



North East Lincolnshire 2023

Local Plan Review

Habitats Regulations Assessment Report

North East Lincolnshire Council

Final report

Prepared by LUC

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Chapter 1

Introduction

1.1 LUC has been commissioned by North East Lincolnshire Council to carry out a Habitats Regulations Assessment (HRA) of the North East Lincolnshire Local Plan Review which, once adopted, will replace the current North East Lincolnshire Local Plan 2013-2032. The new Local Plan will cover the period up to 2042.

1.2 This HRA Screening Report relates to the Draft Local Plan Review which is being published for consultation in January 2024 for six weeks and it should be read in conjunction with that document.

Context

1.3 The Local Plan Review will set the planning framework for North East Lincolnshire looking forward to 2042 and beyond. The Draft (Regulation 18) Local Plan Review sets out policies and proposals to address housing needs and other economic, social and environmental issues.

1.4 North East Lincolnshire Council consulted on a Scoping and Issues Paper between September and November 2022. The Scoping and Issues Paper explained what North East Lincolnshire Council believes are the main issues facing the Borough. The consultation also included a Call for Sites which informed the preparation of the Strategic Housing and Economic Land Availability Assessment (SHELAA) and the Brownfield Land Register. The outcomes of that consultation have in turn fed into the preparation of the Draft Local Plan Review, which this HRA report relates to.

The requirement to undertake Habitat Regulations Assessment of Development Plans

1.5 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007 [See reference 1]; the currently applicable version is the Habitats Regulations 2017 [See reference 2], as amended. When preparing the new Local Plan, North East Lincolnshire Council is therefore required by law to carry out an HRA. The Council can commission consultants to undertake HRA work on its behalf and this (the work documented in this report) is then reported to and considered by the Council as the 'competent authority'. The Council considers this work and would usually only progress a plan if it considers that the plan will not adversely affect the integrity [See reference 3] of any 'Habitat site', as defined below. The exception to this would be where 'imperative reasons of overriding public interest' can be demonstrated; see paragraph 1.17. The requirement for authorities to comply with the Habitats Regulations when preparing a plan is also noted in the Government's online Planning Practice Guidance [See reference 4] (PPG).

1.6 HRA refers to the assessment of the potential effects of a development plan on one or more sites afforded the highest level of protection in the UK: Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). These were classified under European Union (EU) legislation but, since 1st January 2021, are protected in the UK by the Habitats Regulations 2017 (as amended). Although the EU Directives from which the UK's Habitats Regulations originally derived are no longer binding, the Regulations still make reference to the lists of habitats and species that the sites were designated for, which are listed in annexes to the EU Directives:

- SACs are designated for particular habitat types (specified in Annex 1 of the EU Habitats Directive [See reference 5] and species (Annex II). The listed habitat types and species (excluding birds) are those considered to be most in need of conservation at a European level. Before EU exit day,

designation of SACs also had regard to the coherence of the 'Natura 2000' network of Habitat sites. After EU exit day, regard is had to the importance of such sites for the coherence of the UK's 'national site network'.

- SPAs are classified for rare and vulnerable birds (Annex I of the EU Birds Directive [See reference 6]), and for regularly occurring migratory species not listed in Annex I.

1.7 The term 'European sites' was previously commonly used in HRA to refer to 'Natura 2000' sites [See reference 7] and Ramsar sites (international designated under the Ramsar Convention). However, a Government Policy Paper [See reference 8] on changes to the Habitats Regulations 2017 post-Brexit states that:

- Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new 'national site network'.
- The national site network includes existing SACs and SPAs; and new SACs and SPAs designated under these Regulations.
- Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with SACs and SPAs and may be designated for the same or different species and habitats.

1.8 Although Ramsar sites do not form part of the new national site network, the Government Policy Paper [See reference 9] states that:

1.9 "Any proposals affecting the following sites would also require an HRA because these are protected by government policy:

- proposed SACs
- potential SPAs
- Ramsar sites - wetlands of international importance (both listed and proposed)
- areas secured as sites compensating for damage to a European site."

1.10 Furthermore, the NPPF [See reference 10] and practice guidance [See reference 11] currently still state that competent authorities responsible for carrying out HRA should treat Ramsar sites in the same way as SACs and SPAs. The legislative requirement for HRA does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves.

1.11 In line with feedback from Natural England on other recent HRAs, this report uses the term 'Habitats sites' rather than 'European sites' or 'national site network' to refer to SAC, SPA and Ramsar sites, the latter which does not form part of the national site network.

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 Habitat site in question. 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. Where uncertainty or doubt remains, an adverse effect should be assumed.

Stages of Habitat Regulations Assessment

1.13 This section below summarises the stages involved in carrying out an HRA, based on various guidance documents [See reference 12 and 13]. This HRA presents the methodology and findings of Stage 1: Screening. If Appropriate Assessment is required, this will be conducted at the next stage of plan-making when site allocations are specified in the Local Plan.

Stage 1: Screening (the ‘Significance Test’)

Task

- Description of the development plan and confirmation that it is not directly connected with or necessary to the management of Habitat sites.
- Identification of potentially affected Habitat sites and their conservation objectives [See reference 14].
- Review of other plans and projects.
- Assessment of likely significant effects of the development plan alone or in combination with other plans and projects, prior to consideration of avoidance or reduction (‘mitigation’) measures. In line with the CJEU judgment in Case C-323/17 People Over Wind v Coillte Teoranta, mitigation cannot be taken into consideration during Stage 1: HRA Screening.

Outcome

- 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.

Stage 2: Appropriate Assessment (the ‘Integrity Test’)

Task

- Information gathering (development plan and data on Habitat sites [See reference 15]).

- Impact prediction.
- Evaluation of development plan impacts in view of conservation objectives of Habitat sites.
- Where impacts are considered to affect qualifying features of Habitat sites directly or indirectly, identify how these effects will be avoided or reduced ('mitigation').

Outcome

- Appropriate Assessment report describing the plan, Habitat site baseline conditions, the adverse effects of the plan on the Habitat 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

Task

- Identify and demonstrate 'imperative reasons of overriding public interest' (IROPI).
- Demonstrate no alternatives exist.
- Identify potential compensatory measures.

Outcome

- This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

Requirements of the Habitat Regulations Assessment

1.14 In assessing the effects of the Local Plan in accordance with Regulation 105 of the Habitats Regulations (as amended), 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. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not:
- Step 2: Under Reg. 105(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 above.] If so:
- Step 3: Under Reg. 105(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. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public. [This step is undertaken during Stage 2: Appropriate Assessment shown above.]
- Step 4: In accordance with Reg.105(4), but subject to Reg.107, give effect to the land use plan only after having ascertained that the plan will not adversely affect the integrity of the Habitat 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 avoidance of likely significant

effects at Stage 1, and through Appropriate Assessment at Stage 2 by the inclusion of mitigation measures designed to avoid or reduce 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 the Government.

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 their behalf. The HRA also requires close working with Natural England as the statutory nature conservation body in order to obtain the necessary information and agree the process, outcomes, and any mitigation proposals.

Case law changes

1.17 This HRA has been prepared in accordance with relevant case law findings, including most notably the ‘People over Wind’ and ‘Holohan’ rulings from the Court of Justice for the European Union (CJEU).

1.18 The People over Wind, Peter Sweetman v Coillte Teoranta (April 2018) judgment ruled that Article 6(3) of the Habitats Directive should be interpreted as meaning that mitigation measures should be assessed as part of an Appropriate Assessment and should not be considered at the screening stage. The precise wording of the ruling is as follows:

“Article 6(3) ... must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site.”

1.19 In light of the above, the HRA screening stage does not rely upon avoidance or mitigation measures to draw conclusions as to whether the Local Plan could result in likely significant effects on Habitat sites. Instead, any such measures will be considered at the Appropriate Assessment stage as relevant.

1.20 The approach to this HRA is also consistent with the *Holohan v An Bord Pleanala* (November 2018) CJEU judgement which stated:

Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an ‘appropriate assessment’ must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the construction compound and haul routes, only if that authority is certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the ‘appropriate assessment’ must include an explicit and detailed statement of reasons

capable of dispelling all reasonable scientific doubt concerning the effects

1.21 In undertaking this HRA, LUC is considering the potential for effects on species and habitats, including those not listed as qualifying features, to result in secondary effects upon the qualifying features of Habitat sites, including the potential for complex interactions and dependencies. In addition, the potential for offsite impacts, such as through impacts to functionally linked land, and/or species and habitats located beyond the boundaries of Habitat site that may be important in supporting the ecological processes of the qualifying features, is also being fully considered in this HRA.

1.22 Similarly, effects on both qualifying and supporting habitats and species on functionally linked land (FLL) or habitat are being considered in the HRA, in line with the High Court judgment in *RSPB and others v Secretary of State and London Ashford Airport Ltd* [2014 EWHC 1523 Admin] (paragraph 27), which stated that:

“There is no authority on the significance of the non-statutory status of the FLL. However, the fact that the FLL was not within a protected site does not mean that the effect which a deterioration in its quality or function could have on a protected site is to be ignored. The indirect effect was still protected. Although the question of its legal status was mooted, I am satisfied That while no particular legal status attaches to FLL, the fact that land is functionally linked to protected land means that the indirectly adverse effects on a protected site, produced by effects on FLL, are scrutinised in the same legal framework just as are the direct effects of acts carried out on the protected site itself. That is the only sensible and purposive approach where a species or effect is not confined by a line on a map or boundary fence. This is particularly important where the boundaries of designated sites are drawn tightly as may be the UK practice”.

1.23 The approach to the HRA also takes into consideration the ‘Wealden’ judgement and the ‘Dutch Nitrogen Case’ judgements from the Court of Justice for the European Union.

1.24 Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority (2017) ruled that it was not appropriate to scope out the need for a detailed assessment for an individual plan or project based on the annual average daily traffic (AADT) figures detailed in the Design Manual for Roads and Bridges or the critical loads used by Defra or Environmental Agency without considering the in-combination impacts with other plans and projects.

1.25 In light of this judgement, this HRA will therefore consider traffic growth based on the effects of development from the Local Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

1.26 The 2018 ‘Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu (Dutch Nitrogen)’ judgement stated that:

“...the positive effects of the autonomous decrease in the nitrogen deposition...be taken into account in the appropriate assessment..., it is important that the autonomous decrease in the nitrogen deposition be monitored and, if it transpires that the decrease is less favourable than had been assumed in the appropriate assessment, that adjustments, if required, be made.”

1.27 The Dutch Nitrogen judgement also states that according to previous case law:

“...it is only when it is sufficiently certain that a measure will make an effective contribution to avoiding harm to the integrity of the site concerned,

by guaranteeing beyond all reasonable doubt that the plan or project at issue will not adversely affect the integrity of that site, that such a measure may be taken into consideration in the ‘appropriate assessment’ within the meaning of Article 6(3) of the Habitats Directive.”

1.28 The HRA of the Local Plan therefore will only considers the existence of conservation and/or preventative measures if the expected benefits of those measures are certain at the time of the assessment.

Structure of this report

1.29 Chapter 1 has introduced the requirement to undertake HRA of the Local Plan Review. The remainder of the report is structured as follows:

- **Chapter 2:** North East Lincolnshire Local Plan Review - summarises the content of the Draft plan, which is the subject of this report.
- **Chapter 3:** Method - sets out the approach used and the specific tasks undertaken during the Screening stage of the HRA and outlines the method that will be used for the Appropriate Assessment as part of the next iteration of the HRA.
- **Chapter 4:** Screening Assessment - describes the findings of the Screening stage of the HRA.
- **Chapter 5:** Conclusions and Next Steps - summarise the HRA Screening conclusions for the North East Lincolnshire Local Plan Review and describes the next steps to be undertaken, including the requirement for Appropriate Assessment.

Chapter 2

Draft North East Lincolnshire Local Plan Review

2.1 This chapter summarises the contents of the Draft version of the North East Lincolnshire Local Plan Review, which is the subject of this report.

Vision

2.2 The Draft Local Plan Review presents an overall vision for North East Lincolnshire as follows:

“By 2042 North East Lincolnshire will have built on its national and international recognition as a centre for offshore 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 sustained sustainable economic growth will have been created, with conditions to capture and sustain more and better jobs in the area well established. Town centres will be successful, having widened their offer to the communities they serve.

Environmental quality will be an established 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.

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 meet the prospects for economic growth over the plan period and beyond; whilst providing choice within the housing market, and being sensitive to the scale and character of settlements.”

2.3 This vision is intended to be achieved alongside four complementary “Place Statements” that clarify the role of different settlements in meeting the overall vision. The four areas are:

- Urban Area:
 - Grimsby and Cleethorpes.
- Estuary Zone:
 - Land adjacent to the Estuary including the port town of Immingham.
- Western and Southern Arc:
 - Healing, Laceby, Waltham, New Waltham, and Humberston.

- Rural Area:
 - Open countryside including rural settlements.

Strategic Objectives

2.4 The Draft Local Plan Review sets out 10 Strategic Objectives which will support the delivery of the Vision. The Strategic Objectives address the following topics:

- SO1 Population
- SO2 Climate Change
- SO3 Economy
- SO4 Housing
- SO5 Social and Health Inequality
- SO6 Built, Historic and Natural Environment
- SO7 Transport
- SO8 Town Centres and Local Facilities
- SO9 Design
- SO10 Minerals and Waste

Policies

2.5 There are 37 policies within the Draft Local Plan Review, which are presented in the following sections:

- Spatial Strategy
- Climate change, Flooding and Energy
- The Natural Environment

- Design and Amenity
- Employment
- Housing
- Town centres, Social and Cultural Places
- Providing for Minerals
- Providing for Waste

2.6 At this stage the Local Plan does not identify favoured sites for allocation for housing and employment development; rather it identifies reasonable options and invites comment on those options. Site allocations will be specified at the next stage of Plan-making (Regulation 19).

Chapter 3

Method

3.1 This chapter describes the methodology that is being used for the HRA of the North East Lincolnshire Local Plan Review.

Screening Assessment

3.2 HRA Screening of the Local Plan Review has been undertaken in line with current available guidance and has sought to meet the requirements of the Habitats Regulations. The tasks that were undertaken during this Screening stage of the HRA are described in detail below.

3.3 The purpose of the Screening stage is to:

- Identify all aspects of the plan which would have no effect on a Habitat site, so that they can be eliminated from further consideration in respect of this and other plans.
- Identify all aspects of the plan which would not be likely to have a significant effect on a Habitat site (i.e., would have some effect, because of links/connectivity, but which are not significant), either alone or in combination with other aspects of the same plan or other plans or projects, which therefore do not require 'Appropriate Assessment'.
- Identify those aspects of the plan where it is not possible to rule out the risk of significant effects on a Habitat site, either alone or in combination with other plans or projects. This provides a clear scope for the parts of the plan that will require Appropriate Assessment in a future iteration of the HRA.

Identifying Habitat sites that may be affected and their conservation objectives

3.4 In order to initiate the search of Habitat sites that could potentially be affected by a development, it is established practice in HRA to consider sites within the local planning authority area covered by the plan, and other sites that may be affected beyond this area.

3.5 A distance of 20km from the boundary of the plan area is typically used in the first instance to identify Habitat sites with the potential to be affected by the proposals within a development plan. Consideration is then given to whether any more distant Habitat sites may be connected to the plan area via effects pathways, for example through hydrological links or recreational visits by residents. The 20km distance has been agreed with Natural England for HRAs elsewhere and is considered precautionary. All Habitat sites within 20m were assessed in this HRA.

3.6 The assessment also accounts for areas that may be functionally linked to the Habitat sites. The term ‘functional linkage’ is used to refer to the role or ‘function’ that land beyond the boundary of a Habitat site might fulfil in terms of supporting the species populations for which the site was designated or classified. Such an area is therefore ‘linked’ to the site in question because it provides a (potentially important) role in maintaining or restoring a protected population at favourable conservation status.

3.7 While the boundary of a Habitat site will usually be drawn to include key supporting habitat for a qualifying species, this cannot always be the case where the population for which a site is designated or classified is particularly mobile. Individuals of the population will not necessarily remain in the site all the time. Sometimes, the mobility of qualifying species is considerable and may extend so far from the key habitat that forms the SAC or SPA that it would be entirely impractical to attempt to designate or classify all of the land or sea that may conceivably be used by the species [\[See reference 16\]](#). HRA therefore

considers whether any Habitat sites make use of functionally linked habitats, and the impacts that could affect those habitats.

3.8 Habitat sites identified for inclusion in this HRA are listed below in **Table 3.1** and are mapped in **Figure A.1** in Appendix A. Detailed information about each Habitat site is provided in **Appendix B**, described with reference to Standard Data Forms for the SPAs and SACs, and Natural England's Site Improvement Plans [See reference 17]. Natural England's conservation objectives [See reference 18] for the SPAs and SACs have also been reviewed. These state that site integrity must be maintained or restored by maintaining or restoring the habitats of qualifying features, the supporting processes on which they rely, and populations of qualifying species.

Table 3.1: Habitat sites within 20km of North East Lincolnshire

Habitat site	Distance / direction from North East Lincolnshire
Humber Estuary SAC, SPA and Ramsar site	Within the Borough
Greater Wash SPA	7km east
Saltfleetby-Theddlethorpe and Gibraltar Point SAC	17km south

Assessment of 'likely significant effects' of the North East Lincolnshire Local Plan Review

3.9 As required under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 [See reference 19] (as amended), an assessment has been undertaken of the 'likely significant effects' of the plan. The assessment has been prepared in order to identify which policies or site

allocations would be likely to have a significant effect on Habitat sites. The screening assessment has been conducted without taking mitigation into account, in accordance with the 'People over Wind' judgment.

3.10 Consideration has been given to the potential for the development proposed to result in significant effects associated with:

- Physical loss or damage to habitat
- Non-physical disturbance (noise, vibration, and light pollution)
- Non-toxic contamination
- Air pollution
- Recreational pressure
- Change to hydrology, including water quantity and quality

3.11 This thematic / impact category approach will allow for consideration to be given to the cumulative effects of the site allocations once they are known, rather than focussing exclusively on individual developments proposed in the plan.

3.12 A risk-based approach involving the application of the precautionary principle has been adopted in the assessment, such that a conclusion of 'no significant effect' was only reached where it was considered unlikely, based on current knowledge and the information available, that a proposal in the plan would have a significant effect on the integrity of a Habitat site.

3.13 A screening exercise was carried out (**Appendix C**), to document consideration of the potential for likely significant effects resulting from each policy in the plan.

3.14 For some types of impacts, the potential for likely significant effects was determined on a proximity basis. This approach and the assumptions applied are described in more detail in **Chapter 4**.

Interpretation of ‘likely significant effects’

3.15 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.

3.16 In the Waddenzee case [See reference 20], 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).

3.17 A relevant opinion delivered to 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 minimis 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.”

3.18 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 minimis’; 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’.

3.19 The HRA Screening assessment therefore considers whether the Local Plan policies could have likely significant effects either alone or in combination.

Mitigation provided by the plan

3.20 Some of the potential effects of the plan could be mitigated through the implementation of other policies in the plan itself, such as the provision of green infrastructure within new developments (which could help mitigate increased pressure from recreation activities at Habitat sites). Nevertheless, in accordance with the ‘People over Wind’ judgment, avoidance and mitigation measures cannot be relied upon at the Screening stage, and therefore, where such measures exist, they will be considered at the Appropriate Assessment stage for impacts and policies where likely significant effects, either alone or in-combination, could not be ruled out.

Assessment of potential in-combination effects

3.21 Regulation 105 of the Habitats Regulations 2017 requires an Appropriate Assessment where “a land use plan is likely to have a significant effect on a Habitat 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, it will be necessary to consider whether any impacts identified from the Local Plan Review may combine with other plans or projects to give rise to significant effects in-combination.

3.22 Where the Local Plan Review is likely to have an effect on its own e.g., due to water pollution (due to impact pathways being present), but it is not likely to be significant, the in-combination assessment at Screening stage will need to determine whether there may also be the same types of effect from other plans or projects that could combine with the Local Plan to produce a significant effect. If so, this likely significant effect (e.g., water pollution) arising from the Local Plan in combination with other plans or projects, would then need to be considered through the Appropriate Assessment stage (for example to determine if water pollution would have an adverse effect on integrity of the relevant Habitat site). Where the Screening assessment has concluded that there is no impact pathway between development proposed in the Local Plan Review and the conditions necessary to maintain qualifying features of a Habitat site, then there will be no in-combination effects to assess at the Screening or Appropriate Assessment stage. This approach accords with recent guidance on HRA [\[See reference 21\]](#).

3.23 If impact pathways are found to exist for a particular effect but it is not likely to be significant from the Local Plan Review alone, the in-combination assessment will identify which other plans and programmes could result in the same impact on the same Habitat site. This will focus on planned growth (including housing, employment, transport, minerals, and waste) around the affected site, or along the impact corridor, for example, if impacts could arise as a result of changes to a waterway, then planned growth in local authorities along that waterway will be considered.

3.24 The potential for in-combination impacts will therefore focus on plans prepared by local authorities that overlap with Habitat sites that are within the scope of this HRA. The findings of any associated HRA work for those plans will be reviewed where available. Where relevant, any strategic projects in the area that could have in-combination effects with the North East Lincolnshire Local Plan Review will also be identified and reviewed.

3.25 The online HRA Handbook suggests the following plans and projects may be relevant to consider as part of the in-combination assessment:

- Applications lodged but not yet determined, including refusals subject to an outstanding appeal or legal challenge.
- Projects subject to periodic review e.g., annual licences, during the time that their renewal is under consideration.
- Projects authorised but not yet started.
- Projects started but not yet completed.
- Known projects that do not require external authorisation.
- Proposals in adopted plans.
- Proposals in draft plans formally published or submitted for final consultation, examination, or adoption.

3.26 The need for in-combination assessment also arises at the Appropriate Assessment stage, as discussed in the Appropriate Assessment section below.

Appropriate Assessment

3.27 Following the Screening stage, if likely significant effects on Habitat sites are unable to be ruled out, the plan-making authority is required under Regulation 105 of the Habitats Regulations to make an 'Appropriate Assessment' of the implications of the plan for Habitat sites, in view of their conservation objectives. Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of Habitat sites with respect to their conservation objectives and to their structure and function **[See reference 22]**. This includes consideration of plans and projects with the potential for in-combination effects, where relevant.

3.28 Appropriate Assessment will be conducted as part of the next iteration of the HRA, if required, once site allocations are included in the Local Plan.

Assessing the effects on site integrity

3.29 A site's integrity depends on it being able to sustain its 'qualifying features' (i.e., the habitats and species for which it has been designated) and to ensure their continued viability. The Holohan judgement also clarifies that effects on species and habitats not listed as qualifying features, but which could result in secondary effects upon the qualifying features of Habitat sites also need to be considered. The Appropriate Assessment will therefore build upon the information set out in **Appendix B** of this report to consider the characteristics of supporting habitats and species that could be affected by impacts identified at the Screening stage.

3.30 A high degree of integrity at a site 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.

3.31 A conclusion needs to be reached as to whether or not a plan would adversely affect the integrity of any Habitat site. Assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the plan policies and/or site allocations (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.
- Result in fragmentation.
- Result in the loss of key features [\[See reference 23\]](#).

3.32 The conservation objectives for each SAC and SPA (as set out in **Appendix B**) are generally to maintain the qualifying features in favourable condition. Natural England does not define conservation objectives for Ramsar sites, but these can often be inferred from those for co-located SAC or SPA features. The Site Improvement Plans for each site provide a high-level overview of the issues (both current and predicted) affecting the condition of the designated features on the site(s) and outline the priority measures required to improve the condition of the features. An Appropriate Assessment draws on these to help to understand what is needed to maintain the integrity of the Habitat sites.

3.33 For each Habitat site where an uncertain or likely significant effect was identified in relation to the plan, the Appropriate Assessment will set out the potential impacts and make a judgement (based on the information available) on whether the impact will have an adverse effect on the integrity of the Habitat site. Consideration will be 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 Habitat site.

Chapter 4

Screening Assessment

4.1 As described in the Method chapter (**Chapter 3**), a Screening assessment was carried out in order to identify the likely significant effects of the Local Plan Review on the scoped-in Habitat sites. The full Screening assessment can be found in **Appendix C** and the findings are summarised below.

HRA Screening of Policies

No 'likely significant effect' predicted

4.2 The majority of the policies in the Draft Local Plan Review are not expected to result directly in development and therefore will not result in significant effects on Habitat sites. This includes:

Draft Strategic Policies

- Draft strategic policy 1 Settlement hierarchy
- Draft strategic policy 2 Development boundaries
- Draft strategic policy 3 Green wedges
- Draft strategic policy 5 Flood risk
- Draft strategic policy 8 Energy and low carbon living
- Draft strategic policy 10 Landscape
- Draft strategic policy 13 Good design in new developments
- Draft strategic policy 14 Conserving and enhancing the historic environment

- Draft strategic policy 17 Development of strategic housing sites
- Draft strategic policy 18 Affordable housing
- Draft strategic policy 19 Retail hierarchy
- Draft strategic policy 20 Social and cultural places
- Draft strategic policy 21 Safeguarding minerals and related infrastructure
- Draft strategic policy 22 Future requirements for waste facilities
- Draft strategic policy 23 safeguarding waste facilities and related infrastructure

Draft Policies

- Draft policy 1 Health and wellbeing
- Draft policy 3 Biodiversity net gain
- Draft policy 4 Parking
- Draft policy 5 Existing employment areas
- Draft policy 4 Parking
- Draft policy 5 Existing employment areas
- Draft policy 6 Skills and training
- Draft policy 8 Housing mix
- Draft policy 10 Provision for gypsies and travellers
- Draft policy 11 Town centre uses
- Draft policy 12 Future mineral extraction and Secondary Aggregates
- Draft policy 13 Restoration and aftercare (minerals)
- Draft policy 14 Restoration and aftercare (waste)

4.3 The following policies will not result in development and will also contribute to ensuring the safeguarding of Habitat sites (although any mitigation that may

be provided by the policies has not been taken into account at the Screening stage):

- Draft strategic policy 6 Water management
- Draft strategic policy 9 Developing a green infrastructure network
- Draft strategic policy 11 Biodiversity and Geodiversity
- Draft strategic policy 12 Habitat Mitigation - South Humber Bank
- Draft strategic policy 15 Promoting sustainable transport
- Draft policy 2 Green space and recreation

‘Likely significant effect’ predicted

4.4 The following policies could result in development, and therefore could have likely significant effects on Habitat sites although this is uncertain at this stage:

- Draft strategic policy 4 Infrastructure
- Draft strategic policy 7 Renewable and low carbon infrastructure
- Draft strategic policy 16 Tourism and visitor economy
- Draft policy 7 Rural exceptions
- Draft policy 9 Self-build and custom build homes

4.5 In addition, the overall scale of housing and employment development which has been identified as the Council’s favoured option, could result in likely significant effects on Habitat sites as a result of the scale of development proposed over the Local Plan period. The favoured option is to set the housing requirement aligned to the delivery of 415 dwellings per annum over the Plan period, and jobs growth of 4,560 over the Plan period. This would require some flexibility in housing allocations to deliver up to 507 dwellings per annum over the Plan period. The favoured option for the distribution of growth is identified as the ‘arc constraints including strategic urban extensions and urban focus’ option, although specific site allocations are not yet identified.

4.6 At this stage, with site allocations not yet known, consideration has been given in this HRA to the suite of options being considered and, depending on which are eventually taken forward as allocations, there could be likely significant effects on Habitat sites. The effects of the above development could include:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Disturbance to hydrological regimes

4.7 In the next section, further consideration has been given to the potential for these impacts to occur from the emerging Local Plan Review.

HRA Screening of Impacts

4.8 For some types of impacts, screening for likely significant effects was determined on a proximity basis, using GIS data to determine the distance of potential development locations to the Habitat sites that were the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, during the Screening stage a number of assumptions have been applied in relation to assessing the likely significant effects on Habitat sites that may result from the plan, as described below.

Physical damage and loss (onsite)

4.9 Any development resulting from the Local Plan Review would take place within the boundary of North East Lincolnshire, therefore only Habitat sites

within the Borough boundary could be affected by direct physical damage or loss of habitat within the Habitat site boundaries. The Humber Estuary SAC, SPA and Ramsar site are partially located within the Borough boundary and therefore there is potential for direct habitat loss at these sites as a result of development coming forward in the plan.

4.10 However, both of the other Habitat sites considered in this HRA (Saltfleetby-Theddlethorpe and Gibraltar Point SAC and Greater Wash SPA) are located outside of the North East Lincolnshire Borough boundary and therefore no likely significant effects are identified for these sites in relation to onsite physical damage or loss of habitat, either alone or in-combination with other plans and projects.

There is potential for likely significant effects to occur at Humber Estuary SAC, SPA and Ramsar site in relation to onsite physical damage and loss and therefore this effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.11 Based on a review of the site options, there is no potential for direct loss of habitat from within the Humber Estuary SAC, SPA and Ramsar site, given that the site options are all located outside of these European sites. There are no other European sites within the Borough.

Physical damage and loss – functionally linked land (offsite)

4.12 Habitat loss from development in areas outside of the Habitat site boundaries may result in likely significant effects where that habitat contributes

towards maintaining the interest feature for which the Habitat site is designated. This includes land which may provide offsite movement corridors or feeding and sheltering habitat for mobile species such as bats, birds and fish. Habitat sites susceptible to the indirect effects of habitat loss are restricted to those sites with qualifying species that rely on offsite habitat. These were identified as:

- Humber Estuary SAC – fish and marine mammals
- Humber Estuary SPA – birds
- Humber Estuary Ramsar site – birds, fish, marine mammals and amphibians
- Greater Wash SPA – birds

4.13 Saltfleetby-Theddlethorpe and Gibraltar Point SAC is screened out of the assessment as the SAC does not support qualifying features that are reliant on offsite functionality linked habitat.

Humber Estuary SAC, SPA and Ramsar

Birds

4.14 Natural England has advised that its recognised distance for the consideration of offsite functionally linked land in relation to birds is generally 2km, but for certain species, including most notably, golden plover and lapwing, a greater distance of 5km may be appropriate [\[See reference 24\]](#). Increased distances may also be appropriate where significant landscape scale features provide important functional linkages within European sites, for example, where river catchment flood plains and valleys extend considerable distances from a European site.

4.15 A buffer of 5km was considered in relation to Humber Estuary SPA and Ramsar site, which are designated for supporting qualifying bird species including golden plover. Given the proximity of the Humber Estuary SPA and

Ramsar site, which lie partially within North East Lincolnshire Borough, there is potential for impacts upon offsite functionally linked land supporting birds.

Therefore, potential impact on functionally linked land supporting the bird species of the Humber Estuary SPA and Ramsar site will need to be considered further at the Appropriate Assessment stage.

Fish

4.16 Sea and river lamprey are highly mobile species within estuarine and river systems. Given that the Humber Estuary SAC and Ramsar site lie within the Borough, and there are additional rivers and tributaries which are hydrologically connected with Humber Estuary, there is potential for loss of offsite functionally linked land for these species.

Therefore, potential impacts on offsite functionally linked land supporting fish of Humber Estuary SAC and Ramsar site will need to be considered further at the Appropriate Assessment stage.

Amphibians

4.17 With regards to offsite functionally linked land for amphibians such as Natterjack Toad, the maximum distance between breeding sites for Natterjacks is recommended to be 2km, in order to retain connectivity [\[See reference 25\]](#). This suggests that the dispersal distance for Natterjacks is 2km. The known Natterjack Toad population of the Humber Estuary Ramsar is located at dune slacks within Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site, approximately 17km south.

Therefore, potential impacts on offsite functionally linked land supporting natterjack toad of the Humber Estuary Ramsar site can be screened out of further assessment.

Marine Mammals

4.18 Grey seals are also a highly mobile species; however they have particular association with coastal and marine habitats and their breeding population is located at Donna Nook approximately 10km south-east along the coast from North East Lincolnshire Borough.

Therefore, potential impacts on offsite functionally linked land supporting grey seal of Humber Estuary SAC and Ramsar site can be screened out of further assessment.

Conclusion

There is potential for likely significant effects to occur at Humber Estuary SAC, SPA and Ramsar site in relation to offsite functionally linked land for birds and fish. Therefore, this effect will need to be considered further at the Appropriate Assessment stage.

Greater Wash SPA

4.19 A buffer of 2km was considered in relation to Greater Wash SPA, given the nature of the qualifying birds species, which are largely reliant on habitat along the coastline for breeding and sea habitat for foraging, but which may also rely

on freshwater habitats such as lakes and marshes. Given the distance of 6.9km from North East Lincolnshire Borough to Greater Wash SPA, impacts on functionally linked land can be screened out of further assessment.

No likely significant effect is predicted in relation to loss of functionally linked land to the Greater Wash SPA, either alone or in-combination with other plans and projects. Therefore, this effect is screened out of further assessment.

Site Options

4.20 Based on a review of the site options being considered for allocation in the Local Plan Review, there is potential for impacts on offsite functionally linked land both for the birds and fish of Humber Estuary SAC, SPA and Ramsar site, due to the proximity of site options located along the estuary at Cleethorpes, and between Grimsby and Immingham, and along the main rivers and tributaries which are hydrologically connected with Humber Estuary. Further assessment will be required once site allocations are identified at the Regulation 19 stage.

Non-physical disturbance (on site)

4.21 Noise and vibration effects, e.g., during the construction of new housing or employment development, are most likely to disturb bird species and are thus a key consideration with respect to Habitat sites where these species are the qualifying features. These effects, and particularly vibration, may also impact upon grey seals of the Humber Estuary SAC and Ramsar site. Artificial lighting at night (e.g., from streetlamps, flood lighting and security lights) has the potential to affect species where it occurs in close proximity to key habitat areas, such as key roosting sites of SPA birds and movement, feeding or breeding areas of grey seal of the SAC and Ramsar site.

4.22 It has been assumed that the effects of noise, vibration and light are most likely to be significant within a distance of 500 metres. There is also evidence of 300 metres being used as a distance up to which certain bird species can be disturbed by the effects of noise [See reference 26]; however, it has been assumed (on a precautionary basis) that the effects of noise, vibration and light pollution are capable of causing an adverse effect if development takes place within 500 metres of a Habitat site with qualifying features sensitive to these disturbances.

4.23 Only Humber Estuary SAC, SPA and Ramsar site lie within the Borough boundaries and there are no other Habitat sites within 500m of the Borough. Likely significant effects on the Greater Wash SPA and Saltfleetby-Theddlethorpe and Gibraltar Point SAC can be screened out due to their distance from the Plan area.

Humber Estuary SAC, SPA and Ramsar site

4.24 The effects of disturbance from noise, vibration and light are most likely to be significant if development takes place adjacent to the Humber Estuary. Given the location of Humber Estuary SAC, SPA and Ramsar site, which lie within North East Lincolnshire Borough and support species of bird, these sites may be susceptible to non-physical disturbance.

4.25 Fish species are less likely to be impacted by non-physical disturbance, however there is potential for impacts to arise from non-physical disturbance, such as increased lighting on watercourses used by these species from adjacent development and as such these species have therefore been screened in for further assessment.

Therefore, there is potential for likely significant effects to occur at Humber Estuary SAC and Ramsar site in relation to non-physical disturbance of fish and this effect will need to be considered further at the Appropriate Assessment stage.

4.26 In addition, marine mammals are less likely to be impacted by non-physical disturbance than birds but could be susceptible to effects from vibration resulting from development along the coast or the bank of the Humber Estuary, such as flood defence works. However, given the distance of approximately 10km from the Borough to the breeding population at Donna Nook, development within North East Lincolnshire is not likely to result in effects on the grey seal population 10km away.

Therefore, non-physical disturbance impacts on fish and marine mammals of the Humber Estuary SAC and Ramsar site can be screened out of further assessment.

4.27 The SPA and Ramsar site supports a range of qualifying bird species that are susceptible to impacts from non-physical disturbance, such as disturbance from noise, vibration and lighting.

Therefore, there is potential for likely significant effects to occur at Humber Estuary SPA and Ramsar site in relation to non-physical disturbance of birds and this effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.28 Based on a review of the site options being considered for allocation in the Local Plan Review, there is potential for non-physical disturbance to bird species of the Humber Estuary SPA and Ramsar site, given the location of some site options which lie within 500m of the European site boundaries. This includes:

- ELR020
- ELR015a

- ELR021
- HOU034a

4.29 Further assessment will be required once site allocations are identified at the Regulation 19 stage.

Non-physical disturbance (offsite functionally linked land)

4.30 Non-physical disturbance from development in areas outside of the Habitat site boundaries may result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the Habitat site is designated. Habitat sites with qualifying species that may rely on habitat outside of the designated site and within North East Lincolnshire Borough include Humber Estuary SAC, SPA and Ramsar site. For further detail on the use of offsite functional habitat in relation to the North East Lincolnshire Borough refer to section on 'Physical Damage and Loss - functionally linked land (offsite)'.

Humber Estuary SAC, SPA and Ramsar site

4.31 In addition to potential for likely significant effects in relation to non-physical disturbance of birds and fish onsite at the Humber Estuary SPA and Ramsar site, there is also potential for non-physical disturbance to offsite functionally linked land supporting qualifying bird and fish species within North East Lincolnshire Borough.

Therefore, non-physical disturbance impacts on the qualifying birds and fish of Humber Estuary SPA and Ramsar site will need to be considered further at the Appropriate Assessment stage.

Site Options

4.32 Based on a review of the site options being considered for allocation, there is potential for non-physical disturbance to affect the qualifying birds of the Humber Estuary SPA and Ramsar site using functionally linked land, due to the proximity of site options located along the estuary at Cleethorpes, and between Grimsby and Immingham, and along the main rivers and tributaries which are hydrologically connected with Humber Estuary. Further assessment will be required once site allocations are identified at the Regulation 19 stage.

Non-toxic contamination (dust) (on site)

4.33 Non-toxic contamination can be caused by the creation of dust from construction. This can smother terrestrial habitats or increase the turbidity of freshwater, estuarine and coastal habitats, preventing natural processes. It can also contribute to nutrient enrichment, which can lead to changes in the rate of vegetative succession and habitat composition.

4.34 The effects of dust creation are most likely to be significant if development takes place within 500m of a Habitat site with qualifying features sensitive to these effects, such as terrestrial, freshwater or estuarine and coastal habitats, or sites designated for habitats and plant species. This is the distance that, in our experience, provides a robust assessment of effects in plan-level HRA and meets with the agreement of Natural England.

4.35 Habitat sites that may be adversely affected by the creation of dust as a result of development as part of the Local Plan are those within the Local Plan area or within 500m of its boundary that also support species susceptible to dust air pollution.

4.36 Given the location of the Humber Estuary SAC, SPA and Ramsar, which lie partially within the Borough, there is potential for likely significant effects to arise as a result of non-toxic contamination.

4.37 Likely significant effects on the Greater Wash SPA and Saltfleetby-Theddlethorpe and Gibraltar Point SAC can be screened out due to their distance from the Plan area.

Likely significant effects from the North East Lincolnshire Local Plan in relation to non-toxic contamination will need to be considered through Appropriate Assessment in relation to Humber Estuary SAC, SPA and Ramsar site.

Site Options

4.38 Based on a review of the site options being considered for allocation in the Local Plan Review, there is potential for non-toxic contamination to occur at Humber Estuary SAC, SPA and Ramsar site as a result of development in the Local Plan due to the proximity of site options which lie within 500m of these European sites. This includes:

- ELR020
- ELR015a
- ELR021
- HOU034a
- HOU034c
- HOU381

4.39 Further assessment will be required once site allocations are identified at the Regulation 19 stage.

Non-toxic contamination (dust) (offsite functionally linked land)

4.40 Dust may also adversely affect qualifying features at functionally linked habitats within the Borough. It was established in the 'Physical Damage and Loss - functionally linked land (offsite)' section of this report, that Humber Estuary SAC, SPA and Ramsar site support such qualifying features.

Therefore, there is potential for likely significant effects to arise as a result of non-toxic contamination of offsite functionally linked land. This effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.41 Based on a review of the site options, there is potential for non-toxic contamination to affect qualifying features of Humber Estuary SAC, SPA and Ramsar site using functionally linked land, due to the proximity of site options located along the estuary at Cleethorpes, and between Grimsby and Immingham, and along the main rivers and tributaries which are hydrologically connected with Humber Estuary. Further assessment will be required once site allocations are identified at the Regulation 19 stage.

Air pollution

4.42 Air pollution is most likely to affect Habitat 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 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 levels, which can then affect plant health, productivity and species composition.

4.43 In terms of vehicle traffic, nitrogen oxides (NO_x, 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 NO_x can cause eutrophication of soils and water.

4.44 Based on the Highways England Design Manual for Road and Bridges (DMRB) LA 105 Air quality (which sets out the requirements for assessing and reporting the effects of highway projects on air quality), 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.

4.45 For highways developments within 200m of sensitive receptors, the DMRB provides the following screening criteria to ascertain whether there are likely to be significant impacts:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- There will be a change in speed band; or
- Road carriageway alignment will change by 5m or more.

4.46 This traffic forecast data may be needed, where significant increases in traffic are possible on roads within 200m of Habitat sites, to determine if increases in vehicle traffic are likely to be significant. In line with the Wealden judgement [\[See reference 27\]](#), the traffic growth considered by the HRA should be based on the effects of development provided for by the plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

4.47 It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) are likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000

AADT). As such, where a site is within 200m of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.

4.48 The key commuting corridors within the Borough, for new housing and employment development, will likely include the A180, A16, A18, A46, A160, A1031, A1098, A1136, A1173, and A1243, which are highlighted in **Figure A.2** in **Appendix A**.

4.49 The following Habitat sites are within 20km of North East Lincolnshire support habitats susceptible to the effects of air pollution and are within 200m of a strategic road:

- Humber Estuary SAC, SPA and Ramsar site (A15, A63, A1031, A1077, A1098, and A1166)
- Greater Wash SPA (A1033)
- Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC (A1031).

Humber Estuary SAC, SPA and Ramsar site

4.50 Humber Estuary SAC, SPA and Ramsar site are located within 200m of the A15, A63, A1031, A1077, A1098, and A1166. 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.

Greater Wash SPA

4.51 Greater Wash SPA lies along the coast within 200m of the A1033 within the town of Withernsea in East Riding of Yorkshire. Although the SPA is within 200m of the A1033, that route is not expected to experience a significant increase in traffic generation as a result of development in North East Lincolnshire because it is on the opposite side of the Humber Estuary and there are no direct links to or from the larger towns where development is focused. In

addition, there is a distance of over 17km between Withernsea and North East Lincolnshire (at the nearest point) which means that diffuse pollution experienced at Withernsea is not expected to result in likely significant effects. Greater Wash SPA is therefore screened out in relation to increased air pollution.

Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC

4.52 Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC 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 and Cleethorpes 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. The SAC has been screened out in relation to increased air pollution.

Therefore, likely significant effects from the North East Lincolnshire Local Plan in relation to air pollution will need to be considered as part of the Appropriate Assessment in relation to Humber Estuary SAC and Ramsar site, but can be screened out in relation to the Greater Wash SPA and Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC.

Site Options

4.53 There is potential for air pollution impacts on the Humber Estuary SAC, SPA and Ramsar site, as a result of development of site options and the combined influence of site options in increasing traffic of strategic roads. Further assessment will be required once site allocations are identified at Regulation 19 stage.

Air pollution (offsite functionally linked land)

4.54 Air pollution may also adversely affect qualifying features at functionally linked habitats, if the habitats deteriorate to the extent that their ability to support the qualifying species is affected.

4.55 Humber Estuary SAC, SPA and Ramsar site supports species which may use functionally linked land within the Borough.

Therefore, there is potential for air pollution impacts, as a result of growth proposed in the Local Plan, to affect functionally linked land of these European sites. This effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.56 There is potential for air pollution impacts from the development of site options cumulatively to impact on functionally linked land of the Humber Estuary SAC, SPA and Ramsar site. Further assessment will be required once site allocations are identified at Regulation 19 stage.

Recreation and urban impacts

4.57 Recreational activities and human presence can result in significant effects on Habitat sites. Habitat sites with qualifying bird species are likely to be particularly susceptible to recreational disturbances from walking, dog walking, angling, illegal use of off-road vehicles and motorbikes, wildfowling, and water sports. In addition, recreation can physically damage habitat as a result of trampling, fire or vandalism and also through erosion associated with terrestrial activities.

4.58 The North East Lincolnshire Local Plan will result in housing growth, and associated population increase in the Borough. Therefore, there is potential for likely significant effect resulting from increases in recreational impacts associated with population growth during the Local Plan period.

4.59 The Local Plan will also result in growth in tourism, particularly given the coastal location of the Borough and the draw which coastal towns have for tourists and visitors. This can have particular implications for coastal European sites, especially those supporting sensitive habitats or species such as sand dune habitats, and breeding or overwintering birds of SPAs and Ramsar sites. Visitor recreational activity is concentrated around the resort of Cleethorpes, however, visitors staying in tourist resorts are likely to visit nearby coastal sites. Therefore, there is potential for likely significant effect resulting from increases in recreation impacts associated with increases in visitor numbers as a result of growth in the Local Plan.

4.60 Where increases in population or increases in visitor numbers are likely to result in significant increases in recreation at a Habitat site, either alone or in combination, the potential for likely significant effects will require assessment.

4.61 Each Habitat site will typically have a 'Zone of Influence' (ZOI) within which increases in population would be expected to result in likely significant effects. ZOIs are usually established following targeted visitor surveys and the findings are therefore typically specific to each Habitat site (and often to specific areas

within a Habitat site). The findings are likely to be influenced by a number of complex and interacting factors and therefore it is not always appropriate to apply a generic or non-specific ZOI to a European site.

Humber Estuary SAC, SPA and Ramsar site

4.62 Although no specific visitor surveys have been carried out for all European sites within and surrounding North East Lincolnshire, a recreational visitor survey of the Humber Estuary was carried out in 2012 by Footprint Ecology [See reference 28]. This identified that during the summer, an average of 50% of day visitors travelled from further afield with a distance of 8.5km travelled, whereas 50% of winter visitors travelled a median distance of 4.4km from their home by car.

4.63 Over recent years, there has been substantial development in the understanding of recreational impacts on European sites. In the absence of an updated visitor survey or recreational impact assessment for Humber Estuary, and in line with similar recreational impact based ZOIs in Norfolk, including for Breydon Water SPA and Ramsar, a more precautionary ZOI of 25km has been applied in this assessment. This ZOI is identified for residential development recreational impacts from the 2021 Norfolk Green Infrastructure and Recreational impact Avoidance and Mitigation Strategy (GIRAMS) [See reference 29].

4.64 Further consideration of visitor impacts on the Humber Estuary sites will therefore be required as part of the Appropriate Assessment.

Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC

4.65 There is no known visitor survey work for Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC. Therefore, no specific ZOI is defined for this site and in line with a precautionary approach a non-specific ZOI of 30km has been applied

in this assessment. This is broadly in line with similar recreational impact based ZOIs in Norfolk, including for Winterton-Horsey Dunes SAC in Great Yarmouth. This ZOI is identified for residential development recreational impacts from the 2021 Norfolk Green Infrastructure and Recreational impact Avoidance and Mitigation Strategy (GIRAMS) [\[See reference 29\]](#).

4.66 Further consideration of visitor impacts on this site will therefore be required as part of the Appropriate Assessment.

Greater Wash SPA

4.67 No ZOI have previously been identified for Greater Wash SPA. Therefore, in line with a precautionary approach a non-specific ZOI of 30km has been applied in this assessment. This is broadly in line with similar recreational impact based ZOIs in Norfolk, including for Great Yarmouth North Denes SPA, which also supports breeding Little Tern. This ZOI is identified for residential development recreational impacts from the 2021 Norfolk GIRAMS) [\[See reference 29\]](#).

4.68 Further consideration of visitor impacts on this site will therefore be required as part of the Appropriate Assessment.

Conclusion

There is potential for likely significant effects to occur at Humber Estuary SAC, SPA and Ramsar site, Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC and Greater Wash SPA in relation to impacts from recreation and therefore this effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.69 There is potential for recreational impacts on the Humber Estuary SAC, SPA and Ramsar site, Greater Wash SPA and Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC as a result of housing development of site options and the combined influence of site options in increasing recreational pressure at these Habitat sites. Further assessment will be required once site allocations are identified at the Regulation 19 stage.

Recreation and urban impacts (offsite functionally linked land)

4.70 Recreational impacts from development in areas outside of the Habitat site boundaries may result in likely significant effects where there is an additional need for greenspaces and green infrastructure within areas of land that contributes towards maintaining the interest feature for which the Habitat site is designated. Habitat sites with qualifying species that may rely on habitat outside of the designated site and within North East Lincolnshire Borough include Humber Estuary SAC, SPA and Ramsar site. For further detail on the use of offsite functional habitat in relation to the North East Lincolnshire Borough refer to section on 'Physical Damage and Loss - functionally linked land (offsite)'.

Humber Estuary SAC, SPA and Ramsar site

4.71 In addition to the potential for likely significant effects in relation to recreational impacts on birds on site at Humber Estuary SPA and Ramsar site, there is also potential for recreational impacts at offsite functionally linked land supporting the qualifying bird species within North East Lincolnshire.

Therefore, this effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.72 Based on a review of the site options, there is potential for recreational impacts on birds of Humber Estuary SPA and Ramsar using functionally linked land, due to the proximity of site options located along the estuary at Cleethorpes, and between Grimsby and Immingham, and along the main rivers and tributaries which are hydrologically connected with Humber Estuary. Further assessment will be required once site allocations are identified at Regulation 19 stage.

Water quantity and quality

4.73 An increase in demand for water abstraction and treatment resulting from the growth proposed in the plan could result in changes in hydrology at Habitat sites. Depending on the qualifying features and particular vulnerabilities of the Habitat sites, this could result in likely significant effects, for example, due to changes in environmental or biotic conditions, water chemistry and the extent and distribution of favoured habitat conditions.

4.74 North East Lincolnshire lies within the Grimsby, Ancholme and Louth Abstraction Licensing Strategy area due to water scarcity across the region **[See reference 30]**. This limits the amount of water that can be extracted based on the level of flow of main rivers and tributaries across a catchment.

4.75 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.

4.76 Greater Wash SPA is located 6.9km away from North East Lincolnshire and although it is hydrologically connected, via the Humber Estuary, it is considered to be sufficiently distant that there should not be likely significant effects as a result of changes in water quantity and quality.

4.77 Saltfleetby-Theddlethorpe Dunes & 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 quantity and quality due to Local Plan proposals have been screened out.

Therefore, likely significant effects from the North East Lincolnshire Local Plan in relation to water quality and quantity impacts will need to be considered through Appropriate Assessment in relation to Humber Estuary SAC, SPA and Ramsar site but can be screened out in relation to Greater Wash SPA and Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC.

Site Options

4.78 Based on a review of the site options, there is potential for water quality impacts, on the Humber Estuary SAC, SPA and Ramsar site, given the location of site options which are hydrologically connected with Humber Estuary. Further assessment will be required once site allocations are identified at Regulation 19 stage.

Water quantity and quality (offsite functionally linked land)

4.79 Impacts on water quality and quantity may also adversely affect qualifying features at functionally linked habitats, if the habitats deteriorate to the extent that their ability to support the qualifying species is affected.

4.80 Humber Estuary SAC, SPA and Ramsar site supports species which may use functionally linked land within the Borough.

Therefore, there is potential for water quality and quantity impacts, as a result of growth proposed in the Local Plan, to affect functionally linked land of these Habitat sites. This effect will need to be considered further at the Appropriate Assessment stage.

Site Options

4.81 Based on a review of the site options, there is potential for impacts on water quality and quantity on offsite functionally linked land both for birds and for fish of Humber Estuary SAC, SPA and Ramsar site, due to the proximity of site options located along the estuary at Cleethorpes, and between Grimsby and Immingham, and along the main rivers and tributaries which are hydrologically connected with Humber Estuary. Further assessment will be required once site allocations are identified at Regulation 19 stage.

Summary of Screening Assessment

4.82 **Table 4.1** below summarises the HRA Screening conclusions reached in relation to the Draft Local Plan Review. Impact types for which a conclusion of

'no likely significant effect' was reached are shown with no colour. Those potential impacts where 'likely significant effects' could not be ruled out are shown in orange and these will be considered in more detail at the future Appropriate Assessment stage.

Table 4.1: Summary of Screening Assessment

Habitat site	Physical Damage and Loss	Non-physical Disturbance	Non-toxic Contamination (Dust)	Air Pollution	Recreation and urban impacts	Water Quantity and Quality
Humber Estuary SAC	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)
Humber Estuary SPA	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)
Humber Estuary Ramsar	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)	Potential likely significant effects (incl. offsite)
Greater Wash SPA	No likely significant effects	No likely significant effects	No likely significant effects	No likely significant effects	Potential likely significant effects	No likely significant effects
Saltfleetby-Theddlethorpe and Gibraltar Point SAC	No likely significant effects	No likely significant effects	No likely significant effects	No likely significant effects	Potential likely significant effects	No likely significant effects

Chapter 5

Conclusion and Next Steps

5.1 A number of proposals and draft policies in the Draft Local Plan Review have been found to have likely significant effects on Habitat sites because they will result in development which could impact upon those sites. In particular, the overall scale of residential and employment development indicated as the Council's favoured option could result in likely significant effects, although these cannot be assessed in detail through Appropriate Assessment until site allocations are identified at the next stage of plan-making.

5.2 The HRA Screening stage has determined that there could be likely significant effects relating to the following types of impacts:

- **Physical damage and loss** – in relation to Humber Estuary SAC, SPA and Ramsar site (both onsite and offsite).
- **Non-physical disturbance** – in relation to Humber Estuary SPA and Ramsar site (both onsite and offsite).
- **Non-toxic contaminants** - in relation to Humber Estuary SAC, SPA and Ramsar site (both onsite and offsite).
- **Air pollution** – in relation to Humber Estuary SAC, SPA and Ramsar site (both onsite and offsite).
- **Recreation** – in relation to Humber Estuary SAC, SPA and Ramsar site (both onsite and offsite) and Greater Wash SPA and Saltfleetby-Theddlethorpe and Gibraltar Point SAC (onsite only).
- **Water quality and quantity** – in relation to Humber Estuary SAC, SPA and Ramsar site (both onsite and offsite).

Next steps

5.3 HRA is an iterative process and as such may need to be updated in light of newly available evidence and comments from key consultees. This report will be subject to consultation with Natural England and the Environment Agency alongside the Draft Local Plan Review in order to confirm that the conclusions of the assessment are considered appropriate at this stage of plan-making.

5.4 Given the conclusion of likely significant effect for one or more impacts on each of the European sites, the HRA will proceed to Appropriate Assessment stage as part of the next iteration of Plan-making, to determine whether the Local Plan Review will result in Adverse Effects on the Integrity of any Habitat sites. The Appropriate Assessment stage will also take into account any mitigation, such as safeguards embedded within Local Plan policies.

Key Evidence Required for Appropriate Assessment

5.5 Alongside further information on the emerging Local Plan Review, in particular site allocations, the following key evidence will be required to inform the Appropriate Assessment:

- Existing avoidance and mitigation strategies for European sites, including South Humber Mitigation Strategy [\[See reference 31\]](#);
- Recreation studies and / or visitors surveys or similar for Humber Estuary SAC, SPA and Ramsar site, Greater Wash SPA and Saltfleetby-Theddlethorpe and Gibraltar Point SAC to inform appropriate ZOI for considering recreational impacts as a result of the Local Plan;
- Road traffic AADT calculations are required to determine whether thresholds are exceeded in-combination with other plans and projects as a result of the Local Plan. If AADT thresholds are exceeded air quality modelling will be required to understand whether the Plan will result in adverse effect on integrity and whether avoidance and mitigation measures can be applied which would prevent an adverse effect on integrity;; and

Chapter 5 Conclusion and Next Steps

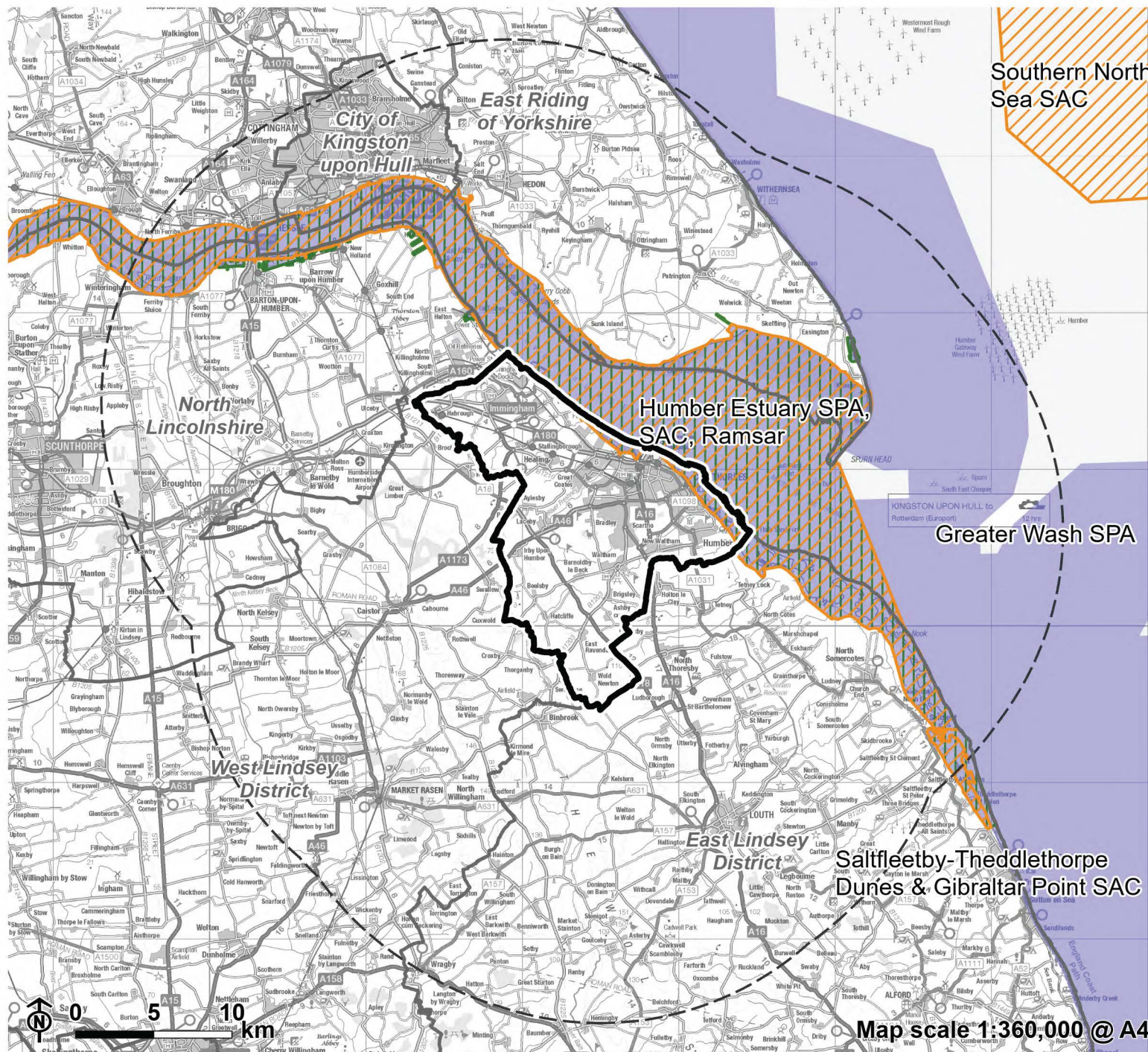
- Water resources management plans / Water Cycle Study for North East Lincolnshire Borough and neighbouring authorities.

LUC

December 2023

Appendix A

Figures

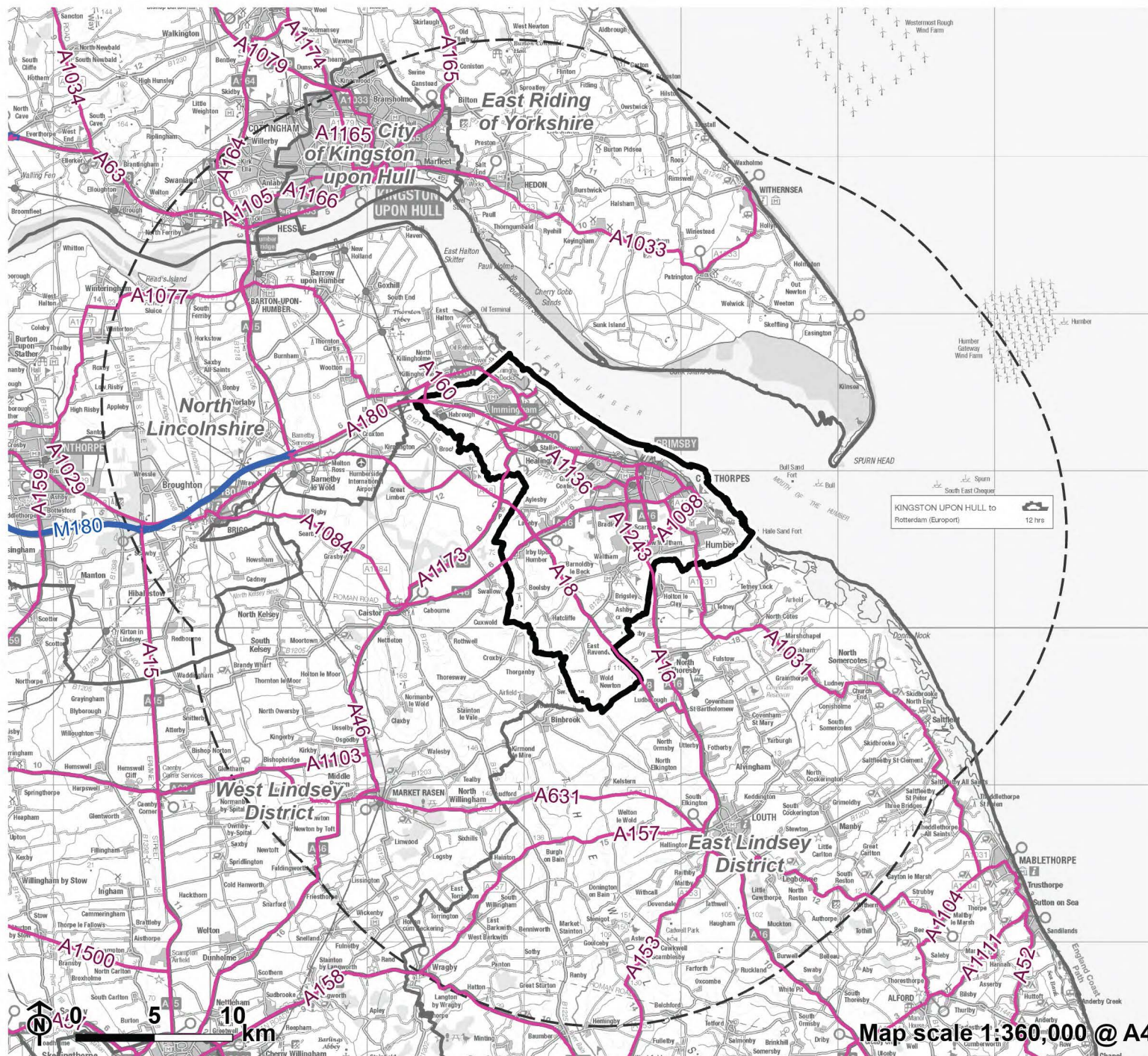


HRA of North East
Lincolnshire Local Plan
North East Lincolnshire
Council



**Figure A.1: European Sites
within 20km of North East
Lincolnshire**

- North East Lincolnshire
- District
- Neighbouring local
authority
- Buffer 20km
- Special Area of
Conservation (SAC)
- Ramsar site
- Special Protection Area
(SPA)



HRA of North East
Lincolnshire Local Plan
North East Lincolnshire
Council



**Figure A.2: Key Strategic
Roads within 20km of
North East Lincolnshire**

- North East Lincolnshire
- District
- Neighbouring local
authority
- Buffer 20km
- A Road
- Motorway

Map scale 1:360,000 @ A4

Appendix B

Attributes of Habitat sites

B.1 This appendix contains information about the Habitat sites scoped into the HRA. Information about each site's area, the site descriptions, qualifying features, pressures and threats are drawn from Natural England's Site Improvement Plans (SIPs) [See reference 32], Standard Data Forms or Ramsar Information Sheets available from the JNCC website [See reference 33] and Supplementary Advice Notes [See reference 34]. These advise on the site's features and how to implement the conservation objectives. Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs [See reference 35].

Humber Estuary SAC

B.2 Situated within the northern boundary of the Borough, stretching along the estuary from Goole to the coastline. The estuary has a total area of 36,657.15 hectares.

Summary of reasons for designation

Qualifying Habitats (Annex I):

1130 Estuaries

- The Humber is the second-largest coastal plain estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macro-tidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney. Suspended sediment concentrations are high, and are derived

from a variety of sources, including marine sediments and eroding boulder clay along the Holderness coast. This is the northernmost of the English east coast estuaries whose structure and function is intimately linked with soft eroding shorelines.

1140 Mudflats and sandflats not covered by seawater at low tide

- The Humber Estuary includes extensive intertidal mudflats and sandflats not covered by seawater at low tide. Upstream from the Humber Bridge, extensive mud and sand bars in places form semi-permanent islands [See reference 36].

Qualifying species (Annex II):

1095 **Sea Lamprey** (*Petromyzon Marinus*)

- A primitive, jawless fish resembling an eel. It is the largest of the lampreys found in the UK. The species occurs in estuaries and easily accessible rivers over much of the Atlantic coastal area of western and northern Europe and eastern North America. It is reasonably widespread in UK rivers. In some places it is still common, but it has declined in parts of its range and has become extinct in a number of rivers. Sea lampreys need clean gravel for spawning, and marginal silt or sand for the burrowing juvenile ammocoetes. Sea lampreys prefer warm waters in which to spawn [See reference 37].
- The site contains the necessary habitat requirements for spawning and survival of juveniles owing to the extensive suitable habitats available in the Humber Estuary including 1330 Atlantic salt meadows, a range of sand dune types in the outer estuary, together with subtidal sandbanks (H1110 Sandbanks which are slightly covered by sea water all the time), extensive intertidal mudflats (H1140 Mudflats and sandflats not covered by seawater at low tide), glasswort beds (H1310 *Salicornia* and other annuals colonising mud and sand), and 1150 coastal lagoons.

1099 **River Lamprey** (*Lampetra Fluviatilis*)

- Found in coastal waters, estuaries and accessible rivers in western Europe, UK populations are considered important for the conservation of the species at an EU level. The species is normally anadromous (i.e., spawning in freshwater but completing part of its life cycle in the sea), and pollution or artificial obstacles such as weirs or dams impede migration **[See reference 38]**
- The Humber Estuary qualifies owing to the extensive river system of clear water and suitable areas of gravels, silt or sand for spawning, including important tributaries, which provide conservation of the range of habitat features required by the species.

1364 **Grey Seal** (*Halichoerus Grypus*)

- Spending most of the year at sea, grey seals may range widely in search of prey. They come ashore in autumn to form breeding colonies on rocky shores, beaches, in caves, occasionally on sandbanks, and on small largely uninhabited islands. In such locations they may spread some distance from the shore and ascend to considerable heights. The species are among the rarest seals in the world: the UK population represents about 40% of the world population and 95% of the EU population **[See reference 39]**
- Site selection takes account of the UK's special responsibility to protect this species. The largest breeding colonies, based on pup production, have been selected. Sites have been identified using the most up-to-date population data available, although populations at individual sites may fluctuate. Colonies have also been selected to ensure coverage of the geographical range of breeding in the UK. The sites recommended for selection contain a significant proportion of the UK breeding population of grey seals.

Habitat site pressures and threats

Current pressures

■ Water pollution

- There is an annual Dissolved Oxygen (DO) sag in the tidal River Ouse which has been present for many years but has shown improvements more recently due to reductions in pollution. The DO sag means that at certain times of year, the water quality thresholds set out in the conservation objectives for the site are not being met. It is possible that the DO sag may cause a barrier to sea lamprey when they are migrating through the area during the summer months. Further investigation is needed into the impacts.

■ Undergrazing

- Lack of recent grazing by livestock has resulted in suitable habitat no longer being maintained for roosting/loafing SPA birds. Investigation is needed to ensure that any future introduction of grazing would be neutral or beneficial to the saltmarsh and dune SAC features.

■ Natural changes to site conditions

- Changes in the topography and habitats in the inner estuary may lead to a reduction of important habitats such as mudflats. There is evidence of changes including increased growth of *Salicornia* on mudflats. There are also increasing sediment loads within North Killingholme Haven Pits, which is affecting water levels and sluice functioning. The causes are unknown and need further investigation.

■ Invasive species

- The presence of *Azolla* in the drains at Far Ings is currently being addressed. The presence of Himalayan Balsam is a catchment wide issue and there are localised patches of Giant Hogweed and Japanese Knotweed. Marine invasive species are also present with the slipper limpet and Chinese mitten crab being an issue, however the extent is unknown and more investigation is necessary.

Appendix B Attributes of Habitat sites

- Fisheries: Commercial marine and estuarine
 - Dredges (inc. hydraulic), benthic trawls and seines and shore-based activities are categorised as 'Red' for the mudflats and sandflats not covered by seawater at low tide interest feature (and specifically the sub-feature: Eelgrass communities) as part of Defra's revised approach to commercial fisheries management in EMSs.
- Air Pollution: Impact of atmospheric nitrogen deposition
 - Nitrogen deposition exceeds site relevant critical loads, with potential for degradation of estuarine habitat quality and condition.
- Direct land take from development
 - Commercial scale collection of *Salicornia* occurs near Saltfleetby. There was a proposal in 2013 regarding the harvesting of this species. There are management measures in place through 'Codes of Conduct' but these have had limited management success [\[See reference 40\]](#).
- Disturbance of birds and grey seals by walkers, including dog walkers and photographers.

Potential future threats

- Climate Change – affecting weather conditions, and natural geomorphological coastal and estuarine processes, and sea level rise with potential to result in habitat loss or degradation and changes in species composition.
- Coastal squeeze
 - The gradual and persistent loss of intertidal habitat due to sea level rise, alterations in sediment supply and presence of fixed defences affects saltmarsh and mudflat habitat extent and condition. The Humber Estuary 2015 Site Improvement Plan [\[See reference 40\]](#) identifies coastal squeeze as a particular threat to the Humber Estuary. However, the HRA of the Humber River Basin District Flood Risk Management Plan [\[See reference 41\]](#), which covers the period 2021-2027, identifies that coastal squeeze impacts have been fully explored

and mitigation or compensation quantified. If necessary, mitigation is provided through the SMP and Coastal Strategy process and their HRAs, and through the Flood and Coastal Erosion Risk Management (FCERM) National Strategy 2021, and compensation delivered in the form of the Habitat Compensation Programme. A loss in mudflat can in turn affect SPA bird features that depend on these habitats.

Conservation objectives

- Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
 - The extent and distribution of qualifying natural habitats and habitats of qualifying species
 - The structure and function (including typical species) of qualifying natural habitats
 - The structure and function of the habitats of qualifying species
 - The supporting processes on which qualifying natural habitats and habitats of qualifying species rely
 - The populations of qualifying species, and,
 - The distribution of qualifying species within the site [\[See reference 42\]](#).

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

B.3 The following information has been identified from Natural England's supplementary advice on conserving and restoring site features [\[See reference 43\]](#).

- The SAC's qualifying habitat relies on:

Appendix B Attributes of Habitat sites

- 1130 **Estuaries**, are formed of a variety of vegetational communities, called 'biotopes'. The Humber Estuary SAC estuary comprises the following Annex I habitats which are present as a qualifying feature but not a primary reason for selection of the site:
 - 1110 Sandbanks which are slightly covered by sea water all the time
 - 1150 Coastal lagoons * Priority feature
 - 1310 Salicornia and other annuals colonizing mud and sand
 - 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
 - 2110 Embryonic shifting dunes
 - 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")"
 - 2130 "Fixed coastal dunes with herbaceous vegetation ("grey dunes")" * Priority feature
 - 2160 Dunes with *Hippopha - rhamnoides*
- Humber Estuary comprises of the following sub-features:
 - Subtidal coarse sediment (A5.1)
 - subtidal sand (A5.2)
 - subtidal mud (A5.3)
 - subtidal mixed sediments (A5.4)
 - intertidal sand and muddy sand (A2.2)
 - intertidal mud (A2.3)
 - intertidal mixed sediment (A2.4)
 - intertidal seagrass beds (A2.61)
 - Tidal reed bed (A5.541)
 - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) (H1330) and Salicornia and other annuals colonising mud and sand (H1310)

- 1140 **Mudflats and sandflats not covered by seawater at low tide**
are usually located in the most sheltered areas of the coast where large quantities of silt from rivers are deposited in estuaries. In sheltered areas communities are typically dominated by polychaete worms, and bivalve molluscs and may support very high densities of mud-snails. Sand flats occur on open coast beaches and bays where wave action or strong tidal currents prevent the deposition of finer silt. On more exposed coasts the biodiversity may be lower and the communities dominated by crustaceans such as *Bathyporeia* [See reference 44]. The intertidal mudflats and sand flats feature in the Humber Estuary is comprised of the following habitat types:
 - Littoral sand and muddy sand (Intertidal sand and muddy sand subfeature (A2.2);
 - Littoral mud (Intertidal mud subfeature) (A2.3);
 - Littoral mixed sediments (Intertidal mixed sediment subfeature) (A2.4);
 - Eelgrass (Intertidal Seagrass Beds subfeature) (A2.61).

B.4 The SAC's qualifying species rely on:

- 1095 **Sea lamprey**
 - Prefer shallow coastal areas, though they are found at depths between 0.91 and 4.57 m. Hatched in gravel or rock beds in small, freshwater streams and rivers. After the larval stage, they migrate into saltwater ocean habitats. They return to freshwater to lay their eggs.
 - Newly hatched larval Sea lampreys are freshwater filter-feeders that consume detritus, algae, and other organic material found at river bottoms. Mature Sea lampreys feed on fish. This species does not have a preference of host species [See reference 45].
- 1099 **River lamprey**
 - Much like Sea lamprey, River lamprey are migratory, spawning in clean sandy gravels in fresh water rivers. The young larvae then migrate to the soft marginal silt areas of a river to grow.

- Juvenile River lampreys feed on the algae, bacteria and detritus. They can spend five years in the mud before metamorphosing into Mature Sea lampreys and migrate towards the sea. There they will feed parasitically on fish; blood; body fluids; and carrion [\[See reference 46\]](#).
- 1364 **Grey seal**
 - The grey seal live in temperate and subarctic waters on both sides of the North Atlantic ocean with land habitats that differ between individual groups of seals. Some are found along rocky continental coasts, while others are comfortable on isolated islands [\[See reference 47\]](#).
 - Grey seal's feed on fish (mostly sand eels, hake, whiting, cod, haddock, pollock, and flatfish), crustaceans, squid, octopuses, and sometimes seabirds. Their diet varies by age class, sex, season, and geographic region [\[See reference 48\]](#).

Humber Estuary SPA

B.5 Situated within the northern boundary of the Borough, stretching along the estuary from Goole to the coastline. The estuary has a total area of 36,657.15 hectares.

Summary of reasons for designation

Qualifying species (Annex II):

Avocet *Recurvirostra avosetta* (Breeding and wintering)

- Habitat Preference – Grassland, marine and intertidal wetlands.
- Diet – Aquatic insects and their larvae, crustaceans and worms.

Bittern *Botaurus stellaris* (Breeding and wintering)

- Habitat Preference – Reedbeds and associated freshwater and estuarine habitats.
- Diet – Feed on fish, amphibians and insects within mudflats and marshes.

Hen harrier *Circus cyaneus* (Wintering)

- Habitat Preference – Moor, marsh, steppe and fields.
- Diet – Mostly small birds, nestlings, and small rodents.

Golden plover *Pluvialis apricaria* (Wintering)

- Habitat Preference – Moorland, farmland and estuaries.
- Diet – Worms, beetles and insects.

Bar-tailed godwit *Limosa lapponica* (Wintering)

- Habitat Preference – Low-lying coast such as estuaries, with a muddy or sandy substrate.
- Diet – Mainly shellfish, marine snails, worms and shrimps.

Ruff *Philomachus pugnax* (Passage)

- Habitat Preference – Wet grasslands and wetlands near the coast.
- Diet – Insects, crustaceans, spiders, molluscs, worms, frogs, small fish, seeds of rice and other cereals, grasses and aquatic plants.

Marsh harrier *Circus aeruginosus* (Breeding)

- Habitat Preference – Found within reedbeds, nesting on the ground.

- Diet – Species that live in or near wetlands, including small birds, ducklings and mammals.

Little tern *Sterna albifrons* (Breeding)

- Habitat preference: nest exclusively on the coast in well-camouflaged shallow scrapes on sand and shingle beaches, spits or inshore islets.
- Diet: fish, crustacean and invertebrates.

Regularly occurring birds on passage

- Internationally important assemblage of passage birds include shelduck *Tadorna tadorna* (wintering), knot *Calidris canutus* (wintering and passage), dunlin *Calidris alpina* (wintering and passage), black-tailed godwit *Limosa limosa* (wintering and passage), and redshank *Tringa tetanus* (wintering and passage).
- Habitat Preferences – The passage bird assemblage relies on a variety of habitats to support population numbers, including intertidal mudflats and sandflats, saltmarsh, seagrass beds and river channel and shallow coastal waters.
- Diet – Varied including fish, invertebrates, worms, crustaceans and molluscs.

Waterbird assemblage (Wintering)

- Internationally important assemblage of wintering birds including dark-bellied brent goose *Branta bernicla bernicla*, shelduck, wigeon *Anas penelope*, teal *Anas crecca*, mallard *Anas platyrhynchos*, pochard *Aythya ferina*, scaup *Aythya marila*, goldeneye *Bucephala clangula*, bittern, oystercatcher *Haematopus ostralegus*, avocet, ringed plover *Charadrius hiaticula*, golden plover, grey plover *Pluvialis squatarola*, lapwing *Vanellus vanellus*, knot, sanderling *Calidris alba*, dunlin *C. alpina*, ruff, black-tailed godwit, bar-tailed godwit, whimbrel *Numenius phaeopus*, curlew *N.*

arquata, redshank, greenshank *Tringa nebularia* and turnstone *Arenaria interpres*.

- Habitat Preferences - The waterbird assemblage relies on a variety of habitats to support population numbers, including intertidal mudflats and sandflats, saltmarsh, seagrass beds and river channel and shallow coastal waters.
- Diet – Varied including fish, invertebrates, worms, crustaceans, molluscs and vegetation.

Habitat site pressures and threats

Current pressures

- Undergrazing
 - Lack of recent grazing by livestock has resulted in suitable habitat no longer being maintained for roosting/loafing SPA/ Ramsar birds. Investigation is needed to ensure that any future introduction of grazing would be neutral or beneficial to the saltmarsh and dune SAC features.
- Public access / disturbance
 - Recreational disturbance could be contributing to declines in breeding and migratory bird populations at certain locations including East Halton Skitter, Barton Pits, Faxfleet and Welwick. The floodbank is adjacent to the river and there are many dog walkers, birders and other regularly occurring activities which may be causing disturbance to birds. Offroad vehicles can also cause disturbance to bird features.
- Fisheries: Fish stocking
 - Several of the clay pits on the south bank of the estuary have active fisheries or have had fisheries in the past and still support non-native fish. The over-stocking of native and non-native fish is destructive to the clay pits freshwater habitat, having a negative impact on water quality and is implicated in the decline of macrophytes and in many of

clay pits. The decline in macrophytes and water quality may both negatively impact SPA/ Ramsar waterbirds.

■ Shooting / scaring

- There is unauthorised wildfowling and game bird management in areas such as Haverfield Quarries. Investigation is needed to understand the extent of the unauthorised wildfowling and the potential impacts on SPA/ Ramsar features.

■ Inappropriate scrub control

- Successional scrub encroachment on grassland and reedbeds at Haverfield Quarries could reduce the likelihood of breeding by the marsh harrier.

Potential future threats

■ Coastal squeeze

- The gradual and persistent loss of intertidal habitat due to sea level rise, alterations in sediment supply and presence of fixed defences affects saltmarsh and mudflat habitat extent and condition. The Humber Estuary 2015 Site Improvement Plan [\[See reference 40\]](#) identifies coastal squeeze as a particular threat to the Humber Estuary. However, the HRA of the Humber River Basin District Flood Risk Management Plan [\[See reference 49\]](#), which covers the period 2021-2027, identifies that coastal squeeze impacts have been fully explored and mitigation or compensation quantified. If necessary, mitigation is provided through the SMP and Coastal Strategy process and their HRAs, and through the Flood and Coastal Erosion Risk Management (FCERM) National Strategy 2021, and compensation delivered in the form of the Habitat Compensation Programme. A loss in mudflat can in turn affect SPA bird features that depend on these habitats.

■ Changes in species distributions

- There are declines in populations of SPA bird/ Ramsar features due to unknown factors. Further investigation is needed to find the cause(s) of the declines and work to address the issues.

Conservation Objectives

B.6 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.

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

B.7 In general, the qualifying bird species of the SPA rely on:

- The sites ecosystem as a whole (see list of habitats above);
- Maintenance of populations of species that they feed on (see list of diets above);
- Off-site habitat, which provide foraging habitat for these species; and
- Open landscape with unobstructed line of sight within nesting, foraging or roosting habitat.

Humber Estuary Ramsar site

B.8 Situated within the northern boundary of the Borough, stretching along the estuary from Goole to the coastline. The estuary has a total area of 36,657.15 hectares.

Summary of reasons for designation

Qualifying Habitats (Annex I):

Ramsar Criterion 1

- Estuarine habitats

Qualifying Species (Annex II):

Ramsar Criterion 3

- Breeding population of grey seal at Donna Nook.
 - Habitat Preferences – The grey seal live in temperate and subarctic waters on both sides of the North Atlantic ocean with land habitats that differ between individual groups of seals. Some are found along rocky continental coasts, while others are comfortable on isolated islands **[See reference 50]**.
 - Diet – Grey seal's feed on fish (mostly sand eels, hake, whiting, cod, haddock, pollock, and flatfish), crustaceans, squid, octopuses, and sometimes seabirds. Their diet varies by age class, sex, season, and geographic region **[See reference 51]**.
- Breeding population of natterjack toad *Bufo calamita* at dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site.
 - Habitat Preferences – Dune slack habitats within Saltfleetby – Theddlethorpe NNR. Shallow (often ephemeral), warm ponds for breeding and open, sandy terrestrial habitats for burrowing and foraging, dispersal and hibernation.
 - Diet- Adults feed on mostly insects including ground beetles (class Carabidae), ants (family Formicidae), and moths (order Lepidoptera),

whereas larvae feed on algae and vegetative matter [\[See reference 52\]](#).

Ramsar Criterion 5

- Assemblage of wintering waterfowl of international importance.
- Habitat Preferences - The waterfowl assemblage relies on a variety of habitats to support population numbers, including intertidal mudflats and sandflats, saltmarsh, seagrass beds and river channel and shallow coastal waters.
- Diet – Varied including fish, invertebrates, worms, crustaceans, molluscs and vegetation.

Ramsar Criterion 6

- Species populations occurring at levels of international importance including golden plover (wintering and passage), knot (wintering and passage), dunlin (wintering and passage), black-tailed godwit (wintering and passage), redshank (wintering and passage), shelduck (wintering), bar-tailed godwit (wintering).
- Habitat Preferences – The passage bird assemblage relies on a variety of habitats to support population numbers, including marshy grassland, intertidal mudflats and sandflats, saltmarsh, seagrass beds and river channel and shallow coastal waters.
- Diet – Varied including fish, invertebrates, worms, crustaceans and molluscs.

Ramsar Criterion 8

- Internationally important migration route for both river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* between coastal waters and their spawning areas.

Appendix B Attributes of Habitat sites

- Habitat Preferences – estuaries, easily accessible rivers and coastal waters, with clean gravels for spawning in rivers and marginal silt or sand for the burrowing juvenile ammocoetes. Sea lampreys prefer warm waters in which to spawn
- Diet - freshwater filter-feeders that consume detritus, algae, and other organic material found at river bottoms. Mature lampreys feed on fish.

Habitat site pressures and threats

Current pressures

- See above as for SPA for full details of the following pressures:
 - Undergrazing
 - Public access / disturbance
 - Fisheries: Fish stocking
 - Shooting / scaring
 - Inappropriate scrub control
- Additional pressures specific to the Ramsar include:
 - Water pollution - There is an annual Dissolved Oxygen (DO) sag in the tidal River Ouse which has been present for many years but has shown improvements more recently due to reductions in pollution. The DO sag means that at certain times of year, the water quality thresholds set out in the conservation objectives for the site are not being met. It is possible that the DO sag may cause a barrier to sea lamprey when they are migrating through the area during the summer months. Further investigation is needed into the impacts. In addition, there are high levels of suspended sediment concentrations (SSC) as a result of the tidal nature of the estuary. This results in turbidity which can affect fish survival if there are additional human induced factors compounding natural levels of turbidity.

Appendix B Attributes of Habitat sites

- Disturbance of birds and grey seals by walkers, including dog walkers and photographers.

Potential future threats

- See above as for SPA for full details of the following pressures:
 - Climate Change – affecting weather conditions, and natural geomorphological coastal and estuarine processes, and sea level rise with potential to result in habitat loss or degradation and changes in species composition
 - Coastal squeeze
 - Changes in species distribution

Conservation Objectives

B.9 There are no set objectives for Ramsar sites.

Non-qualifying habitats and species upon which the qualifying habitats and/or species depend

B.10 In general, the qualifying bird species of the Ramsar rely on:

- The sites ecosystem as a whole (see list of habitats above);
- Maintenance of populations of species that they feed on (see list of diets above);
- Off-site habitat, which provide foraging habitat for these species; and
- Open landscape with unobstructed line of sight within nesting, foraging or roosting habitat.

B.11 The non-qualifying habitats and species of the following features are described within the Humber Estuary SAC above:

- Estuaries
- Sea lamprey
- River lamprey
- Grey seal

B.12 Additionally, the breeding population of natterjack toad rely on pools within sand dune slacks and dune habitats for breeding, digging burrows and hibernating over winter. The species forages on a range of dune insects including beetles, ants and moths. Larval animals feed on vegetation and algae within the pools of dune slacks.

Saltfleetby-Theddlethorpe and Gibraltar Point SAC

B.13 Situated approximately 2km east of North East Lincolnshire's boundaries, along England's east coast, the SAC is of a relatively small size, encompassing an area of approximately 967.65 hectares.

Summary of reasons for designation

Qualifying Habitats (Annex I)

2120 **Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”)**

- The dune system on the composite site contains good examples of “Shifting dunes” within a complex site that exhibits a range of dune types. At this site the *Ammophila*-dominated dunes are associated with lyme-grass *Leymus arenarius* and sand sedge *Carex arenaria*.

2130 **Fixed coastal dunes with herbaceous vegetation (“grey dunes”)**

- The SAC comprises a large intact geomorphologically-active system, with representation of early successional stages on the seaward side, and more stable areas. The lime-rich dunes support a rich and diverse flora including; red fescue *Festuca rubra*; pyramidal orchid *Anacamptis pyramidalis*; bee orchid *Orchis apifera*; sea-holly *Eryngium maritimum*; lesser meadow-rue *Thalictrum minus*; and sea campion *Silene maritima*.

2160 **Dunes with *Hippopha rhamnoides***

- This habitat develops on dune areas and is present in a range of successional stages from early colonisation to mature scrub associated with other species such as elder *Sambucus nigra*, hawthorn *Crataegus monogyna*, and ivy *Hedera helix*. These are typically associated with an understorey of ruderal species. These stands of scrub are important for both migratory and breeding birds.

2190 Humid dune slacks

- Developed from saltmarsh to freshwater habitats after becoming isolated from tidal inundation by sand deposition, the Humid dune slacks are species-rich. The wetness of the dunes, location within the SAC, and management history, determines the present species [\[See reference 53\]](#).

Habitat site pressures and threats

Current pressures

- Inappropriate coastal management
 - There is a lack of hydrological continuity at Gibraltar Point, due to the presence of Bulldog Bank there is no sea to freshwater interface from saltmarsh to the dunes. The bank is part of the EA's adopted sea defences, and policy under the 2010 Shoreline Management Plan is to 'hold the line until 2025'.
- Change to site conditions
 - There are changes to the foreshore that are affecting dune formation processes at Gibraltar Point. Current changes on the foreshore are thought to be associated with the changes to the offshore sandbank. It has been assumed that these are natural but the lack of bathymetry mapping and monitoring means that we do not have a full understanding of whether coastal defence works are playing a part and/or whether these are natural changes.
- Air pollution
 - Nitrogen deposition exceeds site relevant critical loads. Vegetation changes associated with nitrogen enrichment are already apparent. Assessment at both sites of the SAC needs to be undertaken and an implementation plan needs to be drafted to provide guidance for the future management.
- Change in land management

- Scrub is part of feature of the SAC but can dominate the terrestrial areas on to the detriment of other features. Currently, there is too much scrub on both sites that form the SAC, and it needs to be addressed through the Management Plan [\[See reference 54\]](#).

Potential future threats

- Climate Change – affecting weather conditions, and natural geomorphological coastal processes, and sea level rise with potential to result in habitat loss or degradation and changes in species composition

Conservation objectives

- 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 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 [\[See reference 55\]](#).

Non-qualifying habitats and species on which the qualifying habitats and/or species depend

- The SAC's qualifying habitat relies on:
 - 2120 [Shifting dunes along the shoreline with *Ammophila arenaria*](#)
 - The species composition of shifting dunes is constrained by the harsh conditions, but the vegetation is by no means uniform and changes in relation to the stability of the dunes. Drought-tolerant bryophytes

such as the moss *Tortula ruralis*, play an important part in completing the stabilisation of the sand surface [See reference 56]. As such, it can be argued the habitat is reliant on this species.

■ 2130 **Fixed coastal dunes with herbaceous vegetation**

- This habitat typically occurs in areas dominated by marram *Ammophila arenaria* on coastal dunes, and represents the vegetation that replaces marram as the dune stabilises and the organic content of the sand increases. In the UK, this relates specifically to five species:
 - SD7 *Ammophila arenaria*; SD8 *Festuca rubra*; SD9b *Ammophila arenaria*; and SD11 and SD12 *Carex arenaria* [See reference 57].
- As a result, the habitat is reliant on these species of flora to establish the “fixed” dune characteristic and support other species.

■ 2160 **Dunes with *Hippopha rhamnoides***

- Based on available information, it is not thought this habitat is reliant upon other habitats or species other than *Hippopha rhamnoides*, which is explained within the context of the habitat [See references 58 and 59].

■ 2190 **Humid dune slacks**

- The range of communities found within this habitat is considerable and depends on the structure of the dune system, the successional stage of the dune slack, the chemical composition of the dune sand, and the prevailing climatic conditions. While Humid dune slacks include creeping willow, the Annex I type species excludes those sites where the species is dominant.
- The habitat is variously associated with the following species, though it is not determined whether the habitat is reliant upon them: SD13 *Sagina nodosa*; SD14, SD15, and SD16 *Salix repens*; and SD17 *Potentilla anserina* [See reference 60]. The fact that Humid dune slacks can be “artificially” created by turf-stripping and removal of

nutrient-rich soil [See reference 61] would suggest that the habitat is not reliant on specific species to exist.

Greater Wash SPA

B.14 Situated in the middle of the Southern North Sea SAC this site crosses the 12 nautical mile boundary and therefore lies in both territorial and offshore waters. Consists of coarse sediments, sand, mud and mixed sediments with subtidal sandbanks.

Summary of reasons for designation

Qualifying Species (Annex II):

Common scoter *Melanitta nigra* (Non-breeding)

- Habitat Preference - Exclusively marine habitats.
- Diet – Crustaceans and molluscs.

Common tern *Sterna hirundo* (Breeding)

- Habitat preference: shallow water, along coasts, at freshwater inland lakes and in estuaries.
- Diet: mainly eat fish, but also consume shrimps and other crustaceans, small squid, marine worms, and leeches.

Little gull *Hydrocoloeus (Larus) minutus* (Non-breeding)

- Habitat Preference - Shallow freshwater, river basins, marshes and bogs.

Appendix B Attributes of Habitat sites

- Diet – Insects, brine shrimp, crustaceans, molluscs, spiders, marine worms and some small fish.

Little tern *Sterna hirundo* (Breeding)

- Habitat preference: nest exclusively on the coast in well-camouflaged shallow scrapes on sand and shingle beaches, spits or inshore islets.
- Diet: fish, crustacean and invertebrates.

Red-throated diver *Gavia stellata* (Non-breeding)

- Habitat Preference – Seacoasts, rivers, and lakes.
- Diet – Primarily fish but also amphibians and large invertebrates.

Sandwich tern *Thalasseus sandvicensis* (Breeding)

- Habitat preference: coastal areas, nesting in colonies on sand and shingle beaches.
- Diet: fish such as sandeels, sprats and whiting.

Habitat site pressures and threats

Current pressures

- Disturbance of birds at sea as a result of marine industries including offshore wind development, fisheries, oil and gas pipelines, offshore cabling, interconnectors, shipping and aggregate extraction. Disturbance can be caused by construction, operation and maintenance of offshore windfarms, in particular, which has the potential to cause disturbance and displacement of rafting and foraging birds.
- Water quality - Sediment disturbance and excessive changes to turbidity which can arise from marine dredging or aggregates extraction, offshore

windfarm construction, and some types of fishing activity, have the potential to impact upon the foraging ability of this species.

- Water quality – The waterbodies which overlap with the SPA failed their WFD chemical status in the 2019 classification due to measured/assumed elevated levels of polybrominated diphenyl ether (PBDE) and mercury and its compounds. These two chemicals are persistent, bio accumulative and toxic substances, which present risks to wildlife.

Potential future threats

5.6 Climate change – Affected weather conditions and sea temperatures could alter species compositions with potential for impacts upon prey sources.

Conservation Objectives

B.15 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.

Non-qualifying habitats and species upon which the qualifying habitats and/or species depend

In general, the qualifying bird species of the SPA rely on:

Appendix B Attributes of Habitat sites

- The sites ecosystem as a whole (see list of habitats above);
- Maintenance of populations of species that they feed on (see list of diets above);
- Off-site habitat, which provide foraging habitat for these species; and
- Open landscape with unobstructed line of sight within nesting, foraging or roosting habitat.

Appendix C

Screening Assessment

C.1 The sections below detail which types of impacts on Habitat sites could potentially result from each of the policies and site allocations in the Draft North East Lincolnshire Local Plan Review. Where uncertain or likely significant effects are identified, these are required to be considered further via Appropriate Assessment

Overall scale of development

Favoured option for the scale of development

C.2 This is a requirement of 415 dwellings per annum, but with flexibility to deliver 507 dwellings per annum and jobs growth of 4,560 over the plan period.

C.3 Likely activities (operation) to results as a response of the proposal:

- Housing development
- Employment development
- Increased vehicle traffic
- Increased recreation activities
- Increased demand for water consumption and treatment

C.4 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)

- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Disturbance to hydrological regimes

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.5 This is uncertain. Effects will depend largely on the specific sites to be allocated which are not yet identified in the Draft Local Plan Review, but the scale of development proposed could result in effects.

Development site options

C.6 Favoured site allocations are not yet identified; therefore consideration has been given to the range of site options identified for consideration

C.7 Likely activities (operation) to results as a response of the proposal:

- Housing development
- Employment development
- Increased vehicle traffic
- Increased recreation activities
- Increased demand for water consumption and treatment

C.8 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)

- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Disturbance to hydrological regimes

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.9 This is uncertain. Effects will depend largely on which sites are eventually taken forward for allocation in the Local Plan Review.

Strategic policies

Draft strategic policy 1: Settlement hierarchy

C.10 Likely activities (operation) to results as a response of the proposal:

- None. This policy provides a settlement hierarchy which provides a framework for the Council's decisions on the location and scale of development. This policy will not directly result in development.

C.11 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.12 This is unlikely.

Draft strategic policy 2: Development boundaries

C.13 Likely activities (operation) to results as a response of the proposal:

- None. This policy will define Development Boundaries within a policy map and outlines the criteria for development proposed within and adjacent to Development Boundaries. However, this policy will not directly result in development.

C.14 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.15 This is unlikely.

Draft strategic policy 3: Green wedges

C.16 Likely activities (operation) to results as a response of the proposal:

- None. This policy will define Green Wedges within the policy map. This policy will not result in development.

C.17 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.18 This is unlikely.

Draft strategic policy 4: Infrastructure

C.19 Likely activities (operation) to results as a response of the proposal:

- Development of infrastructure

C.20 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Disturbance to hydrological regimes

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.21 This is uncertain. Effects will depend largely on the specific type and location of infrastructure developed which is not yet known.

Draft strategic policy 5: Flood risk

C.22 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines requirements for development to reduce the risk of flood both to current flood risk and future flood risk with regards to the effects of climate change. This policy will not directly result in development.

C.23 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.24 This is unlikely.

Draft strategic policy 6: Water management

C.25 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines measures to manage water resources and avoid adverse effects flow of ground and surface water and on water quality and quantity. This policy will not directly result in development.

C.26 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.27 This is unlikely.

Draft strategic policy 7: Renewable and low carbon infrastructure

C.28 Likely activities (operation) to results as a response of the proposal:

- Renewable energy infrastructure.

C.29 .Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Disturbance to hydrological regimes

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.30 This is uncertain. Effects will depend largely on the specific type and location of renewable energy infrastructure developed which is not yet known

Draft strategic policy 8: Energy and low carbon living

C.31 Likely activities (operation) to results as a response of the proposal:

- None – This policy outlines the requirement for development to follow the principles of the energy hierarchy and also to provide Design and Access Statements for major development with regards to energy efficiency and low carbon technology. This policy will not result in development.

C.32 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.33 This is unlikely.

Draft strategic policy 9 Developing a green infrastructure network

C.34 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines that development will be expected to protect, maintain and improve green infrastructure. A framework of greenspaces and strategic green infrastructure corridors will be identified on a policies map. This policy will not result in development.

C.35 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.36 This is unlikely.

Draft strategic policy 10: Landscape

C.37 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines that development should protect, maintain and improve landscape character. It also requires for landscape appraisals to be conducted where appropriate. This policy will not directly result in development.

C.38 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.39 This is unlikely.

Draft strategic policy 11: Biodiversity and Geodiversity

C.40 Likely activities (operation) to results as a response of the proposal:

- None – This policy provides safeguarding measures to protect and enhance the integrity of biodiversity and geological value of the Borough. This policy will not result in development.

C.41 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.42 This is unlikely.

Draft strategic policy 12 Habitat Mitigation - South Humber Bank

C.43 Likely activities (operation) to results as a response of the proposal:

- None – This policy sets out the habitat mitigation required for developments within the Mitigation Zone of the South Humber Bank which adversely affect the Humber Estuary SPA/Ramsar site due to the loss of functionally linked land. The identified Mitigation Sites will be safeguarded against development, and appropriate habitat will be delivered and managed on these sites in accordance with the North East Lincolnshire South Humber Gateway Ecological Mitigation Delivery Plan. Therefore, this policy will not result in development

C.44 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.45 This is unlikely.

Draft strategic policy 13 Good design in new developments

C.46 Likely activities (operation) to results as a response of the proposal:

- None – This policy outlines the design standards which will be required of all developments. This policy will not result in development.

C.47 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.48 This is unlikely.

Draft strategic policy 14: Conserving and enhancing the historic environment

C.49 Likely activities (operation) to results as a response of the proposal:

- None – This policy provides safeguarding measures to preserve and enhance the integrity of heritage assets. This policy will not result in development.

C.50 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.51 This is unlikely.

Draft strategic policy 15 Promoting sustainable transport

C.52 Likely activities (operation) to results as a response of the proposal:

- None – This policy outlines the requirement for development to provide sustainable transport options as alternatives to car travel. This policy will not directly result in development.

C.53 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.54 This is unlikely.

Draft strategic policy 16 Tourism and visitor economy

C.55 Likely activities (operation) to results as a response of the proposal:

- Tourism-related development

C.56 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination

- Air pollution
- Recreation and urban impacts
- Disturbance to hydrological regimes

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.57 Uncertain. Effects will depend largely on the specific nature and location of tourism-related developments which is not yet known.

Draft strategic policy 17: Development of strategic housing sites

C.58 Likely activities (operation) to results as a response of the proposal:

- None – This policy outlines the requirements of developments to be strategically coordinated with the timely delivery of key infrastructure and sets out the criteria for development of strategic sites. This policy will not directly result in development – allocations will be subject to HRA separately when they are known.

C.59 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.60 This is unlikely.

Draft strategic policy 18: Affordable housing

C.61 Likely activities (operation) to results as a response of the proposal:

- None – This policy sets out the required provision of affordable housing within new developments. This policy will not directly result in development.

C.62 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.63 This is unlikely.

Draft strategic policy 19: Retail hierarchy

C.64 Likely activities (operation) to results as a response of the proposal:

- None - This policy sets out the hierarchy for the scale and nature of town centre development proposals which support and enhance the individual

role of the centre. It also identifies opportunity sites but this policy will not directly result in development.

C.65 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.66 This is unlikely.

Draft strategic policy 20: Social and cultural places

C.67 Likely activities (operation) to results as a response of the proposal:

- None. This policy identifies the types of developments which support social and cultural value that will be permitted. This policy will not directly result in development.

C.68 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.69 This is unlikely.

Draft strategic policy 21: Safeguarding minerals and related infrastructure

C.70 Likely activities (operation) to results as a response of the proposal:

- None. This policy safeguards existing mineral deposits identified within Minerals Safeguarding Areas on the policies map from development. The policy identifies exceptions to safeguarding the land where prior extraction can take place, or if extraction cannot take place where the needs of developments outweighs the need to safeguard the site. This policy will not directly result in development.

C.71 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.72 This is unlikely.

Draft strategic policy 22: Future requirements for waste facilities

C.73 Likely activities (operation) to results as a response of the proposal:

- None. This policy sets out the locational criteria for developments for waste management facilities. This policy will not directly result in development.

C.74 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.75 This is unlikely.

Draft strategic policy 23: safeguarding waste facilities and related infrastructure

C.76 Likely activities (operation) to results as a response of the proposal:

- None. This policy safeguards existing waste management facilities identified on the policies map from encroachment of incompatible development. This policy will not directly result in development.

C.77 Potential impacts if policy is implemented

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.78 This is unlikely.

Policies

Draft policy 1 Health and wellbeing

C.79 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines the requirement for developments to promote and support physical and mental wellbeing. This policy will not result in development.

C.80 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.81 This is unlikely.

Draft policy 2: Green space and recreation

C.82 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines that development will be expected to protect, maintain and improve green spaces and open spaces for recreation. The policies map will present those areas already protected. In addition, developers will be required to make provision for green space, sport and recreation facilities in accordance with the additional needs that the development generates. This policy will not result in development.

C.83 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.84 This is unlikely.

Draft policy 3: Biodiversity net gain

C.85 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines the requirements for developments to retain, protect and enhance biodiversity and where appropriate deliver at least a 10% measurable net gain as part of development. This policy will not result in development.

C.86 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.87 This is unlikely.

Draft policy 4: Parking

C.88 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines the requirements for developments to provide appropriate parking provision and sets the criteria for parking provisions. This policy will not result in development.

C.89 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.90 This is unlikely.

Draft policy 5: Existing employment areas

C.91 Likely activities (operation) to results as a response of the proposal:

- Non This policy safeguards existing employment areas and outlines the requirements that will apply to any proposals for non-employment use on

existing employment sites. This policy will not directly result in development.

C.92 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.93 This is unlikely.

Draft policy 6: Skills and training

C.94 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines where development which supports improvement in local skills and training opportunities within existing facilities and towns centres will be supported. It also outlines the requirements of developments of 100m² or more to support local supply chains and seek local labour supporting the local economy. This policy will not result in development.

C.95 ..Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.96 This is unlikely.

Draft policy 7: Rural exceptions

C.97 Likely activities (operation) to results as a response of the proposal:

- Housing development in rural areas.

C.98 ..Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution
- Recreation and urban impacts
- Disturbance to hydrological regime

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.99 Uncertain – effects will depend largely on the specific sites that may be developed which is not yet known.

Draft policy 8: Housing mix

C.100 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines the type of housing mix required of new developments. However, it does not directly result in development.

C.101 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.102 This is unlikely.

Draft policy 9: Self-build and custom build homes

C.103 Likely activities (operation) to results as a response of the proposal:

- Housing development

C.104 Potential impacts if policy is implemented:

- Physical damage/disturbance (on and offsite)
- Non-physical disturbance (on and offsite)
- Non-toxic contamination
- Air pollution

- Recreation and urban impacts
- Disturbance to hydrological regimes

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.105 This is uncertain. Effects will depend largely on the specific sites which may be developed which are not yet known.

Draft policy 10: Provision for gypsies and travellers

C.106 Likely activities (operation) to results as a response of the proposal:

- None. This policy sets out the criteria that will be used for determining proposals for sites to accommodate gypsies, travellers and travelling show people. The policy does not propose development of this nature.

C.107 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.108 This is unlikely.

Draft policy 11: Town centre uses

C.109 Likely activities (operation) to results as a response of the proposal:

- None. This policy identifies the types of developments which would be permitted within town centres. This policy will not directly result in development.

C.110 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.111 This is unlikely.

Draft policy 12: Future mineral extraction and Secondary Aggregates

C.112 Likely activities (operation) to results as a response of the proposal:

- None. This policy outlines the assessment which the Council will undertake when considering proposals for the extraction of minerals. This policy will not directly result in development.

C.113 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.114 This is unlikely.

Draft policy 13: Restoration and aftercare (minerals)

C.115 Likely activities (operation) to results as a response of the proposal:

- None. This policy sets out the requirement for all mineral related applications to be accompanied by detailed proposals for subsequent restoration of the entire site and lists the criteria of such proposals. This policy will not directly result in development.

C.116 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.117 This is unlikely.

Draft policy 14: Restoration and aftercare (waste)

C.118 Likely activities (operation) to results as a response of the proposal:

- None. This policy sets out the requirement for all landfill/ landraise applications to be accompanied by detailed proposals for subsequent restoration of the entire site and lists the criteria of such proposals. This policy will not directly result in development.

C.119 Potential impacts if policy is implemented:

- There are no forecast potential impacts if this policy is implemented.

Is the policy likely to have significant effects and therefore need to be scoped into the Appropriate Assessment?

C.120 This is unlikely.

References

- 1 Available online at - [HM Government \(2007\) The Conservation \(Natural Habitats, &c.\) \(Amendment\) Regulations 2007 \(SI No. 2007/1843\)](#)
- 2 Available online at - [HM Government \(2017\) The Conservation of Habitats and Species Regulations 2017 \(SI No. 2017/1012\)](#), as amended by [HM Government \(2019\) The Conservation of Habitats and Species \(Amendment\) \(EU Exit\) Regulations 2019 \(SI No. 2019/579\)](#)
- 3 UK Government Planning Practice Guidance
- 4 Available online at - [Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government \(2019\) Appropriate assessment: Guidance on the use of Habitats Regulations Assessment](#)
- 5 Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').
- 6 Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (the 'Birds Directive').
- 7 The network of protected areas identified by the EU: European Commission (2008) Natura 2000 [online]. Available at: https://ec.europa.eu/environment/nature/natura2000/index_en.html
- 8 Available online at - [Department of Environment, Food and Rural Affairs \(2021\) Changes to the Habitats Regulations 2017](#)
- 9 Available online at - [Department for Environment, Food and Rural Affairs \(2021\) Changes to the Habitats Regulations 2017](#)
- 10 Available online at - [Ministry of Housing, Communities & Local Government \(2021\) National Planning Policy Framework, para 176](#)
- 11 Available online at - [David Tyldesley & Associates, The HRA Handbook, Section A3. A subscription based online guidance document](#)
- 12 Available online at - [Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local](#)

References

- [Government \(2019\) Appropriate assessment: Guidance on the use of Habitats Regulations Assessment](#)
- 13** Available online at - [David Tyldesley & Associates, The HRA Handbook. A subscription based online guidance document](#)
- 14** Conservation objectives are published by Natural England for SACs and SPAs. Available online at:
<https://publications.naturalengland.org.uk/category/6490068894089216>
- 15** Conservation objectives, supplementary advice and Site Improvement Plans obtained from Natural England. Available online at:
<http://publications.naturalengland.org.uk/category/5458594975711232>
- 16** Chapman, C. & Tyldesley, D. (2016) Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – a review of authoritative decisions. Natural England Commissioned Reports, Number 207.
- 17** Obtained from the Natural England website. Available at:
www.naturalengland.org.uk
- 18** Natural England (undated) Conservation Objectives for European Sites [online]. Available at:
<http://publications.naturalengland.org.uk/category/6490068894089216>
- 19** SI No. 2017/2012.
- 20** ECJ Case C-127/02 “Waddenzee” Jan 2004.
- 21** Available online at - [The HRA Handbook. David Tyldesley & Associates, a subscription based online guidance document](#)
- 22** 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.
- 23** 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.

References

- 24 Dover District Council and Natural England (2023). Statement of Common Ground. Online available at: ED8 DDC and NE SoCG Final Redacted June 2023_Redacted (doverdistrictlocalplan.co.uk)
- 25 Sinsch, U., Oromi, N., Miaud, C., Denton, J. & Sanuy, D. (2012). Connectivity of local amphibian populations: modelling the migratory capacity of radio-tracked natterjack toads. *Animal Conservation* 15, 388-396.
- 26 British Wildlife Magazine. October 2007.
- 27 Wealden v SSCLG [2017] EWHC 351 (Admin).
- 28 Available online at - [Footprint Ecology \(2012\) Results of the recreational visitor surveys across the Humber Estuary](#)
- 29 Available online at - [Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy. Habitats Regulations Assessment Strategy Document](#)
- 30 Available online at - [Environment Agency \(2020\) Grimsby, Ancholme and Louth Abstraction Licencing Strategy](#)
- 31 Available online at - [NE Lincs Council \(2019\) South Humber Gateway Ecological Mitigation – North East Lincolnshire Delivery Plan](#)
- 32 Available online at - [Natural England \(undated\) Site Improvement Plans: East of England](#)
- 33 Available online at - [JNCC \(undated\) UK Protected Areas](#)
- 34 Available online at - [Natural England \(undated\) Conservation Objectives for European Sites](#)
- 35 Available online at - [Natural England \(undated\) Conservation Objectives for European Sites](#)
- 36 Available online at - [JNCC \(undated\) Humber Estuary](#)
- 37 Available online at - [JNCC \(undated\) 1095 Sea lamprey *Petromyzon marinus*](#)
- 38 Available online at - [JNCC \(undated\) 1099 River lamprey *Lampetra fluviatilis*](#)

References

- 39 Available online at - [JNCC \(undated\) 1364 Grey seal *Halichoerus grypus*](#)
- 40 Available online at - [Natural England \(2014\) Site Improvement Plan: Humber Estuary \(SIP108\)](#)
- 41 Available online at - [Environment Agency \(2022\) Humber Flood Risk Management Plan HRA](#)
- 42 Available online at - [Natural England \(2014\) European Site Conservation Objectives for Humber Estuary SAC \(UK00300170\)](#)
- 43 Available online at - [Natural England \(2023\) Humber Estuary SAC Supplementary Advice](#)
- 44 Available online at - [National Parks & Wildlife Service \(undated\) Mudflats & sandflats not covered by seawater at low tide](#)
- 45 Available online at - [Animal Diversity Web \(undated\) *Ptomyzon marinus*](#)
- 46 Available online at - [Canal & River Trust \(undated\) River lamprey](#)
- 47 Available online at - [Animal Diversity Web \(undated\) *Halichoerus grypus*](#)
- 48 Available online at - [NOAA Fisheries \(undated\) Gray Seal](#)
- 49 Available online at - [Environment Agency \(2022\) Humber Flood Risk Management Plan HRA](#)
- 50 Available online at - [Animal Diversity Web \(undated\) *Halichoerus grypus*](#)
- 51 Available online at - [NOAA Fisheries \(undated\) Gray Seal](#)
- 52 Available online at - [Natural England \(undated\) Natural England Species Information Note SIN009. Natterjack Toad](#)
- 53 Available online at - [JNCC \(undated\) Saltfleetby-Theddlethorpe Dunes and Gibraltar Point](#)
- 54 Available online at - [Natural England \(2014\) Site Improvement Plan: Saltfleetby-Theddlethorpe Dunes & Gibraltar Point](#)
- 55 Available online at - [Natural England \(2019\) Saltfleetby-Theddlethorpe Dunes & Gibraltar Point SAC Conservation Objectives](#)
- 56 Available online at - [JNCC \(undated\) 2120 Shifting dunes along the shoreline with *Ammophila arenaria*](#)

References

- 57 Available online at - [JNCC \(undated\) 2130 Fixed dunes with herbaceous vegetation](#)
- 58 Available online at - [JNCC \(undated\) Dunes with Hippophae rhamnoides](#)
- 59 Available online at - [European Environment Agency \(2019\) Dunes with Hippophae rhamnoides](#)
- 60 Available online at - [JNCC \(undated\) 2190 Humid dune slacks](#)
- 61 Available online at - [European Commission \(undated\) 2190 Humid dune slacks](#)

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