Leavenheath Neighbourhood Plan 2022 - 2037

HRA Report

Babergh & Mid Suffolk District Councils

Final report

Prepared by LUC

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Introduction

1.1 LUC has been commissioned by Babergh & Mid Suffolk District Councils (the Councils) to carry out an Habitats Regulations Assessment (HRA) of the Leavenheath Neighbourhood Plan. The Neighbourhood Plan was commissioned by the Leavenheath Parish Council and was developed by a Steering Group of local residents, made up of Parish Councillors and other interested residents. This iteration of the HRA report assesses the impacts of the Pre-submission Draft Leavenheath Neighbourhood Plan (2021) as amended by the Submission Draft version dated February 2022.

Previous HRA work

1.2 In December 2021, Place Services carried out an HRA of the Regulation 14 Pre-submission consultation version of the Leavenheath Neighbourhood Plan 2022-2037. This was submitted for comment to Natural England as the statutory consultee. Subsequently, the Councils identified potential shortcomings in the original HRA work and commissioned LUC to produce a new HRA of the Plan. LUC's assessment is entirely independent of the earlier HRA.

The requirement to undertake Habitats Regulations Assessment of development plans

1.3 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. Neighbourhood Plans, once

approved at referendum, become part of the statutory development plan therefore an HRA is required by law to be carried out by the 'competent authority' (the Councils). The Councils can commission consultants to undertake HRA work on their behalf and this (the work documented in this report) is then reported to and considered by the Councils as the competent authority. The Councils consider this work and would usually **[See reference 3]** only progress a plan if it considers that the plan will not adversely affect the integrity **[See reference 4]** of any 'European site', as defined below. 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 (PPG) **[See reference 5]** .

1.4 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 1 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 6]**) and species (Annex II).
- SPAs are classified for rare and vulnerable birds (Annex I of the EU Birds Directive **[See reference 7]**), and for regularly occurring migratory species not listed in Annex I.

1.5 The term 'European sites' was previously commonly used in HRA to refer to 'Natura 2000' sites **[See reference 8]** and Ramsar sites (international designation under the Ramsar Convention). However, a Government Policy Paper **[See reference 9]** 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.

1.6 Although Ramsar sites do not form part of the new national site network, the Government Policy Paper **[See reference 10]** confirms that all Ramsar sites remain protected in the same way as SACs and SPAs. In LUC's view and unless the Government provides any guidance to the contrary, potential effects on Ramsar sites should continue to form part of the HRA of plans and projects since the requirement for HRA of plans and projects that might adversely affect Ramsar sites forms an essential part of the protection confirmed by the Government Policy Paper. Furthermore, the NPPF **[See reference 11]** and practice guidance **[See reference 12]** currently still state that competent authorities responsible for carrying out HRA should treat Ramsar sites in the same way as SACs and SPAs.

1.7 The requirement for HRA does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves. This report uses the term 'European sites' rather than 'national site network', which takes into account SAC, SPA and Ramsar sites, the latter which does not form part of the national site network.

1.8 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 European 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

1.9 The section below summarises the stages involved in carrying out an HRA, based on various guidance documents **[See reference 13 and 14]**. This HRA presents the methodology and findings of Stage 1: Screening.

Stage 1: Screening (the 'Significance Test')

Tasks

- Description of the development plan and confirmation that it is not directly connected with or necessary to the management of European sites.
- Identification of potentially affected European sites and their conservation objectives **[See reference 15]**.
- 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 **[See reference 16]**.

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 European sites **[See reference 17]**).
- Impact prediction.
- Evaluation of development plan impacts in view of conservation objectives of European sites.
- Where impacts are considered to directly or indirectly affect qualifying features of European sites, identify how these effects will be avoided or reduced ('mitigation').

Outcome

- Appropriate Assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will firstly, be avoided and secondly, be reduced, 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

1.10 In assessing the effects of the 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 European site.

1.11 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.

1.12 The HRA should be undertaken by the 'competent authority', in this case Babergh & Mid Suffolk District Councils, 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

1.13 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).

1.14 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 taken into account 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."

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

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

> 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 of the work envisaged on the site concerned.

1.17 In undertaking this HRA, LUC considered 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 European 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 European site that may be important in supporting the ecological processes of the qualifying features, has also been fully considered in this HRA.

1.18 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.

1.19 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.

1.20 In light of this judgement, the HRA therefore considers traffic growth based on the effects of development from the plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

1.21 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."

1.22 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."

1.23 The HRA of the Leavenheath Neighbourhood Plan therefore 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

1.24 This chapter (Chapter 1) described the background to the production of the plan and the requirement to undertake HRA. The remainder of the report is structured as follows:

- Chapter 2: Leavenheath Neighbourhood Plan summarises the content of the 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.
- Chapter 4: Screening assessment describes the findings of the screening stage of the HRA.
- Chapter 5: Conclusions and next steps summarises the HRA conclusions for the Leavenheath Neighbourhood Plan and describes the next steps to be undertaken.

Chapter 2

Leavenheath Neighbourhood Plan

Vision

2.1 The overarching vision for Leavenheath by the end of the Neighbourhood Plan Period in 2037 is:

> *"Leavenheath will be one community of three hamlets and the surrounding countryside. It will be a more connected, cohesive and rural parish. It will be developed in a way that is sustainable and sensitive to its residents' needs and location, its character and the natural environment, particularly the Area of Outstanding Natural Beauty. It will be a place where all generations can live now and in the future."*

2.2 The overarching vision is supported by a series of objectives under four themes:

- Environmental and Landscape
- Development and Design
- Access
- Community Infrastructure

Objectives

2.3 The objectives for the Leavenheath Neighbourhood Plan are as follows:

Environment and Landscape

Objective 1: To protect and enhance the green and open character of the parish, whilst enabling access to the countryside.

Development and Design

Objective 2: To ensure that any future development is sustainable, well designed, suitably located, compliments and enhances the character of Leavenheath.

Access

Objective 3: To encourage safe walking and cycling within and beyond Leavenheath parish.

Community Infrastructure

Objective 4: To enable a cohesive joined up community with appropriate community and sports infrastructure.

2.4 The objectives are used as a framework for 14 policies.

Policies

2.5 The policies within the Leavenheath Neighbourhood Plan are as follows:

Environment and Landscape

- Policy LEAV1: Views of community importance
- Policy LEAV2: Local Green Spaces
- Policy LEAV3: Landscape and biodiversity
- Policy LEAV4: Surface water drainage

Development and Design

- Policy LEAV5: Location, size and rate of housing development
- Policy LEAV6: Pattern of growth and strategic gap between hamlets
- Policy LEAV7: Housing size, type and tenure
- Policy LEAV8: Non-designated Heritage Assets
- Policy LEAV9: Design principles (including the Leavenheath Design Guidelines and Codes)

Access

- Policy LEAV10: Walking and cycling
- Policy LEAV11: Traffic and road safety

Community Infrastructure

- Policy LEAV12: Recreational Space
- Policy LEAV13: Protection of existing community infrastructure
- Policy LEAV14: Convenience/small shop

Chapter 3

Method

Screening assessment

3.1 HRA Screening of the plan was undertaken in line with current available guidance and sought to meet the requirements of the Habitats Regulations. The tasks that were undertaken during the screening stage of the HRA and the conclusions reached are described in detail below. This section of the HRA report sets out policies and impact types for which likely significant effects are predicted or cannot be ruled out prior to consideration of mitigation and avoidance measures.

3.2 The purpose of the screening stage is to:

- Identify all aspects of the plan that would have no effect on a European site. These can be eliminated from further consideration in respect of this and other plans.
- Identify all aspects of the plan that would not be likely to have a significant effect on a European site (i.e. would have some effect because of links/connectivity but the effect is not significant), either alone or in combination with other aspects of the same plan or other plans or projects. These 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 European 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.

Identifying European sites that may be affected and their conservation objectives

3.3 As a first step in identifying European 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.

3.4 A distance of 20km from the boundary of the plan area was used in the first instance to identify European sites with the potential to be affected by the proposals within a development plan. Consideration was then given to whether any more distant European 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 in this region **[See reference** 18**]** and is considered precautionary. All European sites within 20km were assessed in this HRA.

3.5 The assessment also takes into account areas that may be functionally linked to the European sites. The term 'functional linkage' is used to refer to the role or 'function' that land beyond the boundary of a European 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.

3.6 While the boundary of a European 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 19]**. HRA therefore

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

3.7 European sites identified for inclusion in the HRA are listed below in **Table 3.1** and their locations illustrated in **Figure A.1** in Appendix A. Detailed information about each European 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 20]**. Natural England's conservation objectives **[See reference 21]** 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: European Sites within 20km of Leavenheath Neighbourhood Plan Area

European Site	Closest Distance / Location from Neighbourhood Plan Area
Stour and Orwell Estuaries SPA and Ramsar	11.28km east
Abberton Reservoir SPA and Ramsar	15.42km south
Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar	16.26km southeast
Essex Estuaries SAC	16.26km southeast
Blackwater Estuary (Mid-Essex Coast Phase 4) SPA and Ramsar	19.59km south

Assessment of 'likely significant effects' of the plan

3.8 As required under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 **[See reference 22]** (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 European sites. The screening assessment has been conducted without taking mitigation into account, in accordance with the 'People over Wind' judgment.

3.9 Consideration was 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.
- Changes to hydrology, including water quantity and quality.

3.10 This thematic/ impact category approach also allowed for consideration to be given to the cumulative effects of any site allocations, rather than focussing exclusively on individual developments provided for by the plan.

3.11 A risk-based approach involving the application of the precautionary principle was adopted in the assessment, such that a conclusion of 'no significant effect' was only reached where it was considered unlikely, based on current knowledge and the information available, that a development plan policy or site allocation would have a significant effect on the integrity of a European site.

3.12 A screening assessment was prepared (Appendix C), to document consideration of the potential for likely significant effects resulting from each policy and site allocation in the plan.

3.13 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'

3.14 Relevant case law helps to interpret when an effect should be considered a likely significant effect, when carrying out HRA of a land use plan.

3.15 In the Waddenzee case **[See reference 23]**, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (transposed into Reg. 102 of 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).

3.16 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."

3.17 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'.

3.18 The HRA screening assessment therefore considers whether the Proposed Submission Neighbourhood Plan policies could have likely significant effects either alone or in combination.

Mitigation provided by the plan

3.19 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 European 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 were 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

3.20 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 European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, where likely insignificant effects are identified for the plan alone, it is necessary to consider whether these may become significant effects in combination with other plans or projects.

3.21 Where the plan is likely to have an effect on its own (due to impact pathways being present), but it is not likely to be significant, the in-combination assessment at Screening stage needs to determine whether there may also be the same types of effect from other plans or projects that could combine with the plan to produce a significant effect. If so, this likely significant effect arising from the plan in combination with other plans or projects, would then need to be considered through the Appropriate Assessment stage to determine if the impact pathway would have an adverse effect on integrity of the relevant European site. Where the screening assessment has concluded that there is no impact pathway between development proposed in the plan and the conditions necessary to maintain qualifying features of a European 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** 24**]**.

3.22 If impact pathways are found to exist for a particular effect but it is not likely to be significant from the plan alone, the in-combination assessment will identify which other plans and programmes could result in the same impact on the same European site. This will focus on planned growth (including housing, employment, transport, minerals and waste) around the affected site, or along the impact corridor.

3.23 The potential for in-combination impacts will therefore focus on plans prepared by local authorities that overlap with European 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 plan will also be identified and reviewed.

3.24 The online HRA Handbook **[See reference** 25**]**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.

3.25 The need for in-combination assessment also arises at the Appropriate Assessment stage. This will be discussed in more detail if an Appropriate Assessment is required.

Chapter 4

Screening Assessment

4.1 As described in the Chapter 3, a screening assessment was carried out in order to identify the likely significant effects of the plan on the scoped-in European sites. The detailed screening assessment, which sets out the decision-making process used for this 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 Leavenheath Neighbourhood Plan does not allocate any sites for residential development. Instead, the 'Development and Design' policies within it set out criteria that any windfall development that comes forward must meet, noting that the acceptability of such development within dwelling clusters and/or a defined hamlet is already established by the Joint Local Plan. Should schemes which are supported by the Leavenheath Neighbourhood Plan move forward, individual project-level HRAs should be carried out to determine any likely significant effects.

4.3 Since none of the policies of the Leavenheath Neighbourhood Plan are expected to directly result in development, they will not result in significant effects on European sites. Therefore, no likely significant effects are predicted as a result of the plan.

HRA Screening of impacts

4.4 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 European 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 were applied in relation to assessing the likely significant effects on European sites that may result from the plan, as described below.

Physical damage and loss (on-site)

4.5 Any development resulting from the plan would take place within Leavenheath neighbourhood plan area; therefore only European sites within the boundary of the neighbourhood plan area could be affected through physical damage or loss of habitat from within the site boundaries. No European sites were identified within the boundary of the neighbourhood plan area and therefore no likely significant effect is predicted in relation to physical damage and loss.

Conclusion

4.6 No likely significant effects will occur from the plan as a result of physical damage and loss to onsite habitat, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Physical damage and loss (offsite)

4.7 Habitat loss from development in areas outside of the European site boundaries may result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the European site is designated. This includes land which that may provide offsite movement corridors or foraging and sheltering habitat for mobile species such as birds, bats and fish. European 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:

- Stour and Orwell Estuaries SPA and Ramsar.
- Abberton Reservoir SPA and Ramsar.
- Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar.
- Blackwater Estuary (Mid-Essex Coast Phase 4) SPA and Ramsar.

4.8 Therefore, these European sites were considered susceptible to impacts from proposed development in the plan area. However, as no policies will directly result in development, likely significant effects as a result of physical damage and loss to offsite habitat can be ruled out.

4.9 All other European sites were screened out of the assessment as they do not support qualifying features that are reliant on offsite functionally linked habitat.

Conclusion

4.10 No likely significant effects will occur from the plan as a result of physical damage and loss to offsite habitat, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Non-physical disturbance (noise, vibration and light)

4.11 Noise and vibration effects are most likely to disturb bird species and thus are a key consideration with respect to potential effects on European sites where birds are the qualifying features. Artificial lighting at night has the potential to affect species where it occurs in close proximity to key habitat areas, such as key roosting sites of SPA birds.

4.12 It has been assumed that the effects of noise, vibration and light are most likely to be significant within a distance of 500 metres from the source. 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 European site with qualifying features sensitive to these disturbances.

4.13 All European sites were located over 500m from the neighbourhood plan area and therefore were not considered susceptible to impacts from development in the plan area. These European sites were screened out of the assessment.

Conclusion

4.14 No likely significant effects will occur from the plan as a result of non-physical disturbance, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Non-toxic contamination

4.15 Non-toxic contamination can include the creation of dust. This can smother terrestrial habitats preventing natural processes and as increased sediment, can potentially affect the turbidity of aquatic habitats. Dust/sediment may also contribute to nutrient enrichment which can lead to changes in the rate of vegetative succession and habitat composition.

4.16 The effects of non-toxic contamination are most likely to be significant if development takes place within 500m of a European site with qualifying features sensitive to these effects, such as riparian and wetland 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.

4.17 All European sites were located over 500m from the neighbourhood plan area and therefore were not considered susceptible to impacts from development in the plan area. These European sites were screened out of the assessment.

Conclusion

4.18 No likely significant effects will occur from the plan as a result of non-toxic contamination, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Air pollution

4.19 Air pollution is most likely to affect European 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.

4.20 In terms of vehicle traffic, nitrogen oxides (NO_X, i.e. NO and NO_2) 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.

4.21 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.

4.22 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.

4.23 Thus, where significant increases in traffic are possible on roads within 200m of European sites, traffic forecast data may be needed to determine if increases in vehicle traffic are likely to be significant. In line with the Wealden judgment **[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.

4.24 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.

4.25 The strategic roads identified for new development within the neighbourhood plan area are: A134, A1071, A131 and A12.

4.26 All other European sites were situated over 200m from a strategic road and were not considered to be susceptible to impacts from air pollution and were therefore screened out of the assessment.

4.27 No policies will directly result in development and therefore likely significant effects as a result of air pollution can be ruled out at this stage.

Conclusion

4.28 No likely significant effects will occur from the plan as a result of air pollution, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Recreation

4.29 Recreational activities and human presence can result in significant effects on European sites. European 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 erosion, trampling, fire or vandalism.

4.30 Each European 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 European site (and often to specific areas within a European 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.

4.31 Existing visitor survey work available for European sites is summarised in **Table 4.1** below:

Table 4.1: Zone of Influence (ZOI) derived from existing visitor survey work

European Site	ZOI
Stour and Orwell Estuaries SPA and Ramsar	13.0km **[See reference 28]**
Abberton Reservoir SPA and Ramsar	16.0km **[See reference 29]**
Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar	9.7km **[See reference 25]**
Essex Estuaries SAC	9.7km / 22.0km* **[See reference 25]**
Blackwater Estuary (Mid-Essex Coast Phase 4) SPA and Ramsar	22.0km **[See reference 25]**

*Essex Estuaries SAC overlaps with Colne Estuary and Blackwater Estuary SPA and Ramsar sites. The respective ZOIs have been applied throughout.

4.32 A review of the European sites and their recreational ZOIs determined that the following European sites do not have a recreational ZOI that extends into the neighbourhood plan area and can therefore be scoped out of further assessment:

- Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar.

4.33 No policies will directly result in development and therefore likely significant effects as a result of recreation can be ruled out at this stage.

Conclusion

4.34 No likely significant effects will occur from the plan as a result of recreation, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Reduced water quantity and quality

4.35 An increase in demand for water abstraction and treatment resulting from the growth proposed in the neighbourhood plan area could result in changes in hydrology at European sites. Depending on the qualifying features and particular vulnerabilities of the European 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 preferred habitat conditions.

4.36 All scoped-in European sites have been identified to support habitats and/or qualifying species, which are susceptible to impacts from changes in water quantity and quality.

4.37 No policies will directly result in development and therefore likely significant effects as a result of water quantity and quality can be ruled out at this stage.

Conclusion

4.38 No likely significant effects will occur from the plan as a result of water quantity and quality, either alone or in-combination with other plans and policies, as a result of proposed development in the plan.

Summary of Screening Assessment

4.39 Table 4.2 below summarises the Screening conclusions reached in this HRA. Impact types for which a conclusion of no likely significant effect (no LSE) was reached are shown with no colour. No potential impacts were identified for which likely significant effects (potential LSE) could not be ruled out. Therefore, it was not necessary to proceed to the Appropriate Assessment stage.

Table 4.2: Summary of screening assessment

European Site	Physical damage and loss	Non-physical disturbance	Non-toxic contamination	Air Pollution	Recreation	Reduced water quality and quantity
Stour and Orwell Estuaries SPA	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Stour and Orwell Estuaries Ramsar	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Abberton Reservoir SPA	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Abberton Reservoir Ramsar	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Colne Estuary (Mid-Essex Coast Phase 2) SPA	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Colne Estuary (Mid-Essex Coast Phase 2) Ramsar	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Essex Estuaries SAC	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Blackwater Estuary (Mid-Essex Coast Phase 4) SPA	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Blackwater Estuary (Mid-Essex Coast Phase 4) Ramsar	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE

Chapter 5

Conclusion and Next Steps

5.1 At the Screening stage of HRA, no likely significant effects are predicted on European sites, either alone or in combination with other policies and proposals. However, it is expected that any windfall development which the Leavenheath Neighbourhood Plan supports and is within the plan boundary will be required to undertake an individual project-level HRA to determine impacts.

Recommendations

5.2 No changes to the Leavenheath Neighbourhood Plan are assumed in reaching the conclusion of this HRA of no likely significant effects. However, to strengthen the protection for European sites provided by Leavenheath Neighbourhood Plan policies governing windfall development, it is recommended that the following policy amendments are made:

LEAV5: Location, scale and rate of housing development

- **Amendment 1:** this policy wording should be amended as follows:
  - **Current Text:** *"Does not have an adverse effect on the integrity of Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar site where land is within 13km Zone of Influence of Suffolk Coast Recreation Disturbance Avoidance and Mitigation Strategy (RAMS)."*
  - **Recommended Text:** *"Can demonstrate no likely significant effects or adverse effects on site integrity of European sites through an individual project-level Habitats Regulations Assessment (HRA). There is a requirement for all residential development within the 13km Zone of Influence (ZOI) of Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar to make a financial contribution towards mitigation measures, as detailed in the Suffolk Coast Recreation Disturbance Avoidance and Mitigation Strategy (RAMS)."*

LEAV12: Recreational space

- **Amendment 2:** this policy wording should be amended as follows:
  - **Current Text:** *"Provision should be determined in consultation with the local community and Natural England. For residential development of more than 50 houses within the 13km ZOI of Stour and Orwell Estuaries SPA and Ramsar site, Natural England's advice to avoid predicted recreational disturbance at these Habitats sites is to secure sufficient green space to meet daily recreational needs."*
  - **Recommended Text:** *"Provision should be determined in consultation with the local community and Natural England. For residential development comprising more than 50 houses within the 13km ZOI of the Stour and Orwell Estuaries SPA and Ramsar, Natural England's advice to avoid predicted recreational disturbance at these European sites is to secure sufficient green space to meet daily recreational needs, as detailed in the Suffolk Coast Recreation Disturbance Avoidance and Mitigation Strategy (RAMS)."*
- **Amendment 3:** the supporting text should replace the word "Habitats sites" with "European sites" to be consistent with this HRA.

Next steps

5.3 An Appropriate Assessment is not required for the Leavenheath Neighbourhood Plan as none of the policies will result in development and likely significant effects from the plan can therefore be ruled out. However, project-level HRAs of windfall development should be undertaken as these developments come forwards.

5.4 HRA is an iterative process and as such, this assessment should be updated if any relevant, newly available evidence or comments from key consultees are received prior to the plan being finalised. It is recommended that this report is subject to consultation with Natural England and the Environment Agency to confirm that the conclusions of the assessment are considered appropriate at this stage of plan-making.

Appendix A

Map of European Sites within 20km of the Leavenheath Neighbourhood Plan Area

Habitat Risk Assessment Screening
for Babergh Mid Suffolk Neighbourhood Plans

LUC

European Designated Sites within 20km of Leavenheath CP

- Neighbourhood Plan
- 20km buffer from Neighbourhood Plan
- Babergh District Council
- Other Local Authority
- RAMSAR
- SAC
- SPA

Leavenheath CP

Stour and Orwell Estuaries

Colne Estuary (Mid-Essex Coast Phase 2)

Abberton Reservoir

Blackwater Estuary (Mid-Essex Coast Phase 4)

Essex Estuaries

0 5 10 km

Map scale 1:200,000 @ A3

CB:AHB EB:Hardie-Brown_A LUC FIG1_10994_r0_EuropeanSites_A3L 26/05/2022
Source: OS, NE

Appendix B

Attributes of European Sites

This appendix contains information on the European sites scoped into the HRA. Site areas and designated features are drawn from SAC and SPA Standard Data Forms and Ramsar Site Information Sheets **[See reference 30]** The overviews of sites and their locations are drawn from Natural England's Site Improvement Plans **[See reference 31]**. Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs **[See reference 32]**.

Stour and Orwell Estuaries SPA

Overview of site and its location

The Stour and Orwell estuaries straddle the eastern part of the Essex/Suffolk border in eastern England. The estuaries include extensive mud-flats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. The mud-flats hold Enteromorpha, Zostera and Salicornia spp. The site also includes an area of low-lying grazing marsh at Shotley Marshes on the south side of the Orwell. In summer, the site supports important numbers of breeding Avocet Recurvirostra avosetta, while in winter they hold major concentrations of waterbirds, especially geese, ducks and waders. The geese also feed, and waders roost, in surrounding areas of agricultural land outside the SPA.

The site has close ecological links with the Hamford Water and Mid-Essex Coast SPAs, lying to the south on the same coast.

Qualifying features

Annex I species:

- Over winter: Hen Harrier *Circus cyaneus*

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

Over winter:

- Black-tailed Godwit *Limosa limosa islandica*
- Dunlin *Calidris alpina alpina*
- Grey Plover *Pluvialis squatarola*
- Pintail *Anas acuta*
- Redshank *Tringa totanus*
- Ringed *Plover Charadrius hiaticula*
- Shelduck *Tadorna tadorna*
- Turnstone *Arenaria interpres*

The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl including:

- Cormorant *Phalacrocorax carbo*
- Pintail *Anas acuta*
- Ringed Plover *Charadrius hiaticula*
- Grey Plover *Pluvialis squatarola*
- Dunlin *Calidris alpina alpine*
- Black-tailed Godwit *Limosa limosa islandica*

- Redshank *Tringa tetanus*
- Shelduck *Tadorna tadorna*
- Great Crested Grebe *Podiceps cristatus*
- Curlew *Numenius arquata*
- Dark-bellied Brent Goose *Branta bernicla bernicla*
- Wigeon *Anas Penelope*
- Goldeneye *Bucephala clangula*
- Oystercatcher *Haematopus ostralegus*
- Lapwing *Vanellus vanellus*
- Knot *Calidris canutus*
- Turnstone *Arenaria interpres*

Conservation objectives

With regard to the individual species and/or assemblage of species for which the site has been classified ("the Qualifying Features" listed below):

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features; and
- The distribution of the qualifying features within the site.

Key vulnerabilities

Coastal squeeze – Coastal defences are present along most of the Orwell coastline to mitigate for impacts from climate change, such as rising sea level. Unless changes are made to the management of the coastline, habitats supporting qualifying SPA birds will be lost or degraded through coastal squeeze, sedimentation and reduced exposure.

Public access/disturbance – Stour and Orwell Estuaries is subject to land- and water-based activities, including boating and water sports; walking; bait-digging; fishing; wildfowling; and military overflight training. These activities are likely to impact habitats supporting breeding and overwintering water birds. A better understanding of which species and habitats are most susceptible; which types of activity are most disturbing; and which locations and times of year are most sensitive is required to ensure the Estuaries are appropriately managed.

Changes in species distribution – Declines in the number of bird species present at Orwell coastline have occurred. This is likely to be the result of changes in population and distribution on an international scale, due to climate change.

Invasive species – An increase in Spartina anglica may be affecting the growth of Spartina maritime, a key habitat feature for qualifying bird roosting and feeding areas of saltmarsh and mudflat.

Planning permission: General – The issue of development in combination with other factors is not fully understood. To ensure management is appropriate to the SPA a better understanding of the sensitivities relating to each habitat, species and location to different types of development is required. Difficult issues highlighted by the SIP include; a) Assessing the cumulative effects of

numerous, small and often 'non-standard' developments. b) Development outside the SPA boundary can have negative impacts, particularly on the estuaries' birds. c) Assessing the indirect, 'knock-on' effects of proposals. d) Pressure to relax planning conditions on existing developments.

Air pollution: impact from atmospheric nitrogen deposition – Atmospheric nitrogen deposition exceeds the relevant critical loads for coastal dune habitats used by breeding terns and hence there is a risk of harmful effects.

Inappropriate coastal management – Due to the presence of existing hard sea defences, such as sea walls there is little scope for adaptation to rising sea levels. Any freshwater habitats behind failing seawalls are likely to be inundated by seawater, which would result in the loss of this habitat within the SPA.

Fisheries: Commercial and estuarine – Commercial fishing activities can be very damaging to inshore marine habitats and the bird species dependent on the communities they support. Any ‘amber or green’ categorised commercial fishing activities in Habitats Marine Sites are assessed by Kent and Essex Inshore Fisheries Conservation Authority (IFCA). This assessment takes into account any in-combination effects of amber activities and/or appropriate plans or projects.

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:

- The sites ecosystem as a whole (see list of habitats below).
- Maintenance of populations of species that they feed on (see list of diets below).
- Off-site habitat, which provide foraging habitat for these species.

- Open landscape with unobstructed line of sight within nesting, foraging or roosting habitat.

Limosa limosa islandica: Black-tailed Godwit:

- Habitat Preference – Marshy grassland and steppe, and on migration mudflats.
- Diet - Insects, worms and snails, but also some plants, beetles, grasshoppers and other small insects during the breeding season.

Calidris alpina alpine: Dunlin

- Habitat Preference – Tundra, moor, heath, and on migration estuaries and coastal habitat.
- Diet - Tundra, moor, heath, and on migration estuaries and coastal habitat.

Pluvialis squatarola: Grey Plover

- Habitat Preference – Tundra, and on migration pasture and estuaries.
- Diet - In summer, invertebrates and in winter primarily marine worms, crustaceans and molluscs.

Anas acuta: Pintail

- Habitat Preference – Lakes, rivers, marsh & tundra
- Diet - A variety of plants and invertebrates.

Tringa totanus: Redshank

- Habitat Preference – Rivers, wet grassland, moors and estuaries.
- Diet - Invertebrates, especially earthworms, cranefly larvae (inland) crustaceans, molluscs, marine worms (estuaries).

Charadrius hiaticula: Ringed Plover

- Habitat Preference – Sandy areas with low vegetation, and on migration estuaries.
- Diet - Mostly invertebrates, especially insects, molluscs and crustaceans.

Tadorna tadorna: Shelduck

- Habitat Preference – Coasts, estuaries and lakes.
- Diet - Mostly invertebrates, especially insects, molluscs and crustaceans.

Arenaria interpres: Turnstone

- Habitat Preference – On migration beaches and rocky coasts.
- Diet - Insects, crustaceans and molluscs.

Phalacrocorax carbo: Cormorant

- Habitat Preference – Larger lakes and coastal.
- Diet - Fish.

Podiceps cristatus: Great Crested Grebe

- Habitat Preference – Reed-bordered lakes, gravel pits, reservoirs and rivers. In the winter, they are also found along the coast.
- Diet - Mostly fish, some aquatic invertebrates especially in summer.

Numenius arquata: Curlew

- Habitat Preference –Marsh, grassland and on migration mudflats.
- Diet - Worms, shellfish and shrimps.

Branta bernicla bernicla: Dark-bellied brent goose

- Habitat Preference – Tundra, and on migration marshes and estuaries.
- Diet - Vegetation, especially eel-grass.

Anas Penelope: Wigeon

- Habitat Preference – Marsh, lakes, open moor, on migration estuaries.
- Diet - Mostly leaves, shoots, rhizomes and some seeds.

Bucephala clangula: Goldeneye

- Habitat Preference – Lakes, rivers, and on migration seacoasts.
- Diet - Insects, molluscs and crustaceans.

Haematopus ostralegus: Oystercatcher

- Habitat Preference – Sandy, muddy and rocky beaches.
- Diet - Mussels and cockles on the coast, mainly worms inland.

Vanellus vanellus: Lapwing

- Habitat Preference – Pasture, arable land, wet meadow, on migration estuaries
- Diet - Worms and insects.

Calidris canutus islandica: Red knot

- Habitat Preference – Tundra, and on migration coastal habitat.
- Diet - In summer, insects and plant material, and in winter inter-tidal invertebrates, esp molluscs.

Calidris canutus: Knot

- Habitat Preference – Coastal habitat.
- Diet - Insects and plant material during the summer; and inter-tidal invertebrates, especially molluscs during the winter.

Stour and Orwell Estuaries Ramsar site

Overview of site and its location

Refer to Stour and Orwell Estuaries SPA above.

Qualifying features

Ramsar criterion 2

Contains seven nationally scarce plants:

- Stiff saltmarsh-grass *Puccinellia rupestris*
- Small cord-grass *Spartina maritime*
- Perennial glasswort *Sarcocornia perennis*
- Lax-flowered sea lavender *Limonium humile*
- Eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*.

Ramsar criterion 5

Assemblages of international importance; species with peak counts in winter; 63,017 waterfowl.

Ramsar criterion 6 species/ populations occurring at levels of international importance:

Species with peak counts in spring/autumn:

- Common redshank, Tringa totanus tetanus.

Species with peak counts in winter:

- Dark-bellied brent goose, *Branta bernicla bernicla*;
- Northern pintail, *Anas acuta*;
- Grey plover, *Pluvialis squatarola*;
- Red knot, *Calidris canutus islandica*;
- Dunlin, *Calidris alpina alpina*
- Black-tailed godwit, *Limosa limosa islandica;*
- Common redshank.

Conservation objectives

None available.

Key vulnerabilities

Similar to Stour and Orwell Estuaries SPA (see above).

A key threat identified by RIS was erosion.

Erosion – Natural coastal processes exacerbated by fixed sea defences, port development and maintenance dredging. Erosion is being tackled through sediment replacement for additional erosion that can be attributed to port development and maintenance dredging. A realignment site has been created on-site to make up for the loss of habitat due to capital dredging. General background erosion has not been tackled although a Flood Management Strategy for the site is being produced.

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

Plants

Plant communities are reliant on the coastal habitats within the Ramsar site. These habitats are dependent on a range of coastal factors and processes, including salinity, sedimentation, sea level, turbidity and elevation.

Birds

Refer to Stour and Orwell Estuaries SPA above.

Abberton Reservoir SPA

Overview of site and its location

Abberton Reservoir is a large water storage reservoir close to the Essex coast. It is one of the most important reservoirs in the country for overwintering waterfowl and also supports substantial aggregations of moulting birds in early autumn and a large colony of tree-nesting cormorants. Causeways divide the reservoir into three sections.

Qualifying features

Supports the following internationally important waterbird assemblage:

- *Podiceps cristatus*; Great crested grebe (Non-breeding)
- *Phalacrocorax carbo*; Great cormorant (Breeding)

- *Cygnus olor*; Mute swan (Non-breeding)
- *Anas penelope*; Eurasian wigeon (Non-breeding)
- *Anas strepera*; Gadwall (Non-breeding)
- *Anas crecca*; Eurasian teal (Non-breeding)
- *Anas clypeata*; Northern shoveler (Non-breeding)
- *Aythya ferina*; Common pochard (Non-breeding)
- *Aythya fuligula*; Tufted duck (Non-breeding)
- *Bucephala clangula*; Common goldeneye (Non-breeding)
- *Fulica atra*; Common coot (Non-breeding)
- *Pluvialis apricaria*; European golden plover (Non-breeding)

Conservation objectives

With regard to the individual species and/or assemblage of species for which the site has been classified:

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;

- The distribution of the qualifying features within the site.

Key vulnerabilities

Siltation – high sediment load in reservoir inflow due to agricultural practices within catchment.

Public access / disturbance – designated waterbirds are vulnerable to human disturbance but well controlled by Essex & Suffolk Water; occasional trespassing and disturbance by low flying aircraft.

Planning permission: general – potential future threat to designated waterbirds if farmland providing supporting habitat close to the SPA were lost to development; requires further study.

Changes in species distributions – unexplained decline in designated population of cormorant.

Bird strike – death of designated mute swans and possibly other species from collision with overhead powerlines near reservoir.

Water pollution – Water stored in the reservoir is high in nutrients (eutrophic) as it comes from intensively farmed catchment areas. Resulting algal blooms may include toxic blue-green algae that can kill wildfowl, though no significant mortality has been recorded.

Historically, increased water from the reservoir led to low water levels although no decrease in wildfowl was attributed to this. Currently the water level of the main, eastern section is being raised by 3 metres to increase storage capacity. As part of the level-raising scheme, the original concrete banks have been removed and the shoreline re-profiled, creating extensive new areas of shallow wetland habitat for the site's waterfowl.

The Water Company has a consultative committee which addresses conservation issues at all its sites, and the Abberton Reserve Committee (involving Essex Wildlife Trust and EN) addresses local issues.

Air Pollution: risk of atmospheric nitrogen deposition – The site is identified as at risk from air pollution as Nitrogen deposition levels exceed the site-relevant critical load for ecosystem protection. However the site's Nitrogen load is likely to be dominated by levels in the water entering the reservoir (mainly from the distant Ouse catchment) rather than direct deposition.

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:

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

Podiceps cristatus; Great crested grebe (Non-breeding)

- Habitat Preference – Reed-bordered lakes, gravel pits, reservoirs and rivers. In the winter, they are also found along the coast.
- Diet – Mostly fish, some aquatic invertebrates esp in summer.

Phalacrocorax carbo; Great cormorant (Breeding)

- Habitat Preference – Larger lakes and coastal habitat.
- Diet – Fish, mostly by diving from surface.

Cygnus olor; Mute swan (Non-breeding)

- Habitat Preference – Lakes, ponds & rivers.
- Diet – Aquatic vegetation (to 1m deep), also grazes on land; occasionally takes insects, molluscs, small amphibians.

Anas penelope; Eurasian wigeon (Non-breeding)

- Habitat Preference – Marsh, lakes, open moor, and on migration also estuaries.
- Diet – Mostly leaves, shoots, rhizomes, also some seeds.

Anas strepera; Gadwall (Non-breeding)

- Habitat Preference – Marshes, lakes, and on migration also rivers and estuaries.
- Diet – Leaves, shoots, mostly while swimming with head under water.

Anas crecca; Eurasian teal (Non-breeding)

- Habitat Preference – Lakes, marshes, ponds & shallow streams.
- Diet – Omnivorous, mostly seeds in winter, feeds mostly at night in shallow water.

Anas clypeata; Northern shoveler (Non-breeding)

- Habitat Preference – Shallow lakes, marsh, reedbed & wet meadow.
- Diet – Omnivorous, esp. small insects, crustaceans, molluscs, seeds; filters particles with sideways sweeping of bill.

Aythya ferina; Common pochard (Non-breeding)

- Habitat Preference – Lakes & slow rivers, and on migration also estuaries.
- Diet – Mostly plant material, also small animals.

Aythya fuligula; Tufted duck (Non-breeding)

- Habitat Preference – Marshes, lakes, and on migration also rivers, estuaries.
- Diet – Omnivorous, feeds on mud bottom mostly by diving.

Bucephala clangula; Common goldeneye (Non-breeding)

- Habitat Preference – Lakes, rivers, and on migration also seacoasts.
- Diet – Insects, molluscs and crustaceans, mainly by diving.

Fulica atra; Common coot (Non-breeding)

- Habitat Preference – Lakes, marsh, rivers, and seacoast.
- Diet – Omnivorous, but mostly aquatic plants.

Abberton Reservoir Ramsar site

Overview of site and its location

Refer to Abberton Reservoir SPA above.

Qualifying features

Supports 23787 waterfowl (5 year peak mean 1998/99-2002/2003) including the following internationally important waterbird assemblage:

- Gadwall, *Anas strepera strepera*;
- Northern shoveler, *Anas clypeata*;
- Eurasian wigeon, *Anas Penelope*;

- Mute swan, *Cygnus olor*;
- Common pochard, *Aythya farina*;
- Great cormorant, *Phalacrocorax carbo carbo*;
- Eurasian teal, *Anas crecca*;
- Tufted duck, *Aythya fuligula*;
- Common coot, *Fulica atra atra*;
- Pied avocet, *Recurvirostra avosetta*;
- Ruff, *Philomachus pugnax*,
- Black-tailed godwit, *Limosa limosa islandica*;
- Spotted redshank, *Tringa erythropus*,
- Common greenshank, *Tringa nebularia*,
- Common goldeneye, *Bucephala clangula*.

Conservation objectives

None available.

Key Vulnerabilities

Refer to Abberton Reservoir SPA above.

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

Refer to Abberton Reservoir SPA above.

Colne Estuary (Mid-Essex Coast Phase 2) SPA

The Colne Estuary is located on the coast of Essex in eastern England. It is a comparatively short and branching estuary, with five tidal arms that flow into the main channel of the River Colne. The estuary has a narrow intertidal zone predominantly composed of flats of fine silt with mud-flat communities typical of south-eastern English estuaries. The estuary is of importance for a range of wintering wildfowl and waders, in addition to breeding Little Tern Sterna albifrons which nest on shell, sand and shingle spits. There is a wide variety of coastal habitats which include mud-flat, saltmarsh, grazing marsh, sand and shingle spits, disused gravel pits and reedbeds which provide feeding and roosting opportunities for the large numbers of waterbirds that use the site.

The Colne Estuary is an integral component of the phased Mid-Essex Coast SPA

Qualifying features

Annex I populations of the following species:

During the breeding season -

- Little Tern *Sterna albifrons*

Over winter -

- Avocet *Recurvirostra avosetta*
- Golden Plover *Pluvialis apricaria*
- Hen Harrier *Circus cyaneus*

This site also qualifies under Article 4.2 of the Directive (79/409/EEC) by

supporting populations of Habitats importance of the following migratory species:

Over winter -

- Dark-bellied Brent Goose *Branta bernicla bernicla*
- Redshank *Tringa totanus*

The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.

Conservation objectives

Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Key vulnerabilities

Coastal squeeze – Coastal defences along much of the Essex coastline prevent intertidal habitats from shifting landward in response to rising sea

levels. As a result, these habitats are being gradually degraded and reduced in extent, with knock-on effects on the waterbirds and other species they support. 'Managed realignment' schemes and additional intervention measures to create new areas of intertidal habitat and reduce erosion rates are being implemented but more will be needed to offset future losses. Grazing marshes in the area of the Mid Essex Coast SPAs are important for waterbirds and are also threatened by sea level rise because most are near or below mean high tide level, currently protected behind seawalls.

Public access /disturbance – Breeding and overwintering waterbirds are susceptible to human disturbance from a range of land- and water-based activities - including boating and watersports, walking, bait-digging, fishing and wildfowling - as well as low-flying aircraft. Some activities, such as powerboating, may produce physical disturbance to habitats.

Planning permission: general – Several of the issues affecting the Essex Estuaries and the management of disturbance effects on the sites are related to each other, and addressing them is likely to require an improved overview of the relative sensitivities of different habitats, species and locations to different types of development.

Changes in species distributions – Declines have occurred in the numbers of some of the waterbird species using the Essex Estuaries SIP area but these may be due to changes in their distributions or population levels at a national or continental scale, possibly linked to climate change.

Invasive species – An increase in Pacific oyster *Crassostrea gigas* settlement and colonisation within the Habitats Marine Site may result in areas of foreshore being covered in such numbers as to make them difficult to access and utilise as feeding grounds for overwintering birds. Invasive common cord grass may adversely affect other species and habitats, including feeding and roosting areas of SPA bird species.

Fishing – Recreational bait digging may impact waterbirds e.g. by reducing prey availability, or damaging the intertidal mudflats and sandflats and

associated communities. The extent of the activity and potential impacts on site features are not currently well understood. Certain forms of commercial fishing, e.g. bottom towed fishing gear; can be very damaging to inshore marine habitats and the bird species dependent on the communities they support.

Air Pollution: risk of atmospheric nitrogen deposition – Atmospheric nitrogen deposition exceeds the relevant critical loads for coastal dune habitats used by breeding terns and hence there is a risk of harmful effects. However, on the Essex estuaries declines in the numbers of breeding terns appear to be due mainly to erosion of a man-made cockle-shingle bank (at Foulness) and to disturbance (elsewhere), rather than to over-vegetation of breeding areas caused by nitrogen deposition.

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:

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

Dark-bellied brent goose (Non-breeding); *Branta bernicla bernicla*

- Habitat Preference – Tundra, and on migration marshes and estuaries.
- Diet - Vegetation, especially eel-grass.

Common pochard (Breeding); *Aythya ferina*

- Habitat Preference – Lakes & slow rivers, and on migration also estuaries

- Diet – Mostly plant material, also small animals.

Hen harrier (Non-breeding); *Circus cyaneus*

- Habitat Preference – Moor, marsh, steppe and fields.
- Diet – Mainly small birds and mammals.

Ringed plover (Breeding); *Charadrius hiaticula*

- Habitat Preference – Sandy areas with low vegetation, and on migration estuaries.
- Diet – In summer, invertebrates and in winter primarily marine worms, crustaceans and molluscs.

Common redshank (Non-breeding); *Tringa tetanus*

- Habitat Preference – Rivers, wet grassland, moors and estuaries.
- Diet – Invertebrates, especially earthworms, cranefly larvae (inland) crustaceans, molluscs, marine worms (estuaries).

Little tern (Breeding); *Sterna albifrons*

- Habitat Preference – Seacoasts, rivers and lakes.
- Diet – Small fish and invertebrates.

Colne Estuary (Mid-Essex Coast Phase 2) Ramsar site

Overview of site and its location

Refer to Colne Estuary (Mid-Essex Coast Phase 2) Ramsar SPA above.

Qualifying features

Ramsar criterion 1

The site is important due to the extent and diversity of saltmarsh present.

Ramsar criterion 2

The site supports 12 species of nationally scarce plants and at least 38 British Red Data Book invertebrate species.

Ramsar criterion 3

This site supports a full and representative sequence of saltmarsh plant communities covering the range of variation in Britain.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

32041 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6

Species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

- Dark-bellied brent goose, *Branta bernicla bernicla*;

- Common redshank, *Tringa totanus tetanus*.

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Conservation objectives

None available.

Key vulnerabilities

Refer to Colne Estuary (Mid-Essex Coast Phase 2) Ramsar SPA above.

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

Habitat -

Saltmarsh habitat is reliant a range of coastal factors, in particular sedimentary and tidal processes which influence the pattern and development of vegetation. These factors influence the complex interdependent intertidal, subtidal and terrestrial habitats present along the coast.

Plants -

Plant communities are reliant on the coastal habitats within the Ramsar site. These habitats are dependent on a range of coastal factors and processes, including salinity, sedimentation, sea level, turbidity and elevation.

Invertebrates -

These species are reliant on the saltmarsh habitat and characteristic flora and fauna that are present within the Habitats site. Key sources of food range from flowering plants, organic matter and other invertebrate species.

Birds -

Refer to Colne Estuary (Mid-Essex Coast Phase 2) SPA above. Consideration also needs to be given to black-tailed godwit, for which this Ramsar site is designated for;

- Black-tailed godwit *Limosa limosa islandica*
- Habitat Preference – Marshy grassland and steppe, and on migration mudflats.
- Diet – Insects, worms and snails, but also some plants, beetles, grasshoppers and other small insects during the breeding season.

Essex Estuaries SAC

Overview of site and its location

Large estuarine site in south-east England. The site comprises the major estuaries of the Colne, Blackwater, Crouch and Roach river.

Qualifying features

Annex 1 habitats that are a primary reason for selection of this site:

- Estuaries

- Mudflats and sandflats not covered by seawater at low tide
- Salicornia and other animals colonising mud and sand
- Spartina swards (*Spartinion maritimae*)
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Mediterranean and thermo-Atlantic halophilous scrubs

Annex 1 habitats present as a qualifying feature:

- Sandbanks which are slightly covered by seawater all the time

Conservation objectives

With regard to the individual species and/or assemblage of species for which the site has been classified:

- Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Key vulnerabilities

Coastal squeeze - Coastal defences along much of the Essex coastline prevent intertidal habitats from shifting landward in response to rising sea levels. As a result, these habitats are being gradually degraded and reduced in extent, ‘Managed realignment’ schemes and additional intervention measures to create new areas of intertidal habitat and reduce erosion rates are being implemented but more will be needed to offset future losses.

Fisheries: Commercial marine and estuarine – Shellfish dredging over subtidal habitats has been identified as an Amber activity and is considered a high priority for assessment and development of possible management for the site.

Bottom towed fishing gear has been categorised as a 'Red' for the interest features listed, specifically the seagrass beds *Zostera* spp, a sub-feature of the SAC.

Planning Permission: general – Several of the issues affecting the Essex Estuaries and the management of disturbance effects on the sites are related to each other, and addressing them is likely to require an improved overview of the relative sensitivities of different habitats, species and locations to different types of development.

Invasive species - Non-native invasive species such as the American whelk tingle *Urosalpinx cinerea* and Slipper limpet *Crepidula fornicata* are known to occupy subtidal muddy habitats, potentially impacting native communities through competition for resources and predation. Invasive common cord grass may adversely affect plant species for which the Essex Estuaries SAC is designated.

Fisheries: Recreational marine and estuarine – Recreational bait digging may damage the intertidal mudflats and sandflats and associated sub-features

and communities, such as eelgrass beds. The extent of the activity and potential impacts on site features are not currently well understood.

Air Pollution: risk of atmospheric nitrogen deposition - Atmospheric nitrogen deposition exceeds the relevant critical loads for coastal dune habitats used by breeding terns and hence there is a risk of harmful effects. However, on the Essex estuaries declines in the numbers of breeding terns appear to be due mainly to erosion of a man-made cockle-shingle bank (at Foulness) and to disturbance (elsewhere), rather than to over-vegetation of breeding areas caused by nitrogen deposition.

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

Habitat

The qualifying habitats of the SAC are reliant a range of coastal factors, including salinity, sedimentation, tide, sea level, turbidity and elevation, which influence the interdependent intertidal, subtidal and terrestrial habitats. These factors influence the complex interdependent intertidal, subtidal and terrestrial habitats present along the coast.

Additional factors are provided below for each habitat (where relevant).

Sandbanks which are slightly covered by sea water all the time.

Reef-building species such as Sabellaria spinulosa help to stabilise the sediment, allowing the colonisation of sessile animals.

Blackwater Estuary (Mid-Essex Coast Phase 4) SPA

Overview of site and its location

The Blackwater Estuary is a large estuary between the Dengie peninsula and Mersea Island on the Essex coast. It stretches from immediately adjacent to Maldon and about 8 km south of Colchester.

Qualifying features

Qualifying Features (Waterbird assemblage):

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Aythya ferina*; Common pochard (Breeding)
- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Sterna albifrons*; Little tern (Breeding)

Additional Qualifying Features Identified by the 2001 UK SPA Review:

- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Recurvirostra avosetta*; Pied avocet (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Non-breeding)

- *Pluvialis apricaria*; European golden plover (Non-breeding)
- *Philomachus pugnax*; Ruff (Non- breeding)
- *Tringa totanus*; Common redshank (Non-breeding)

Conservation objectives

With regard to the individual species and/or assemblage of species for which the site has been classified:

- Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.

Subject to natural change, to maintain or restore:

- 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 populations of the qualifying features;
- The distribution of the qualifying features within the site.

Key vulnerabilities

Similar to Colne Estuary SPA (see above).

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:

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

Dark-bellied brent goose (Non-breeding); *Branta bernicla bernicla*

- Habitat Preference – Tundra, and on migration marshes and estuaries.
- Diet – Vegetation, especially eel-grass.

Common pochard (Breeding); *Aythya farina*

- Habitat Preference – Open lakes and gravel pits in the summer and large lakes and estuaries during the winter.
- Diet – Plants and seeds, snails, small fish and insects.

Hen harrier (Non-breeding); *Circus cyaneus*

- Habitat Preference – Moor, marsh, steppe and fields.
- Diet – Mainly small birds and mammals.

Ringed plover (Breeding); *Charadrius hiaticula*

- Habitat Preference – Sandy areas with low vegetation, and on migration estuaries.
- Diet – In summer, invertebrates and in winter primarily marine worms,

crustaceans and molluscs.

Grey plover (Non-breeding); *Pluvialis squatarola*

- Habitat Preference – Tundra, and on migration pasture and estuaries.
- Diet – In summer, invertebrates and in winter primarily marine worms, crustaceans and molluscs.

Dunlin (Non-breeding); Calidris alpina alpine

- Habitat Preference – Tundra, moor, heath, and on migration estuaries and coastal habitat.
- Diet – Insects, snails and worms.

Black-tailed godwit (Non-breeding); *Limosa limosa islandica*

- Habitat Preference – Marshy grassland and steppe, and on migration mudflats.
- Diet – Insects, worms and snails, but also some plants, beetles, grasshoppers and other small insects during the breeding season.

Little tern (Breeding); *Sterna albifrons*

- Habitat Preference – Seacoasts, rivers and lakes.
- Diet – Small fish and invertebrates.

Waterbird Assemblage –

The waterfowl assemblage relies on a variety of habitats to support population numbers, including intertidal mudflats and sandflats, boulder and cobble shores, saltmarsh, seagrass beds and shallow coastal waters

Blackwater Estuary (Mid-Essex Coast Phase 4) Ramsar site

Overview of site and its location

Refer to Blackwater Estuary (Mid-Essex Coast Phase 4) SPA above.

Qualifying features

Represents 70% of the saltmarsh habitat in Essex and 7% of the total area of saltmarsh in Britain. Invertebrate fauna includes at least 16 British Red Data Book species:

- Water beetle *Paracymus aeneus*;
- Amselfly *Lestes dryas*;
- Flies *Aedes flavescens*, *Erioptera bivittata*, *Hybomitra expollicata*;
- Spiders *Heliophanus auratus* and *Trichopterna cito*;
- Beetles *Baris scolopacea*, *Philonthus punctus*, *Graptodytes bilineatus* and *Malachius vulneratus*;
- Flies *Campsicemus magius*, *Myopites eximia*;
- Moths *Idaea ochrata* and *Malacosoma castrensis*;
- Spider *Euophrys*.

Supports a full and representative sequences of saltmarsh plant communities covering the range of variation in Britain.

Supports the following internationally important wildfowl assemblage:

- Dark-bellied brent goose, *Branta bernicla*;

- Grey plover, *Pluvialis squatarola*;
- Dunlin, *Calidris alpina alpine*;
- Black-tailed godwit, *Limosa limosa islandica*;
- European golden plover, *Pluvialis apricaria apricaria*;
- Common redshank, *Tringa totanus tetanus*.

Conservation objectives

None available.

Key vulnerabilities

Similar to Colne Estuary SPA (see above).

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

Habitats -

Saltmarsh habitat is reliant a range of coastal factors, in particular sedimentary and tidal processes which influence the pattern and development of vegetation. These factors influence the complex interdependent intertidal, subtidal and terrestrial habitats present along the coast.

Invertebrates -

These species are reliant on the saltmarsh habitat and characteristic flora and fauna that are present within the Habitats site. Key sources of food range from

flowering plants, organic matter and other invertebrate species.

Birds -

Refer to Blackwater Estuary (Mid-Essex Coast Phase 4) SPA above for details on qualifying bird species.

Appendix C

Detailed Screening Assessment of Policies

Environment and Landscape

LEAV1: Views of community importance

Potential likely significant effects

None – this policy identifies important views and vistas and seeks to protect them from inappropriate development.

Discussion

None.

Conclusion

No likely significant effected predicted

LEAV2: Local Green Spaces

Potential likely significant effects

None - this policy identifies Local Green Space for special protection.

Discussion

None.

Conclusion

No likely significant effected predicted

LEAV3: Landscape and biodiversity

Potential likely significant effects

None - this policy encourages the protection of landscapes and biodiversity. It also encourages the delivery and enhancement of ecological networks and wildlife corridors.

Discussion

None.

Conclusion

No likely significant effected predicted

LEAV4: Surface water drainage

Potential likely significant effects

None - This policy aims to ensure that new development will not cause or contribute to new flooding or drainage issues, exacerbate existing issues, or cause water pollution.

Discussion

None.

Conclusion

No likely significant effected predicted

Development and Design

LEAV5: Location, scale and rate of housing development

Potential likely significant effects

None – this policy sets out criteria that any windfall development that comes forward must meet.

Discussion

Whilst this policy does set conditions for supporting development it does not allocate land for development.

Conclusion

No likely significant effected predicted.

LEAV6: Pattern of growth and strategic gap between hamlets

Potential likely significant effects

None – this policy seeks to protect the open and undeveloped nature of the parish.

Discussion

None.

Conclusion

No likely significant effected predicted.

LEAV7: Housing size, type and tenure

Potential likely significant effects

None – this policy sets out housing type criteria that any windfall development that comes forward must meet.

Discussion

None.

Conclusion

No likely significant effected predicted.

LEAV8: Non-designated Heritage Assets

Potential likely significant effects

None – this policy seeks to protect the character and appearance of non-designated heritage assets.

Discussion

None.

Conclusion

No likely significant effected predicted.

LEAV9: Design principles (design guidelines and codes)

Potential likely significant effects

None - this policy sets out the design criteria that all developments will be expected to satisfy.

Discussion

None.

Conclusion

No likely significant effected predicted.

Access

LEAV10: Walking and cycling

Potential likely significant effects

None - this policy sets out that development should contribute to an enhanced and joined up walking and cycling networks.

Discussion

The policy promotes the use of sustainable transport and as such may provide mitigation for the impacts of other policies in relation to increased car and the associated air pollution. While the enhanced walking and cycling networks called for by this policy could result in the development of land to accommodate this infrastructure, such development is not provided for by this plan but would form part of separate project proposals that would be subject to HRA.

Conclusion

No likely significant effected predicted.

LEAV11: Traffic and road safety

Potential likely significant effects

None - this policy sets out that major developments should identify the level of additional traffic that is likely to be generated, and the impact of this traffic on pedestrians, cyclists, road safety, and private and public parking within the parish.

Discussion

None.

Conclusion

No likely significant effected predicted.

Community Infrastructure

LEAV12: Recreational space

Potential likely significant effects

None – this policy sets out a requirement that all major development should include recreational green space and informal spaces, play equipment and sports facilities where appropriate.

Discussion

None.

Conclusion

No likely significant effected predicted.

LEAV13: Protection of existing community infrastructure

Potential likely significant effects

None – this policy sets out protection of community infrastructure.

Discussion

None.

Conclusion

No likely significant effected predicted.

LEAV14: Convenience/small shop

Potential likely significant effects

None - this policy encourages the development of a convenience/small shop.

Discussion

Whilst this policy does set conditions for the supporting development it does not allocate land for development.

It is noted that this policy states this development may reduce additional journeys out of the parish. This may provide mitigation for the impacts of other policies in relation to increased car and the associated air pollution.

Conclusion

No likely significant effected predicted.

References

1 HM Government (2007) The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (SI No. 2007/1843) [online]. Available at: https://www.legislation.gov.uk/uksi/2007/1843/contents

2 HM Government (2017) The Conservation of Habitats and Species Regulations 2017 (SI No. 2017/1012) [online]. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents/made, as amended by HM Government (2019) The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI No. 2019/579) [online]. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573

3 The exception to this would be where 'imperative reasons of overriding public interest' can be demonstrated; see paragraph 1.17.

4 The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated. (Source: UK Government Planning Practice Guidance).

5 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 [online]. Available at: https://www.gov.uk/guidance/appropriate-assessment

6 Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').

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8 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.htm

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10 Department for Environment, Food and Rural Affairs (2021) Changes to the Habitats Regulations 2017 [online]. Available at: https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017

11 Department for Levelling Up, Housing and Communities (2012) National Planning Policy Framework, para 176 [online]. Available at: https://www.gov.uk/guidance/national-planning-policy-framework

12 David Tyldesley & Associates, The HRA Handbook, Section A3. A subscription based online guidance document, available at: https://www.dtapublications.co.uk/handbook/European

13 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 [online]. Available at: https://www.gov.uk/guidance/appropriate-assessment

14 David Tyldesley & Associates, The HRA Handbook. A subscription based online guidance document, available at: https://www.dtapublications.co.uk/handbook

15 Conservation objectives are published by Natural England for SACs and SPAs.

16 In line with the CJEU judgment in Case C-323/17 People Over Wind v Coillte Teoranta, mitigation must only be taken into consideration at this stage and not during Stage 1: HRA Screening.

17 In addition to SAC and SPA citations and conservation objectives, key information sources for understanding factors contributing to the integrity of the sites include (where available) conservation objectives supplementary advice and Site Improvement Plans prepared by Natural England. Natural England (undated) Site Improvement Plans by region [online]. Available at: http://publications.naturalengland.org.uk/category/5458594975711232

18 A buffer distance of 20km has been applied based on the buffer distance applied to North Essex HRAs. This seems relevant given the large distances identified in relation to recreation.

19 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.

20 Obtained from the Natural England website. Available at: www.naturalengland.org.uk

21 Natural England (undated) Conservation Objectives for European Sites [online]. Available at: http://publications.naturalengland.org.uk/category/6490068894089216

22 SI No. 2017/2012.

23 ECJ Case C-127/02 “Waddenzee” Jan 2004.

24 The HRA Handbook. David Tyldesley & Associates, a subscription based online guidance document [online] Available at: https://www.dtapublications.co.uk/handbook/European

25 The HRA Handbook. David Tyldesley & Associates, a subscription based online guidance document [online] Available at: https://www.dtapublications.co.uk/handbook/European

26 British Wildlife Magazine. October 2007

27 Wealden v SSCLG [2017] EWHC 351 (Admin).

28 Bird Aware Essex Coast (2020) Essex Coast Recreational disturbance Avoidance and Mitigation Strategy: Supplementary Planning Document (SPD). Available at: https://birdaware.org/essex/our-strategy/

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