records



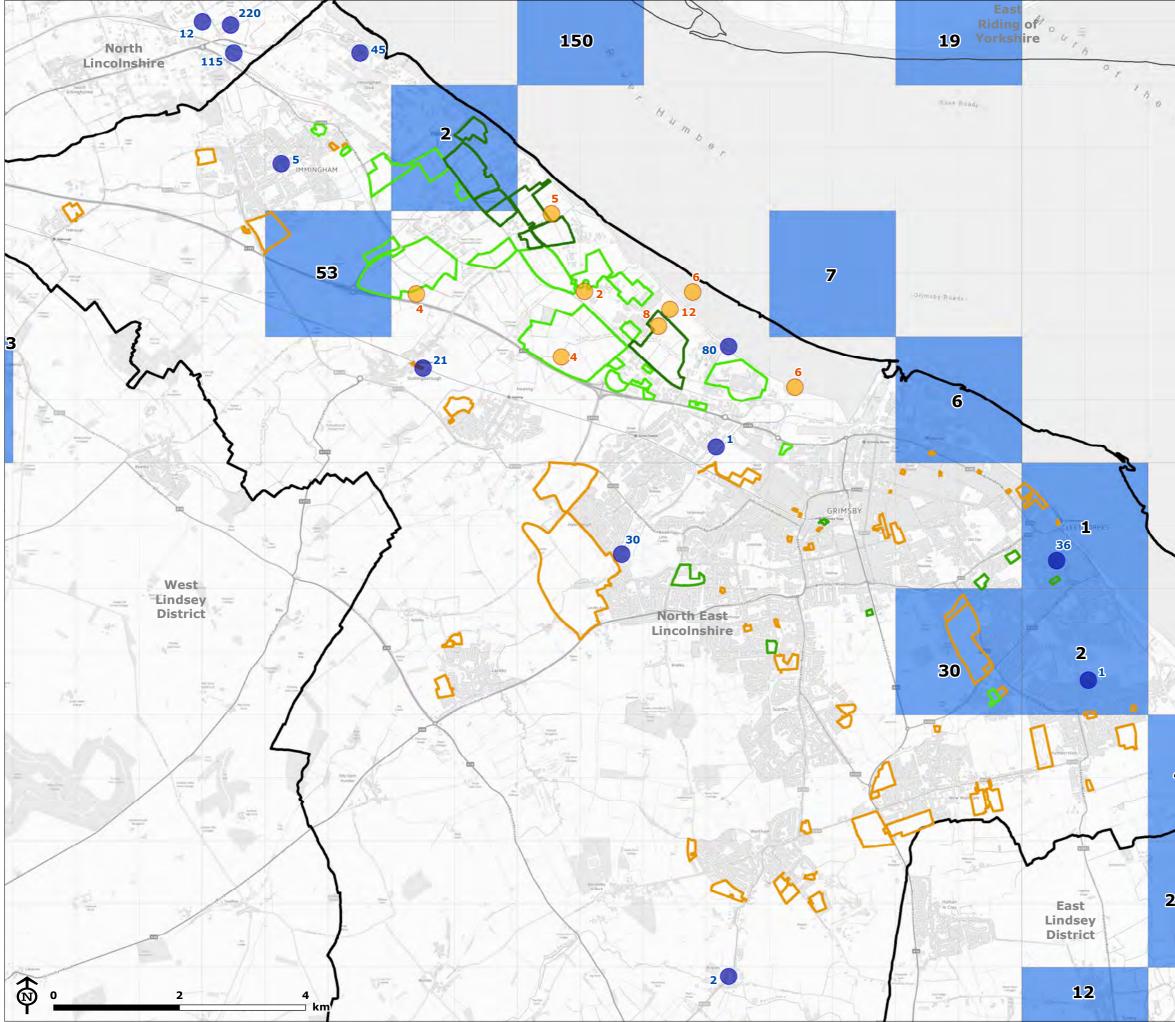
Point data record (with max count value)





Map Scale @ A3: 1:60,000





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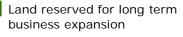
Figure 5.7.13: Teal Records in	n
Relation to Housing and	
Employment Allocations	

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NE Lincolnshire district boundary

Surrounding districts



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Employment sites allocated in Local Plan

Development Company sites allocated in Local Plan

Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)

Teal

Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records



Point data record (with max count value)

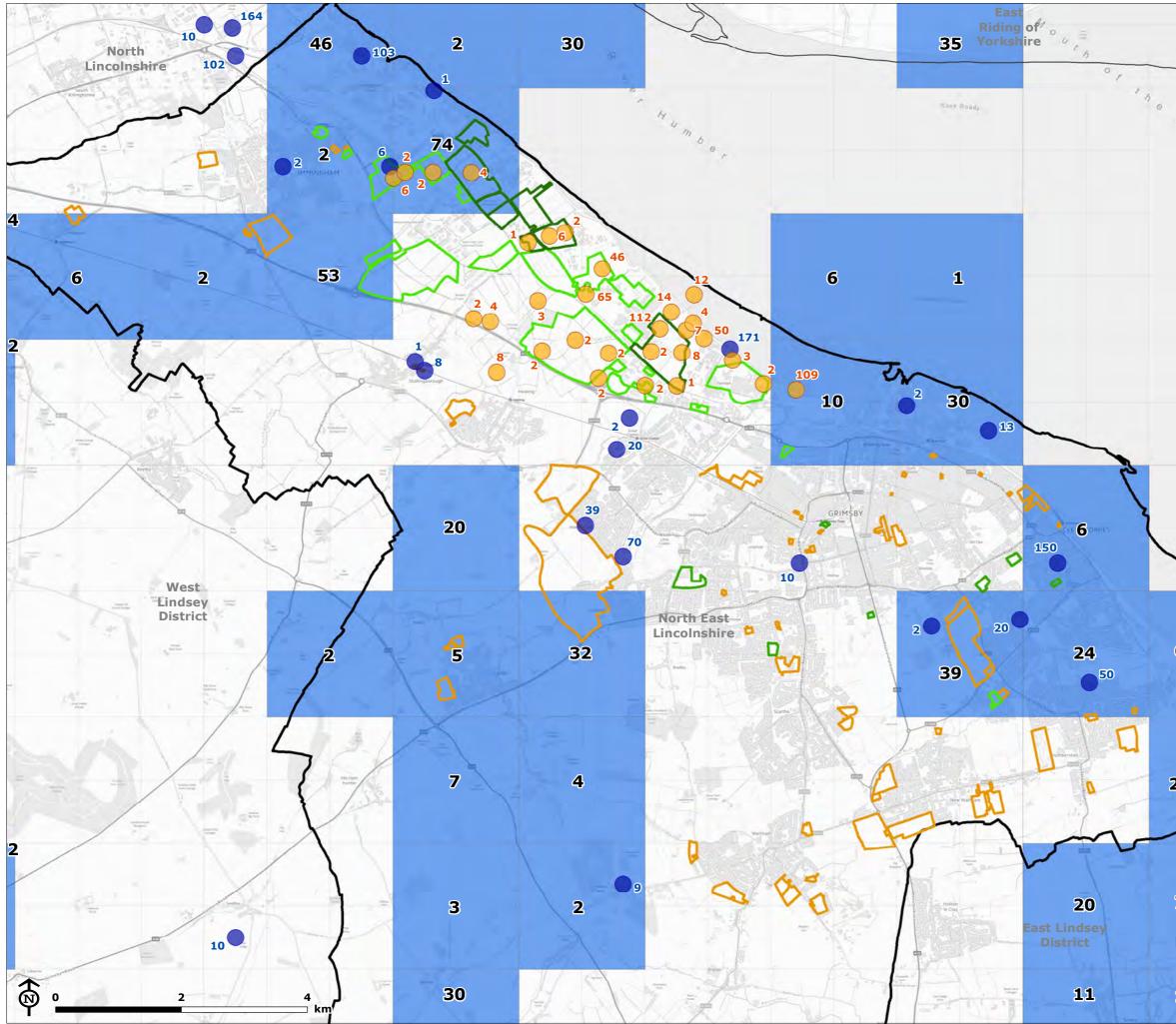
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Map Scale @ A3: 1:60,000



CB:VG EB:Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council



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in Relation to Housing and Employment Allocations
NE Lincolnshire district boundary
Surrounding districts
Land reserved for long term business expansion
Employment sites allocated in Local Plan
Development Company sites allocated in Local Plan
Housing sites allocated in Local Plan

BTO data (with max count value in the centre of the grid square)



Lincolnshire Environmental Records Centre (Part of Greater Lincolnshire Nature Partnership)



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Point data record (with max count value)

North & East Yorkshire Ecological Data Centre records



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Point data record (with max count value)





CB: VG EB: Goosen_V LUCEDI 5784-01_017_Bird_species_DDP_A3L 17/07/2017 Source: OS, GNLP, NE LincoInshire County Council

6 Conclusions

- 6.1 The HRA of the North East Lincolnshire Local Plan (incorporating main modifications made following examination) has been undertaken in accordance with currently available guidance and is based on a precautionary approach, as required under the Habitats Regulations. The updated overall HRA findings reached during the Appropriate Assessment stage are presented in **Chapter 5** of this report and the HRA conclusions and recommended further requirements are summarised below.
- 6.2 Provided that the identified mitigation and recommendations are implemented, adverse effects on the integrity of Natura 2000 sites around North East Lincolnshire from policies and site allocations in the Local Plan will not occur, either alone or in-combination with other plans or projects. Key mitigation safeguards included in the Local Plan (incorporating Main Modifications) which will need to be implemented to ensure 'no adverse effect' occurs are summarised below:
 - Further development of the Cleethorpes Habitat Management Plan To provide certainty that the Cleethorpes Habitat Management Plan will mitigate the effects of recreational pressures associated with the Local Plan. As specified in Policy 10 Tourism and Visitor Economy, supported development should promote "Securing appropriate, effective and timely mitigation when necessary; including a commitment to further development of the Cleethorpes Habitat Management Plan to manage increasing recreational pressures and access to sensitive areas. Any mitigation or management measures will be implemented prior to impacts occurring". It is recommended that the Council further develops the Habitat Management Plan working closely with Natural England and RSPB to maximise its effectiveness in alleviating recreational disturbance effects. The Management Plan, or equivalent, will need to continue to be reviewed and updated in light of bird and visitor monitoring results to ensure that appropriate mitigation of recreational pressure is implemented successfully in perpetuity.
 - **Policy 4 Employment Allocations** As specified in the Local Plan Sites ELR016a and ELR016b have been identified as having high potential to support SPA/Ramsar birds and therefore proposals will need to be supported by an assessment for these species. In addition, as specified in the Local Plan, there is a need for project level HRA if likely significant effects on the Humber Estuary SAC, SPA and Ramsar are predicted alone or in-combination with other existing or potential sources of air pollution. Sites that are located within the South Humber Bank Mitigation Zone will need to be progressed in accordance with the provisions set out in Policy 6 'Habitat Mitigation South Humber Bank.
 - **Policy 6 Habitat Mitigation South Humber Bank** As specified in the Local Plan, within the Mitigation Zone identified on the Policies Map, proposals which adversely affect the Humber Estuary SPA/Ramsar site due to the loss of functionally linked land will normally be required to provide their own mitigation. Mitigation sites are to be safeguarded against development and appropriate development is to be provided in line with The North East Lincolnshire South Humber Gateway Ecological Mitigation Delivery Plan.
 - Policy 11 Housing Allocations As specified in the Local Plan, sites identified as having medium or high potential to support SPA/Ramsar birds will be required to provide an assessment for these species. This assessment should incorporate a suitable level of data collection and/or bird surveying to determine the individual and cumulative importance of the site for SPA/Ramsar species. Where the assessment identifies the potential for adverse effects resulting from the offsite habitat loss and/or disturbance, appropriate and timely measures must be taken to mitigate such impacts. Such mitigation is likely to be in the form of alternative habitat managed specifically for the affected bird species and/or contributions towards the provision of strategic mitigation sites. Any strategic mitigation provision must be additional to that provided through the South Humber Bank Strategic Mitigation which only mitigates for sites within the South Humber Bank Mitigation Zone. All such measures must be in place and operational prior to the relevant impact(s), and must be maintained for the

duration of the impact(s). With regard to recreational pressures, the Council will track planning permission granted on all housing sites and will identify and secure appropriate, effective and timely mitigation to manage increasing recreational pressures on the Humber Natura 2000 sites when necessary; this includes a commitment to further development of the Cleethorpes Habitat Management Plan. Any mitigation or management measures identified will be implemented prior to impacts occurring.

- Policy 30 Renewable Energy and Low Carbon Infrastructure As referred to in the Local Plan, developments and their associated infrastructure will be assessed on their merits and subject to impact considerations, taking into account of individual and cumulative effects, with regard given to the findings of the HRA and potential impacts on SPA birds, where appropriate.
- **Policies 39 and 42** As specified in these policies, in making this provision, recognition should be made to the role such green space plays in mitigating the effects of recreational pressure on the Humber Estuary SCA/SPA/Ramsar, specially designing natural green space which is attractive to walkers and dog walkers, particularly in areas where development is most likely to result in increasing visitors to the Humber Estuary SAC/SPA/Ramsar'.
- 6.3 In summary, providing that the safeguards and mitigation measures included in the North East Lincolnshire Local Plan (incorporating Main Modifications) are successfully implemented as intended, the Local Plan will not result in adverse effects on the integrity of European Sites.

LUC July 2017

Appendix 1

Attributes of Natura 2000 sites within North East Lincolnshire Borough (+20km)

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity		
Natura 2000 sites within	Natura 2000 sites within 20km of North East Lincolnshire Borough					
Humber Estuary SAC	36,657.15	Situated to the north of the boundary stretching along the estuary from Goole to the coastline. A small section falls within the Borough boundary.	Annex I Habitats: Estuary Sandbanks which are slightly covered by sea water all the time Coastal lagoons Salicornia and other annuals colonizing mud and sand Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) Embryonic shifting dunes "Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")" "Fixed coastal dunes with herbaceous vegetation (""grey dunes"")" Dunes with <i>Hippopha rhamnoides</i> <u>Annex II species</u> Sea lamprey <i>Petromyzon marinus</i> River lamprey <i>Lampetra fluviatilis</i>	 Human impacts⁵¹ Climate change Sea level rise Key issues include: coastal squeeze impacts on the sediment budget, impacts on the 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. The conservation objectives are to⁵²: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; 		

Table A1.1: Attributes of Natura 2000 sites within North East Lincolnshire Borough (+20km)

 ⁵¹ Humber Estuary SAC Site Citation 2011 (<u>http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0030170.pdf</u>)
 ⁵² European Site Conservation Objectives for Humber Estuary SAC (UK0030170), Natural England, 2012.

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
			Grey seal Halichoerus grypus	 The extent and distribution of qualifying natural habitats and habitats of qualifying species The structure and function (including typical species) of qualifying natural habitats The structure and function of the habitats of qualifying species The supporting processes on which qualifying natural habitats and habitats and habitats of qualifying species, and, The distribution of qualifying species within the site.
Humber Estuary SPA	37630.24	Situated to the north of the boundary stretching along the estuary from Goole to the coastline. A small section is found within the Borough boundary.	Article 4.2: Annex 1 Birds:Avocet Recurvirostra avosettaBittern Botaurus stellarisHen harrier Circus cyaneusGolden plover Pluvialis apricariaBar-tailed godwit Limosa lapponicaRuff Philomachus pugnaxMarsh harrier Circus aeruginosusLittle tern Sterna albifronsArticle 4.2: Regularly occurring migratory birds – internationally important assemblage of breeding birds:Shelduck Tadorna tadorna	 Human impacts⁵³ Climate change Sea level rise Key issues include: coastal squeeze impacts on the sediment budget, impacts on the 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.

⁵³ Humber Estuary SPA Citation 2007 (<u>http://jncc.defra.gov.uk/pdf/SPA/UK9006111.pdf</u>)

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
			Knot <i>Calidris canutus</i> Dunlin <i>Calidris alpine</i> Black-tailed godwit <i>Limosa limosa</i> Redshank <i>Tringa tetanus</i>	 The conservation objectives are to⁵⁴: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; The extent and distribution of the habitats of the qualifying features The structure and function of the habitats of the qualifying features The supporting processes on which the habitats of the qualifying features rely The population of each of the qualifying features, and, The distribution of the qualifying features within the site.
Humber Estuary Ramsar	37987.8	Situated to the north of the boundary stretching along the estuary from Goole to the coastline. A small section is found within the Borough boundary.	Internationally important wetland site. ⁵⁵ <u>Annex 1 Birds:</u> European golden plover <i>Pluvialis</i> <i>apricaria</i> Red knot <i>Calidris canutus islandica</i> Dunlin <i>Calidris alpina alpine</i> Black-tailed godwit <i>Limosa limosa</i> <i>islandica</i> Common redshank <i>Tringa totanus</i> <i>tetanus</i>	N/A

 ⁵⁴ European Site Conservation Objectives for Humber Estuary SPA (UK9006111), Natural England, March 2014.
 ⁵⁵ Humber Estuary Ramsar itation 2008 (<u>http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0030170.pdf</u>)

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
			Shelduck <i>Tadorna tadorna</i> Bar-tailed godwit <i>Limosa lapponica</i> <u>Annex II species</u> Grey seal <i>Halichoerus grypus</i>	
Saltfleetby-Theddlethorpe and Gibraltar Point SAC	960.2	Very small site located approximately 2km outside of the site boundary to the east.	Annex I habitats: Mediterranean and thermo-Atlantic halophilous scrubs Embryonic shifting dunes Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") Fixed dunes with herbaceous vegetation ("grey dunes") Dunes with Hippophae rhamnoides Humid dune slacks	 Sedimentation Recreational disturbance The conservation objectives are to⁵⁶: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring the extent and distribution of the habitats of qualifying species. The extent and distribution of the qualifying natural habitats The structure and function (including typical species) of the qualifying natural habitats, and, The supporting processes on which the qualifying natural habitats rely

⁵⁶ European Site Conservation Objectives for Saltfleetby_Theddlethorpe and Girbaltar Point SAC Special Area of Conservation Site Code: UK0030270, Natural England, July 2014.

Appendix 2

HRA Screening of the North East Lincolnshire Local Plan

Table A2.1: Screening matrix for Humber Estuary SAC

Note that this matrix presents the conclusions of the screening stage – where likely significant effects on the SAC could not be ruled out the relevant policies were subject to further assessment during the Appropriate Assessment stage of the HRA (see **Chapter 5**).

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
New Policy 1: Employment land supply	Employment development Increased vehicle traffic Increased demand for water treatment	Development of employment sites may impact levels of air pollution from increased vehicle traffic and from industrial activities. This has the potential to increase pollutants, which may affect water quality and plant communities (in particular Salicornia, Atlantic salt meadows and dune habitats). The increased demand for water treatment and disposal could also affect the integrity of the Humber Estuary SAC as a result of increased discharge and changes in water quality . Significant effects on the SAC in relation to physical damage/loss of habitat are not considered likely,	Policy 6: Habitat Mitigation – South Humber Bank sets out the Council's strategy for preserving the integrity of the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management of mitigation sites. Policy 40: Biodiversity and Geodiversity states that the Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to establish and secure appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the	Uncertain – the policy has the potential to significantly affect air pollution and water quality. Potential effects depend on the location and design of development. Although other policies in the Local Plan would provide some mitigation, more detail is required to establish whether these impacts will have a likely significant effect on site integrity particularly employment allocations located outside the South Humber Mitigation Zone, which would not be mitigated by the South.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
		because the areas identified for employment use in Policy 4 do not extend into the SAC.	 internationally important biodiversity sites. Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. 	
New Policy 2: Housing land supply	Residential development Increase in recreational pressure Increased vehicle traffic. Increased demand for water treatment	The policy could result in non-physical disturbance during the construction phase and other impacts may include air pollution from an increase in traffic, which may impact water quality and plant communities and an increase in recreational disturbance on SAC	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport	Uncertain – there is potential for housing located in close proximity to the SAC to have a significant impact on dune systems from increased levels of recreation and there may also be impacts relating to air and water pollution. However, this is largely dependent on the location and design of development. Even with the mitigation built into the Local

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
		habitats near to allocated development sites. Equally impacts from increased demand for water treatment and disposal may affect the water quality and quantity of the Humber Estuary.	requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	Plan, further assessment is therefore required.
New Policy 3: Settlement Hierarchy and New Policy 4: Distribution of housing growth	Residential development near the Humber Estuary Increase in recreational pressure Increased vehicle traffic. Increased demand for water treatment	These policies could result in non-physical disturbance during the construction phase and other impacts may include air pollution from an increase in traffic, which may impact water quality and plant communities and an increase in recreational disturbance on SAC habitats near to allocated development sites. Equally impacts from increased demand for water treatment and disposal may affect the water quality and	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and	Uncertain – there is potential for housing located in close proximity to the SAC to have a significant impact on dune systems from increased levels of recreation and there may also be impacts relating to air and water pollution. This is largely dependent on the location and design of development. Even with the mitigation built into the Local Plan, further assessment is therefore required.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
		quantity of the Humber Estuary.	Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	
Policy 2: Development boundaries	None – the policy sets out criteria for assessing proposals for development outside of development boundaries but will not itself result directly in development. The policy approach to development boundaries seeks to focus development within existing built up areas where it is less likely to affect sensitive Natura 2000 sites.	N/A	N/A	No
Policy 3: Providing infrastructure	The policy relates to the mechanisms for delivering physical, social and green infrastructure but will not itself result in the development of new infrastructure that could affect the integrity of Natura 2000 sites.	N/A	N/A	No
Policy 4: Employment allocations	Employment development Increased vehicle traffic Increased demand for water	Development of employment sites may impact levels of air pollution from increased	Policy 6: Habitat Mitigation – South Humber Bank sets out the Council's strategy for preserving the integrity of	Uncertain – the policy has the potential to significantly affect air pollution and water quality. Although other policies in the

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
	treatment	 vehicle traffic and from industrial activities. This has the potential to increase pollutants, which may affect water quality and plant communities (in particular Salicornia, Atlantic salt meadows and dune habitats). The increased demand for water treatment and disposal could also affect the integrity of the Humber Estuary SAC as a result of increased discharge and changes in water quality. Significant effects on the SAC in relation to physical damage/loss of habitat are not considered likely, because the area of the Operational Port, within which development proposals for port related use will be actively supported, as identified on the policies map, does not extend within the boundaries of the SAC. 	the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management of mitigation sites. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to establish and secure appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important biodiversity sites. Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent	Local Plan would provide some mitigation, more detail is required to establish whether these impacts will have a likely significant effect on site integrity particularly employment allocations located outside the South Humber Mitigation Zone, which would not be mitigated by the South.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
		None of the employment site allocations listed in the policy are within the boundaries of the SAC.	 impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. 	
Policy 5: Existing employment areas	Development or re-use of vacant sites within existing employment areas	This policy advocates the use of existing employment sites and is therefore unlikely to result in additional development affecting the SAC. However, changes or intensification of site use may result in impacts on water quality and air pollution.	Policy 6: Habitat Mitigation – South Humber Bank sets out the Council's strategy for preserving the integrity of the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management of mitigation sites. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to	No – this policy will not result in likely significant effects on the SAC as it will only result in the redevelopment or re-use of sites in already in existing employment areas which means that increases in vehicle traffic or demand for water treatment are likely to be minimal. Therefore, taking into account the mitigation built into the Local Plan, likely significant effects are not expected.

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Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
			appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important biodiversity sites.	
Policy 6: Habitat mitigation – South Humber Bank	None – the policy will not itself result in development.	N/A	This policy itself should provide mitigation for the potential effects of other Local Plan proposals. The policy sets out the Council's strategy for preserving the integrity of the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management of mitigation sites.	No
Policy 7: Office development	Office development Increased vehicle traffic Increased demand for water	Office development will be directed to town centres and their peripheries which means that development would	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and	No - the policy steers office development to town centres in favour of more peripheral locations, where significant traffic generation is less likely

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
	treatment	be steered away from the SAC. However, such development is likely to cause an increase in vehicle traffic, which may result in increased levels of air pollution . This has the potential to change water quality levels and plant communities. The increased demand for water treatment and disposal could also result in a negative impact on the integrity of the Humber Estuary SAC, as a result of increased discharge and changes in water quality .	after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to establish and secure appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important biodiversity sites.	and the mitigation built into the Plan means that likely significant effects on the SAC are not expected.
Policy 8: Skills and training	None – the policy supports proposals that would help develop skills and training but	N/A	N/A	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
	will not itself result directly in new development.			
Policy 10: Tourism and Visitor Economy	Tourism-related development Increase in recreational pressure Increased vehicle traffic Increased demand for water treatment	An increase in visitor numbers in and around North East Lincolnshire as a result of this policy could result in increased air pollution from vehicle traffic and changes in water quality from an increase in demand for water treatment. There could also be an increase in visitor numbers at the SAC resulting in noise and general disturbance.	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	Uncertain – the policy could contribute to an increase in air pollution and decline in water quality at the SAC, as well as an increase in visitor numbers causing disturbance. The mitigation within other Local Plan policies is not enough to rule out likely significant effects at this stage.
Policy 11: Housing allocations	Residential development Increase in recreational pressure	The policy could result in non-physical disturbance during the construction phase and other impacts	Policy 33: Water Management ensures appropriate management of water is considered and	Uncertain – there is potential for housing located in close proximity to the SAC to have a significant impact on dune

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
	Increased vehicle traffic. Increased demand for water treatment	may include air pollution from an increase in traffic, which may impact water quality and plant communities and an increase in recreational disturbance on SAC habitats near to allocated development sites. Equally impacts from increased demand for water treatment and disposal may affect the water quality and quantity of the Humber Estuary.	 implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals. 	systems from increased levels of recreation and there may also be impacts relating to air and water pollution. Even with the mitigation built into the Local Plan, further assessment is therefore required.
Policy 12: Development of strategic housing	None – the policy sets out criteria that will apply to the development of housing at three sites that are already allocated through Policy 11, which is considered separately above in relation to the potential impacts on the SAC.	N/A	The policy includes a number of criteria that will help to mitigate the impacts of the strategic housing developments, including requirements to incorporate green infrastructure, sustainable transport links and to enhance biodiversity where possible.	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
Policy 13: Housing mix	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 14: Provision for elderly person's housing needs	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 15: Housing density	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 16: Affordable housing	None – the policy will not itself result in new development.	No effects	N/A	No
Policy 17: Rural exceptions	Small-scale housing development in rural areas Increase in vehicle traffic Increased demand for water treatment	The policy could lead to housing development which could affect the SAC through non- physical disturbance depending on the location of the development, and through an increase in air pollution from vehicle traffic and changes in water quality as a result of increased demand for water treatment.	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable	No – any development resulting from this policy would be very small in scale and therefore is unlikely to result in significant traffic generation or demand for water treatment. In order to affect the SAC through non- physical disturbance the development would need to be located within very close proximity of the SAC which is unlikely as the policy applies to the Borough's rural areas. Effects would be mitigated through the application of other policies in the Local Plan and

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
			transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	likely significant effects are not expected.
Policy 18: Self build and custom build homes	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 19: Provision for Gypsies and Travellers	The policy sets out criteria that will be used to assess proposals for Gypsy and Traveller sites, but will not itself lead directly to development.	N/A	N/A	No
Policy 20: Good design in new developments	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 21: Retail hierarchy and town centre development	Retail development and development relating to town centre uses Increase in vehicle traffic	No effect as the policy promotes the development within town centres away from the Natura 2000 sites.	N/A	No
Policy 22: Grimsby town centre opportunities	Mixed use development Increase in vehicle traffic Increased recreation pressure	Development will not result in the physical loss of habitat at the SAC or non-physical disturbance as it will be located	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and	Uncertain – although development resulting from the policy would not be within close proximity of the Natura 2000 site and would be within the

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
	Increase in demand for water treatment	within Grimsby. However, there could be potential impacts on the SAC through increased recreation pressure , increased air pollution from vehicle traffic, which can affect water quality and vegetation and increased demand for water disposal.	after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	urban area, the effect on the SAC is uncertain in relation to air and water pollution and recreation pressure. To understand the impacts on the Natura 2000 site in more detail an Appropriate Assessment is required.
Policy 23: Cleethorpes town centre opportunity sites	Mixed use development Increase in vehicle traffic Increased recreation pressure Increase in demand for water treatment	Development will not result in the physical loss of habitat at the SAC or non-physical disturbance as it will be located within Cleethorpes. However, there could be potential impacts on the SAC through increased recreation pressure , increased air pollution from vehicle traffic, which can affect water	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to	Uncertain – although development resulting from the policy would not be within close proximity of the Natura 2000 site and would be within the urban area, the effect on the SAC is uncertain in relation to air and water pollution and recreation pressure. To understand the impacts on the Natura 2000 site in more detail an Appropriate Assessment is

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
		quality and vegetation and increased demand for water disposal.	address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use.	required.
			Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	
Policy 25: Primary shopping frontages	None - the policy relates to which uses will be acceptable within primary shopping frontages but will not itself lead to development. In addition the policy relates to uses within urban areas away from the SAC.	N/A	N/A	No
Policy 26: Freeman Street district centre	Mixed use development	No effect as development will be situated within Grimsby away from the SAC.	N/A	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
Policy 27: Local centres	Small scale retail development	Potential impacts on the SAC are likely to be minimal as development will occur within existing built up areas. An increase in air pollution is unlikely as retail developments would be small in scale and within local centres, so likely to be used by people living locally and accessed without the need to generate additional car journeys.	Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	No – the nature and location of any development that would result from this policy mean that significant effects on the SAC are unlikely.
Policy 28: Social and cultural places	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 29: Grimsby town football club community stadium	Development of a new football stadium Increased vehicle traffic Increased demand for water treatment	Depending on the location of the stadium, the SAC could be affected by non- physical disturbance ; however loss of habitat from within the site boundary is not likely as the stadium would be an onshore development and is likely to be located within or on the edge of Grimsby. Potential	Policy 35 promotes the use of sustainable modes of transport and as such may provide mitigation for the impacts of other policies in relation to increased car use and the associated air pollution. The policy itself states that a green transport plan will be required, along with facilities to maximise public transport	No – likely significant effects in relation to increased air pollution, water pollution or non- physical disturbance cannot be entirely ruled out at this stage until more information is available.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
		effects include air pollution from increased traffic, which may increase pollutants, thus affecting water quality and vegetation structure and demand for water treatment and disposal , which may affect water quality and quantity.	patronage. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	
Policy 30: Renewable and low carbon infrastructure	Renewable and low carbon infrastructure development	Potential affects could include physical loss of SAC habitat depending on the location of the infrastructure. The SAC could also be affected by non-physical disturbance such as noise and light pollution during the construction phase.	Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals. The policy itself states that proposals for renewable energy development will be assessed in relation to impacts on biodiversity, geodiversity and nature, particularly in relation to designations, displacement,	Uncertain – the policy could result in development that could affect the integrity of the SAC depending on its exact location and nature, therefore further assessment is needed to identify whether likely significant effects will occur.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
			disturbance and collision and the impact of emissions/contamination.	
Policy 31: Energy and low carbon living	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 32: Flood risk	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 33: Water management	None – the policy will not itself result in new development.	N/A	The policy ensures appropriate management of water is considered during and after development. This should help to prevent impacts on water quality in the SAC from other Local Plan policies.	No
Policy 34: Telecommunications	None – the policy sets out criteria that proposals for telecommunications will be assessed against but will not itself result in new development.	N/A	N/A	No
Policy 35: Promoting sustainable transport	None – the policy will not itself result in new development.	N/A	The policy promotes the use of sustainable modes of transport and as such may provide mitigation for the impacts of other policies in relation to increased car use	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
			and the associated air pollution.	
Policy 36: Safeguarding transport infrastructure	Development of Road and rail infrastructure Increased vehicle traffic	Potential impact on SAC includes air pollution from increased vehicle traffic. However, the identified transport infrastructure improvement schemes are located over 1km away from the SAC so are therefore unlikely to have a significant affect.	N/A	No
Policy 37: Parking	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 38: Conserving and enhancing the historic environment	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 39: Developing a green infrastructure network	None – the policy will not itself result in new development.	N/A	The policy may help to mitigate the potential effects of other proposals in the Local Plan in relation to increased pressure for recreation space at Natura 2000 sites.	No
Policy 40: Biodiversity and geodiversity	None – the policy will not itself result in new development.	N/A	The policy should provide mitigation for the potential	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
			effects of other Local Plan policies as it seeks to protect designated biodiversity sites from the potential impacts of development.	
Policy 41: Landscape	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 42: Green space and recreation	None – the policy will not itself result in new development.	N/A	The policy will safeguard the loss of any private or public green spaces and ensure development proposals include areas of green space within their plan. This may help to mitigate the potential effects of other proposals in the Local Plan in relation to increased pressure for recreation space at Natura 2000 sites.	No
Policy 43: Safeguarding minerals and related infrastructure	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 44: Mineral extraction and Secondary Aggregates	None – the policy sets out criteria that will be used to assess future proposals for minerals extraction, but will not itself directly result in new minerals-related development.	N/A	N/A	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
Policy 45: Restoration and aftercare (minerals)	None – the policy will not itself result in new development.	N/A	The restoration of extractions sites could provide new opportunities to restore and enhance habitats, which may help to prevent coastal squeeze on SAC.	No
Policy 46: Future requirements for waste facilities	Development of waste management facilities Increased vehicle traffic Increased demand for water abstraction and treatment	Depending on the nature and exact location of waste management facilities there could be increased emissions from the facility itself and from vehicle movements, resulting in increased air pollution . There could also be non-physical disturbance or h abitat loss depending on where development takes place. Changes to hydrology may also result from demand for water abstraction and treatment.	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	Uncertain – although there is mitigation built into the Local Plan, until more information is available it is not possible to rule out likely significant effects on the SAC.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on the Humber Estuary SAC	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on the Humber Estuary SAC (taking mitigation into account)?
Policy 47: Safeguarding waste facilities and related infrastructure	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 48: Restoration and aftercare (waste)	None – the policy will not itself result in new development.	N/A	The restoration of extraction sites could provide new opportunities to qualifying bird species of Natura sites by restoring and enhancing habitats.	No

Table A2.2: Screening matrix for Humber Estuary SPA and Ramsar site

Note that this matrix presents the conclusions of the screening stage – where likely significant effects on the SPA and/or Ramsar site could not be ruled out the relevant policies were subject to further assessment during the Appropriate Assessment stage of the HRA (see **Chapter 5**).

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
New Policy 1: Employment land supply	Employment development Increased vehicle traffic Increased demand for water treatment	Development of employment sites may impact levels of air pollution from increased vehicle traffic and from industrial activities. This has the potential to increase pollutants, which may affect water quality and plant communities (in particular Salicornia, Atlantic salt meadows and dune habitats). The increased demand for water treatment and disposal could also affect the integrity of the Humber Estuary SAC as a result of increased discharge and changes in water quality . Significant effects on the SAC in relation to physical damage/loss of habitat are not considered likely,	Policy 6: Habitat Mitigation – South Humber Bank sets out the Council's strategy for preserving the integrity of the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management of mitigation sites. Policy 40: Biodiversity and Geodiversity states that the Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to establish and secure appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important	Uncertain – the policy has the potential to significantly affect air pollution and water quality. Potential effects depend on the location and design of development. Although other policies in the Local Plan would provide some mitigation, more detail is required to establish whether these impacts will have a likely significant effect on site integrity particularly employment allocations located outside the South Humber Mitigation Zone, which would not be mitigated by the South.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		because the areas identified for employment use in Policy 4 do not extend into the SAC.	 biodiversity sites. Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. 	
New Policy 2: Housing land supply	Residential development Increase in recreational pressure Increased vehicle traffic. Increased demand for water treatment	The policy could result in non-physical disturbance during the construction phase and other impacts may include air pollution from an increase in traffic, which may impact water quality and plant communities and an increase in recreational disturbance on SAC habitats near to allocated	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to	Uncertain – there is potential for housing located in close proximity to the SAC to have a significant impact on dune systems from increased levels of recreation and there may also be impacts relating to air and water pollution. However, this is largely dependent on the location and design of development. Even with the mitigation built into the Local Plan, further assessment is

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		development sites. Equally impacts from increased demand for water treatment and disposal may affect the water quality and quantity of the Humber Estuary.	address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	therefore required.
New Policy 3: Settlement Hierarchy and New Policy 4: Distribution of housing growth	Residential development near the Humber Estuary Increase in recreational pressure Increased vehicle traffic. Increased demand for water treatment	These policies could result in non-physical disturbance during the construction phase and other impacts may include air pollution from an increase in traffic, which may impact water quality and plant communities and an increase in recreational disturbance on SAC habitats near to allocated development sites. Equally impacts from increased demand for water treatment and disposal may affect the water quality and quantity of the Humber	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The	Uncertain – there is potential for housing located in close proximity to the SAC to have a significant impact on dune systems from increased levels of recreation and there may also be impacts relating to air and water pollution. This is largely dependent on the location and design of development. Even with the mitigation built into the Local Plan, further assessment is therefore required.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		Estuary.	Council will have regard to biodiversity and geodiversity when considering development proposals.	
Policy 2: Development boundaries	None – the policy sets out criteria for assessing proposals for development outside of development boundaries but will not itself result directly in development. The policy approach to development boundaries seeks to focus development within existing built up areas where it is less likely to affect sensitive Natura 2000 sites.	N/A	N/A	No
Policy 3: Providing infrastructure	The policy relates to the mechanisms for delivering physical, social and green infrastructure but will not itself result in the development of new infrastructure that could affect the integrity of Natura 2000 sites.	N/A	N/A	No
Policy 4: Employment allocations	Employment development Increased vehicle traffic Increased demand for water treatment	Some of the allocated employment sites listed in the policy are within 2km of the SPA and Ramsar site; therefore	Policy 6: Habitat Mitigation – South Humber Bank sets out the Council's strategy for preserving the integrity of the Humber Estuary	Yes – the proposed development would result in the removal of habitat, which is likely to be used by qualifying bird species from the SPA and Ramsar site. This is

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		the SPA and Ramsar site are likely to be affected by physical loss of offsite habitat used by qualifying birds, as well as non-physical disturbance such as noise, vibration and light pollution, increased air pollution from increased levels of vehicle traffic and industrial activities and increased demand for water treatment and disposal , which could impact the quality and quantity of the Ramsar's near natural estuary. Proposed modification SPM61 states that development proposals within Operational Port Areas will need to 'pass the tests of the Habitats Regulations'. This highlights the fact that HRA should be undertaken for development proposals of this nature.	Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management of mitigation sites. However, this strategy will only mitigate for the loss of land located within the mitigation zone Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to establish and secure appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important biodiversity sites. Policy 33: Water Management ensures appropriate management of water is considered and	likely to have a significant effect; therefore a more detailed assessment will be required. There could also be impacts from non-physical disturbance, air pollution and changes in water quality/quantity although they are less likely to be significant, taking into account mitigation.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
			implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC.	
			Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use.	
			Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	
Policy 5: Existing employment areas	Development or re-use of vacant sites within existing employment areas	This policy advocates the use of existing employment sites and is therefore unlikely to result in additional development affecting the SPA or Ramsar site. However, changes or intensification of site use may result in impacts on water quality and air	Policy 6: Habitat Mitigation – South Humber Bank sets out the Council's strategy for preserving the integrity of the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions towards the provision and management	No – this policy will not result in likely significant effects on the SPA or Ramsar site as it will only result in the redevelopment or re-use of sites in already in existing employment areas which means that increases in vehicle traffic or demand for water treatment are likely to be minimal. Therefore, taking into account the mitigation built into the Local Plan, likely significant

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		pollution.	of mitigation sites. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals, specifically seeking to establish and secure appropriate management of, long term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important biodiversity sites.	effects are not expected.
Policy 6: Habitat mitigation – South Humber Bank	None – the policy will not itself result in development.	N/A	This policy itself should provide mitigation for the potential effects of other Local Plan proposals. The policy sets out the Council's strategy for preserving the integrity of the Humber Estuary Natura 2000 sites while allowing future economic development to take place, and includes a requirement for developers to make contributions	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
			towards the provision and management of mitigation sites.	
Policy 7: Office development	Office development Increased vehicle traffic Increased demand for water treatment	Office development will be directed to town centres and their peripheries which means that development would be steered away from the SPA and Ramsar site. However, such development is likely to cause an increase in vehicle traffic, which may impact birds and water quality of the SPA and Ramsar site by increasing air pollution. The increased demand for water treatment and disposal may also have an impact on the Ramsar's estuary habitat.	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use.	No - the policy steers office development to town centres in favour of more peripheral locations, where significant traffic generation is less likely and the mitigation built into the Plan means that likely significant effects on the SPA and Ramsar site are not expected.
Policy 8: Skills and training	None – the policy supports proposals that would help develop skills and training but will not itself result directly in new development.	N/A	N/A	No
Policy 10: Tourism and	Tourism-related development	An increase in visitor	Policy 33: Water	Uncertain – the policy could

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
Visitor Economy	Increase in recreational pressure Increased vehicle traffic Increased demand for water treatment	numbers in and around North East Lincolnshire as a result of this policy could result in increased air pollution from vehicle traffic and changes in water quality from an increase in demand for water treatment. There could also be an increase in visitor numbers at the SPA and Ramsar site resulting in noise and general disturbance.	Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	contribute to an increase in air pollution and decline in water quality at the SPA and Ramsar site, as well as an increase in visitor numbers causing disturbance to the qualifying bird species. The mitigation within other Local Plan policies is not enough to rule out likely significant effects at this stage.
Policy 11: Housing allocations	Residential development Increase in recreational pressure Increased vehicle traffic. Increased demand for water treatment	Impacts on the SPA and Ramsar site are likely to result in habitat loss (offsite), non-physical disturbance such as noise, vibrations and light pollution, increased recreational disturbances to offsite	Policy 39: development will consider the need to maintain and improve green infrastructure whilst considering the impacts on local wildlife sites. Policy 42: green spaces and recreation will be protected	Yes – the physical loss of habitat used by qualifying bird species of the SPA and Ramsar is likely to have significant impacts. There may also be impacts associated with air and water pollution, changes in water quantity, and recreational disturbance. Some policies may provide potential

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		habitat and increased air pollution . Increased demand for water treatment and disposal, may also affect the quality and quantity of the Ramsar site's estuary.	 and new spaces will be provided, in conjunction with development. This will decrease pressure from increased recreational use. See policy 33, 35 and 40 Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase. above. 	mitigation for other impacts; however this needs to be considered in more detail through the Appropriate Assessment.
Policy 12: Development of strategic housing	None – the policy sets out criteria that will apply to the development of housing at three sites that are already allocated through Policy 11, which is considered separately above in relation to the potential impacts on the SAC.	N/A	The policy includes a number of criteria that will help to mitigate the impacts of the strategic housing developments, including requirements to incorporate green infrastructure, sustainable transport links and to enhance biodiversity where possible.	No
Policy 13: Housing mix	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 14: Provision for elderly person's housing	None – the policy will not itself result in new development.	N/A	N/A	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
needs				
Policy 15: Housing density	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 16: Affordable housing	None – the policy will not itself result in new development.	No effects	N/A	No
Policy 17: Rural exceptions	Small-scale housing development in rural areas Increase in vehicle traffic Increased demand for water treatment	The policy could lead to housing development which could affect the SPA or Ramsar site through loss of offsite habitat or non-physical disturbance depending on the location of the development, and through an increase in air pollution from vehicle traffic and changes in water quality as a result of increased demand for water treatment.	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	No – any development resulting from this policy would be very small in scale and therefore is unlikely to result in significant traffic generation or demand for water treatment. In order to affect the SPA or Ramsar site through non-physical disturbance the development would need to be located within very close proximity of the sites which is unlikely as the policy applies to the Borough's rural areas. Effects would be mitigated through the application of other policies in the Local Plan and likely significant effects are not expected.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
Policy 18: Self build and custom build homes	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 19: Provision for Gypsies and Travellers	The policy sets out criteria that will be used to assess proposals for Gypsy and Traveller sites, but will not itself lead directly to development.	N/A	N/A	No
Policy 20: Good design in new developments	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 21: Retail hierarchy and town centre development	Retail development and development relating to town centre uses Increase in vehicle traffic	No effect as the policy promotes the development within town centres away from the Natura 2000 sites.	N/A	No
Policy 22: Grimsby town centre opportunities	Mixed use development Increase in vehicle traffic Increased recreation pressure Increase in demand for water treatment	The development is likely to impact qualifying bird through increased recreational pressure and increased air pollution from vehicle traffic. The Ramsar site may also be affected by water pollution from an increased demand for water treatment and disposal.	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to	Uncertain – although development resulting from the policy would not be within close proximity of the Natura 2000 sites and would be within the urban area, the effect on the SPA and Ramsar site is uncertain in relation to air and water pollution and recreation pressure. To understand the impacts on the Natura 2000 site in more detail an Appropriate Assessment is

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
			address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	required.
Policy 23: Cleethorpes town centre opportunity sites	Mixed use development Increase in vehicle traffic Increased recreation pressure Increase in demand for water treatment	The development could impact qualifying bird species of the Natura 2000 sites through non- physical disturbances during construction and air pollution from increased traffic. The Ramsar site is also likely to be affected by increased recreational pressure on the sand dunes situated next to the development and increased demand for water treatment which could affect water quality .	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The	Uncertain –there is potential for significant impacts on the SPA and Ramsar site as a result of the close proximity of the development to the designation. To understand the impacts on the Natura 2000 sites in more detail an Appropriate Assessment is required.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
			Council will have regard to biodiversity and geodiversity when considering development proposals.	
Policy 25: Primary shopping frontages	None - the policy relates to which uses will be acceptable within primary shopping frontages but will not itself lead to development. In addition the policy relates to uses within urban areas away from the SAC.	N/A	N/A	No
Policy 26: Freeman Street district centre	Mixed use development	No effect as development will be situated within Grimsby away from the SPA and Ramsar site.	N/A	No
Policy 27: Local centres	Small scale retail development	Potential impacts on the SPA and Ramsar site are likely to be minimal as development will occur within existing built up areas. An increase in air pollution is unlikely as retail developments would be small in scale and within local centres, so likely to be used by people living locally and accessed without the	Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	No – the nature and location of any development that would result from this policy mean that significant effects on the SPA and Ramsar site are unlikely.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		need to generate additional car journeys.		
Policy 28: Social and cultural places	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 29: Grimsby town football club community stadium	Development of a new football stadium Increased vehicle traffic Increased demand for water treatment	Depending on the location of the stadium, the qualifying bird species of the SPA and Ramsar could be affected by loss of offsite habitat or non-physical disturbance ; however loss of habitat from within the site boundary is not likely as the stadium would be an onshore development and is likely to be located within or on the edge of Grimsby. Potential effects include air pollution from increased traffic, which may increase pollutants, thus affecting water quality and vegetation structure and demand for water treatment and disposal , which may affect water quality and	Policy 35 promotes the use of sustainable modes of transport and as such may provide mitigation for the impacts of other policies in relation to increased car use and the associated air pollution. The policy itself states that a green transport plan will be required, along with facilities to maximise public transport patronage. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	No – likely significant effects in relation to increased air pollution, water pollution or non- physical disturbance cannot be entirely ruled out at this stage until more information is available.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		quantity.		
Policy 30: Renewable and low carbon infrastructure	Renewable and low carbon infrastructure development	Impacts from development may include loss of habitat (on and offsite), non-physical disturbance and air pollution during construction.	Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals. The policy itself states that proposals for renewable energy development will be assessed in relation to impacts on biodiversity, geodiversity and nature, particularly in relation to designations, displacement, disturbance and collision and the impact of emissions/contamination.	Uncertain – the policy could result in development that could affect the integrity of the SPA/Ramsar site depending on its exact location and nature, therefore further assessment is needed to identify whether likely significant effects will occur. It is noted that the supporting text to Policy 30 states that opportunities for onshore wind energy development are considered to be limited and that renewable energy capacity is most likely to be increased through further solar farm development; therefore the likelihood of disturbance or damage to bird species (e.g. through collision) is reduced.
Policy 31: Energy and low carbon living	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 32: Flood risk	None – the policy will not itself result in new development.	N/A	N/A	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
Policy 33: Water management	None – the policy will not itself result in new development.	N/A	The policy ensures appropriate management of water is considered during and after development. This should help to prevent impacts on water quality in the SAC from other Local Plan policies.	No
Policy 34: Telecommunications	None – the policy sets out criteria that proposals for telecommunications will be assessed against but will not itself result in new development.	N/A	N/A	No
Policy 35: Promoting sustainable transport	None – the policy will not itself result in new development.	N/A	The policy promotes the use of sustainable modes of transport and as such may provide mitigation for the impacts of other policies in relation to increased car use and the associated air pollution.	No
Policy 36: Safeguarding transport infrastructure	Development of Road and rail infrastructure Increased vehicle traffic	The SPA and Ramsar site could be affected by physical loss of habitat (offsite), non-physical disturbances, such as noise, vibration and light and air pollution to the	Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals.	Uncertain – there could be a likely significant effect on the qualifying bird species of the SPA, due to the proximity of suitable offsite habitat for birds to the road. Further assessment is required to understand the

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		surrounding habitat.		level of impact on the SPA.
Policy 37: Parking	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 38: Conserving and enhancing the historic environment	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 39: Developing a green infrastructure network	None – the policy will not itself result in new development.	N/A	The policy may help to mitigate the potential effects of other proposals in the Local Plan in relation to increased pressure for recreation space at Natura 2000 sites.	No
Policy 40: Biodiversity and geodiversity	None – the policy will not itself result in new development.	N/A	The policy should provide mitigation for the potential effects of other Local Plan policies as it seeks to protect designated biodiversity sites from the potential impacts of development.	No
Policy 41: Landscape	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 42: Green space and recreation	None – the policy will not itself result in new development.	N/A	The policy will safeguard the loss of any private or public green spaces and ensure	No

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
			development proposals include areas of green space within their plan. This may help to mitigate the potential effects of other proposals in the Local Plan in relation to increased pressure for recreation space at Natura 2000 sites.	
Policy 43: Safeguarding minerals and related infrastructure	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 44: Mineral extraction and Secondary Aggregates	None – the policy sets out criteria that will be used to assess future proposals for minerals extraction, but will not itself directly result in new minerals-related development.	N/A	N/A	No
Policy 45: Restoration and aftercare (minerals)	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 46: Future requirements for waste facilities	Development of waste management facilities Increased vehicle traffic Increased demand for water abstraction and treatment	Depending on the nature and exact location of waste management facilities there could be increased emissions from the facility itself and from vehicle movements, resulting in increased air	Policy 33: Water Management ensures appropriate management of water is considered and implemented during and after development. This should help to prevent impacts on water quality	Uncertain – although there is mitigation built into the Local Plan, until more information is available it is not possible to rule out likely significant effects on the SPA and Ramsar site.

Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects on Humber Estuary SPA/Ramsar site	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Humber Estuary SPA/Ramsar site (taking mitigation into account)?
		pollution . There could also be non-physical disturbance or habitat loss depending on where development takes place. Changes to hydrology may also result from demand for water abstraction and treatment.	 and quantity in the SAC. Policy 35: Promoting Sustainable Transport requires developers to address the impacts of their proposals in relation to increased vehicle traffic and to promote sustainable transport use. Policy 40: Biodiversity and Geodiversity states that The Council will have regard to biodiversity and geodiversity when considering development proposals. 	
Policy 47: Safeguarding waste facilities and related infrastructure	None – the policy will not itself result in new development.	N/A	N/A	No
Policy 48: Restoration and aftercare (waste)	None – the policy will not itself result in new development.	N/A	The restoration of extraction sites could provide new opportunities to qualifying bird species of Natura sites by restoring and enhancing habitats.	No

Appendix 3

Review of Potential for In-Combination Effects with other Local Authority Plans

Central Lincolnshire Local Plan: Submission version (October 2015)

Planning policy in **West Lindsey** is the responsibility of the Central Lincolnshire Joint Planning Unit which is currently producing the Central Lincolnshire Local Plan. This emerging plan will cover the Local Authorities of the City of Lincoln, West Lindsey, and North Kesteven District Councils and replace the Local Plans of these areas. The Central Lincolnshire Local Plan was submitted to the Secretary of State on 29 June 2016.

West Lindsey lies to the south west of North East Lincolnshire.

<u>Housing</u>

36,960 new dwellings will be provided across the Central Lincolnshire area between 2012 and 2036. Most development (23,654 new homes) will be accommodated in the Lincoln Strategy Area centred on the city of Lincoln. Gainsborough and Sleaford have each been identified as the locations for a further 12% (4,435 homes) of the total housing provision in the Central Lincolnshire Area. The remaining 12% of housing development required in the Central Lincolnshire area will be provided at other settlements in accordance with the settlement hierarchy.

Employment Land Provision

The Local Plan states that over the plan period an appropriate amount of new employment land will be delivered. The Policies Map has identified seven Strategic Employment Sites which are reserved for B1, B2 and B8 Uses. These are at Teal Park, Lincoln Science and Innovation Park, Network 46 Camp Road, Somerby Park, Sleaford Enterprise Park, land at Hemswell Cliff and land at Lincolnshire Showground. The gross size of all of these sites in total is 203.1ha.

HRA Findings

The April 2016 Central Lincolnshire Local Plan Habitats Regulations Assessment (HRA)

Methodology and Screening Report for the Proposed Submission Local Plan (which was identical to the Submission version) concluded that the Local Plan mitigates against all of its own potential significant negative effects. The Local Plan was considered 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 has been 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. **Therefore, likely significant effects in combination with the North East Lincolnshire Local Plan are not expected.**

North Lincolnshire: Adopted Core Strategy (June 2011) and Housing and Employment Land Allocations Development Plan Document 2016

North Lincolnshire lies to the north west of North East Lincolnshire. The Core Strategy was adopted in 2011 and the Housing and Employment Land Allocations DPD was prepared in the context of the overall growth figures in the Core Strategy in order to identify specific site allocations.

<u>Housing</u>

The Core Strategy states that between 2010 and 2026 12,063 new dwellings (754 new dwellings per year) are required to be provided in North Lincolnshire. The majority of housing is to be located in the Major Sub-Regional Town (Scunthorpe) and the Market Towns (Barton upon Humber, Brigg, Crowle, Epworth, Kirton in Lindsey and Winterton) of the District. Housing is to be distributed as follows:

- Scunthorpe: 9,892 homes
- Barton upon Humber: 724 homes
- Brigg: 844 homes
- Crowle: 145 homes
- Kirton in Lindsey: 181 homes
- Winterton: 277 homes

Specific sites for residential development are allocated in the Housing and Employment Land Allocations DPD and only sites that fit with the spatial strategy set out in the Core Strategy were considered for

inclusion. Sites on brownfield land were prioritised.

Employment Land Provision

The Employment Land Review 2010 for North Lincolnshire identified a requirement for 168ha of employment land in the District. As such a number of strategic employment sites are to be identified at the following broad areas as per Policy CS11 of the Core Strategy:

- Scunthorpe: 71ha
- Sandtoft Business Park: 58.5ha
- Humberside Airport: 20ha
- Market Towns: 10ha

Specific sites for employment development are allocated in the Housing and Employment Land Allocations DPD and the allocated sites reflect the ambition of the Core Strategy to achieve economic growth and diversification at Scunthorpe. Due to this, priority was given to site options within and adjacent to Scunthorpe, the South Humber Bank and immediate area, the Market Towns of Brigg and Barton upon Humber, Humberside Airport and land at Sandtoft for a business park.

HRA Findings

The October 2010 HRA Screening Report for the Core Strategy Submission Draft concluded that eight of the 27 policies in the Core Strategy DPD were likely to lead to significant effects on the Humber Estuary SAC, SPA and Ramsar site and the Thorne Moor SAC, Hatfield Moor SAC and Thorne and Hatfield Moors SPA. The significant effects identified were related to changes in the Humber Estuary SAC, SPA and Ramsar site and Hatfield Moor SAC and Thorne and Hatfield Moors SPA. The significant effects identified were related to changes in the Humber Estuary SAC, SPA and Ramsar site and Hatfield Moor SAC, Thorne Moor SAC and Thorne and Hatfield Moors SPA in terms of disturbance to key species, reduction in habitat area, changes to water quality and changes to air quality. Appropriate Assessment was subsequently carried out for the Core Strategy in December 2010. It was concluded that 21 development aspects of eight policies in the Core Strategy may lead to likely significant effects and thus adverse effects on the integrity of the European sites, without mitigation. Mitigation measures are provided in the report and it is concluded that the implementation of these appropriate measures will mean that alone or in combination with other plans and projects the Core Strategy will not lead to adverse effects on integrity of a European Site.

A separate HRA was also carried out in relation to the Housing and Employment Land Allocations DPD (Habitats Regulations Assessment Stage 1: Significance Test and Stage 2: Appropriate Assessment, December 2014). Prior to considering mitigation, the conclusion of the HRA was that it was not possible to ascertain that the DPD would not have an adverse effect on the integrity of the Humber Estuary SAC, SPA and Ramsar site. However, taking into account the mitigation provided through the South Humber Gateway Strategic Mitigation Strategy and other measures, the HRA conclusion was that the Housing and Employment Allocations DPD will not have an adverse effect on the Humber Estuary SAC, SPA and Ramsar Site either alone or in combination with other plans or projects.

Therefore, likely significant effects in combination with the North East Lincolnshire Local Plan are identified prior to mitigation; however following implementation of the South Humber Gateway Strategic Mitigation Strategy, likely significant effects are not expected.

East Riding: Local Plan Strategy Document (adopted April 2016)

East Riding does not border North Eats Lincolnshire but is located on the opposite northern bank of the Humber Estuary. As such it buffers the northern boundary of the Humber Estuary SAC, SPA and Ramsar site.

<u>Housing</u>

Provision will be made in East Riding for at least 23,800 (net) additional dwellings (1,400 per annum) in the East Riding between 2012 and 2029. The majority of housing development is to be provided in the principal towns of East Riding (Beverley, Bridlington, Driffield and Goole) where 10,850 new dwellings (45.6% of the total number of homes) will be located. The towns of the District will accommodate a further 22.4% (5,340 homes) and the Major Haltemprice Settlements will accommodate 14.9% of new housing development (3,550 homes) in the District. The remaining housing development required in the District is to be provided at the Rural Service Centres and Primary Villages as well as the Villages and Countryside in

the District.

Employment Land Provision

The Strategy Document identifies that the future needs of the East Riding economy will be met through the allocation of at least 235 hectares of employment land. 55 hectares is to be provided for B1 uses predominantly in the Major Haltemprice Settlements and the Principal Towns. 65 hectares are to be identified for B2 uses and this provision is to be spread across a range of sites around the East Riding. Locations along the East-West Multi-Modal Transport Corridor are to primarily be used to allocate 115 hectares for B8 uses.

HRA Findings

The Habitat Regulations Assessment report for the East Riding Local Plan Strategy Document (April 2014) considered the potential impacts of the Proposed Submission Strategy Document on European sites (Flamborough Head and Bempton Cliffs SPA, Flamborough Head SAC, Hornsea Mere SPA, Humber Estuary Ramsar site, Humber Estuary SPA, Humber Estuary SAC, Thorne and Hatfield Moors SPA, Thorne Moor SAC, Lower Derwent Valley Ramsar site, Lower Derwent Valley SPA, Lower Derwent Valley SAC, River Derwent SAC and Skipwith Common SAC). It concluded that Draft Policy S6 part B, which relates to 240 hectares of land at Hedon Haven would result in the loss of land that is used as functional habitat by birds from adjacent Humber Estuary SPA/Ramsar. The Appropriate Assessment could not conclude that the policy as originally proposed would not have an adverse effect upon the integrity of the international sites due to the potential to affect the distribution of the birds in the adjacent part of the estuary which would be contrary to the conservation objective to maintain the distribution of the features of the SPA.

Mitigations measures were identified in the form of enhanced habitat at Newton Garth and Hedon Haven. These sites will provide wet grassland which is of a higher value as functional land than the arable land which is being lost. The Proposed Submission Local Plan policy S6 part B and its supporting text was amended to reduce the size of the allocation from 240 hectares to 205 hectares (including the low impact use in the mitigation buffer). The supporting text for the policy was also modified to recognise the need for the provision of the mitigation area. Taking into account this mitigation, the Appropriate Assessment therefore concluded that the Proposed Submission Policy S6 part B will not have an adverse effect upon the integrity of the Humber Estuary SPA/Ramsar. **Therefore, likely significant effects in combination with the North East Lincolnshire Local Plan are not expected.**

East Lindsey: Draft Core Strategy (February 2016)

The emerging East Lindsey Local plan is to be made up of two key documents; the Draft Core strategy and the Settlement Proposals document. Both documents were published for consultation in February 2016.

East Lindsey is located to the north of North East Lincolnshire, across the other side of the Humber Estuary.

<u>Housing</u>

The overall housing target set out in the Draft Core Strategy is 7,815 homes over the Plan period. The target is broken down into two separate targets:

- A maximum target on the coast of 1,308 which covers the area of the Coastal Flood Hazard maps and which will be confined to existing commitments.
- A minimum target of 6,534 for the inland part of the District.

Employment Land Provision

Inland employment growth in the District is addressed in Strategic Policy 9 (SP9) of the Core Strategy document. The following allocations are made through this policy to support the growth and diversification of the local economy:

- Alford: 1ha
- Coningsby/Tattershall: 1 ha
- Horncastle: 5ha
- Spilsby: a minimum of 3ha
- Louth: 12ha

HRA Findings

The HRA Technical Note for the Local Plan (June 2016) considered the implications of changes to the Local Plan since HRA work was previously undertaken and sought to identify where this would affect the HRA conclusions previously reached in 2012 and 2013. The Technical Note concludes that, taking into account the mitigation provided through the Local Plan policies relating to the Natural Environment, the Plan will not have adverse effects on the integrity of European sites. **Therefore, significant effects in-combination with the North East Lincolnshire Local Plan are not expected.**

Able Marine Energy Park

Able Marine Energy Park is to be located on land near North Killingholme and the site is partly located within the Humber Estuary SAC, SPA and Ramsar site.

Project details

This project would develop a new quay and the facilities for the manufacture of offshore wind turbines. Planning permissions was granted in June 2013 for a business park, offices, transport depot, warehousing, external storage, distribution, chilled and frozen logistics, vehicle storage, motel and HGV park.

<u>HRA Findings</u>

The HRA Report for the development concluded during the Appropriate Assessment that the scheme would have likely significant effects on the integrity of the Humber Estuary SAC as a result of loss of intertidal mudflats. The proposal would also result in the loss of important supporting habitat for the qualifying bird species of the Humber Estuary SPA and Ramsar site. As part of the HRA process, consideration was therefore given to potential alternative solutions and Imperative Reasons of Overriding Public Importance (IROPI) and mitigation was agreed with Natural England. More than one third of the site will be extensively landscaped with major wildlife and nature reserves to provide alternative habitat and therefore meet the provisions of the Habitat Regulations. On this basis, **likely significant effects in-combination with North East LincoInshire's Local Plan are not considered likely.**

A160/A180 Port of Immingham Improvement

This project relates to the A160 and A180 near the Port of Immingham. This site is located near the Humber Estuary SAC, SPA and Ramsar site. This project is underway but had not been completed.

Project details

This project involves upgrading the existing single-carriageway section of the A160 to dual carriageway, with associated junction improvements, including works at Brocklesby Interchange on the A180.

<u>HRA Findings</u>

The HRA concluded that the project would not have a likely significant effect on any European sites within 2km of the roads, including the Humber Estuary SAC, SPA and Ramsar site. On this basis, **likely** significant effects in-combination with North East Lincolnshire's Local Plan are not considered likely.

North Killingholme Power Project

The North Killingholme Power Project is to be located north of North Killingholme and east of East Halton. The site lies adjacent to and partially within the Humber Estuary SAC, SPA and Ramsar site.

Project details

This project consists of the development of a new thermal generating station that will operate either as a Combined Cycle Gas Turbine (CCGT) plant or as an Integrated Gasification Combined Cycle (IGCC) plant, with a total electrical output of up to 470MWe.

<u>HRA Findings</u>

The HRA identified potential for likely significant effects of the plan on the Humber Estuary SAC, SPA and Ramsar site with relation to habitat loss, fragmentation, air quality, hydrological changes, mortality and disturbance. However, the Development Consent Order contains a series of measures that must be implemented to mitigate such effects. With this mitigation in place, there are expected to be no adverse effects on the integrity of the European sites. On this basis, **likely significant effects in-combination with North East Lincolnshire's Local Plan are not considered likely.**

River Humber Gas Pipeline Replacement Project

The River Humber Gas Pipeline runs **beneath the Humber Estuary commencing approximately 2** miles north east of Goxhill, North Lincolnshire, terminating approximately 1 mile south east of Paull, East Riding of Yorkshire.

Project details

This project involves the replacement of a 42 natural gas transmission pipeline, housed within a tunnel beneath the Humber Estuary.

HRA Findings

The screening assessment determined that the project may lead to likely significant effects on the Humber Estuary SPA and Ramsar site. However, the Development Consent Order contains a series of measures that must be implemented to mitigate such effects. With this mitigation in place, there are expected to be no adverse effects on the integrity of the European sites. On this basis, **likely significant effects in-combination with North East LincoInshire's Local Plan are not considered likely.**

Appendix 4

Consultation comments received from Natural England and how they were addressed in the HRA

Table A4.1: Natural England consultation comments in relation to the HRA of North East Lincolnshire's Local Plan (Pre-Submission version)
January 2016 consultation and responses including actions taken in this updated HRA report

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
HRA	Natural England is concerned that there are a large number of issues with the Habitats Regulations Assessment (HRA) of the Local Plan that will need to be resolved at this stage of the plan making process. We would be keen to meet with the Council to provide further advice on how our concerns with the HRA can be resolved before formal submission. Once these issues have been resolved within the HRA, amendments will need to be made to the corresponding policies.	A meeting took place on Monday 16 th May 2016 between NELC, LUC and Natural England to discuss the consultation comments. Further detail about the specific amendments discussed is provided below.
HRA	 We have set out our concerns in detail throughout our representations but in summary we consider that the main issues to be: Insufficient evidence to rule out adverse effects on integrity from air pollution. Lack of an evidence trail of decision making with regards to the assessment of housing allocations and employment allocations regarding their impact on functionally linked land. Lack of an evidence trail of decision making with regards to the assessment of housing allocations with regards to the impact of recreational pressure and disturbance. The promotion of development within the boundaries of the Humber Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site. 	Noted – see responses to specific comments below.
HRA	Natural England advises that the HRA should be undertaken in the light of the identified sites' conservation objectives as required by the legislation. We note that paragraph 3.5 of the report refers to the Standard Data Forms and Site Improvement Plans and these are referred to throughout the report whereas the conservation objectives and citations are only referred to in a footnote to Appendix 1. The Standard Data Forms and Site Improvement Plans are useful additional information but are not a basis for undertaking the assessment. We note that the conclusions of the Appropriate Assessment section (section 5) refer to likely significant effects where this stage of the process should be assessing whether there are	Noted, this terminology issue has been addressed in this update to the HRA report. Paragraph 3.5 has been updated to refer to the Conservation Objectives. These were already listed in detail for each site within the table in Appendix 1, with the footnote showing the reference source. References to 'likely significant effects' in Chapter 5 have been amended to instead refer to 'adverse effects on integrity'. The HRA was undertaken in the context of the

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	adverse effects on the integrity of European Sites.	qualifying features of each European site, with reference to the identified information sources as relevant.
 on the site integrity of the Humber Estuary designated sites from development in these areas. If mitigation cannot be delivered, again the plan can only proceed if it is demonstrated that there are imperative reasons of overriding public interest (IROPI), there is no alternative and compensatory measures are provided for the impacts on the designated site habitat – i.e. it 	 likely significant effect on the Humber Estuary SAC cannot be ruled out as a result of air quality impacts from traffic emissions. Given that this is the appropriate assessment, the conclusion should read that it is not possible to ascertain that there will be no adverse effect on the site integrity of the Humber Estuary designated sites from development in these areas. If mitigation cannot be delivered, again the plan can only proceed if it is demonstrated that there are imperative reasons of overriding public interest (IROPI), there is no alternative and compensatory measures are provided for the impacts on the designated site habitat – i.e. it is not possible to end the Habitats Regulations Assessment at this stage and without the HRA being completed, it is not possible for the plan to be implemented. Natural England advises that the traffic forecast data referred to in the HRA report is provided and that any impacts identified by the data are resolved before the plan is 	Noted – the terminology has been amended in this update to the HRA report. The terminology in paragraph 5.30 has been amended to refer to 'adverse effects on integrity' rather than 'likely significant effects'.
		Reference to APIS data (showing that Nitrogen deposition levels at the Humber Estuary are exceeding critical loads in relation to certain habitats) has been added to the report. Table 5.2 has been expanded to comment on which
		site allocations could be most likely to contribute additional traffic to the strategic roads within 200m of Natura 2000 sites.
	The HRA report has been updated to take account of traffic forecasting data which has now been provided by NELC. This showed that increases in AADT along the identified routes of more than 1,000 were likely; therefore further ecological analysis was undertaken and the HRA conclusions have been updated on this basis.	
HRA	Natural England advises that the in-combination assessment should include assessment of the plan in-combination with the North Lincolnshire Housing and Employment Land	Noted, this DPD has been added to the in-combination effects assessment in Appendix 3 of this updated HRA

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	Allocations Development Plan Document 2016.	report.
HRA	With regard to employment allocations in the South Humber Gateway area we consider that the HRA should determine that there are likely significant effects in-combination with North Lincolnshire but that adverse effects on integrity will be mitigated effectively should the South Humber Bank Mitigation Scheme be delivered.	Noted, the in-combination effects assessment in Appendix 3 has been updated to this effect.
Policy 4	Employment - Operational Port Natural England notes that the 'Employment - Operational Port' area designation shown on the policies map includes land within the boundaries of the Humber Estuary SAC, SPA and Ramsar and that Policy 4 states that development within this area will be actively supported.	At the meeting with Natural England on 16/05/16, North East Lincolnshire Council officers explained that the Policies Map and supporting text would be amended to show that the Operational Port area extends beyond the jurisdiction of the Council.
	Natural England advises that this will require an assessment under the Habitats Regulations and that without mitigation it will not be possible to ascertain that there will be no adverse effect on the site integrity of the Humber Estuary designated sites from development in these areas. If mitigation cannot be delivered (which will be difficult for habitat loss within the designated site boundary) the plan can only proceed if it can be demonstrated that there are imperative reasons of overriding public interest (IROPI), there is no alternative and compensatory measures are provided for the loss of designated site habitat.	The screening matrix in Appendix 2 has been amended to reflect the updated wording of Policy 4 and to be clear that the policy does not propose development within the boundaries of the Humber Estuary SAC, SPA or Ramsar site.
	Given the difficulties of mitigating impacts of direct habitat loss within the designated site boundary, Natural England considers that the policies map should not include land within the boundaries of the Humber Estuary designated sites and that this should be amended prior to formal submission.	
	If this is not amended, the Operational Port Areas element of Policy 4 must be assessed in the Habitats Regulations Assessment, although as stated above it will prove difficult to pass the tests of Regulation 103. Furthermore such development would not be in line with Policy 40 which seeks to protect manage and enhance international, national and local sites of biological and geological conservation importance.	

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
Policy 4	Air quality Natural England notes that, while the impact of increased vehicle traffic from Policy 4 Employment Allocations has been identified as a threat to the Humber Estuary designated sites, there is no evidence that potential for emissions from industrial sources as a result of the policy and allocations has been considered. In addition to the further traffic modelling and assessment identified in the Habitats Regulations Assessment we advise that the impact of employment allocations both alone and in combination with each other and other sources of air pollution, such as vehicle traffic should be undertaken. The assessment should consider the distance between allocations and sensitive habitats, existing background levels and potential contribution from the allocations.	The HRA report has been amended to more clearly recognise the potential for emissions from industrial activities to affect the Natura 2000 sites, as well as emissions from increased traffic. The updated HRA work resulted in a further recommendation being made to North East Lincolnshire Council regarding additional wording to be added to Policy 4. North East Lincolnshire Council has since addressed this recommendation through the proposed modifications to the Local Plan and the updated HRA conclusions reflect this.
Policy 4	Functionally linked land Natural England disagree with para 5.54 of the Habitats Regulations Assessment which asserts that there are no likely significant effects with regards to the Humber Estuary SPA from offsite habitat loss and damage as there is no evidence that employment allocations outside of the South Humber Gateway mitigation area have been considered for their potential to impact on functionally linked land for SPA and Ramsar birds. We advise that the mitigation identified will only offset the impact of allocations within the mitigation zone. All employment allocations with the potential to impact on offsite habitat for SPA and Ramsar birds must be considered for their suitability for such species in a desk based assessment and should qualifying species in significant numbers be identified, either alone or in combination with other allocations, then mitigation measures should be delivered through the plan in order to avoid adverse effects on the integrity of the Humber Estuary SPA and Ramsar. We advise that mitigation delivered through the South Humber Bank strategic mitigation scheme specifically addresses allocations in the South Humber Bank Mitigation Zone and will not mitigate for housing or employment allocations outside the identified area Natural England is particularly concerned about the following sites but all allocations must be considered: • ELR010	Noted, the distinction between employment sites within the South Humber Gateway mitigation area and those outside of it has been made in this updated HRA report. The desk-based site survey work suggested by Natural England has been undertaken and presented in Chapter 5 of this updated HRA Report.

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	 ELR036 ELR037 ELR016a ELR016b 	
	Natural England advises that assessment of the potential for the allocated sites to support SPA and Ramsar birds is required before the sites are allocated. All allocations should be subject to a desk-based assessment of their suitability for SPA and Ramsar birds. This should involve:	
	 A data search from the local Ecological Data Centre. Consultation with the Council's Ecologist. Consultation with local bird groups and other organisations that may hold relevant information. A desk-based assessment - using aerial photography, mapping, habitat maps and relevant ecological literature – of the suitability for SPA birds of the habitats present on the proposed allocation. 	
	In cases where no evidence of the potential for use by SPA and Ramsar birds, then no further assessment of this issue is needed at plan stage. Where it is not possible to conclude that SPA and Ramsar birds would not use the site, further surveying may need be undertaken prior to the allocation of the sites in order to properly understand the level of use by SPA and Ramsar birds and any identified impacts on these birds should be avoided or mitigated.	
Policies 4/6	Project level assessment	Noted, this point has been addressed by North East Lincolnshire Council through an amendment to the
	Natural England notes that paragraph 12.3 states that:	wording of Policy 6. No amendments to the HRA report
	"It is anticipated that the implementation of the strategic mitigation works will enable sites to come forward without further restrictions."	were required to reflect this change.
	We are concerned that this gives the impression that no further assessment will be needed for allocations within the South Humber Gateway mitigation zone. Natural England advise that the mitigation is concerned with offsetting the impact of development in this area on offsite bird habitat and does not consider the range of other impacts such development may	

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	have on the Humber Estuary designated sites.	
	Natural England advises that Policy 6 should make it clear that development proposals will need to consider the specific impacts of the development on the Humber Estuary designated sites.	
Policy 6	Since 2007, Natural England has invested considerable time and resources into the South Humber Bank strategic approach to mitigation and we welcome the recognition given to the importance of the Humber Estuary designated sites in the plan. We also support the goal to create a world class economy hand in hand with a world class environment, and acknowledge the potential to facilitate the delivery of this economically important development whilst avoiding adverse effects upon the Humber Estuary's internationally protected interest features. We therefore welcome the inclusion of the South Humber Bank mitigation in the plan; however we have a number of concerns regarding the delivery of the mitigation and thus the soundness of the South Humber Gateway employment allocations proposed in the plan and the legal compliance with the Habitats Regulations. We advise that these should be easy to resolve.	These issues relate mainly to the Local Plan, changes to which have been reflected in this updated HRA report. A further meeting took place between North East Lincolnshire Council and Natural England on 18/05/16 about the Mitigation Strategy and the sticking point with regards to mitigation land to be provided by Cristal was overcome. References in the HRA report to Policy 6 do not need to be changed to reflect the amendments to the policy wording proposed by the Council.
	Reference is made to the 2015 version of the South Humber Gateway Mitigation Strategy in paragraph 12.42. We assume this is the final document which was produced to support North Lincolnshire Council's LDF examination. This document may need updating to ensure it is still accurate and current for North East Lincolnshire's plan and Natural England advises that it will then need to be included as a supporting document in the Local Plan. This is to ensure that all necessary measures, which are already agreed, are available to support the implementation of the Policy.	
	Natural England notes that para 12.43 of the supporting text for Policy 6 states that:	
	"Two additional areas of potential managed wetland relate to a triangular area of land at the former Huntsman Tioxide site (ELR005) and further land west of the largest area of proposed managed wetland. These areas of land, at the time of publication of this Plan, are subject to final discussions regarding safeguarded mitigation land."	
	We consider that the ELR005 site constitutes an important element of the mitigation strategy as the site regularly supports significant numbers of curlew, a protected SPA/ Ramsar	

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	waterbird. Without this site, the plan does not provide sufficient certainty that adequate mitigation will be provided to avoid adverse effects on integrity from the development proposed within the South Humber Gateway mitigation zone.	
	Natural England also notes that Policy 6 states that	
	"In the event that the contribution is not met or is disputed, proposals for development within the Mitigation Zone will, in addition to all other normal planning requirements, be required to identify the impact of the proposed development on the Humber Estuary SAC together with details of the proposed mitigation to address such negative impacts. It will be a requirement of any planning consent that the mitigation strategy is implemented prior to the commencement of development."	
	While we acknowledge that this option will be open to developers we consider that, unless the proposal site will not impact on suitable habitat, such an option would be unviable; requiring significant additional survey work (at least one year) and consideration of the incombination impacts. Furthermore any mitigation necessary will need to be of a scale and in a location to be effective to offset impacts on the Humber Estuary SPA/ Ramsar site. We consider that the evidence produced for the South Humber Gateway mitigation demonstrates that such an approach will not prove cost effective for developers and as such this approach should not be promoted in the plan as it may mislead developers and weaken the policy.	
	Finally Natural England notes para 12.46 in the supporting text for Policy 6 which makes it clear that the Council has recognised that early implementation of the mitigation is vital to ensure that economic development is not delayed. Natural England strongly advises that the mitigation must be delivered before further development in the South Humber Gateway mitigation area can go ahead. This may require a phased approach if discussions regarding the site at ELR005 delays delivery on that site - i.e.to avoid delays with future developments, delivery of the mitigation must be started as soon as possible.	
	The South Humber Gateway Mitigation Strategy should be provided as a supporting document to the plan. If any updates or amendments are required; Natural England would be pleased to help with this. The Humber Local Nature Partnership produced the original document and may also be willing to help.	
	Natural England advises that the plan should provide sufficient certainty that the mitigation	

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	site at ELR005 will be delivered so that it can be a proposed mitigation site rather than a potential site. Should this not prove possible, the Council will need to demonstrate why this site is no longer required and that the mitigation strategy can provide adequate and effective mitigation for the proposed development in the mitigation area without this site.	
	Furthermore we advise that the following text should be removed from Policy 6: "In the event that the contribution is not met or is disputed, proposals for development within the Mitigation Zone will, in addition to all other normal planning requirements, be required to identify the impact of the proposed development on the Humber Estuary SAC together with details of the proposed mitigation to address such negative impacts." We advise that you also revise the supporting text for this policy to eradicate errors and would be happy to meet to discuss this and other issues discussed in this response.	
Policy 10	Recreational pressures: Natural England does not consider that the Appropriate Assessment of the impact of recreational pressures on the Humber Estuary SAC, SPA and Ramsar as a result of housing allocations and growth proposed in the plan is adequate. We are particularly concerned about the potential for disturbance of bird features, and trampling and damage to habitats, particularly sand dunes. We note the reference to the Footprint Ecology reports on recreational disturbance in the Habitats Regulations Assessment and in paragraph 12.75 of the plan, however we disagree with paras 5.35 and 5.36 of the Habitats Regulations Assessment as we do not consider that para 12.75 of the plan and Policy 10 are sufficient to deliver mitigation necessary to avoid adverse effects on the integrity of the Humber Estuary designated sites as it does not detail the specific mitigation measures necessary to avoid the predicted impacts.	The Appropriate Assessment conclusions in Chapter 5 of this updated HRA report have been revised and expanded to address the points raised.
	Recreational Disturbance Natural England are concerned that the Habitats Regulations Assessment report provides	The Appropriate Assessment conclusions in Chapter 5 of this updated HRA report have been revised and

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	insufficient evidence to demonstrate that the impact of housing allocations on recreational pressures has been considered. We note for instance that para 5.33 refers to a 2km screening distance which we do not consider to be consistent with the findings of the Footprint Ecology reports. We note that East Riding of Yorkshire District Council is using a 4.42km screening distance based on the findings of the Footprint Ecology work. This will need to be considered in-combination with Policy 10.	expanded to address the points raised.
	Natural England advises that evidence is provided to show that all housing allocations have been considered both alone and in-combination with regards to recreational pressure and damage to the habitat features of the Humber Estuary SAC and Ramsar, particularly sand dune habitats, and disturbance of Humber Estuary SPA and Ramsar birds. If adverse effects on integrity are determined, as implied in paras 5.31 to 5.36 of the HRA report, then specific deliverable mitigation proposals must be identified in the plan based on the recommendations of the Footprint Ecology reports referred to in the Plan.	
Policy 11	Functionally linked land Natural England disagree with para 5.54 of the Habitats Regulations Assessment which asserts that there are no likely significant effects with regards to the Humber Estuary SPA from offsite habitat loss and damage. We note that para 5.53 identifies uncertainty with regards to housing allocation HOU084a and advise that the further assessment necessary cannot be left to the planning application stage. This is because, should a later assessment show that the site is undeliverable due to impacts on the Humber Estuary SPA/ Ramsar site, the plan would not be sound.	The desk-based site survey work suggested by Natural England has been undertaken and presented in Chapter 5 of this updated HRA Report.
	Furthermore there is no evidence that any housing allocation other than HOU084a has been considered with regards to offsite habitat loss or disturbance and advise that all allocations must be assessed for their potential to cause offsite impacts on SPA and Ramsar waterbirds. We note that the Sustainability Appraisal refers to a 1km screening distance to the Humber Estuary SAC, SPA, Ramsar and Site of Special Scientific Interest (SSSI) which we consider to be inadequate with regards to impacts on offsite habitat.	
	All housing allocations with the potential to impact on offsite habitat for SPA and Ramsar birds must be considered for their suitability for such species in a desk based assessment and should qualifying species in significant numbers be identified, either alone or in combination	

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	with other allocations, then mitigation measures should be delivered through the plan in order to avoid adverse effects on the integrity of the Humber Estuary SPA and Ramsar. We advise that mitigation delivered through the South Humber Bank strategic mitigation scheme specifically addresses allocations in the South Humber Bank Mitigation Zone and will not mitigate for housing or employment allocations outside the identified area.	
	Natural England is particularly concerned about the following sites but all allocations must be considered:	
	 HOU139 HOU074b HOU342 HOU104 HOU095a HOU095a HOU006 HOU002 HOU074b HOU10b HOU34a HOU233 HOU097 	
	Natural England advises that assessment of the potential for the allocated sites to support SPA and Ramsar birds is required before the housing sites are allocated. All housing allocations should be subject to a desk-based assessment of their suitability for SPA and Ramsar birds. This should involve:	
	 A data search from the local Ecological Data Centre. Consultation with the Council's Ecologist. Consultation with local bird groups and other organisations that may hold relevant information. A desk-based assessment - using aerial photography, mapping, habitat maps and relevant ecological literature – of the suitability for SPA birds of the habitats present 	

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	on the proposed allocation. In cases where no evidence of the potential for use by SPA and Ramsar birds, then no further assessment of this issue is needed at plan stage. Where it is not possible to conclude that SPA and Ramsar birds would not use the site, further surveying may need to be undertaken prior to the allocation of the sites in order to properly understand the level of use by SPA and Ramsar birds and any identified impacts on these birds should be avoided or mitigated. We note that some allocations already have planning permission and therefore that HRA has already been undertaken for these sites. While no further assessment is necessary we advise that the findings of these assessments should be included in the HRA report for the North East Lincolnshire Local Plan and if necessary any mitigation identified in the planning permission should be detailed in the plan – ie the same conclusions should be detailed in the plan HRA as in the project level HRA.	
Policy 30	Natural England does not consider that Policy 30 Renewable and low carbon infrastructure has been adequately assessed in the Habitats Regulations Assessment and therefore does not consider the plan to be legally compliant with regards to the Conservation of Habitats and Species Regulations 2010 (as amended). We note that the policy includes a criterion regarding the impacts on biodiversity and further details in para 14.114 regarding impacts on the Humber Estuary Special Area of Conservation (SAC) and Humber Estuary Special Protection Area (SPA) however there is no evidence presented that there is capacity in the plan area to accommodate the proposed target of 75MW of grid connected renewable energy by 2032 without adverse effects on the integrity of the Humber Estuary SAC or SPA. We are particularly concerned about the potential impact on the SPA/ Ramsar site including collision and displacement from wind turbines and loss of offsite functionally-linked land. We also note that para 3.13 of the HRA report refers to potential for loss of habitat within the boundaries of Natura 2000 sites. We are not clear what part of Policy 30 this or any other section of the plan this refers to but advise that without mitigation it will not be possible to ascertain that there will be no adverse effect on the integrity of the Humber Estuary designated sites from development in these areas. If mitigation cannot be delivered, the plan can only proceed if it is demonstrated that there are imperative reasons of overriding public interest (IROPI), there is no alternative and compensatory measures are provided for the	Paragraph 3.13 of the HRA report explained the assumptions that have underpinned the screening assessment and conclusions – it did not refer to any particular policy or proposal within the Local Plan. However, the sentence referred to has been removed for the avoidance of confusion and because this doesn't affect the meaning of paragraph 3.13. This issue was discussed during the meeting with Natural England on 18/05/16 and Natural England advised that the HRA report should be amended so as not to refer to the potential for renewable energy development to result in the loss of habitat at European sites. The HRA report has now been amended to this effect. One of the Council's proposed modifications to the Local Plan comprises additional text to explain the fact that the renewable energy target will mainly be met through existing permissions for solar development and will not result in extensive

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	loss of designated site habitat. This is a long and complicated process and so we advise that it is preferable to amend the plan to ensure that it does not result in an adverse effect on site integrity. Natural England advises that the Council assesses the capacity of the Plan area to accommodate the proposed target in Policy 30. We note that para 14.110 includes a commitment to produce a Supplementary Planning Document to identify areas within the borough that are suitable for wind energy development and suggest that evidence gathered for this purpose may provide the necessary information to inform this assessment. We advise that the statement regarding habitat loss within the boundaries of the Humber Estuary designated sites in para 3.13 is clarified and if necessary further assessment is undertaken.	wind energy development that could affect the Humber Estuary sites. Changes to the supporting text to Policy 30 in the Local Plan have been reviewed and minor changes have been made to the text in the screening matrix for the SPA/Ramsar site.
Policy 43	Natural England are concerned that the Minerals Safeguarding Areas map includes minerals deposits within the Humber Estuary designated sites. While we note that Policy 43 only promotes extraction where non-minerals development is proposed and includes a caveat for where such extraction is not environmentally acceptable, we advise that such areas should be removed from the policies map as it is likely that extraction would not be possible without adverse effects on the integrity of the Humber Estuary SAC, SPA and Ramsar or damage to the interest features of the Humber Estuary Site of Special Scientific Interest (SSSI). Natural England advises that minerals safeguarding areas within the boundaries of the Humber Estuary designated sites should be removed from Minerals Safeguarding Areas map.	North East Lincolnshire Council officers and Natural England discussed this point at the meeting on 16/05/16 and the Council officers agreed to amend the wording of the policy to strengthen the point about environmental constraints. These proposed policy amendments have been reviewed and no changes to the HRA report are required.
Policy 40	Natural England welcomes policy 40 which we consider to be in line with national policy.	Noted, no further work required.
Policy 41	Natural England welcomes policy 40 which we consider to be in line with national policy.	Noted, no further work required (assume this should refer to Policy 41).

 Table A4.2: Natural England consultation comments in relation to the Updated HRA of North East Lincolnshire's Local Plan (Pre-Submission version and proposed modifications) September 2016 consultation and responses including actions taken in this updated HRA report

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
Physical damage/disturbance to species/habitat loss (offsite)	Natural England note and welcome the progress made with regards to the assessment of housing (policy 11) and employment (policy 4) allocations concerning their impact on the loss of functionally linked land for Humber Estuary Special Protection Area (SPA) and Ramsar birds. However we consider that there are some inaccuracies in the assessment undertaken and further assessment will be necessary in order to conclude no adverse effects on integrity with regards to Policy 4 and Policy 11 on this issue. We advise that the desk based assessment should make use of bird survey data held by the Humber Ecological Data Centre or Humber Nature Partnership; this data is not mentioned in the HRA and therefore we are unclear whether this data was used in the assessment. If the data has not been used, we advise that they should be consulted in order to ensure that the best and most up to date data is used to inform the Appropriate Assessment. Natural England is concerned that there are a number of inaccuracies in table 5.4 of the updated report regarding habitat suitability for SPA and Ramsar bird species. We advise that marsh harrier will use arable farmland for foraging as well as rough grassland; teal and mallard will both use arable and grassland fields that are prone to flooding or holding any standing seasonal water. Ruff, whimbrel and curlew will also make use of grassland and rable habitats outside the boundaries of the Humber Estuary SPA and Ramsar. We advise that you consult the RSPB on this issue.	The assessment was repeated following a detailed review of bird habitat requirements and specific information from RSPB (Richard Barnard). More detailed assessment of site allocation characteristics including openness, flood risk, and presence/absence of limiting factors (note - Appendix 5 deleted and information presented in main report). Receipt of additional bird survey data from Humber Nature Partnership and a cross- checking of all known data sources to ensure all data available was collated. Revised/additional mitigation measures provided.
In-combination	As advised previously, with regards to the in-combination impacts of the South Humber	The in-combination section in Chapter 4 has

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
effects with other local authority plans	Gateway area, we consider that the assessment should determine that there are likely significant effects in-combination with North Lincolnshire but that adverse effects on integrity will be mitigated effectively should the South Humber Bank mitigation scheme be delivered.	been updated to reflect this.
	We advise that you ensure that the in-combination assessment takes account of the cumulative effects of housing and employment allocations outside of the South Humber Gateway area in the North Lincolnshire Housing and Employment Development Plan Document, including with regards to recreational pressures, loss of functionally linked land and air quality impacts.	The in-combination section in Chapter 4 has been updated to address this.
Recreational pressures	Natural England is broadly satisfied with the conclusion of no adverse effects on integrity with regards to Policy 10 alone. We consider that, given that the policy includes no allocations or quantum of development, the policy wording regarding designated sites and the supporting text concerning mitigation are sufficient. However we do not consider that the assessment of the impactof the housing target and allocations is sufficient or justifies the conclusion of no adverse effects on integrity at this stage. We note that para 5.46 states that "Local Plan Policy 39: Green Infrastructure and Policy 42: Green Space and Recreation may provide some mitigation for increased recreation pressure however we do not consider that this provides sufficient detail regarding the mechanisms for these polities to mitigate for the impacts of increased housing or whether there is sufficient certainty that enough appropriate alternative open space will be delivered. We also do not consider that the phrase 'may provide some mitigation' is sufficiently certain in this context. We note that Policy 42 refers to accessibility standards but advise that the Habitats Regulations Assessment report should include an assessment of whether these are sufficient and provide sufficient certainty regarding delivery to avoid adverse effects on the integrity of the Humber Estuary SAC, SPA and Ramsar. Furthermore policy SC8 of Bradford's draft Core Strategy includes a specific requirement for residential development, within the zone of influence for recreational pressures identified, to include mitigation. This is specified either as on site provision of alternative green space or financial contributions to the provision of offsite alternative green space or access management or habitat management within the designated site (See modification MM28 in in Proposed Main Modifications document above). These measures tie in with the suggested mitigation measures in section 8 of the Footprint Ecology Humber Estuary Recreational Pressures report.	Detailed review of Footprint Ecology Study and recognition of key findings of specific relevance to NE Lincs. Updated HRA assessment recognises the importance of an approach including provision of alternative open space, site management, and education. Policy modification requirements are provided to provide specific mitigation in respect of the Humber SAC/SPA/Ramsar.

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
Air pollution – emissions from traffic	Natural England notes and welcomes the progress made with the assessment of road traffic related air quality emissions as a result of the housing and employment growth proposed in the plan however we disagree with the conclusions at this stage and advise that further assessment will be necessary in order to rule out adverse effects on the integrity of the Humber Estuary SAC, SPA and Ramsar.	LUC determined that a different risk-based approach is required to address the issue of air quality. We identified areas of specific habitats that are qualifying features of the SAC that could be sensitive to increases in air pollution and determined what proportion of each habitat lay within 200m of the road. The updated assessment is presented in Chapter 5 .
	First and foremost we advise that the assessment must include details of the estimated Process Contribution (PC) of the increase in traffic noted in the assessment on different roads. In order to calculate this we advise that you use the 'Local' tab of the Design Manual for Roads and Bridges (DMRB) Screening Method spreadsheet which is available from the web archive version of Highway's England's website.	See above. Additionally, in order to calculate process contribution, it is necessary to have access to current traffic flows, predicted future baseline traffic flows and predicted future traffic flows with the plan in place. This information is not available.
you have collected from the APIS website in order to give you the total Predicted Environmental Contribution (PEC). In order to determine whether the impact of traffic emissions is significant at an sensitive locations you have identified you should compare the PEC to the Critic and Critical Level you have identified through APIS for the relevant designated habitat. Where the PEC is less the 70% of the relevant Critical Load or Level, as on APIS, then likely significant. effects can be ruled out. Natural England notes that para 5.30 and table 5.30 compare the size of the Hu Estuary SAC as a whole with the area potentially affected by the emissions from traffic. We advise that the SAC is extremely large and made up of a range of di inter-related habitats and that as a result figures expressed as a percentage of are effectively meaningless and could "hide" significant impacts at a local level. assume that the question being posed here is whether the loss of habitat can be classed as de minimis but with the numbers given in	In order to determine whether the impact of traffic emissions is significant at any of the sensitive locations you have identified you should compare the PEC to the Critical Load and Critical Level you have identified through APIS for the relevant designated site habitat. Where the PEC is less the 70% of the relevant Critical Load or Level, as identified on APIS, then likely significant.	See above.
	Natural England notes that para 5.30 and table 5.30 compare the size of the Humber Estuary SAC as a whole with the area potentially affected by the emissions from road traffic. We advise that the SAC is extremely large and made up of a range of different and inter-related habitats and that as a result figures expressed as a percentage of the whole are effectively meaningless and could "hide" significant impacts at a local level. We assume that the question being posed here is whether the loss of habitat can be classed as de minimis but with the numbers given in this format and without figures for the Predicted Environmental Contribution (PEC) we are unable to	See above. In addition, we have presented the area of the SAC that would be at risk of increased levels of pollution, as well as the area and percentage of each specific habitat at risk in Chapter 5 .

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
	Natural England notes that para 5.31 states that the area of the Humber Estuary SAC close to the A1098 is mud and sand habitat which contradicts the priority habitat data held by Natural England which shows that there is a significant area of saltmarsh and sand dune habitat in very close proximity to the A1098 at Cleethorpes. We note also that you refer only to using aerial photography to identify habitats in para 5.29 and advise that you also make use of habitat data for more accuracy. The data Natural England holds is publically available from the MAGIC website (see below) but we also advise that you ensure you have the most up to date habitat data from the Local Ecological Records Centres.	See above and Chapter 5. We have used MAGIC to supplement our previous assessment of habitat types.
Policy 30 Renewable Energy	Natural England notes the response to our comments on Policy 30 in table A4.1. We welcome the clarification regarding development within the designated site boundaries and the clarification that the target will be mainly met through existing permissions. However we advise that the assessment itself is updated with the estimates of how much of the 75MW target can be met through existing permissions and assesses whether the remaining target can be met without developing in areas which may threaten the Humber Estuary SAC, SPA and Ramsar or other significant constraints. If it is determined that the remaining target can be met through development in areas that will not affect the Humber Estuary designated sites or any other significant effects then this should be clearly stated in the conclusions.	Noted. The supporting text to Policy 30 identifies that 60MW of the 75MW target has already been consented. It is not possible for LUC to assess whether the remaining 15MW can be met without developing in areas which may threaten the Humber Estuary SAC, SPA and Ramsar sites, taking into account the variety of renewable technologies available and the pace of development in the range and efficiency of renewable technologies. In LUC's view, it is not necessary to carry out a detailed study as Policy 30 provides an aspirational target rather than a firm commitment, through insertion of the qualifying term "seek". Policy 30 states that "The Council will support opportunities to maximise renewable energy capacity within the Borough and seeks to deliver at least 75MW of installed grid-connected renewable energy by 2032". The safeguards built into both the policy and the supporting text, together with Policy 40: Biodiversity and Geodiversity, the NPPF, and the requirement for HRA at the project level in

Aspect of the Plan/HRA being commented on	Natural England comment	Response/action taken
		accordance with the Habitats Regulations, provides sufficient assurance that the integrity of Natura 2000 sites will be safeguarded when implementing this policy.
	With regards to your estimation that the target will be most likely met through solar rather than wind energy sources we advise that, while solar does not have the same impact on SPA and Ramsar birds in terms of collision risk, it still poses a risk through loss of large areas of functionally linked land for these birds.	Noted.
Additional concerns	Natural England welcomes the update to para 3.5 which satisfies our concern that the assessment was undertaken against the European Site conservation objectives.	Noted.
	We welcome the change of terminology across the Appropriate Assessment section from 'likely significant effects' to 'adverse effects on integrity'.	Noted.
	Natural England welcomes the removal of the Operational Port Area allocation from within the Humber Estuary designated site boundaries. However we advise that the assessment of Policy 4 should include reference to the requirement for project level assessment and modification SPM61 relating to the Habitats Regulations. At present the assessment only makes reference to the allocation being outside the designated site boundary, with regards to the Operational Port Area. We are concerned that this could be misinterpreted to mean no further assessment is necessary at the project level providing that the proposal is not within the designated site.	Table A2.2 has been updated to address this.