



Capel St Mary Neighbourhood

Plan 2018 to 2037

HRA Report

Babergh & Mid Suffolk District Councils

Final report

Prepared by LUC

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Capel St Mary Neighbourhood Plan 2018 to 2037

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Chapter 1

Introduction

1.1 LUC has been commissioned by Babergh & Mid Suffolk District Councils (the Councils) to carry out a Habitats Regulations Assessment (HRA) of the Capel St Mary Neighbourhood Plan. The Neighbourhood Plan was created by Capel St Mary Parish Council and local residents. This iteration of the HRA report assesses the impacts of the Pre-Submission (Regulation 14) Capel St Mary Neighbourhood Plan V3.0 (published 16/08/2021).

Previous HRA work

1.2 In December 2021, Place Services carried out an HRA of the Regulation 14 Pre-submission consultation version of the Capel St Mary Neighbourhood Plan 2018-2037. 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 competent authority 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 designated 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 This report uses the term 'European sites' rather than 'national site network' to refer to those types of designated site required to be considered in HRA, i.e. SACs (including candidate SACs), SPAs (including potential SPAs), and Ramsar sites. The requirement for HRA does not apply to other nationally designated wildlife sites such as Sites of Special Scientific Interest or National Nature Reserves.

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 be avoided through, firstly, avoidance, and secondly, reduction, 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 Capel St Mary 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: Capel St Mary 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 Capel St Mary Neighbourhood Plan and describes the next steps to be undertaken.

Chapter 2

Capel St Mary Neighbourhood Plan

Vision

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

"That Capel St Mary retains its rural quality whilst meeting local housing needs and protecting and developing the infrastructure, including essential services, to provide a sustainable future.."

2.2 The overarching vision is supported by a series of objectives, which are detailed in each Chapter of the Neighbourhood Plan. To achieve this vision, planning applications will be monitored to ensure that local housing needs are met and that clubs, sports facilities and green spaces are maintained at a level that is adequate for the population and are financially viable.

2.3 The following objectives were also provided in the plan:

- **Significant Factor for the Proposed Developments:** To develop and sustain the core village status of Capel St Mary by ensuring any future development is sustainable and supports a range of employment, services, housing and recreational facilities.
- **Housing and Design:** To create affordable and high-quality housing that maintains and improves green space provision, community as well as the village character.
- **Transport:** To create a safer road system within the parish for vehicles, cyclists, pedestrians and other users.

- **Infrastructure:** To ensure the infrastructure of the village is maintained in relation to the needs of its residents, and that assets important to the village are protected.
- **Environment:** Villagers should be able to enjoy Capel St Mary's natural environment and every opportunity should be taken to enhance and access it.

2.4 The objectives are used a framework for 21 policies.

Policies

2.5 The policies within the Capel St Mary Neighbourhood Plan are as follows:

- Policy CSM1 - Capel St Mary Spatial Strategy
- Policy CSM2 - Housing Mix
- Policy CSM3 - Conformance to Best Practice Design Principles
- Policy CSM4 - Retaining and Enhancing Character Through Residential Design
- Policy CSM5 - Green Infrastructure in New Developments
- Policy CSM6 - Affordable Housing
- Policy CSM7 - Accommodation Needs for Older People
- Policy CSM8 - Extensions, Division and Demolition New Builds
- Policy CSM9 - Local Flooding
- Policy CSM10 - Transport - New Developments
- Policy CSM11 - Infrastructure
- Policy CSM12 - High-Speed Broadband
- Policy CSM13 - Loss of Facilities and Services
- Policy CSM14 - Heritage Assets

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- Policy CSM15 - Biodiversity
- Policy CSM16 - Green Spaces
- Policy CSM17 - Stutton Brook Corridor
- Policy CSM18 - Trees and Shrubs
- Policy CSM19 - New Business Premises
- Policy CSM20 - Harm to Existing Business Premises
- Policy CSM21 - Retention of Existing Employment Site

Chapter 3

Methodology

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 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 18]. 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 location 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 19]. Natural England’s conservation objectives [See reference 20] 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 Capel St Mary Neighbourhood Plan Area

European Site	Closest Distance / Location from Neighbourhood Plan Area
Stour and Orwell Estuaries SPA and Ramsar	2.36km south
Hamford Water SAC, SPA and Ramsar	14.4km southeast
Essex Estuaries SAC	15.5km southwest
Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar	15.5km southwest
Deben Estuary SPA and Ramsar	19.4km northeast
Abberton Reservoir SPA and Ramsar	19.3km southwest

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 21] (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 effects should be considered as a likely significant effect, when carrying out HRA of a land use plan.

3.15 In the Waddenzee case [See reference 22], the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:

An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44). An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48). Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).

3.16 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 [\[See reference 23\]](#).

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 [\[See reference 24\]](#) 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 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 Capel St Mary Neighbourhood Plan does not allocate any sites for residential development. Instead, a number of the policies within it set out criteria that any new residential/ or employment developments that come forward must meet. Should schemes which are supported by the Capel St Mary 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 Capel St Mary 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 Capel St Mary 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 site
- Abberton Reservoir SPA and Ramsar site
- Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar site
- Deben Estuary SPA and Ramsar site
- Hamford Water SPA and Ramsar site

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 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 important 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. 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 25]; 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 types of disturbance.

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 which can smother habitats preventing natural processes and may also lead to effects associated with increased sediment and dust which can potentially affect the turbidity of aquatic habitats and can 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 types of disturbance, 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 NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NO_x can cause eutrophication of soils and water.

4.21 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 26], 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 A single strategic road for new development, the A12, is within in the neighbourhood plan area. Additionally, the A14, A137 and A120 are strategic roads likely to serve development within the neighbourhood plan area.

4.26 The following European sites were identified as being within 20km of the neighbourhood plan area, within 200m of one of the strategic roads identified above, and as having interest features potentially susceptible to air pollution:

- Stour and Orwell Estuaries SPA and Ramsar site (A137).

4.27 All other European sites were situated over 200m from the strategic roads identified above and/or were not considered to have interest features that are susceptible to impacts from air pollution and were therefore screened out of the assessment.

4.28 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

4.29 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

4.30 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 trampling, fire or vandalism and also through erosion associated with terrestrial activities.

4.31 Each European site will typically have a ‘Zone of Influence’ (ZOI) within which increases in population would be expected to result in likely significant recreation 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.

4.32 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 site	13.0km [See reference 27]
Abberton Reservoir SPA and Ramsar site	16.0km [See reference 28]
Hamford Water SAC, SPA and Ramsar site	8km [See reference 25]
Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar site	9.7km [See reference 25]
Essex Estuaries SAC	9.7km / 22.0km* [See reference 25]
Deben Estuary SPA and Ramsar site	13km [See reference 25]

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

4.33 A review of the European sites and their recreational ZOI 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:

- Abberton Reservoir SPA and Ramsar site
- Hamford Water SAC, SPA and Ramsar site
- Colne Estuary (Mid-Essex Coast Phase 2) SPA and Ramsar site
- Essex Estuaries SAC
- Deben Estuary SPA and Ramsar site

4.34 The ZOI for Stour and Orwell Estuaries SPA and Ramsar site extends into the neighbourhood plan area. However, no policies will directly result in development and therefore likely significant effects as a result of recreation can be ruled out for Stour and Orwell Estuaries SPA and Ramsar site.

Conclusion

4.35 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

4.36 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.

4.37 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.

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

Conclusion

4.39 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

4.40 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. Potential impacts where likely significant effects ('potential LSE') could not be ruled out would be shown in orange and considered in more detail at the Appropriate Assessment stage but no such effects were identified.

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
Hamford Water SPA	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Hamford Water SAC	No LSE	No LSE	No LSE	No LSE	No LSE	No LSE
Hamford Water 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

Chapter 4 Screening assessment

European Site	Physical damage and loss	Non-physical disturbance	Non-toxic contamination	Air pollution	Recreation	Reduced water quality and quantity
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
Deben Estuary 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 development which the Capel St Mary 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 Capel St Mary Neighbourhood Plan are assumed in reaching the conclusion of this HRA as there are likely no significant effects. However, to strengthen the protection for European sites provided by Capel St Mary Neighbourhood Plan policies governing windfall development, it is recommended that the following policy amendments are made:

Policy CSM1: Capel St Mary Spatial Strategy

- **Amendment 1:** this policy and supporting text should be amended to state that development may only be supported where no likely significant effects (LSE) or adverse effects on site integrity (AEoI) have been demonstrated through an individual project-level HRA.
- **Amendment 2:** this policy and supporting text should be amended to refer for the requirement for all residential development within the ZOI of European sites to make a financial contribution towards mitigation measures, as detailed in the Suffolk Coast RAMS or through bespoke mitigation agreed with the local authority.

Policy CSM5: Green Infrastructure in New Developments

- **Amendment 3:** this policy should be amended to refer to Suffolk Coast RAMS which provides advice on greenspace for residential development to avoid adverse effect on integrity on the Stour & Orwell Estuaries SPA and Ramsar site.

Next steps

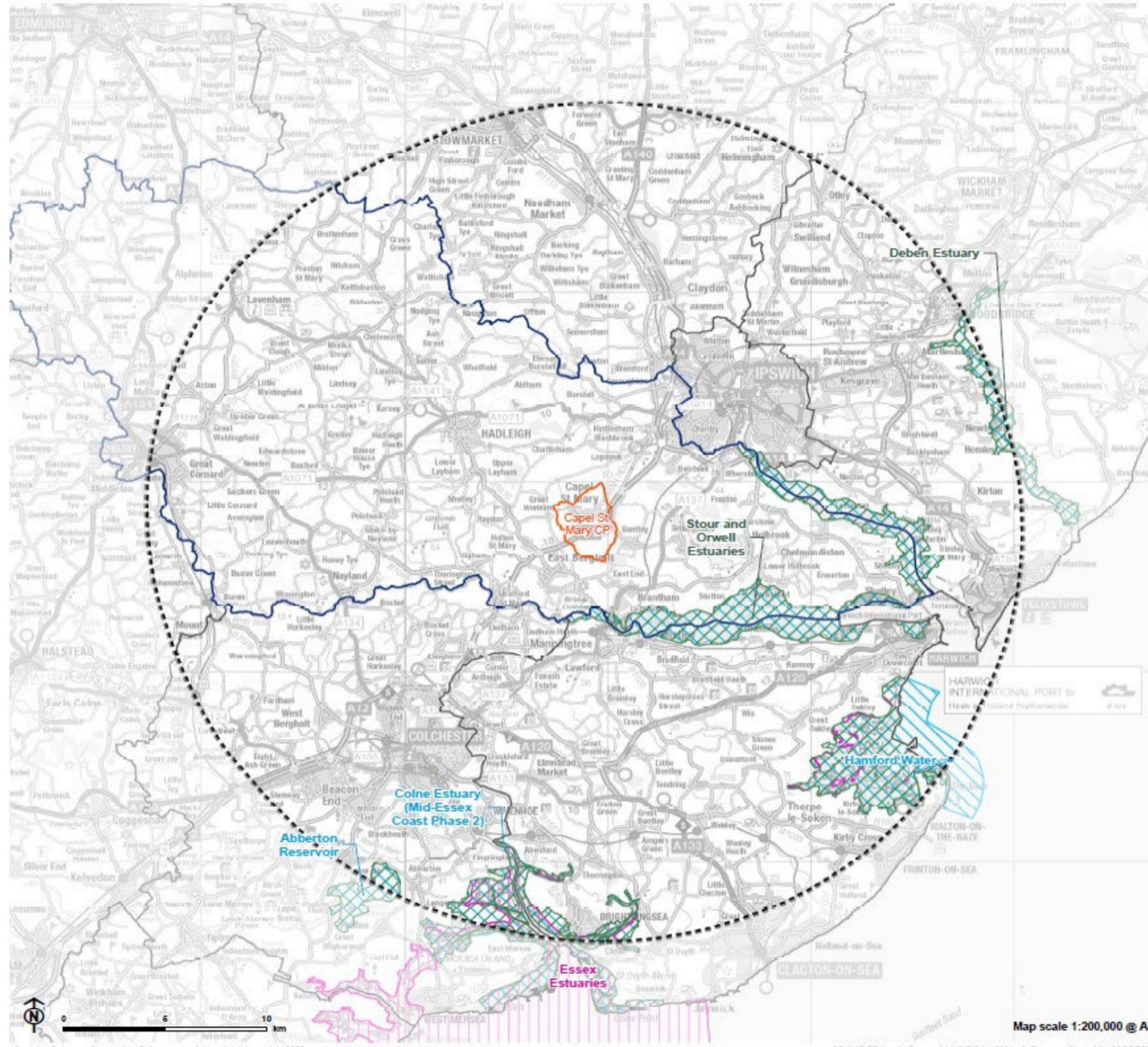
5.3 An appropriate assessment is not required for the Capel St Mary Neighbourhood Plan as none of the policies will result in development. However, project-level HRAs of windfall development should be undertaken as these developments come forwards.

5.4 HRA is an iterative process and as such is expected to be updated in light of newly available evidence and comments from key consultees. 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

European sites within 20kn of Capel St Mary Neighbourhood Plan Area

Figure A.1: European Designated Sites within 20km of Capel St Mary



Habitat Risk Assessment Screening for Babergh Mid Suffolk Neighbourhood Plans

European Designated Sites within 20km of Capel St. Mary CP

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

0 5 10 km
Contains Ordnance Survey data © Crown copyright and database right 2022

Map scale 1:200,000 @ A3

CB:AHB EB Hardie-Brown, A LUC F101_10094_0_EuropeanSites_A3_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 29] The overviews of sites and their locations are drawn from Natural England's Site Improvement Plans [See reference 30] Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs [See reference 31].

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*

Appendix B Attributes of European sites

- 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 maritima*, 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.

Appendix B Attributes of European sites

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

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.

Dunlin *Calidris alpina alpina*:

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

Grey Plover *Pluvialis squatarola*:

- 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.

Redshank *Tringa totanus*:

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

Ringed Plover *Charadrius hiaticula*:

Appendix B Attributes of European sites

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

Shelduck *Tadorna tadorna*:

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

Turnstone *Arenaria interpres*

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

Cormorant *Phalacrocorax carbo*:

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

Great Crested Grebe *Podiceps cristatus*:

- 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.

Curlew *Numenius arquata*:

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

Dark-bellied brent goose *Branta bernicla bernicla*:

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

Appendix B Attributes of European sites

Wigeon *Anas Penelope*:

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

Goldeneye *Bucephala clangula*:

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

Oystercatcher *Haematopus ostralegus*:

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

Lapwing *Vanellus vanellus*:

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

Red knot *Calidris canutus islandica*:

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

Knot *Calidris canutus*:

- 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

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 maritima*
 - 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 totanus*.
- Species with peak counts in winter:
 - Dark-bellied brent goose, *Branta bernicla bernicla*;

Appendix B Attributes of European sites

- 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.

Deben Estuary SPA

Overview of site and its location

Deben Estuary is located on the coast of Suffolk in eastern England. It extends south-eastwards for over 12 km from the town of Woodbridge to the sea just north of Felixstowe. The estuary mouth is the narrowest section and is protected by the presence of shifting sandbanks. The intertidal areas are constrained by sea walls. The saltmarsh and intertidal mud-flats that occupy the majority of the site, however, display the most complete range of saltmarsh community types in Suffolk. The estuary holds a range of swamp communities that fringe the estuary, and occasionally form larger stands

Qualifying features

- Dark-bellied brent goose *Branta bernicla bernicla*:
- Pied avocet •*Recurvirostra avosetta*

Conservation objectives

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change:

- Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring
- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Key Vulnerabilities

Coastal squeeze – Examination of the quality of saltmarsh, rather than quantity (which had shown little change in extent) through a detailed vegetation mapping survey of saltmarsh habitats (carried out to the National Vegetation Classification (NVC) standard (Abrehart and Jackson 2013)) provides evidence of coastal squeeze. Results were compared with an earlier NVC study (Suffolk Wildlife Trust 1993) and indicated that there had been a widespread decline in the quality of saltmarsh, and an increase in lower marsh habitats at the expense of mid and upper marsh vegetation communities. This is indicative of coastal squeeze as changes result from more frequent inundation. Also, coastal squeeze on saltmarsh will affect mudflat areas as saltmarsh is lost and the estuary balance/function is altered. This may have effects on SPA birds as well. The developing policy of the Deben Estuary Partnership should have scope for natural adaption.

Public Access/Disturbance – Increased recreational activity on the estuary could lead to increased levels of disturbance to wintering birds, to their detriment. Sources of disturbance include boats, canoes, jet skis, walkers and dogs, kite surfers, paramotorists, and low flying aircraft, etc. Shooting activity outside the site is unregulated and may be a significant source of disturbance to wintering birds.

Changes in species distribution – There is a risk of *Spartina anglica* encroaching on estuarine muds. With *Spartina* at the front, and reed encroaching at the back, the saltmarsh could be squeezed out affecting the habitats of birds.

Air Pollution: risk of atmospheric nitrogen deposition – Air pollution impacts on vegetation diversity. Aerial deposits of nitrogen may exceed the threshold limit (20 – 30 kg N ha⁻¹ yr⁻¹) above which the diversity of saltmarsh vegetation begins to be altered (possibly to reed) and adversely impacted. The impact on SPA birds is unclear. Many land use practices contribute to this issue including locally land spreading, outdoor pigs, high nutrient inputs on fields, etc.

Water Pollution – Inappropriate water quality may impact on the supporting habitats of SPA birds. Eutrophication may be having an influence on reed growth and saltmarsh composition. Increased flood events could lead to habitat change/loss of diversity. Nutrient run off from farming operations could exacerbate the issue.

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).

Appendix B Attributes of European sites

- 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.

Pied avocet *Recurvirostra avosetta*:

- Habitat Preference – mudflats, lagoons, sandy beaches.
- Diet – invertebrates, especially insects, crustaceans, worms and small fish.

Deben Estuary Ramsar

Overview of site and its location

Refer to Deben Estuary SPA above.

Qualifying features

Ramsar criterion 2

- Supports a population of the mollusc *Vertigo angustior* (Habitats Directive Annex II (S1014); British Red Data Book Endangered). Martlesham Creek is one of only about fourteen sites in Britain where this species survives.

Ramsar criterion 6

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- 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*.

Conservation objectives

None available.

Key Vulnerabilities

Similar to Deben Estuary SPA (above).

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

Refer to Similar to Deben Estuary SPA (above).

Colne Estuary (Mid-Essex Coast Phase 2) SPA

Overview of site and its location

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

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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.

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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*

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- 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, crane fly 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

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

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- 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.

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- 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.

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- 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.

Hamford Water SAC

Overview of site and its location

Hamford Water is a large, shallow estuarine basin comprising tidal creeks and islands, intertidal mud- and sand-flats

Qualifying features

Qualifying Features:

- *Fisher's estuarine moth Gortyna borelii lunata*

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;

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- 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

Inappropriate scrub control

- Scrub encroachment results in a loss of habitat for Fisher's Estuarine Moth, as the moth's larval foodplant (hog's fennel) is a species of open grassland. Although there are plans in place for scrub reduction/control in several areas, more action is likely to be needed to get/keep it under control.

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

In general, the qualifying species of the SAC 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).

Fisher's Estuarine Moth

- Habitat Preference - sea-walls and coastal grassland
- Diet - Hog's Fennel.

Hamford Water SPA

Overview of site and its location

Overview of site and its location. Refer to Hamford Water SAC above.

Qualifying features

Annex I species present as a qualifying feature:

- Little Tern *Sterna albifrons*

Over winter

- Avocet *Recurvirostra avosetta*;
- Golden Plover *Pluvialis apricaria*;
- Ruff *Philomachus pugnax*.

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

On passage:

- Ringed Plover *Charadrius hiaticula*.

Over winter:

- Black-tailed Godwit *Limosa limosa islandica*;
- Dark-bellied Brent Goose *Branta bernicla bernicla*;
- Grey Plover *Pluvialis squatarola*;
- Ringed Plover *Charadrius hiaticula*;

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- Teal *Anas crecca*;
- Common shelduck *Tadorna tadorna*;
- Common redshank *Tringa tetanus*.

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** – The Essex coastline is subject to rising sea levels and increasing frequency in coastal and tidal surges, as a result of climate. To prevent intertidal habitats from shifting landward hard sea defences have been implemented. The combination of climate change, sea defences and subsidence are likely to contribute to coastal squeeze, which will lead to the degradation and reduction of suitable habitat used by overwintering and breeding birds for feeding, roosting and/or nesting.
- **Changes in species distribution** – Declines in the number of bird species present at Hamford Water SPA have occurred. This is likely to be

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the result of changes in population and distribution on an international scale, due to climate change.

- **Public access/disturbance** – Hamford Water attracts a large number of yachts and accompanying watersports. Sensitive areas of the SPA are threatened by unauthorised access on foot, from boats and by quad bike/motorbike.
- **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.
- **Fisheries: Commercial marine 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 European 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.

Little Tern *Sterna albifrons*:

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

Avocet *Recurvirostra avosetta*:

- Habitat Preference - Mudflats, lagoons and sandy beaches.
- Diet - Aquatic insects and their larvae, crustaceans and worms.

Golden Plover *Pluvialis apricaria*

- Habitat Preference – Tundra, wet moor, and on migration pasture & estuaries.
- Diet – Invertebrates, esp beetles, earthworms, this species feeds extensively at night.

Ruff *Philomachus pugnax*

- Habitat Preference – Grassy tundra, lakes, farmland, on migration mudflat.
- Diet – Invertebrates, especially insects, and some plant material (especially in winter).

Ringed plover *Charadrius hiaticula*

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

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.

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Dark-bellied brent goose *Branta bernicla bernicla*

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

Grey plover *Pluvialis squatarola*

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

Common shelduck *Tadorna tadorna*

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

Eurasian teal (Non-breeding) *Anas crecca*

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

Common redshank *Tringa totanus*

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

Hamford Water Ramsar site

Overview of site and its location

Hamford Water Ramsar site SPA/SAC above.

Qualifying features

Species/populations with peak counts in spring/autumn:

- Ringed plover, *Charadrius hiaticula*;
- Common redshank, *Tringa totanus tetanus*.

Species/populations with peak counts in winter:

- Dark-bellied brent goose, *Branta bernicla bernicla*;
- Black-tailed godwit, *Limosa limosa islandica*.

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

- Grey plover, *Pluvialis squatarola*.

Conservation objectives

None available.

Key Vulnerabilities

Refer to Hamford Water SPA (above).

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

Refer to Hamford Water 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)

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- *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.

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- 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.

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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*,

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- 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.

Appendix C

Detailed screening assessment of policies

Policy CSM1 - Capel St Mary Spatial Strategy

Potential likely significant effects

C.1 None – This policy sets out how the neighbourhood area will accommodate development as a Core Village in the District's settlement hierarchy and outlines requirements that new housing proposals will have to address.

Discussion

C.2 None.

Conclusion

C.3 No likely significant effected predicted

Policy CSM2 - Housing Mix

Potential likely significant effects

C.4 None - This policy specifies the range of housing types that meet local needs and would therefore be supported. .

Discussion

C.5 None.

Conclusion

C.6 No likely significant effected predicted

Policy CSM3 - Conformance to Best Practice Design Principles

Potential likely significant effects

C.7 None – this policy expects any development proposals to conform to best practice design principles.

Discussion

C.8 None.

Conclusion

C.9 No likely significant effected predicted

Policy CSM4: Retaining and Enhancing Character Through Residential Design

Potential likely significant effects

C.10 None – The policy requires development proposals to protect the amenity of neighbours and reflect local character.

Discussion

C.11 None.

Conclusion

C.12 No likely significant effected predicted

Policy CSM5: Green Infrastructure in New Developments

Potential likely significant effects

C.13 None – This policy sets out criteria to be met by major new housing development to ensure that it contributes to a good network of multi-functional green infrastructure.

Discussion

C.14 None

Conclusion

C.15 No likely significant effected predicted.

Policy CSM6: Affordable Housing

Potential likely significant effects

C.16 None – This policy seeks to ensure there if sufficient mix of affordable housing provision and that such housing has the same design as other housing provision.

Discussion

C.17 None.

Conclusion

C.18 No likely significant effected predicted.

Policy CSM7: Accommodation Needs for Older People

Potential likely significant effects

C.19 None – This policy supports, in principle, provision of housing for older people.

Discussion

C.20 None.

Conclusion

C.21 No likely significant effected predicted.

Policy CSM8: Extensions, Division and Demolition New Builds

Potential likely significant effects

None – This policy sets conditions for planning applications for extension, demolition and rebuild, or division of existing properties.

Discussion

C.22 None.

Conclusion

C.23 No likely significant effected predicted.

Policy CSM9: Local Flooding

Potential likely significant effects

None – This policy sets a requirement for all new developments to submit proposals for on-site drainage and water resource management.

Discussion

C.24 None.

Conclusion

C.25 No likely significant effected predicted.

Policy CSM10: Transport - New Developments

Potential likely significant effects

C.26 None - This policy sets out the requirement for development to deliver sustainable transport solutions.

Discussion

C.27 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.

Conclusion

C.28 No likely significant effected predicted.

Policy CSM11: Infrastructure

Potential likely significant effects

C.29 None - this policy supports provision of additional pre-school, primary school, health care, or green space capacity.

Discussion

C.30 None.

Conclusion

C.31 No likely significant effected predicted.

Policy CSM12: High-Speed Broadband

Potential likely significant effects

C.32 None – this policy sets out requirements for high-speed broadband for all new residential and commercial premises.

Discussion

C.33 None.

Conclusion

C.34 No likely significant effected predicted.

Policy CSM13: Loss of Facilities and Services

Potential likely significant effects

C.35 None – this policy sets out protection of existing community facilities and services.

Discussion

C.36 None.

Conclusion

C.37 No likely significant effected predicted.

Policy CSM14: Heritage Assets

Potential likely significant effects

C.38 None - this policy is designed to protect heritage assets.

Discussion

C.39 None.

Conclusion

C.40 No likely significant effected predicted

Policy CSM15: Biodiversity

Potential likely significant effects

C.41 None - this policy is designed to encourage developers to incorporate biodiversity features and habitats into new developments.

Discussion

C.42 None.

Conclusion

C.43 No likely significant effected predicted

Policy CSM16: Green Spaces

Potential likely significant effects

C.44 None - this policy designates local green spaces.

Discussion

C.45 None.

Conclusion

C.46 No likely significant effected predicted

Policy CSM17: Stutton Brook Corridor

Potential likely significant effects

C.47 None - this policy requires development proposals to preserve the rural character of the Stutton Brook corridor.

Discussion

C.48 None – Although this policy is unlikely to have a significant effect on any statutory sites preserving Stutton Brook, which is within the catchment area of

Stour and Orwell Estuary, may indirectly safeguard water quality and quantity going into the Stour and Orwell Estuary.

Conclusion

C.49 No likely significant effected predicted

Policy CSM18: Trees and Shrubs

Potential likely significant effects

C.50 None - this policy places a requirement on any proposals requiring landscaping to include native species.

Discussion

C.51 None.

Conclusion

C.52 No likely significant effected predicted

Policy CSM19: New Business Premises

Potential likely significant effects

C.53 None - This policy supports development of new business premises in principle, subject to requirements to safeguard local character and the environment.

Discussion

C.54 None.

Conclusion

C.55 No likely significant effected predicted

Policy CSM20: Harm to Existing Business Premises

Potential likely significant effects

C.56 None – This policy sets out requirements that must be met in order for expansion of existing business premises or change of use of existing business premises to be supported.

Discussion

C.57 None.

Conclusion

C.58 No likely significant effected predicted

Policy CSM21: Retention of Existing Employment Sites

Potential likely significant effects

C.59 None - this policy restricts development of existing employment sites for other uses.

Discussion

C.60 None.

Conclusion

C.61 No likely significant effected predicted.

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- 3 The exception to this would be where 'imperative reasons of overriding public interest' can be demonstrated; see paragraph 1.17.
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 - 12 David Tyldesley & Associates, The HRA Handbook, Section A3. A subscription based online guidance document, available at: <https://www.dtapublications.co.uk/handbook/European>
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 - 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>

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